

**NATURE IN THE CITY:**

An exploration of urban park planning in response to  
contemporary relationships with the natural environment

by

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## **ABSTRACT**

### **Nature in the City: An exploration of urban park planning in response to contemporary relationships with the natural environment**

One of the fundamental roles that urban parks play is to serve as a reflection of public sentiment concerning relationships with nature. Within a shared social context, each person comes to her or his own understanding of an agreeable way to interact with the urban natural environment. The construction of this understanding is dynamic. It occurs as an ongoing process of internalization of culturally determined ethical perspectives and of reflection on experiences created through individual circumstance. Differences in this understanding shape different expectations for what is an appropriate way to relate to urban nature.

Addressing the array of simultaneously occurring expectations the public has for experiencing nature in the city is an ongoing project in the planning and design of urban parks. This study makes a significant contribution to the challenges facing park planning in North America by documenting public ideas about the purpose, intent and use of urban natural area park land. It suggests a model for understanding the various relationships people have with the natural environment. The study suggests, as well, that the romanticized view of wilderness is profoundly influential in shaping urban nature. These concerns are explored within the general theoretical context of ideas about nature and creating meaning from experiences, and through analysis of results of a public survey conducted in Calgary, Alberta.

The model developed in this study presents a psychographic profile of four basic modes of interacting with nature and explains how these relationships are reflected in expectations for the provision of urban nature experiences. The Consumer, Adventurer, Steward and Guardian all are oriented differently toward the planning, care and management of urban natural area park land. Together they form a composite outlook on the urban natural environment that can best be described as cautious consumption. The study raises the possibility that subsequent research could work to explore shared expectations among the various orientations, especially concerning whether to leave more park land in a natural state or to continue to provide the traditional variety of park types in urban communities. It stresses the need to broaden planning goals to attend to socio-cultural, biophysical, and psychological aspects of urban natural area parks.

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Gae VanSiri  
August, 1997



# **PART I: INTRODUCTION**

## **CHAPTER 1**

### **Scope of the Study**

#### **1.1 Purpose and Objectives**

This dissertation explores contemporary relationships with urban nature. The key issue is the pressure that natural area park land in cities is facing – pressure to be all things to all people, and pressure to be put to other more socially or economically productive uses. The problem is investigated through examining views on nature and the influence that these views have on park planning policies and practices. The situation in Calgary, Alberta provides a context for the study.

Parks serve as a reflection of public sentiment concerning contemporary understanding of relationships with nature. It is suggested that studying the affinity that people have for nature in the city, and analyzing the expectations that this affinity creates in terms of planning for urban natural area park land, provides an avenue to define this sentiment. Without an indication of collective sentiment concerning the affective aspects of park land in the urban environment, the more easily quantifiable and rationalized economic and ancillary functions of park land will tend to be seen as more beneficial to the public interest. For this reason, the study of human emotional interaction with the environment is relevant to the work of urban planners, landscape architects and others involved in planning urban parks and public spaces. The results can contribute to knowledge about the significance of natural area park land in the city.

The issue of natural areas in the city is of interest and importance from a number of perspectives – undeveloped urban green space contributes to the socio-cultural, biophysical and psychological viability of human lifestyle and habitat. Coming to terms with any differences in understanding about relationships with the urban natural environment is important to the future of city life because of the contribution that natural area park land makes to fostering individual and community well-being (Bonnes, Aiello, and Grazia Ardone 1994).

The findings from this study suggest that contemporary relationships with the urban natural environment are complex and multi-dimensional. The range is from ultra-conservative to moderately radical orientations toward the provision of urban nature. Although traditional utility-

based perspectives dominate, these co-exist with relationships grounded in kinship and with expressions of ambivalence or hostility. But the predominate way of relating to urban nature is perhaps best described by the concept of *cautious consumption*. A relationship oriented towards cautious consumption of the urban natural environment is typically activity driven and place-based. It involves a fairly narrow and conventional range of nature experiences that produce predictable feelings of well-being. This wide range of interactions creates a variety of expectations for urban park development.

These ideas and issues are explored within a general theoretical context concerning ideas about nature and through analysis of results of a public survey administered to a random sample of Calgary households (see Appendix X for an overview of the research process). The public survey component uses opinions, reported behaviours and descriptive narrative in the analysis of the use and meaning of urban natural area park land. The discussion of theory related to human-environment relationships is based on a conventional literature review concerned with two main themes. The first is the influence of culture in providing a framework for interpreting meaning. The landscape – with park land as an essential component – is seen as a fundamental expression of human-environment interactions. The second is the role of experience in creating meaning from contact with the natural environment. The idea of nature, especially as it relates to understanding the notion of wilderness, provides a framework for studying the formation of expectations for experiencing urban nature.

Given that the major purpose of doing research in an applied area such as park planning is “to improve professional practice through gaining a better understanding of it” (Merriam and Simpson 1984, 100),<sup>1</sup> research into these concerns can lead to a greater appreciation of the complexities of planning for natural area park land. By examining what factors contribute to relationships with urban nature and how these relationships are expressed through policy and practices concerning the provision of public natural area park land in the city, it might be possible to foster a vision of urban development which endorses widespread acceptance of the role that park land can play in creating and maintaining a healthy human habitat.

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<sup>1</sup> The citation provided by Merriam and Simpson is: Gordon Darkenwald. 1980. Field Research and Grounded Research Theory. In *Changing Approaches to Studying Adult Education*, eds. Huey B. Long, Roger Hiemstra and Associates, 69. San Francisco: Jossey-Bass. The original source was not consulted.

With this goal in mind, the objectives for this study are:

1. To review and synthesize the relevant literature on ideas about nature, cultural determinism, interpreting meaning, and park planning;
2. To explore the ways people conceptualize and describe experiences with urban nature and to consider how these interpretations impact future expectations for nature experiences in the city;
3. To develop a model which suggests and explains factors that influence the development of different human relationships with the urban natural environment;
4. To assess public views concerning the planning of natural area park land in the city; and
5. To propose ways for park planning to respond to these issues.

The question guiding the research is: *What factors contribute to the development of relationships with the natural environment and how are these relationships reflected in expectations for the provision of urban natural area park land?* The thesis is that within a particular social context, culturally determined environmental ethics and individually defined experiences with the natural environment combine to produce expectations for the appropriate care, management, and planning of urban natural area park land.

## **1.2 Organization of the Dissertation**

This dissertation has ten chapters organized into five different parts. There is also a list of Reference sources, which appears following the last chapter, and nine appendices.

Part One has two chapters. Chapter 1 describes the research interests and objectives for the study. It provides an overview of the purpose, rationale, assumptions and methods of the research. The situation in Calgary is presented as a case study. Chapter 2 is a review of park planning concerns. It outlines the research problem in detail, drawing from the literature and from the author's professional experience as a park planner.

Part Two – which is comprised of Chapter 3 – provides a discussion of the theoretical framework as it applies to the idea of nature and the way in which meaning is produced from contact with the

natural environment. Emphasis is on the notion that irrespective of the particular physical manifestations, nature is a cultural construct – ideas about nature respond to variations in human inclinations and understanding, and meanings vary in relation to changes in this understanding. The discussion also considers transformations in the idea of wilderness. It considers the possibility that urban nature is essentially seen as domesticated wilderness: people tend to remark on “nice” not “nasty” forms of nature, safe not wild, and accessible not remote or elusive manifestations of nature as appropriate or ideal representations of nature in the city.

Part Three has three chapters that describe the methodology and results of the Nature in the City public survey conducted in Calgary in the spring of 1995. Chapter 4 includes a thorough discussion of all questionnaire design and pretest methods. Chapter 5 reports on the demographic and forced-choice question results. It provides a comparison of the demographic profile of the survey respondents to the Calgary public in general. It also contains a preliminary analysis of question by question results, including the referendum-style question used to poll the sample on preferences for the provision of natural area park land. Chapter 6 is a content analysis of the open-ended question concerning the meaning that nature in the city has for people. Common themes are presented and discussed. Selected respondent narratives are profiled as examples of the variety of nature experiences that take place in the city.

Part Four has three chapters that provide an in depth analysis of the key concepts under consideration – affective responses and inclinations towards urban nature. The analysis talks about the factors that define relationships with nature in the city. Chapter 7 looks at similarities and differences in the intentions that people have for interaction with the urban natural environment. It explores ideas about nature as they relate to ethical understanding. The discussion specifically looks at the results in terms of public sentiments concerning the preservation of natural area park land as expressed in both this 1995 study and in one conducted in 1991. Chapter 8 considers the impact of past experience on interpreting the meaning and benefit of nature in the city. It discusses the different characteristics of groups displaying varying degrees of involvement with urban nature. Chapter 9 speculates on the influence that social context has on shaping affinity for nature. Through further manipulation of the data it synthesizes the analyses of results discussed in Chapters 7 and 8. This chapter also presents a model describing four possible psychographic



orientations to nature. Each is grounded in the context of a different social reality and implies a different affinity for nature based on ethics and experience. The model explains the diverse expectations that arise from differences in relationships with the natural environment.

Part Five has one chapter. Chapter 10 is the conclusion which considers the contributions that this study makes to understanding relationships with urban nature. It looks at the influence that the wilderness idea is having on shaping urban nature and speculates on the potential to reconcile the paradox of artificial naturalism. It discusses public expectations concerning appropriate interaction with nature in an urban context and the consequences of such expectations for the future provision of urban natural area park land. Finally, it considers the implications that these expectations have for planning natural area park land, asking whether there is a need to broaden planning goals to formally address socio-cultural, biophysical, and psychological aspects of urban nature.

### **1.3 Overview of the Research Process**

This section discusses the rationale and assumptions for the study. It argues the case for studying urban nature and outlines the points of understanding that guide the enquiry.

#### **1.3.1 Rationale**

Research into urban nature experiences has focused on observing physical characteristics and arrangements of space through studies that work on the identification of peoples' preferences for particular natural features and configurations.<sup>2</sup> The primary intent is to inform open space design and management. Such an approach is meant to manage the appearance of a site rather than attend to its ecological, historical, cultural or personal significance. Studies in areas such as environmental psychology, landscape assessment, and urban and regional planning, which are in a

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<sup>2</sup> Perhaps most well-known in this area is the work of environmental psychologists Rachel and Stephen Kaplan. Their 1989 *The Experience of Nature: A Psychological Perspective* includes, in addition to a comprehensive presentation of the primarily cognitive aspects of the appreciation of natural environments, an appendix containing a summary of key preference studies. The Kaplans' work is behaviourist in orientation. It is not a good reflection of the critical theory approach to investigation that has worked its way through analysis of socio-cultural phenomena in the last ten years. The move toward consideration of ideas as well as things is better reflected in work related to public space design and management by Carr, Francis, Rivlin and Stone (*Public Space* 1992) in which the authors give full attention to the need to attend to the needs, rights and meanings being sought by the people who will ultimately be using, or experiencing the spaces. A truly post-modern perspective is offered by Thayer (1994) in his assessment of the ultimate impact of technology on our experience of, with, and in evolving urban landscapes/environments.

large part motivated by a concern over the quality of human-environment relationships, concentrate on how space is used rather than on what space means. The ultimate practical application of use assessment models is in the development of marketable residential, industrial, and commercial environments. The success of these market endeavours is based on certain assumptions. It assumes that human behaviour can be easily and accurately predicted and that people are essentially oblivious to context. It is also based on the belief that since certain environmental attributes are basically “theoretically interchangeable” commodities (Williams, Patterson and Roggenbuck 1992, 30), it is possible to reproduce specific environments anywhere. This commodity approach seeks to modify or customize the environment in the human-environment relationship (see Figure 1).

**Figure 1**



**WORKING WITH THE LAND:** Designers of Glendale Meadows aim to preserve as much of the natural environment as possible

**Marketing residential subdivisions**  
*(Calgary Herald 13 July 1996)*

Neil Evernden (1985) suggests that relationships are a basic condition of existence, and that the type of relationship one has with “the environment” (however it might be conceptualized), contributes to an overall context for the development of self-in-the-world. This context provides a reference point around which to construct meaning from personal experience. The traditional

approaches to analysis of human-environment relationships have more recently been supplemented with work that looks at this experiential aspect of an encounter with a setting.<sup>3</sup> Such work provides insights into the meaning that experience generates. It contributes to a better understanding of the changes which may be required to the human factors (such as rethinking of expectations) in the human-environment relationship.

Phenomenological and ethnographic methods, which use a detailed analysis of a small number of individual cases, contribute a rich source of data to understanding individual perspectives on environmental experience. Using a traditional quantitative method combined with components of such qualitative analysis, this study probes individual responses to experience with nature. While still relying on aggregate data for analysis, the study provides an opportunity for speculation and reflection on theory related to the role that interpretation of experience within a particular social context plays in creating and sustaining appropriate human-environment relationships.<sup>4</sup>

In depth socio-cultural analysis (Cranz 1982) has found that park land in the city continues to afford one of the best opportunities for realizing public life in a community. Threats to the supply of urban open space result from a failure to fully recognize this capacity and potential in parks (Gold 1988). In being common ground, both literally and figuratively, parks can provide a place for people of all stations and circumstances to celebrate, communicate, and recreate. The equality of opportunity that urban park land provides is not lost on the public. For the most part, everyone is able to visit park areas in the city free of charge (even though it is theoretically possible to control access in a number of cases). This is recognized as an important benefit of urban natural areas (see Nature in the City survey results in subsequent chapters).

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<sup>3</sup> See for example Beringer (1992) concerning the role of experience in the formation of environmental ethics in adolescents. See also Patterson (1993) who suggests that experience is “an emergent narrative rather than a deterministically predictable outcome” (Patterson 1993, 122). His proposed paradigm for studying human action is “productive hermeneutics” which he describes as a meaning-based model portraying humans as active participants (rather than reflexive agents in a stimulus response relationship with the environment) in the construction of meaning from experience.

<sup>4</sup> Although not speaking explicitly about experiences with the natural environment, Harvey notes that “[t]he path between the historical and geographical grounding of experience and the rigours of theory construction is hard to negotiate” (Harvey 1985, xvi). He suggests, as a consequence, that the functions of speculation – by which he means being intellectually innovative in our consideration of influences that act on interpretation of experience, and reflection – by which he means the critical evaluation of experience, are vital to the construction of new theory in the area of experience assessment.

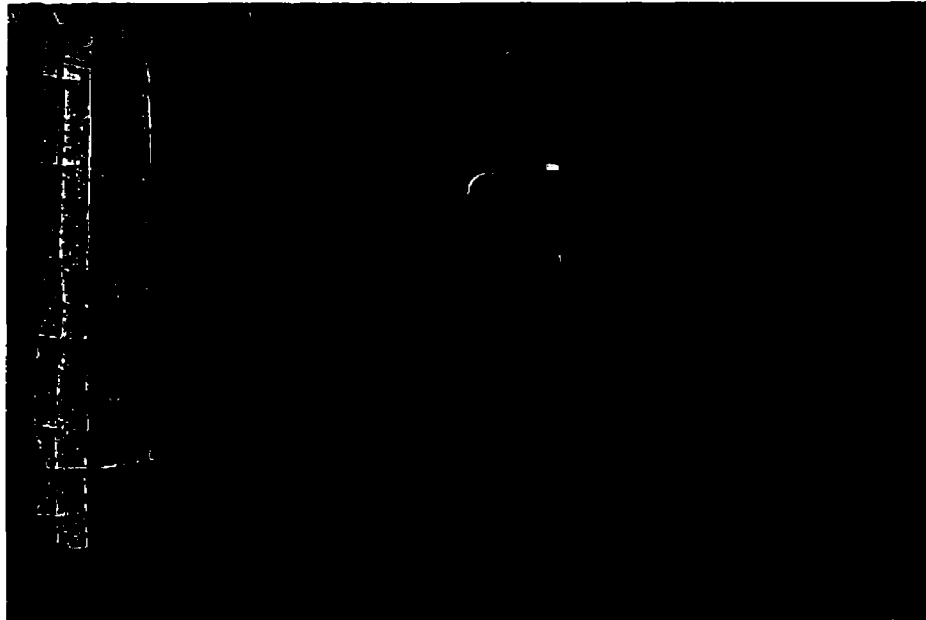
Not as well recognized by the general public as an important concern is the tendency towards intensifying development on open spaces. The intensification of natural landscapes in particular is considered to be the single greatest contributor to loss of biodiversity in communities today (Poracsky and Houck 1994). In general, the role biodiversity has in sustaining human life is rapidly becoming the paramount environmental concern of the developed world community (Minister of Supply and Services Canada 1995). Current development processes, including those that result in the permanent loss of local open space, pose a serious threat to human habitat (Weaver and Kim 1994). The balance that urban open space gives to the more intense use of land in our cities is essential to supporting biodiversity in an urban context.

Recently, the physical environment of a community has been shown to be especially valued by residents of Canada's urban centres (J. Patterson 1995). Not only is the natural landscape seen as fundamental to developing a unique sense of place (Johnston 1990), but citizens also intuitively feel that interaction with nature in the city has profound emotional benefit (Ulrich 1983). Urban park land otherwise seen to be vacant and underutilized is taking on new life in keeping with present public sensibilities concerning the preservation of natural environments. As a result, interest in the provision of urban natural area park land is becoming more intense in Canadian cities today (Dwyer 1995). An example of this increasing interest is growth in organizations such as the "Friends of ---," who rally around local park sites; the Evergreen Foundation, which looks at naturalization of school yards; and the Federal Government's Active Living - *Go for Green!* campaign, which supports a variety of local environmental initiatives.

For many people urban natural area park land may be the only chance they have to experience close contact with nature (Raglon 1993). Indeed, the proximity and convenience that nature in the city presents for people to experience the natural environment is a fully acknowledged contribution that urban natural area park land makes to the quality of life in a community (Calgary Parks & Recreation 1986). But perhaps the more compelling reason to study ideas about the protection of urban nature is that even very small bits and pieces of it (see Figure 2, next page) will suffice to provide city dwellers with a legitimate experience with nature (Gallagher 1993). The physical constraints on re-developing communities make space allocation an especially significant concern. These considerations combined with the fact that experience with nearby nature extends an

opportunity to build a generalized appreciation for the natural environment (Ibid.) are important reasons for interest in urban natural area park land.

**Figure 2**

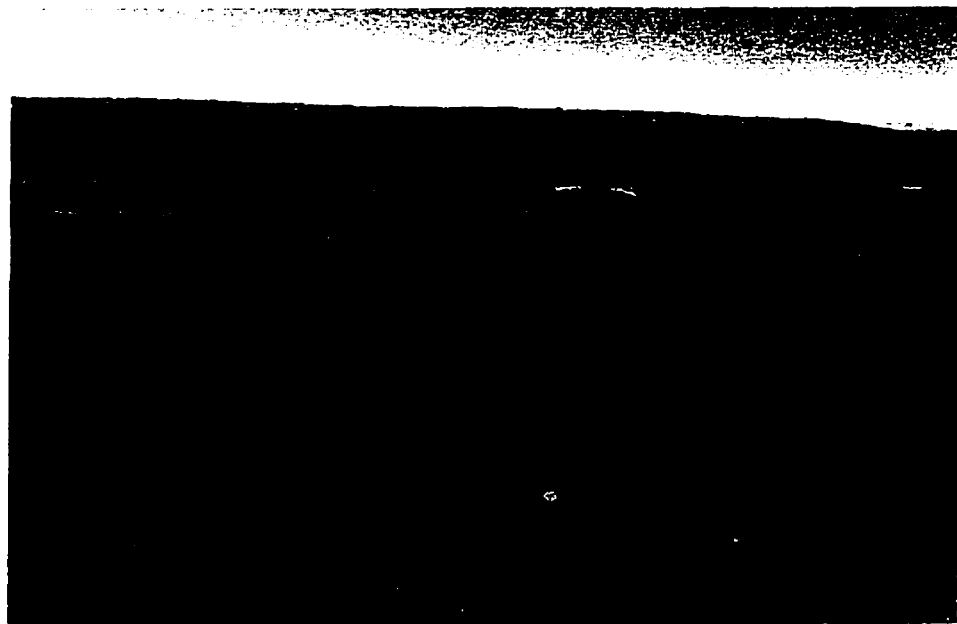


**A neighbour in her garden – a generalized appreciation of nature  
(Photo by the author)**

In terms of psychological contributions that parks make to the human condition, there is very little documentation that is directly concerned with studying the experience of urban nature. In fact, it has been noted in the past that there is an undeniable need for research into the experience of nature in an urban context (Kaplan, R. 1983). Work in the area of park planning has also found that, due to a failure to integrate open space into the essential framework of a community (Gold 1988), there is a growing trend to remove park land from the public domain. This trend towards the privatization of public land observed in American cities (Francis 1988) points to a reduction in the opportunity to experience nature in the city and supports the underlying assumption of this study – that park land use value is being undermined in urban areas. There is work more specific to affective influences of urban parks that has for some years been looking into the meaning different public space has for people (see Carr, Francis, Rivlin and Stone 1992, for example). Studies such as one which found that there were differences in the perception that city administrators and residents had of local community open space (Francis 1987) contribute to our understanding about “the role open space plays in everyday urban life” (Ibid., 102).

The competition to maximize undeveloped park land is especially intense when there are apparent conflicts in civic needs. It can be difficult in such circumstances to establish political support for park uses. But whatever is decided about the function of parks is largely derived from the particular vision that city builders and residents have of their community (Cranz 1982). For example, the citizens of Calgary have recently started to take exception to overtly economic and utilitarian perspectives on the use of undeveloped park land. This was demonstrated this past year during public hearings for GoPlan – the City’s long-range transportation plan. The Plan proposed to include additional river crossings through existing park areas. Although the crossings were designed to improve traffic flow as Calgary grows, they were hotly debated. Transportation planning in Calgary historically has tended to downplay the significance of both the environmental and psychological impact in selecting alignments. Routes are judged instead primarily on their economic and/or geophysical efficiency (Calgary Parks & Recreation 1994b). But public concern over proposals to disturb any existing natural area, especially the Weaslehead (Figure 3) – a unique natural area along the Elbow River within the city limits – as was proposed in the GoPlan, has been extensive and ultimately effective. In approving the new transportation Plan, City Council, for the time being at least, recognized the public’s wishes not to include any new river crossings.

**Figure 3**



**Aerial photo of the Weaslehead  
(Photo courtesy of Calgary Parks & Recreation)**

As this case demonstrates, the Plan architects, who are likely experiencing the park environment in an intellectual context, tended to view it primarily as space to manipulate in constructing a viable and attractive urban fabric (Relph 1976). Some politicians or business people, on the other hand, experienced the park land as a commodity or investment and see the main benefit of the land in terms of political or economic opportunity it affords. Viewing space as an abstraction is a reflection of how institutionalized intervention produces space in cities (Rotenberg and McDonogh 1993). It suggests a certain degree of dissonance between what people who actually know a park as a unique and meaningful place experience and what planners understand the role of park land to be (Godbey, Grafee, and James 1993). It seems reasonable to suggest that those who use a park, and who are in direct contact with a particular physical environment, are more likely to appreciate the park for the experiences it provides.

These issues and concerns – the case for an experiential-based outlook on park planning, the differences in public sensibilities concerning appreciation of the natural environment, and the increased pressure on park space that results from its status as the “least cost” development option (More, Stevens, and Allen 1988, 139) – form the basis for interest in researching the connections between park planning and relationships with the urban natural environment. The next section considers the assumptions that underlie the investigation.

### **1.3.2 Assumptions**

Considerable work has gone into identifying and describing preferred tastes in both natural and built form. This enables the construction or re-creation of urban and natural environments capable of providing satisfying experiences (Kaplan and Kaplan 1989; Lynch 1960). While such work is not without interest, this study does not speculate on what aspects of a particular environment might be associated with certain preferences and subsequently certain meanings. The analysis examines instead what people feel is meaningful. It is based on certain assumptions about the creation of meaning in experiences with the environment. These assumptions are:

- i) that all environmental experience takes place within a social context (see Kuhn 1985; Weigert 1991);
- ii) that experience provides a situation or structure for interaction from which an individual creates meaning (Barton 1994; Patterson 1993);

- iii) that in choosing to engage in a certain experience with the natural environment, an individual seeks to reflect a particular sense of self (Bagozzi 1992; Epstein 1989; Haggard and Williams 1992; Wojciszke 1989); and
- iv) that past experiences have an influence on any current and future engagements with the environment (Berleant 1992; Gallagher 1993; Ittelson, Franck, and O'Hanlon 1976; Knopf 1983; Ladd 1977; Ulrich 1983; and Wilson 1980).

### **1.3.2.1 Experience Takes Place Within a Social Context**

This study assumes, first and foremost, that human-environment interactions take place within a particular social context constraining the potential meanings that individuals might draw from engagement with the environment. The point has been made that experiences with nature are far more individualistic than other types of experience (McGinnis 1994). But there is shared knowledge of the variety of possible ways to understand nature in our culture. The experience of shared landscapes provides one such basis for common understanding. Landscapes represent a social group's "imagined relationship with nature" (Cosgrove 1984, 15). They are also indicative of a "historically specific way of experiencing the world" that is meaningful to a certain group of people (Ibid.).

Chapter 3 discusses in detail both the historical and contemporary shape of ideas about nature that contribute to common culturally-specific knowledge regarding experiences with the natural environment. The assumption that social context sets bounds on meaning is important in suggesting that there is a shared basis for the interpretation of experience. This point becomes significant when considering options for providing opportunities to experience nature in the city.

### **1.3.2.2 Individuals Create Meaning**

Experience is a circumstance or situation which structures an individual's interaction with the environment. The thing that one experiences – a sensation, physical impact, imaginative impulse, and so on – carries no meaning in itself as an object of stimulation (Schellekens 1979), although it has been suggested that our actions in the environment are not without "natural" meaning (Weigert 1991). For example, a singular backcountry hiking experience may result in someone achieving a deep sense of exhilaration, producing a meaning related to personal well-being and competency,



but the accumulated impact on the environment of many experiencing this same *event* may have a meaning of reduced capacity of the environment to thrive. This is referred to as the physical or natural meanings resulting from human/environment interaction. As we do not easily grasp this kind of meaning in our actions, it has been suggested that the natural environment is increasingly at peril (Ibid.).

This study focuses on the interpreted, rather than natural or “physicalistic” meaning (Weigert’s phrase). It assumes that meaning is not inherent in an act, but rather is in the mind of the person involved in the act (Barton 1994). If it is accepted that people create different meanings from interaction with the same environment, a local natural area park for example, it must be assumed that there is no generic meaning in an experience. But in the case of intentioned experiences, there is the possibility that an experience will already have an understood meaning for an individual. It is also possible that different individuals may sense the same meaning. These kinds of meanings are created through an anticipated outcome or expectation that a person or persons hopes to achieve by experiencing a particular environment. The meaning is formed by both the physical aspect of the landscape and an intention to relate to it (Von Maltzahn 1994).

The intentioned experience is comprised of a series of perceptions and judgments involving anticipation, manipulation, evaluation and integration, in which the person first focuses intention on the environment in question, then engages in an experience, processes the effects of involvement and consults personal scripts to situate meaning. Patterson (1993) cautions that it takes more than being able to determine an individual’s point of view to be able to understand the context in which experience takes place. He suggests positivist research approaches force individuals to be too abstract and theoretical in reflecting on their experiences. Instead the emphasis should be on an assessment of narrative. This approach is context bound – recognizing that “experience is contextual, influenced by an individual’s unique identities, current personal projects, recent past experiences and situational influences” (Patterson 1993, 183) – and is a more appropriate method for studying meaning.

In assessing and reporting on an experience after the fact, people may be more or less aware of the influences that personal history and situational factors have on the way meaning is interpreted. The survey conducted for this study uses an open-ended question to explore meanings created from

experience with nature in the city. This is an attempt to allow the respondent to establish his or her own context from which to report meaning. But the influence of social context on the respondents' narratives must be extrapolated from theoretical conjecture and from the researcher's understanding of the local context for the urban nature experience. Those who look to social dynamics for explanations tend to use aggregate methods of research (Kuhn 1985). In this respect, this study categorizes the meanings individuals reported into common themes, not in order to identify generic meanings in the natural area park experience, but to look for shared intentions in experience that would result in common expectations being expressed about urban natural areas.

Experience requires active involvement of an agent with her or his environment. The involvement takes the form of an ongoing exploration process in which a person continually situates his or her self in the world, by ordering impressions (Tuan 1977). It has been suggested that there are four common characteristics in the processing of experience that enable all individuals to gain an understanding of their world (Ittelson, Franck, and O'Hanlon 1976). The thought is that everyone essentially orients themselves to the environment in which they act in order to establish a satisfactory relationship with the world (Ibid.). People also establish basic categories for analysis, or ideas about causal connections of experience, that relate to their own particular needs, which become more complex over time (Op. cit). Everyone strives, as well, to establish his or her own sense of order and harmony, as he or she becomes more familiar with the potential conflicts involved in interactions with the environment (Ibid.). Lastly, it is suggested that everyone engages in "purposeful action [or a] continuing process through which the individual actively creates the situation within which he [or she] has [an] experience" (Ittelson, Franck, and O'Hanlon 1976, 201). This process of orienting, categorizing, harmonizing, and seeking particular kinds of circumstances provides a structure for creating meaning through interaction with the environment. Previous experiences, current interests and general view of the world influence both the type of experience an individual chooses to undertake and the meaning she or he sees in the circumstance (Finger 1994).

### **1.3.2.3 Interactions Reflect a Sense of Self**

The assumption that self-concept is a factor in defining the meaningfulness of experiences is reflected in the notion that personal scripts and narratives are key to creating personal meaning within a social context. By providing basic guidelines for personal reality, scripts establish a way

to organize and access past experience (Oatley 1978). As Epstein (1989) describes it in his cognitive experiential self theory, a personal theory of reality (or schema, script or narrative) is a conceptual tool used to facilitate basic psychological functions. The script operates primarily at a preconscious level in that it includes thoughts and images of which a person may not normally be aware (Epstein 1989). In relying on a personal reality construct, an individual is then able to process an experience within a “relatively stable, coherent conceptual system” (Ibid. 8). Epstein suggests that the personal reality framework also serves to monitor behaviour, including providing motivation to create and sustain a positive self-image. It is suggested here that a particular self-image directs a person’s interest and involvement in the nature experience. How a person thinks he or she should feel or act in part contributes to interpretation of that experience (Bagozzi 1992). Further, interest expressed through participation in various leisure pursuits is one way in which people activate an “ongoing process of self-definition, validation, maintenance, and enhancement” (Haggard and Williams 1992, 2). By engaging in leisure experiences people are constantly making sense of their world and their place within it. In these terms the leisure experience has the potential to significantly influence one’s personal sense of reality. In so far as a person freely engages in leisure, the leisure nature experience may in fact provide one of the best opportunities to align our ideal and actual selves (Ibid.).

#### **1.3.2.4 Past Experiences Influence Future Engagements with the Environment**

The assumption that past experience has an effect on the production of current meanings is important in suggesting that expectations are key to both personal and collective interpretation of meaning. The way a person conceives an environment depends, in part, on the experience that he or she has had with it. If people have similar expectations, it is most likely because they have been similarly schooled (Knopf 1983). This suggests that there is potential for public dialogue to inspire the establishment of socio-cultural parameters for defining a collective experience with nature (McGinnis 1994). It is not a traditional view of dialogue that is being suggested but one based in storytelling, speculation, symbolism and political action, all designed to create a new myth about what nature means (Ibid.). The idea that myths about the environment can contribute to its construction (Simmons 1993) is born out in terms of the planning and design of park land.

Because parks reflect our relationship with nature, they have a role to play in the myth making. Natural area park land provides an environment-in-common for playing out stories being presented

for and by the public. Past experience contributes to current understandings about appropriate uses for the urban natural environment. In accommodating changes in the meanings that various uses create, public natural areas serve as a stage for expressing contemporary expectations for encounters with nature in the city. The interactive aspect of past experience helps to explain how it is possible for people to change the expectation they have concerning an experience with nature in relation to terms set out by popular culture. As Wilson (1980) sees it, “[o]ur past experiences continually take on new meaning in the light of more recent events and must be constantly re-worked and re-evaluated in accordance with our present outlook even to the point of repudiating past selves” (Wilson 1980, 141). The malleability of this meaning-making is what makes room for different understandings to work their way into both the private and public psyche, thereby re-shaping interpretations and, as some have suggested, subsequent behaviours as well (Finger 1994; Kim 1993; Pestello and Pestello 1991; Tourangeau 1987).<sup>5</sup>

The form that urban natural area parks have today shows how culture and politics have acted upon the environment in the past (Cranz 1991). But contemporary relationships with the natural environment are represented in current expectations about the appropriate function of these special areas. There is a strong sense that a park provides the best way to bound the urban nature experience in that it signals where “human interaction with nature begins” (Walter Phillips Gallery Editorial Collective 1991: unpaginated). There is also the potential for discord to arise out of the lack of collective understanding of what constitutes appropriate kinds of interaction with the urban natural environment. A review of the circumstances in Calgary provides a case from which to consider this possibility in more detail.

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<sup>5</sup> The debate over the causal link between attitude and behaviour is thoroughly covered elsewhere in the literature (see Bagozzi 1992; Finger 1994; and Kim 1993, for example). In any case the link between attitude and behaviour is not being directly studied in this work. A connection is being suggested between the views a person forms concerning the appropriate use of natural areas, termed inclination, and the affinity he or she has for nature, operationalized through calculating scores for selected survey questions, including an assessment of the meaningfulness of nature. Meaning is seen as arising out of experience and experience is oriented by intention. Bagozzi (1992), too, sees meaning as a function of intention. He suggests that intentions are influenced by attitudes, but unlike other theorists in attitude dynamics, he allows that intentions do not necessarily result in action (or behaviour). Carrying out an action or behaviour depends on, among other things, the opportunity and means available to act (Ibid.). While attitude provides a reason for forming an intention to act, the motivational link is actual desire to perform an action. One’s view on appropriate strategies for natural area park land in the city is termed an “inclination,” so that the relationship that is being explored is between experience, as expressed through affinity, and inclination.

## 1.4 The Calgary Context<sup>6</sup>

The city of Calgary is located in the foothills of the Rocky Mountains in the southern half of the province of Alberta. Although perhaps better known for its western heritage, the city's numerous skyscrapers grouped tightly into the compact downtown speak to its equally important, if not more sophisticated, role as the administrative and financial centre of the Canadian oil and gas industry. Founded in 1875 by the North West Mounted Police (now the Royal Canadian Mounted Police or RCMP), Calgary's population has grown dramatically, almost doubling in the last 25 years alone, and it is anticipated that it will reach the one million mark (projected for 2013) within the next 20 years (Calgary Parks & Recreation 1994). Calgary was officially incorporated as a town in 1884, with a population of 1,000. One hundred and eleven years later, in 1995, Calgary comprised an area of about 720 square kilometres (or approximately 275 square miles), with a population just under 750,000 (City of Calgary Public Information Department 1996).

Wide open spaces and a political commitment to a unicity style of municipal government (which favours extending corporate boundaries) likely contribute to Calgary's dispersed settlement pattern. As well, easy access to the Rocky Mountains "adds a profound, long-established and often articulated appreciation of the outdoors to the community's collective psyche" (Calgary Parks & Recreation 1994, 19). With an abundant supply of fresh air and water, and exceptional local and regional parks and recreation resources, it is perhaps not surprising that Calgary ranked number one on the Quality of Life Index in a 1991 survey of Canadian communities (see page 90 of the 1991 Urban Canada Study, conducted by Angus Reid Group). As noted in the *Calgary Parks & Recreation 1994-98 Business Plan*:

All of these 'quality of life' factors place extremely high expectations on the provision of goods and services in general in our community. The Calgary public is used to having the newest and best available products and at the same time looks for old-fashioned good value and experiences. These are particularly onerous demands in times of fiscal restraint and increasing competition for parks and recreation resources (Ibid.).

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<sup>6</sup> The information in this section is drawn from a number of sources, including the author's own personal knowledge as a long-time resident of Calgary. The main sources consulted are *The City of Calgary 1996 Municipal Handbook*, published by the City of Calgary's Public Information Department and the *Calgary Parks & Recreation 1994-96 Business Plan*. Much of the text in the Business Plan was originally researched and written and/or edited by the author in her capacity as the Department's Senior Planner. Sources consulted during the preparation of the Business Plan include: numerous City of Calgary publications and archival documents; Morris Barraclough's (1975) *From Prairie to Park: Green Spaces in Calgary*; Max Foran's (1978) *Calgary: An Illustrated History*; and the *Urban Canada Report* (1991), prepared by Angus Reid Group. Specific facts are credited to the appropriate source.

In 1995 the \$75 million tax-supported operating budget for providing parks and recreation services to the citizens of Calgary represented close to 12% of the City's overall operating budget. Approximately one-third of this was allocated to parks operations and management. Of the parks allocation, about 90% was targeted for parks maintenance. This in turn was directed at the upkeep of some 6700 hectares (or over 16,000 acres) of community park land, including natural areas and undevelopable environmental reserve, but excluding athletic parks, golf courses and cemeteries, which are part of the Facilities allocation.<sup>7</sup> It also does not include the popular Fish Creek Park (Figure 4) in the southern part of Calgary. Although situated within the city limits, Fish Creek Park is provincially owned and operated (Fish Creek was initially developed through Phase One of the Urban Parks Program, funded through Alberta Heritage Savings Trust Fund, and directed at providing Alberta's medium-sized and two large urban centres – Calgary and Edmonton – with assistance to enhance parks in their urban areas). The budgeted amount for 1995 capital

**Figure 4**



**Fish Creek Park  
(Photo courtesy of Calgary Parks & Recreation )**

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<sup>7</sup> This information is extrapolated from page 2 of The City of Calgary 1995 Budget Summary pamphlet, and pages 8 and 15 of the *Calgary Parks & Recreation 1995 Annual Report*.

improvement to parks, pathways and urban parks development under Phase Two of the Urban Parks Program totalled an additional \$20 million, of which just over half was actually expended as capital budgeting uses a five-year envelope.<sup>8</sup>

Calgary Parks & Recreation has a long history of consulting with the public in establishing priorities for funding and services. Records dating back to the mid-1940s show that through a public survey on recreation, Calgarians expressed an interest in connecting and following the Bow and Elbow rivers with pathways. This provided the genesis of the idea for the extensive riverside pathway and off-street bikeway system in place today. Fifty years later Calgary's 300 kilometres of combined walking-jogging-cycling and in-line skating pathway is one of its most defining features – well-used and appreciated by residents and visitors alike. The generosity of the Devonian Foundation (administered by a local family that benefited from oil and gas resources of the region) enabled the Department to seriously pursue this initiative over the years, confident that it was a priority with the citizens of Calgary. Through public studies, included as part of in depth policy planning processes undertaken in 1975, 1980, 1986, and 1991, the Department has been able to record and monitor public opinion related to “long-standing concerns, emerging trends, and changing expectations of the Calgary public in terms of the provision of parks and recreation services” (Calgary Parks & Recreation 1994, 10).

Over the years, differences in opinion concerning appropriate uses for natural area park land have been of particular concern in Calgary, where a number of urban natural areas have become the target for more and different kinds of development. These areas clearly have a special meaning for people. For some citizens particular natural areas represent nature in the city and are seen to have a rightful, if not privileged place in the landscape of Calgary. To others they represent a latent opportunity to enhance and maximize the landscape's economic potential (Dye 1986). One example is Calgary's river valleys.

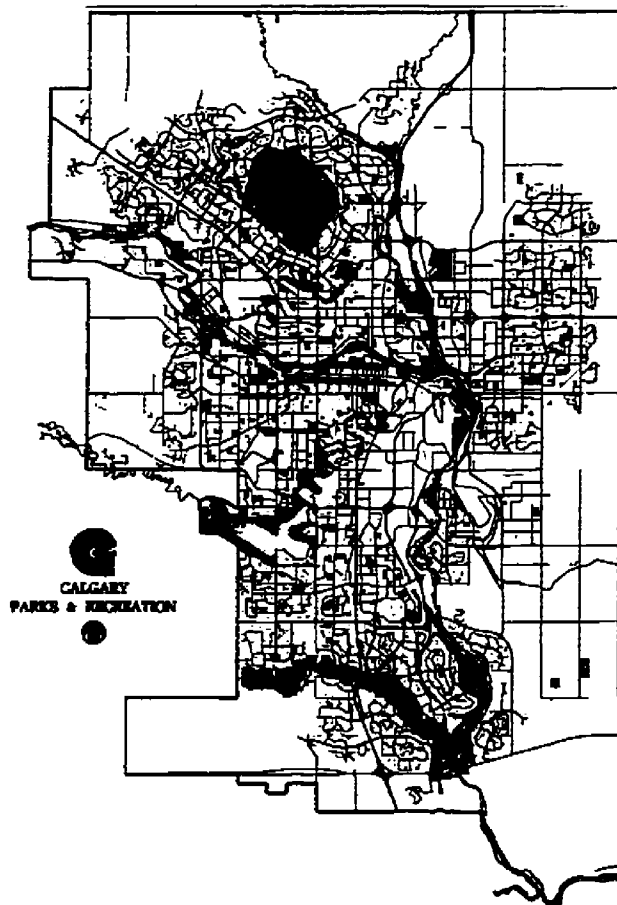
The river valley areas of Calgary are a prominent feature in the city's landscape that are the foundation for the city's image. In the downtown area, the features along the riverfront form the social, rather than geographic, centre of the city. Property directly adjacent to the water's edge,

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<sup>8</sup> Figures are from page 9 of the *Calgary Parks and Recreation 1995 Annual Report*, Item Two - Capital Program Summary.

much of it publicly owned, has been subject to a great deal of land speculation. Over the past 15 years the river valley lands in general have been the focus of two major policy plans: the *Calgary River Valleys Plan* (1984), primarily a land-use document, and the *Urban Park Master Plan* (1994), a 20-year plan for recreational development in the river valley areas. The latter plan included in its preparation a comprehensive biophysical assessment, organized by ecosites, of the land within the study area. As well, in 1991, a special advisory committee was struck by Calgary City Council specifically to address concerns related to the use and development of the river valley areas. Even with such well thought out plans and policies, and diligent monitoring by community groups, in highly competitive land use circumstances it remains a challenge to gain support for park uses in these areas (see Figure 5). This is in spite of the possibility that park land – through helping to sustain a healthy community – provides an equal if not superior benefit to other kinds of development options.

**Figure 5**



**Calgary's river valleys and natural areas  
(Prepared for the author by Calgary Parks & Recreation)**



Pulse on Parks questionnaire  
(Courtesy of Calgary Parks & Recreation)



Dear Resident,

As part of Phase II of the Urban Parks Program, the City of Calgary is eligible for up to \$15 million in grant funds over the next 8 years from the Alberta Government. These funds are for the development of an Urban Parks Calgary City Council directed park system and establish additional links to existing park systems and enhance the river valley.

As the scope of this river valley project exceeds \$15 million, your participation is needed to help set priorities for spending the grant. Every home in Calgary will receive one survey. In households with more than one person, please have one adult fill out the entire questionnaire.

Your participation is appreciated. The results will be made available through the public libraries some time in January 1992.

Sincerely,  
Len Rosen  
Director  
Calgary Parks & Recreation

1) creates a continuous park system along the primary river valleys of Calgary;  
2) provides for year-round recreational activities; 3) provides access for all Calgarians; and 4) protects, conserves, or rehabilitates the river valley environment.

The Heart of the Valley Urban Parks Project goal is to develop a river valley park system that:

1) creates a continuous park system along the primary river valleys of Calgary;  
2) provides for year-round recreational activities; 3) provides access for all Calgarians; and 4) protects, conserves, or rehabilitates the river valley environment.

Proposed Park Boundaries  
Boundaries for the Heart of the Valley Urban Parks Project are:

1) all lands within the setback area of the Bow and Elbow Rivers, Nose Creek, and West Nose Creek; 2) pathways along the Western Irrigation District Canal; and 3) all existing and proposed park lands within city limits along these waterways.

COAL OF THE URBAN PARKS PROJECT

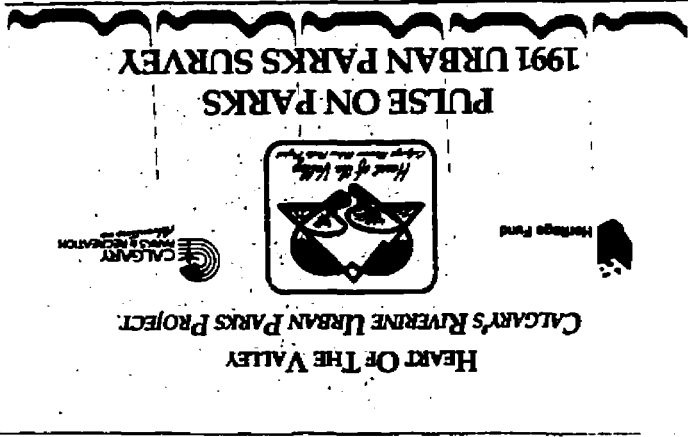


Figure 6

To acknowledge a continued and intense interest in Calgary's river valleys and natural areas and to take advantage of eligibility for the grants that were being made available by the provincial government through Phase Two of the Urban Parks Program, Calgary's City Council approved "The Heart of the Valley: Calgary's Rivertine Urban Parks Project" Concept Plan in the summer of 1991. The Concept Plan established the principles for the preparation of the *Urban Park Master Plan*. After approval of the Concept Plan, direction was given to design and conduct an extensive public participation process in preparing a comprehensive plan for enhancing Calgary's river valley park system. The process was to include a survey of all Calgary households. In late 1991 the Pulse on Parks Urban Parks Survey was distributed to Calgarians (see Figure 6).

The goal of the public opinion survey was “to provide an opportunity for Calgarians to participate in the identification of issues related to the Urban Parks Project,” (Calgary Parks & Recreation 1991, 1). The specific objectives were: enhancing Calgarians’ awareness of the river valley concept plan; providing an opportunity for public participation in the master planning process; measuring the park use patterns of Calgarians; and providing a chance for Calgarians to identify parks and open space preferences (Ibid.).<sup>9</sup>

In one of the questions in the Pulse on Parks survey respondents were asked to identify the level of appropriateness they would place on certain strategies for the care and protection of open space. Respondents were provided with a list of strategies to rate and also given the opportunity to add others not listed. As the Summary Report notes:

Overall, respondents to the Pulse on Parks Survey identified the acquisition of river valley lands, and the acquisition of environmentally sensitive lands as the care and protection strategies which were most appropriate for inclusion in the master planning process for the Heart of the Valley-Urban Parks Project. These issues were followed by: develop open space and control human use, increase public education programmes, preserve open space for wildlife, (and) preserve open space and prohibit human use. The issue of ‘preserve open space and prohibit human use’ was the least supported issue in the Pulse on Parks Survey. Less than 23% of respondents supported this open space strategy as either ‘very appropriate’ or ‘appropriate’.

This concern about restricted access is clearly presented by the levels of support given to the issues of nature trails [in another part of the questionnaire] and ‘preserving open space and prohibiting human use’. The high level of support for the inclusion of the issue of nature trails, [sic] was the second most strongly supported issue. Nature trails must involve interaction with, not exclusion from natural areas. However ‘preserve open space and prohibit human use’ was the least supported issue in the Pulse on Parks Survey [as noted above]. Clearly, respondents expect access to, and enjoyment of the river valley system. (Excerpt from *Pulse on Parks 1991 Urban Parks Survey Summary Report*, Calgary Parks & Recreation 1991, 5-6.)

On closer examination, the results of the “preserve open space and prohibit human use” question show that about half of the people who answered the question found the strategy to limit human use to be appropriate to some degree, while for the other half the option was not acceptable at all.

The results from this study have been used over the past years in the development of numerous

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<sup>9</sup> Modified excerpt from Technical Report and Summary of Responses, page 2.

policy plans.<sup>10</sup> These results, along with the extensive public involvement in the development of a new transportation plan for Calgary (GoPlan) and increased public interest in the concept of sustainable development, also contributed to the policy recommendations contained in the 1995 Sustainable Suburbs Study designed to “provide the basis for planning new suburban communities in Calgary.”<sup>11</sup> The Sustainable Suburbs report presented two important new guidelines for planning local open space as follows. These are:

**Policy OS.1:** Existing natural systems (including significant environmentally sensitive areas) must be integrated into new communities and will form part of a comprehensive and contiguous regional open space system (City of Calgary, Planning & Building Department 1995, 33).

**Policy OS.2:** Built open space (including joint use sites) must be located, sized and configured to create places that are functional, safe, flexible and form a linked open space system (Ibid. 35).

Taken to their full intent, these policies have significant implications for the amount, type and location of local open spaces. Given that the average person likely assumes that park land is a naturally occurring phenomena, and is not necessarily created to reflect any specific ideological goals (Cranz 1982), the public may not be completely aware of any ramifications, intended or otherwise, on their open space supply. Research has indicated that the public generally supports enhancing natural area park land in Calgary. Political will has in principle endorsed preserving environmentally significant areas and professional practice is known to favour an integrated systems approach to planning for natural area park land. But there is very little information concerning the public’s opinion with respect to changing park planning practice to potentially provide a different shape and allocation of all local open space, including natural area park land.

There is, as well, a dearth of information related to the expectation that people have for the provision of convenient opportunities to experience urban nature. There are local studies that look at park use patterns in general, or ask about the quality of parks and recreation services, but none specifically consider the meaningfulness that having a chance to experience nature in the city has for people or what this means for providing such opportunities at a local level.

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<sup>10</sup> Notably the *Natural Area Management Plan*, approved by Council in 1994. The results were also used to inform planning for Calgary Parks & Recreation’s first business plan, approved by Council in July 1995.

<sup>11</sup> This quote is taken from the approved report cover letter dated 1995 September 14.

The escalating competition for river valley land, seeming polarization of public opinion on the human use of natural areas, and pending innovations to suburban development combine to precipitate a need for and an interest in studying feelings towards the urban nature experience in general and the provision of natural area park land in particular. The next chapter outlines these research interests in more detail.

## **CHAPTER 2**

### **Dimensions of Park Planning**

#### **2.1 Overview**

This chapter provides background and definition to the research problem. It discusses concerns of interest to park planning, including consideration of the various pressures on urban park land. The discussion also looks at the influence that culture has on creating park images and meaning. In addition, it considers the need for parks as an element in the urban environment.

#### **2.2 The Pressure on Urban Parks**

##### **2.2.1 Questioning the Value of Urban Park Land**

Early in the history of urban parks, providing the public with the ongoing opportunity to experience the social, psychological and environmental benefits of nearby nature was thought to be in the best interests of a community. Building this type of leisure opportunity into the civic infrastructure was seen as one way to bring the positive influences of the country into urban areas (Schuyler 1986). Over time the assumptions concerning the causal relationship between a good supply of public open space and improvements to the human condition have been called into question.

Land value trends, especially in intensely developed urban areas, have precipitated an instability in land use for undeveloped park land. This stems from the fact that while parks usually do not generate revenue, they do create operational liabilities. Part of the difficulty is that monetary worth of parks has not been firmly established (More, Stevens and Allen 1988). But there is a generalized belief that park use has relatively less value than other types of developable uses. Consequently park land is frequently seen as representing a lost development opportunity and/or potential.

There are at least two factors that have made a significant contribution to this tendency to not value park land as a legitimate investment in its own right. To begin with, as Galen Cranz notes in her book *The Politics of Parks Design* (1982), historically urban parks have been created for purposes ranging from fulfilling specific urban design functions to helping to realize particular socio-political goals. That is, a park has been viewed in essentially utilitarian terms as being a means to some

end, usually aimed at achieving some sort of physical or social order. Others have suggested that along with the now traditional suburban scheme of development, the large, meticulously designed and constructed urban parks built early in North America were primarily aimed at the social reform of urban areas (Schuyler 1986). They provided an essential component in the attempt to reshape city form in the likeness of the surrounding countryside (Ibid.). These functions, while not directly concerned with addressing an experience with nature *per se*, did provide an urban land base from which to articulate a certain relationship with the natural environment.

One of the functions of parks in the past has been to represent the current understanding of nature (Cranz 1982). The stylistic and grandiose pastoral Victorian “pleasure grounds” (Ibid. 3) provided city dwellers with a setting in which to view and appreciate nature (or more accurately to appreciate how civil society was capable of capturing, taming and subduing/controlling nature). These parks were designed on anti-urban ideals and views of nature which held it was more healthy and natural for people to live in the country so parks, modelled on the countryside, would provide a much needed antidote to urban ills (Cranz 1982). As well, the fresh-air philosophy of the “reform era” of the early 1900s of parks design in the United States dictated that formal parks be built in order to provide places for organized activity to take place (aimed at working class people and families) and in this way parks were seen to make a positive contribution to a community’s social health and welfare, goals which were of particular importance to the urban playground movement (Ibid. 61).

The tendency to construct parks left marginal wild areas intact. In some cities these residual wild lands have formed the basis of present day natural open space systems.<sup>1</sup> But the intent at the time was not to create an outlet for interaction with the natural environment. It was rather to present a certain image of the natural world. The desirable image was in keeping with a then-contemporary, and for the most part still prevailing, understanding of nature as a balance to the ill effects of city living. Because parks were seen as contrived constructions aimed at providing a facsimile experience, the location of park land was highly negotiable. In the economics of modern urban development, it makes the most fiscal sense to situate parks on land deemed less suitable for other more economically productive uses. The view is that parks are best built on land left over after planning for all other uses. By association park land has been valued less. But present day sensibilities are changing. Significant and residual natural areas and wild lands are recognized for

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<sup>1</sup> Manilla (1996) observed this trend in Finland as well.

the value they have as an opportunity to enjoy contact with nature and as reminders of the place that the city has in nature (Carr, Francis, Rivlin, and Stone 1992).<sup>2</sup>

The second factor that contributes to perpetuating the down-valuing of undeveloped park land is that park planning practice has tended to reinforce this historical perspective of viewing park land as means to an end. A professional orientation has been established towards planning urban parks that standardizes a stereotypic form and function that is often aimed at enhancing the saleability of urban residential areas. Such an approach emphasizes the amenity characteristic of open space at the expense of establishing other essential functions and meanings for parks. This way of looking at park land can lead to a detached perspective in which the experiential aspect of the park function is seen to be fulfillable in any number of ways in any number of locations. For instance, a park could be a design feature at the entrance to a suburban community, an outdoor recreation play area, or a wildlife preserve. It might also be a buffer between a major roadway and residential development, or perhaps a reserve for some future municipal service needs. It might be that a park acts in more than one of these capacities to some degree, at the same time, and at different times over its life.

### **2.2.2 Identifying the Function of Urban Parks**

Traditionally urban park planning has been based on the understanding that open space has three primary functions to fulfil in city life. In addition to serving human psychological needs such as providing opportunities for socializing and for interaction with nature, park land has a fundamental role in “shaping urban form . . . and [in] conserving biophysical resources” (Wilkinson 1983, 15-26). These functions are not necessarily mutually exclusive (Wright, Braithwaite, William and Forster 1976). But they do result in different planning priorities in different circumstances. For example, in Calgary current park planing policy makes it clear that when land taken as public reserve is also used in storm water management the recreation function of the site is to be of primary concern in establishing matters such as inundation guidelines and so on (Calgary Parks & Recreation 1994). Land functioning as park, but not formally comprising the reserve dedication,

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<sup>2</sup> At the local level, this view has been acknowledged for some time now by interest in the work of individuals such as Dr. Mary Ellen Tyler, who spoke on urban ecology when giving a presentation to the Alberta Landscape Architect Association meeting in Calgary (October 18, 1990 at the Alberta Vocational Centre). The theme of Dr. Tyler’s presentation was the need to address the role that the city has in nature when looking to improve human habitat.

would not likely be subject to such restrictions.

There are those in the field who take a more holistic approach and view the functional distinction in open space planning as unnecessary and perhaps even counter productive to good city planning (see Hough 1984 and 1995, and Whiston Spirm 1981). An example is the work of Michael Hough which is concerned with the “alienation of urban society from environmental values and cultural connections with the land” (Hough 1984, 2). His ideas and design solutions have been influential in the park “naturalization” movement gaining popularity in municipalities across Canada. They have also been important in opening the debate on the appropriate forms that parks should take (Hough 1994), particularly in relation to the presence of nature in the city. Hough notes that there are not many studies about urban attitudes towards nature (Hough 1984). In this regard the work in this study can contribute to understanding public ideas on the appropriate form and function of urban natural area park land.

Park planners are beginning to recognize that although theoretically park sites and functions may be interchangeable and perhaps even dispensable over time, in reality people vest meaning in even the most meagre and insignificant park areas. Changes to location, design or use intent are now more frequently being considered less in terms of an exercise in land forming logistics and more in relation to ecological, social and political considerations. This is indicative of a basic reorientation taking place in the framework for urban open space planning and management which is moving from a bureaucratic outlook to one based on a human ecology approach (Platt 1994a). The rethinking of perspectives by park planners contributes to a revaluing of urban open space in both social and economic terms. Not only is a natural environment more philosophically and politically pleasing, but the perception (not necessarily correct) is that such lands are less costly or easier to maintain. As green open spaces in the city – especially those that are naturally occurring – gain higher currency with urban residents, they subsequently command greater attention from, and are valued differently by, urban developers.

### **2.2.3 Assessing the Benefit of Urban Parks**

Intuition concerning the importance to community well-being of ensuring generous access to public open space may be strong. But intangible benefits such as this are among the most difficult to quantify (Bentkover, Covell and Mumpower 1986; McPherson 1992). Although both public



pressure and professional practice are such that the outlook is gradually changing, in general and as a matter of course, park use on what some view as essentially undeveloped land is still regularly considered secondary to a host of other municipal service demands or urban design functions that may be more readily measurable in terms of public benefit. In Calgary recent evidence of this tendency includes the disposal of inner city park reserve to situate a fire station; the re-location of an established community soccer field to accommodate a storm water retention pond; and the re-plotting of a downtown community to remove park land so as to enhance the residential development potential of the riverbank.

Interest in the documentation of benefits generated from the provision of public parks and recreation opportunities is on the increase (Stevens and More 1988). In the face of significant reductions in funding from senior levels of governments and other traditional sources, municipal governments are under more than the usual pressure to rationalize all of their public services. In studies such as a nationwide poll in the United States, which employed the standard survey-based, social sciences approach to describing perceived benefits (Cox 1986), the majority of respondents reported a perceived benefit from public recreation and parks services. More interestingly, the strongest level of perceived benefits was seen to be at the community rather than personal level (Godbey, Graffe and James 1993). There is another interesting aspect to the study's findings. The authors had previously conducted a study with Canadian parks and recreation professionals on the benefits of providing public parks and recreation services. In comparison to the professionals who identified "protection of the natural environment" as the second highest benefit ("services to the poor" was identified as the number one benefit), the public mentioned the environmental aspect of benefits far less often (Ibid. 80). This low level of public attention towards environmental benefits was also found to be the case in the survey conducted for this study (see Parts III and IV of this dissertation).

In Calgary, the award-winning<sup>3</sup> *Natural Area Management Plan* presents a "strategy for the protection, enhancement, and public enjoyment of City-owned natural environments" (Calgary Parks & Recreation 1994a, 7). It was approved by City Council in 1994 and notes a variety of

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<sup>3</sup> The Canadian Association of Municipal Administrators 1996 Environmental Award was presented to the *Natural Area Management Plan*, Calgary Parks & Recreation "in recognition of an outstanding contribution to the preservation of the environment in the context of Canadian Municipal Administration" (plaque inscription on display in Parks Division office, Calgary Parks & Recreation, 5th Floor, 205-8th Avenue S.E., Calgary).

generic benefits of natural environments in urban areas. The landscape ecology approach of the Plan, while recognizing the benefits and importance of public access to these areas, is not particularly concerned with the “eco-experience” perspective which is based on people having abundant access to urban nature (Balmer 1991, 29). As such it does not remark on the experience aspect of public use and benefit. To be able to appropriately accommodate opportunities for people to benefit from contact with the urban natural environment requires an understanding of the meaning that urban nature has for people.<sup>4</sup> Given that meaning is at least in part constructed from experience within a particular cultural context (Bruner 1990), and that previous experience tends to influence preferences related to perception (Kaplan and Kaplan 1989), it would be instructive to consider how social context and personal experience relate to inclinations regarding the urban natural areas.

## **2.3 The Social Construction of Park Images and Meaning**

### **2.3.1 Negotiating Relationships with the Urban Natural Environment**

It is possible to take for granted what nature in the city means to people without realizing the complex foundation of cultural influences and personal history involved in the making and interpretation of meaning. Nature means trees, fresh air, wild creatures and so on. But these are characteristics of nature rather than meanings and seldom is meaningfulness found solely in the physical attributes of a setting (Williams, Patterson and Roggenbuck 1992). Meanings arise instead from context, possibility, implication, and a sense of identity that goes beyond basic physical features (Pennartz and Elsinga 1990).

The meaning we vest in nature shapes our relationship with the natural environment. This is done through authentication of a particular understanding of the dynamics of social and physical relations between people and things. Cultural constraints and imperatives are fundamental to the construction and manipulation of all historical and contemporary conditions of life (Rapoport 1982). Whatever cultural dynamics are most influential at any given time in any given place are ultimately expressed through the ideas that take hold in literature, politics, scientific research, etc. (Larsen 1992). They are also evident in the meaning and form of the landscape that takes shape (Rapoport 1982). In this way it is culture that provides the framework for negotiating

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<sup>4</sup> Lee points out that benefits-based planning for parks and recreation services requires that once certain benefits are identified, efforts must be made to provide opportunities that maximize the benefit (Lee 1995).

contemporary human/environment relationships. As a consequence, there are vast differences in the way different societies have been oriented towards the natural environment (Altman and Chemers 1980). For example, what European explorers “saw” as untouched wild land in North America, indigenous peoples considered as “tame, domesticated, [land] not dangerous and under control” (Franks 1995, 49). With eyes accustomed to seeing particular patterns of settlement and ways of relating to the land, the recently arrived people failed to recognize local signs of habitation and social organization.

### **2.3.2 Producing Landscape Images**

While books, movies and magazines document changes in social mores and opinions, it is the landscape that chronicles changing understanding of and relationships with the natural environment.<sup>5</sup> The word landscape has a meaning in lay language that is closely associated with scenery (Olwig 1993) or with the framing of an aesthetically alluring image of the natural environment. Largely through the efforts of J.B. Jackson<sup>6</sup> and others who promoted the idea of landscape as the physical consequence of social and political action, landscape has come to be understood as a product of culture (Jackson 1979; Meinig 1979a; Cosgrove 1984; and Daniels and Cosgrove 1988).

Viewed in terms of the convergence of history and culture, the physical form and symbolic meaning of landscape changes as human “engagement with the land changes” (Bender 1993a, 9; also Cosgrove 1984; Conzen 1990a; Burgess 1996). Differences in the actual appearance of the landscape, although somewhat constrained by the existing lay of the land, for the most part are indicative of a particular physical and ideological ordering of human/environment engagement in any given community (Sadler and Carlson 1978b; Tuan 1979; Marx 1991; Greider and Garkovich 1994; and Jones 1994).

The proliferation of a low density, widely dispersed pattern of suburban development emerging in North American cities in the last fifty years illustrates this point. Contemporary society orders its reality on private property, fossil fuels and traditional gender roles. Cultural imperatives currently

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<sup>5</sup> This applies to the built environment as well but the concern here is with the natural environment.

<sup>6</sup> See Meinig (1979b) for a commentary on and explanation of the influence of J.B. Jackson on landscape theory and practice.

place high value on privacy, personal space and individual autonomy. There is at least the appearance of an abundance of land. It is perhaps not surprising that residential development has evolved in the shape that it has. The conventional suburban style of settlement also reflects a certain image of the natural environment.<sup>7</sup> Implied in the wide open style of development is the romantic notion of freedom of the wilds, packaged in the safer, more easily contained imagery of the pastoral countryside (see Figure 7).

Figure 7



**Commodification of Nature**  
(Abridged from the *Calgary Herald* 8 June 1996)

An idyllic and romanticized idea of nature figures quite prominently in local newspaper advertisements for new housing subdivisions in the suburbs.<sup>8</sup> It is not uncommon to see in these hand-illustrated artist's impressions, or coloured photographs, a picturesque view of the

<sup>7</sup> It should be noted, however, that residential styles of all kinds ultimately influence how the natural environment is shaped (Laituri and Kirby 1994).

<sup>8</sup> Thayer (1994) worries that the landscape is losing its ability to mediate between nature and human technological ingenuity, however, it is suggested that in this kind of evocation, landscape imagery serves as a perfect mediation function between the ideal of nature and the ideal of a planned community.

countryside at the city's edge, or a family walking in the wide open spaces, with a grove of trees in the middle distant, and of course, no one else in sight. The message is freedom, fresh air, and few neighbours. These renderings represent and reinforce a mythical ideal of past, present, and future experience with the land and thereby serve to guide experiences and consumption (Relph 1976). It is in this regard that urban nature becomes a commodity subject to all the pressures and whims of the market (Dickens 1994). Rather than being a naturally occurring phenomena, nature in the city becomes a socially constructed cultural artifact charged with contributing to the contemporary view of the good life. This seems to be the case with all objects made or modified by human process.

### **2.3.3 Creating Meaning in Urban Nature**

Some suggest that nature always has been shaped by "its location in a cultural project" (Bennett and Chaloupka 1993a, xi, remarking on Haraway). While everyone can no doubt bring to mind a certain image of nature, few will realize the extent to which that image or one's relationship with the natural environment is conditioned by culture (Crandell 1993; Lease 1995). The likelihood that everyone is almost certain to conjure up a different notion of nature can be attributed in part to the elasticity of social understanding of what is and is not nature<sup>9</sup> and in part to individual interpretation of cultural conditioning. A contemporary example of this is provided in the study by Duncan & Duncan (1984), which describes how a community in Vancouver, British Columbia was successful in ensuring that a particular form and image of nature was preserved as redevelopment of the neighbourhood occurred. The authors observe that the effect was achieved through political action that was convincing in terms of its suggestion that a certain kind of landscape style (i.e. the one suiting the current residents' tastes) was more conducive to a community's livability than other kinds might be.

It has been suggested that when it comes to individual "reading" of socially defined "texts," a person has three options (Burgess 1990): the conventional reading is accepted; some modification is negotiated in the meaning; or the conventional meaning is rejected. Children and newcomers to a culture are socialized to view urban nature in whatever may be the prevailing convention of time or place (Cobb 1977; Larsen 1992; Livingston 1994). Maturing individuals create different meanings

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<sup>9</sup> The post-modern critique contests this is/is not conceptualization of a phenomena. It sees this approach as being reductionist and implores that one realize instead that it is not possible to determine with certainty what nature is other than essentially a part of everything (Phelan 1993).

from relationships with the natural environment as perception and experience are weighed against conventional understanding. Different kinds and intensities of engagement (Fiske and Kinder 1981) with nature will precipitate different understandings. Even though there is some give and take in the individual understanding of ideas of nature, cultural conditions and conditioning still form the framework and set the limits of appropriate and acceptable interpretations.<sup>10</sup>

Take, for example, our culture's agreed upon understanding of the function and meaning of a cemetery. Although there is likely no law preventing it, playing football or frisbee in a cemetery, especially in interment areas, is not at this point in time socially acceptable. Even though a group of people may interpret the space as being appropriate for that kind of engagement, persons doing so would be considered disrespectful. There are secondary negotiated readings of the meaning of cemeteries that are currently tolerated in our culture. These include using a cemetery as an artistic and historical resource. The practice of taking graphite rubbings of unusual headstones, or of exploring grave markers when tracing a family or place history, are examples of such acceptable uses. In the past taking a leisurely stroll or going for a picnic<sup>11</sup> was an acceptable behaviour in a cemetery (Wilkinson 1988); today using a cemetery as a peaceful place to sit and think, or read is also acceptable.

Even minor alterations in popular custom could eventually precipitate a different understanding in the meaning of space. For example, Douglas Coupland (1994) describes an activity he took part in as teenager, which he suggests was fashionable with teenagers in North America at the time. Termed "Harolding," after the film *Harold and Maude*, it involved "hanging around" cemeteries and witnessing funerals, in the spirit of celebrating one's own youth-inspired sense of immortality. As an adult Coupland came to appreciate cemeteries as "havens of respite amid urban chaos" (Coupland 1994, 20). Interestingly enough these are precisely the terms by which many people describe the effects of urban nature. If others come to the same conclusion, there is the possibility of a new definition of the role of cemeteries in a community's open space system. Collective

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<sup>10</sup> Relph suggests however that the less mediated an experience is, especially as it relates to experiencing a certain place, the more authentic it is in that it is not unduly shaped by the fashions of the day (Relph 1976).

<sup>11</sup> The author recollects that in the early 1960s it was common practice at the YWCA day camp in Winnipeg to take young campers to a nearby cemetery for a picnic. The counsellors cautioned about not stepping or sitting on any graves and remarked that we should generally conduct ourselves respectfully.

understanding of the function of cemetery space could conceivably be modified to accommodate changes in real life convention or necessity (Agnew, Mercer, and Sopher 1984).

This is not to suggest that if enough people engage in a particular interpretation of something that social understanding will necessarily change. For individual activity to influence collective understanding, the initial interpretation must be within the realm of social acceptability, however it is defined at the time. To push the envelope of conventional meaning and influence collective understanding, individual interpretations of experience must be in keeping with a broader context of contemporary cultural mores.

## **2.4 The Need for Urban Parks**

Perhaps because its purpose has never been as obvious or as firmly established as that of a cemetery, urban natural area park land does not presently enjoy the same degree of accord in terms of individual interpretation of collective meaning. As an element in a city's physical and social landscape, a natural area park reflects in its form and function the historical record of different engagements with the land. The very idea of park is, in fact, indicative of a certain approach to organizing the natural environment and settlement pattern. Containing a piece of land as park implies the existence of surrounding land that is not park and requires a system of defining boundaries. Historically in North America it is rationalization of land ownership<sup>12</sup> and urbanization of human settlement that both create the need for and allow the creation of parks.

### **2.4.1 Legal Rationalization of Urban Parks**

A system of organizing the environment that allows for the exclusive rights to land in the form of private property requires a connecting system of land in public ownership. Streets, landfill sites, cemeteries, water storage and treatment sites, and so on are needed to enable the co-ordination of public life. As the history of parks in North America shows, concerned citizens in fledgling urban areas early on felt that park land should be added to this list of public services deemed essential for a healthy community.

Still, in Calgary for the first seventy years of its incorporation, public park land was acquired on an

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<sup>12</sup> Salisbury (1993) notes that since at least mediaeval times the primary person/natural environment relationship has been one of ownership. This relationship has been increasingly formalized through various land survey systems (Shepard 1991) and subdivision regulations (Platt 1994a).

opportunity basis<sup>13</sup> either through land donated by benevolent citizens or through the public service efforts of influential citizens (Barracough 1975). A few early parks were provided by land grants from the Federal Government and land was purchased outright for the first public cemetery (Ibid.).<sup>14</sup> With the advent of highly rationalized urban planning and development, provincial legislation in Alberta was enacted which enabled a municipal approving authority to require that up to 10% of land in new subdivisions be deeded to public ownership for park and education purposes. Since that time (approximately the mid-1950s) the provision of park land is no longer haphazard and is recognized as a collective responsibility. This supply of specially dedicated park land joins the patchwork of other kinds of legally defined park space in shaping Calgary's public park system.

The idea of a park is not necessarily either constrained or constituted by legal survey. The notion that a park is first and foremost a social construct became exceedingly obvious in a recent project of massive undertaking in which a Geographic Information System (GIS) data base for monitoring Calgary's park land was under development. The fundamental issue was the difference between a real-life and an administrative understanding of a park. A community's understanding of a park is based on the actual physical configuration and appearance of the land – taken in combination with individual assessments of opportunity for both mental and physical engagement with it. But the official administrative notion of a park is as a parcel type based on “imaginary” legal property lines and regulated by land use designations.

What results is a situation in which land that looks and functions like a park does not show up in GIS reports that are based on applications which select sites by conventional legal parcel area definition. For example, in older inner city communities in Calgary it is often the case that a street had been legally surveyed but for one reason or another never actually constructed. More often than not, these road rights-of-way have become incorporated into adjacent parks areas. On-site the resulting park may be configured as a lovely sloping meadow, while legal base maps show road

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<sup>13</sup> Barracough (1975) suggests that there was a decision in 1911 to require that 5% of all future subdivisions be deeded to the city for parks purposes, however, no documentation can be located to confirm this assertion.

<sup>14</sup> The town originally received a land grant for a cemetery (in 1884) on what turned out to be unsuitable land and a new site was purchased. The original site laid derelict until converted to a public golf course in 1914 (Barracough 1975).



plans and residual parcels. The potential for errors and misunderstandings are obvious. In Calgary's established communities a park may also have taken shape in land zoned for another use, most often residential. Again if only land use designation is used in a GIS application to identify park land in the area, this real-life park will appear as 10 or 12 subdivided residential lots, with the actual use totally masked. The potential for serious misjudgment is evident in this case as well.

As these examples illustrate, it soon became apparent to those working on the GIS development that in order to capture all land thought to be park, an unwieldy number of data layers would need to be "turned on."<sup>15</sup> Short of resurveying every park site in the city not constituted by a single parcel,<sup>16</sup> the option was to ensure that all park sites were field-checked and modified, in person and by hand, in the data base as required. Under the present system of organizing the environment in Calgary it has not been possible nor advisable to try to virtually define real-life without a human assessment of social reality.

**Figure 8**  
**Nose Hill Park**  
**rationalized boundaries**



**(From an overhead transparency prepared in 1992 by Calgary Parks & Recreation)**

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<sup>15</sup> This expression refers to selecting different electronic information files, such as utility locations, street names, legal base lines and so on, from a directory or home source, and activating them in any given query. Each layer of information can then individually be turned on or off. The more layers of information required to identify an item, the more layers that need to be simultaneously activated.

<sup>16</sup> This was done for Nose Hill (see Figure 8), one of Calgary's largest natural area parks. Concern was expressed by surrounding community groups and individuals who were informed enough to know the implications of having an actual and a legal configuration for the park which did not coincide.

The particulars of the Calgary situation demonstrate that the rationalization of land ownership creates a need for parks in order to ensure that such land use has a place among the other kinds of spaces required for public life and private enterprise. Rationalization of land ownership also allows for the creation of parks by recognizing and regulating the park functions as a legitimate and discrete use for special parcels of land within a community.

#### **2.4.2 Psychological Rationalization of Urban Parks**

In terms of the urbanization of human settlement, there are various theories as to how it is that urbanization precipitates a need for representation of nature within the physical structure of urban life. Gold (1988) suggests that human beings have a biological and psychological need for contact with the natural environment that urbanization can threaten if parks are not provided.<sup>17</sup> Jackson (1991) identifies three social forces at work in urban areas that contributed to the emergence of public parks. He suggests that parks have been created, in part, in response to a need or desire for opportunities for social classes to mix, a desire for better living conditions, and a belief that parks can contribute to the enhancement of adjacent property values.

The example of Central Park in New York City is used by Berman & Weil (1992) to illustrate the idea of the democratic spirit inherent in public parks that Jackson talks about. These authors also found that Central Park was an attempt to recreate the feelings generated by wilderness in terms of transcending “worldly values and (becoming) emancipated from the everyday routines of the city” (Ibid. 176). In researching and documenting the history of Lynn Woods, a local natural area park in Lynn, Massachusetts, Jones (1994) too found that social reform aimed at improving urban crowding and pollution was based on providing parks that attempted to recreate the idea of wilderness in the city. Implicit in this domesticated version of the wilderness is the ability of humans to control nature for the good of humanity. As a consequence, the 19th century parks modelled on the likes of Central Park provided both a visual metaphor and a physical means for evoking civic order.

Nature used in this manner serves a chiefly decorative function (Platt 1994a), appealing to and reflecting human aesthetic sensibilities. The containment and display of natural environment in the

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<sup>17</sup> Work in other countries tends to support this notion. A recent study into the history of parks in Finland concluded that using parks is a “sign of urban culture” (Mannila 1996, 5).

city also suggests a kind of collector/specimen dynamic in which favourite examples of nature are replicated or captured and fenced off for personal or public enjoyment (Crandell 1993). In the worst sense, this view of nature as “scenic backdrop” (Groth 1991, 136), relegates the natural environment to the status of a prop designed to both enhance civic pride and commerce and provide respite and balance to the built features of a city. In a more positive sense “giving form to nature” in the city (Riley 1988, 136), not only through the manufacturing of public parks, but also in creating private yards and gardens, provides an opportunity for urban residents to experience nature first-hand. As a consequence a relationship is established with the natural environment that can contribute to a profound sense of personal well-being (see Chapter 6 for reports of experience with nature in the city). But Thayer (1994) cautions that a relationship with urban nature can be significantly compromised by the interference of technology. For example, much of the intervention in urban nature today is designed to capture a fairly static image so that mowers, pesticides, irrigation, and so on play an important role in day-to-day contact with the urban natural environment. There is the possibility, therefore, that relationships will be developed with a contrived illusion.<sup>18</sup>

The most recent theory to emerge concerning the view that by virtue of its very essence urbanization inherently creates a need for contact with the natural environment, is the position that in order to sustain both a healthy habitat and viable ecosystem urban settlement should be integrated with the natural environment (Hough 1984; Hough 1995; Whiston Spirm 1984). By acknowledging the influence of obvious natural resources (Laituri and Kirby 1994) on shaping human enterprise, the city and the natural environment can be “viewed as a single, evolving system” (Whiston Spirm 1984, 5). The conventional romanticized understanding of nature does not necessarily include this perspective. But urban open space systems such as those in Calgary which incorporate storm water management into the biophysical and socio-cultural infrastructure of a community by allowing play fields, walkways and meadows to be inundated with storm water for a specified length of time, reflect this kind of integration. An ecosystem approach to urban park planning and development suggests, too, that there will no longer be the luxury or the

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<sup>18</sup> Thayer goes on to suggest that as a result, the urban natural environment is “containerized and bounded” into places that “nature is presumed to reside” (Thayer 1994, 68).

potentially misguided practice<sup>19</sup> of single use park areas in the city.

It has been suggested that an eco-vision perspective on urban parks is likely to be as wholeheartedly embraced by people as the “parks for a healthy city” reform movement has been in the past (Garcia 1993). The recent resistance to a proposal to locate an underground water reservoir at a popular local natural area park (Nose Hill) illustrates how this might be problematic.<sup>20</sup> While the eco-vision idea of integrating aspects of the natural environment into urban design is appealing, there is much less support for integrating aspects of urban infrastructure into nature. Gold (1988) reports that without such compromises we may well be seeing the end of urban parks as economic realities exact a toll in terms of priority for public funds. As the dry pond example demonstrates, the character of neighbourhood open space in Calgary is already changing to accommodate a more holistic notion of park land that integrates multiple uses into a park’s form and function.

But if the results of the survey done for this study are any indication, these integrated built/natural systems do not necessarily “read” as nature to the average person. The survey results suggest that, for many people, the traditional idea of nature still has a strong hold on their imagination. This romanticized view comes through in respondents’ assessments that since it is not natural for people to be “cooped up” in cities, urban nature is needed for respite and for the “good of the soul.” On this basis people expect experiences with the urban natural environment to be outside of the ordinary day-to-day events of life in the city. In reporting on experiences with nature in the city, respondents describe urban nature in terms of personally rewarding and sometimes awe-inspiring encounters with safe, clean and accessible natural environments, not regular interface with ordinary or mundane functional natural resources. The strength of the traditional view of nature suggests that, while local park space may indeed be undergoing a transformation, there is an expectation that

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<sup>19</sup> This is in reference to Hough’s view that “recreation contributes little to the land on which it occurs. In reality it is parasitic” (Hough 1984, 115), a view not shared by the author. The author’s views are more in line with those of Williams, Patterson, and Roggenbuck who suggest that research has shown that “recreation places can be important for creating shared meaning or group identity” (Williams, et al. 1992, 32, in remarking on Lee’s “Social definition of recreation places,” pages 68-84, in *Social Behavior, Natural Resources, and the Environment*, edited by Burch, Cheek and Taylor [1992], original source not consulted).

<sup>20</sup> Concerned citizens in Calgary were recently successful in having an underground reservoir relocated to a less environmentally significant area on Nose Hill Park. In fairness, everyone involved agreed that the new location, along with less intrusive construction methods, created no hardship or problem for future reservoir plans.

within the city in general there will be opportunities to visit specimen-like examples of nature in the forms of parks solely dedicated to the joy of experiencing the natural environment, however controlled and contrived it may actually be.

## **2.5 Summary**

In providing a testament to the historical effects of both human purpose and natural processes (Whiston Spirm 1984), features such as public park land tend to say more about the culture acting on the environment than the environment itself (Greider and Garkovich 1994). Park land is one aspect of the emerging landscapes that is important to both the physical shape and social expression of community space (Mannila 1996) – it provides an opportunity for the collective interpretation of appropriate human interaction with the physical world of nature (Davies 1988; Rodman 1993). Parks are cultural artifacts and are a reflection of a socio-political context. As Carr, et al.(1992) suggest:

In many ways they [parks] are idealized nature, tamed, cultivated and predictable, based on romantic images . . . [parks] recall the natural setting of the city, but they are physical constructions of a particular society at specific points in time (Carr, Francis, Rivlin and Stone 1992, 41).

Differences in the understanding of our relationship with nature shape different expectations of what is an appropriate purpose, intent or use for a particular park. Each person comes to her or his own understanding of a relationship with nature in part through indirectly just knowing about popular understanding of what nature is (enculturation) and in part through directly participating in meaning-making activity (experience). When the understanding is more universal – when there is greater agreement on how nature is to be perceived – there is less conflict over appropriate interactions. But when the understanding of our relationship with nature is particularized, either into idealistic personal perspectives or into stylized perspectives of communities of interest, there is little agreement in perception and, as a result, more potential for differing expectations.

Attempting to meet the expectations for uses of natural area park land in a diverse community is complicated by limited resources (Dwyer 1995) and by the fact that in highly pluralistic cultures, such as is the case in Calgary today, universally agreed upon interpretations of meaning would tend to be somewhat unusual (Riley 1988) and likely suspect. The challenge is to come to an understanding of an acceptance of a range of options for interaction with urban nature that does not

unduly compromise any reasonable option or the short- and long-term viability of the urban natural environment.

The construction of this understanding is dynamic. As such, it is continually tempered by ongoing public discourse, especially in the media, and especially if there is sustained interest in a particular issue involving the natural environment. Depending on whether human relationships with nature are viewed as rightful domination, privileged co-existence, or something in between, different conclusions will be reached about the best way to present or relate to the idea of nature in the city. The spectrum of possibilities is broad and open to debate.

## **PART II: THE CONCEPT OF NATURE**

### **CHAPTER 3**

#### **Culture, Meaning, and the Idea of Nature**

##### **3.1 Introduction**

Adequate interpretation of meaning to a large extent depends on the degree to which people are able to identify the underlying shape and influence of the context from which meanings arise (Bruner 1990). Understanding the role of context in constructing meaning from experiences with the natural environment is therefore fundamental to research in human/environment relationships. It is particularly important to the ideas in this study about different kinds of relationships people have with the urban natural environment because it is suggested that social context establishes the range of possibilities that ultimately impact individual views related to the provision of natural area park land in the city.

Within our cultural bounds the creation of meaning in a physical environment can be seen as a social embodiment of historical and contemporary intentions (Craik 1986). Human ability in perception provides the link between intentioned knower and the environment.<sup>1</sup> In this way knowledge from the past infuses meaning into the immediate experience. The act of individual perception of elements in the environment – such as places, events, or even sentiments and symbols<sup>2</sup> – allows each of us to apprehend meaning appropriate to the situation by blending memory, beliefs, assumptions (Berleant 1992) and knowledge with experience. It is when moving experience through physiological response to psychological interpretation that the creation of meaning is possible (Barton 1994).

Creating meaning from each encounter with nature in the urban landscape requires that individuals make complex cognitive and affective connections between the experience in which they are engaged and that which they already know. The process of association which brings meaning to

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<sup>1</sup> Shaw and Bransford (1977a) suggest further that only perception is capable of intervening between the knower and the known, as knowing is a direct process.

<sup>2</sup> This is Simmons's (1993) view of the elements in environmental cognition. In reference to collective symbolisms, Penning-Rowell observes that particular landscapes carry symbolic meaning which can sometimes be "deliberately distorted" (Penning-Rowell 1986, 115) by our own particular interests.

an event or thing is fundamentally automatic in that meaning is seen to emerge from each person's subconscious blending of sensations and images with motor and memory patterns (Barton 1994; Rapoport 1982). Through this interactive interpretive process, each person makes his or her world meaningful by "classifying, naming, and ordering" experience using established conceptual systems (Rapoport 1984, 51).

Further, as meanings are created by people, not found in things or objects (Rapoport, 1982), each person's unique internalized interpretive system defines what is perceived in relation to a personal pattern of knowing meaning (C. Rose 1980). In this way each individual searches for the essence of an experience, thing or event, which for them will define meaning (Simmons 1993). It may therefore be possible for two people to find different meanings in the same circumstance (Ibid.). Modifications to the physical environment, as well as to the prevailing social framework, or an individual's personal perspective, result in different meaning being taken from the seemingly same or similar experience. There is then the possibility that a certain environment may not have the same meaning for different people, or for the same person at different times (Allesch 1990).

In fact, changes in our culture's historical and contemporary understanding of the meaning of nature have been well documented over the years (see for example, Leiss 1972; Merchant 1980; Evernden 1992 and more recently Cronon 1995; Soulé and Lease 1995; and Schama 1995). Even though it is formative in determining parameters for appropriate human interaction with the environment, most of the philosophically oriented work about the idea of nature is not directly concerned with nature as the natural environment. The primary consideration is more often an abstract consideration of the question of how we define ourselves as humans in order to interact with what we define as the environment. This essentially takes the form of a discussion of truth, belief and understanding, which in turn determines what knowledge can be used to constitute reality. These discussions as well consider both the normative aspect of nature, in contrast to the idiosyncratic character of culture, in establishing imperatives for human social behaviour. The result is a discourse which blends and blurs the boundaries between the ideas of Nature as a process and theory with those of nature as a product and experience.

This chapter begins by looking first at theory related to the creation of meaning through



experiencing the natural environment. The discussion goes on to consider the collective expression of such meanings, especially in terms of cultural manifestations of processes relating to the production of landscape. This is followed by a review of the idea of Nature in an historical context, using our understanding of the wilderness to illustrate the interplay between the objectification and the romanticization of nature. The wilderness example also illustrates how the process and product aspects of N/nature (Olwig 1984) come together in shaping expectations for contemporary relationships with the natural environment. Subsequent chapters extend the discussion further through speculation on the influences that the wilderness idea has in terms of expectations for the provision of urban nature experiences. The discussion overall is grounded in the view that any account of experiences with nature must take into account both social and psychological aspects (Evernden 1985) and further, that there is a need to re-establish human presence as a legitimate part of nature (Raglon 1991).

## **3.2 Interpreting the Nature Experience**

### **3.2.1 Social Context**

In so far as it is the human mind that creates meaning through making connections between immediate and past experiences (Barton 1994), it might be expected that even within the bounds of a common culture and similar settings there would be individual differences in perceptual and cognitive processing that result in different meanings being extracted from experiences with the same or similar natural environments. The way in which the self defines its circumstance establishes a personal context for making meaning through sensing, acting, thinking and knowing (Von Maltzahn 1994).<sup>3</sup> This customized outlook on the world is the primary source of differences in meanings that result from interactions with the natural environment and is fundamental to studying the meaning constructed from individual experiences with urban nature.

When thinking about what might account for differences in the meanings that people make from experience with the environment, the first point to consider is historical context (Wohlwill 1983). Because each person creates her or his own meaning from the environment, there are many possible interpretations of the same environment (Svobodova 1990a). If we are to acknowledge

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<sup>3</sup> Evernden (1985) needs to be credited for pointing out that the fundamental environmental relationship is between "self and circumstance" (Evernden 1985, 142).

that each person constructs a one-of-a-kind lifeworld<sup>4</sup> from his or her experience with the environment, one might conclude that it is not possible for anyone to know what another knows.<sup>5</sup> But if we also accept that while meanings are personal, they are essentially “negotiated within a social context” (Barton 1994, 85), then we come to a different conclusion – that by virtue of being involved in meaning-making activity, each person takes from and contributes to a social (or collectively known) meaning.

Putnam explains how it is possible for personal and collective understanding to occur simultaneously when she says that “[m]eanings are public property [in that] . . . the same meaning can be “grasped” [or interpreted] by more than one person and by persons at different times . . . [but] “grasping” . . . is still an individual psychological act” (Putnam 1975, 218). It is through participation in such “shared processes of interpretation” that a public meaning is created (Barton 1994, 85).<sup>6</sup> Any public meaning that emerges in this manner is continually modified through the ongoing processes of personal and communal interaction (Seshachari 1992). The subtle interplay of meaning-making interactions that takes place with others and with ourselves results in dramatic changes to our traditional beliefs (Ibid.), including those that we collectively and individually hold concerning the natural environment. Thoughts about, and experiences with, the wilderness, for example, were not the same for the early pioneers in North America as they are for present-day urban adventurers. For one thing, our aesthetic sensibilities have changed so that nature is now revered rather than feared. For another, our collective urban experience is presently based on the perception of a scarcity, rather than an abundance, of wilderness.

The authority that culture has in establishing a framework for the construction of meaning in an environmental context is demonstrated, as well, by the strong distinction we make in our culture

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<sup>4</sup> That is, a unique personal biography in which we create ourselves (Simmons 1993).

<sup>5</sup> This is a concern of Hubbard’s in wondering if it is even possible to scientifically study meanings “ascribed to the environment by virtue of individual histories and experiences” (Hubbard 1994, 126).

<sup>6</sup> In talking specifically about changing attitudes towards other species as part of developing an understanding of the appropriate place of humans in nature, Judith Green speaks of a “kind of transactionally derived equality that feminists and other diversity-focused [groups] have rightly demanded in recent years – in which common meanings and acceptable behaviors [in things social] are determined through negotiations across differences” (Green 1995, 388).

between “natural” and “artificial” environments (Wohlwill 1983).<sup>7</sup> Contemporary media and marketing practices are exuberant in reinforcing and capitalizing on the distinction of good/natural/evil/artificial. This enthusiastic exploitation is an example of what is meant by noting that our culture both produces and consumes meanings through specific codes and symbols related to the creation of the urban environment (Pennartz 1989). The capacity for endurance of the natural/artificial “story” (or text) is representative of an influence in the collective making of meaning referred to as “folk psychology,” which is a narrative system that has been “deeply internalized [by people, and which] organizes people’s experience in, knowledge about, and transactions with the social world” (Bruner 1990, 57). The media in general plays a significant role in creating and sustaining certain narratives concerning nature (images of “fresh” and “pure” for example). In this way, and through participating in the dissemination of certain images, symbols, fictions, opinions and other representations of reality, media images help a certain reality to crystalize and thereby contribute to a particular cultural framework used for establishing environmental meanings (Noelle-Neumann 1984; Burgess 1990).

Even considering the influence of media messages, because there are differences in the symbolic systems that people act within, different individuals and groups will see “different meanings in the landscape and other aesthetic objects” (Bourassa 1991, 27). Consequently the way in which social symbols are understood has the potential to alter meaning. A feminist critique of the self/society interaction suggests that marginalized individuals and groups will not necessarily see themselves in the social symbols available for creating meaning (Westkott 1990). A park, which symbolizes our relationship with nature in its wild and free state, is meant to be pleasing but may instead be threatening to certain users, such as the elderly.<sup>8</sup> Meaning emerges in different guises for each

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<sup>7</sup> It has been suggested, as well, that attention to the differentiation our culture makes between natural and built environments should be fundamental to theorizing about nature experience (Hartig and Evans 1993), for in setting-up a dichotomous relationship like this, one aspect becomes ideal and the other not. The influence of dichotomous (i.e. either/or) thinking is discussed briefly later in this paper. It is seen as a carryover from the desire for universalisms in truth seeking (and of our habit of binomial organization or defining things as is/is not). Paradoxically, it is seen as well as a barrier to the reconciliation of different points of view in the establishment of some *common* meanings for nature in the city in that either/or limits the possibilities of other options (Massey 1993).

<sup>8</sup> For example, Westover (1986) found that “[t]he social meaning assigned to park settings is thought to vary with identifiable characteristics of the parks such as locations, accessibility, size, facility development, and social homogeneity . . . [and further that] there is evidence of gender differences in perceptions of the park’s social environment” (Westover 1986, 2).

person involved in the interactions. In every interaction something is given and something is taken away from the social arena (Barton, 1994). That “give and take” establishes what is public or common meaning. Since not all members of a social group have the same kind of access to or influence in contributing to the formation or acceptance of social meanings, their particular framework for interpreting meanings tends to remain marginalized. Marginalized groups and individuals are likely to demonstrate differing levels of awareness of mainstream symbols or resistance to acceptance of mainstream interpretations of meanings. For example, animal rights activists are well aware of contemporary moral standards related to animal welfare but are not inclined to accept them, choosing instead to fashion an alternate set of ethics.

If we accept that meaning is formed from each encounter with the environment, then it is important to realize that meanings change as contexts change (Barton 1994; Patterson 1993). Every interpretation is open to change as we make new connections through being engaged with the same and different environmental experiences (Barton 1994). A case in point is the social valuing of the natural environment in cities. At one time an area of grass left to grow long adjacent to a roadway carried the meaning of “unkept” or “disorderly.” Although there are still individuals who read this type of landscape in that way, more frequently the social context which values things natural has transformed this landscape’s meaning to “healthy” or “natural ” and, even, “thrifty.”

As Carr, Francis, Rivlin and Stone (1992) note, both the person and the setting are impacted by the meaning-making transactions that take place between an individual and the environment. In the above example both the environmental and social contexts changed with respect to a particular kind of landscape and the physical environment continues to be transformed as a result. The gradual change to the social context which has provided a basis for acceptance of a different type of appearance to these grassed areas serves to illustrate that while the meaning we create is very personalized, it is nonetheless historically situated (Rotenberg and McDonogh 1993) and reflects only one of many possibilities at any given time (Barton 1994).

### **3.2.2 Private Purpose**

Individual perception also accounts for variations in meaning drawn from experiences with the natural environment (Wohlwill 1983). Although perception in its most fundamental sense is

essentially a “neurophysiological process” (Simmons 1993, 76) in which a person intercepts a stimuli from her or his surroundings, when considering what meaning a particular perceptual incident has, it is necessary to move into social and cultural areas of analysis (Burgess 1990).<sup>9</sup> Cognition is the process that brings meaning to sensation (although Ulrich [1983] has argued that it is not always necessary for cognition to occur when experiencing a meaningful affective perceptual event). Perception combined with cognition has been referred to as environmental knowing (Simmons 1993), which is made possible by the knower accessing, sometimes consciously, as well as reflexively, the “accrued meanings of culture” (Berleant 1992, 83). Consequently in experiencing an encounter with nature, the sensations and meanings created are added to an individual’s repertoire of environmental cognition.<sup>10</sup> Each person brings to an experience with nature a fairly well-established set of public and private circumstances.

The possibilities for interpretation also increase when consideration is given to how involved a person is with a particular circumstance. Bourassa (1991) suggests that people who are engaged with an environment will have different views than those who are detached from it (see also Relph 1976). As he notes “[t]he insider will see things in terms of practical significance for everyday life, while the outsiders will largely be unconcerned with or unaware of that level of symbolism” (Bourassa 1991, 27). The results of this study suggest such an insider/outsider status with respect to engagement with the natural environment. The insiders are those who are more involved with the natural environment and exhibit a greater affinity for urban nature.

Further, although there is some debate over whether something needs to have a well-defined and

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<sup>9</sup> The conventional approach to analyzing environmental experience “separates man from environments, divides man into responder and builder, divides environments . . . into natural and man-made and then each of these environments into environment as stimulus and environment product” (Ittelson, Franck, and O’Hanlon 1976, 191). Neither the profound influence that culture has on a person’s relationship with the physical environment (Ulrich 1983) nor the impact that social, functional and symbolic aspects of culture have on shaping space (Carr et al. 1992) has an opportunity to inform this kind of analysis.

<sup>10</sup> Hartig and Evans refer to this accumulation as “adaptedness” and explain it as “aggregated experience an individual brings to bear on perception and evaluation” of the environment (Hartig and Evans 1993, 435).

generally recognized use in order to have meaning (Krampen 1979; MacLean 1993),<sup>11</sup> natural area park land provides a case for suggesting that meaning is not necessarily attached to a generic function *per se*, but rather is subject to the intentions of the user. In terms of experiences within the natural environment, the intention of an individual's contact with nature is perhaps the single most defining feature of the kind of meaning that is created. Wohlwill (1983) suggests a "given individual living in a particular moment in time and in a particular location" ultimately conceptualizes nature based on prior experience (Wohlwill 1983, 29). Since it is known that meaning is constructed in the mind as a response to experience (Barton 1994), it is important to this discussion to look at the relationship between "experience and the creation of meaning" (Barton 1994, 4). As the meaning given to things and events through experience is partially determined by intentions (Cummins 1989; Von Maltzahn 1994), the type of involvement each person chooses to have with the natural environment will result in different meaning.

Individual intentions for interaction with the urban natural environment may in part be related to the different uses each person or group has in mind for a particular environment (Sless 1986). For example, a particular park could be vested with sacred significance for a group of urban aboriginal peoples by virtue of its history as a ceremonial burial ground. Visiting the site to participate in a remembrance ceremony would create one kind of meaning for a member of the aboriginal community. But for a child visiting the same area to play on what she knows as her favourite tobogganing hill the experience would be infused with a different kind of meaning. Even though these uses take place at the same location, different intentions produce different meanings. This

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<sup>11</sup> Krampen (1979) suggests meanings generated by objects change from one social system to another and that if an object serves no useful purpose within a particular system, it therefore does not have meaning.

This view suggests that meaning is attached to an object and is an example of what Putnam (1975) describes as a realist theory of meaning in which meanings are seen to be in reference to an object. Sless's (1986) observation that "meanings are created in use, they are the product of action rather than the basis for action" (Sless 1986, 113) is also a reference type theory of meaning, but it allows that meanings will be altered as uses change. Putnam suggests that it is also possible to consider meanings in terms of explanation, as opposed to reference. This approach she terms the idealist theory of meaning in which meanings are seen to be determined by causal connections. MacLean's point (1993), that as is the case with many park areas, some "objects have meaning for us apart from their usefulness" (MacLean 1993, 175) demonstrates this perspective. He suggests that such objects may have sacred or symbolic meaning, or that the meaning may arise from involvement of our "cognitive capacities" (Ibid.). It seems that cognitive capacities are likely to bring both reference and explanation into play in creating meaning so that in actual terms the theoretical types of meaning are probably blended. Further "use" may have many forms from practical to symbolic. This study holds that while meaning is seen to be created through use, an object does not have to be in use or be of use to have meaning. The "in use" state generates personal meanings from a potential "of use" state.

case shows that as Craik (1986) observes, people “encounter landscapes with something like a plan to attend to and process certain kinds of information” (Craik 1986, 50) as a result of the plan or intention. The meaning generated will be in relation to the expectations set out by this very personal conceptual plan, but will also be encased within the context of a social framework.

An individual’s conceptual framework for interpretation of experiences, or plan of interaction with the environment, is referred to in the psychology literature as a cognitive schemata, frame or script, while critical theory literature describes it as personal text, story or narrative. The critical theory perspective suggests that the psychological framework of a person’s ideas is more like a work in progress than a rigid set of protocols. In each case, however, the scripts or narratives are seen as conceptual structures that organize beliefs, feelings and knowledge in an easily accessible way (Tourangeau 1987). Fiske and Kinder (1981) describe the scripts or narratives as “serviceable, although imperfect devices” (Fiske and Kinder 1981, 173) meant to provide cognitive economy as an individual navigates the world.

This is not to say that people deliberately select a certain mental framework in which to seat an experience or that meaning is created in isolation. As Craik (1986) suggests, cognitive sets are not necessarily explicitly known to the individual nor intentionally brought to bear in a situation. His view is that “psychological factors such as the role the person is enacting at the time or the individual’s personality disposition” (Craik 1986, 50) can make just as significant a contribution to an individual’s perceptual framework. While a psychological perspective necessarily emphasizes the role of the individual’s perspective in making sense of the world, it is suggested throughout this discussion that individuals create meaning within the context of the established social framework available to them. A script or narrative provides an individualized organizing factor as part of the interactive process of making meaning; it personalizes interpretation.

An interactive interpretive process includes aspects of what Patterson (1993) describes as “productive hermeneutics” which dismisses the idea “that meaning is the private property of the individual [and suggests rather that] [m]eaning and action are based in a context of situational influences, shared cultural practices, and social ideologies that might not be immediately apparent to the actor” (Patterson 1993, 47). It is suggested here that both personal and social factors ultimately influence meaning created from experience. People will differ in the kind of scripts they

have, in the ease in which they evoke these conceptual frameworks for use in interpreting experiences (Fiske and Kinder 1981), and in the awareness they have of the scripts' influence in constructing meaning. But if they share a culture, they share, to a greater or lesser degree, a context for interpretation.

The idea of scripts and narratives is useful for analyzing meanings generated from experience with the natural environment when viewed in terms of how a script or narrative contributes to maintaining a person's sense of self. Patterson (1993) suggests that recreationists engaged in leisure activities are participating in "the ongoing enterprise of constructing a life and an identity" (Patterson 1993, 119). Assuming that each person has a sense of self embedded in an interpretive framework of various cognitive scripts, meanings reported from recreational experiences with nature in the city can be seen as representing how a person sees herself or himself in relation to the natural environment. It is suggested that people are likely to report meanings from their experiences with nature that reflect a certain image they have of themselves. From environmentalist to outdoor adventurer, interpretive frameworks that define a certain sense of self would account for the different intensities in the meaning concerning connection with nature that people responding to the survey in this study reported.

It is presumed that the conceptual consistency provided by a well-developed script, defining who you are and what you think, will establish not only what gets to count as knowledge, but also what kinds of things deserve attention and what kinds of behaviour are appropriate. Scripts or narratives offer shortcuts guiding behaviour, both through encouragement and constraint, by establishing in advance the context in which a setting and/or situation will be interpreted (Rapoport 1984). In this way the scripts or narratives focus an individual's attention to particular aspects of an experience (Fiske and Kinder 1981) and, at some level, create intention.

### **3.2.3 Social Meaning**

In addition to the influence that collective and personal histories have on the attachment of different meanings to experiences with nature, Wohlwill (1983) suggests that the actual appearance and character (either "real" or imagined) of the natural environment is a significant factor in defining each experience or encounter with nature. In the most obvious case, a particular environment can "read" as exhilarating or threatening, depending on the circumstances of the person or the event.



In terms of symbolic and imagined characteristics of an environment, it has been pointed out that “[c]ultural groups transform the natural environment into landscapes through the use of different symbols that bestow different meanings of the same physical objects or conditions . . . the symbols and meanings that comprise landscapes reflect what people in cultural groups define to be proper and improper relationships among ourselves and between ourselves and the physical environment” (Greider and Garkovich 1994, 2).<sup>12</sup> Jones’ study of a particular nature park illustrates this point well (Jones 1994). He found that cultural forces and changing perceptions of the environment had an impact on the form that parks take over time.<sup>13</sup> As a result of changes in the way the land base was perceived, he suggests that the nature park which was the focus of his study could essentially be considered a cultural landscape in that it reflected the cumulative effects of decisions acting on it (Jones 1994). It seems that in general, and almost irrespective of the actual physical characteristics of the land, we construct our environment according to the images and ideas that suit our purpose and reflect our understanding of the world.

Real and imagined images of the landscape can sometimes simultaneously overlap in our mind’s eye (Gablik 1985, 87). *La Condition humaine* (The Human Condition 1933), painted by artist René Magritte, illustrates this (see Figure 9). It suggests that “there is no objective landscape,” only representations framed or mediated by imagination, cameras, art and so on.<sup>14</sup> It also suggests a certain “ambiguity” between what is real, what is imagined, and what is presented in a representation (Gablik 1985, 86).

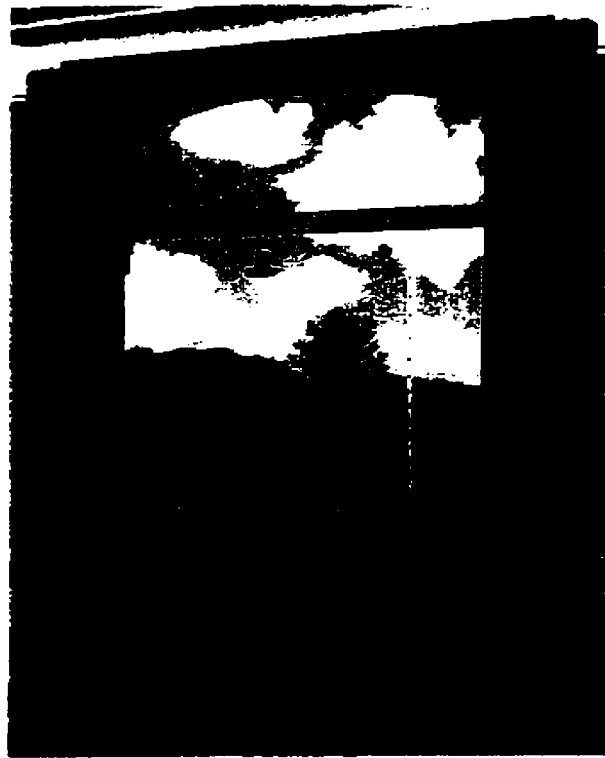
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<sup>12</sup> Bourassa suggests further that “[o]nce a landscape acquires meaning for a cultural group, that group will seek to perpetuate that symbolic landscape as a means of self-preservation” (Bourassa 1991, 109). He may mean rather that the group seeks to preserve a part of its *identity* through seeking to preserve an especially meaningful place.

<sup>13</sup> Jones (1994) tends to draw on references from the U.K., as befits the focus of his thesis. For a comprehensive analysis of this idea in terms of the United States, see Cranz’s *Politics of Parks Design* (1982). Also note that Jones defines the “cultural landscape” as “temporal and spatial patterning of human modifications to the environment” (Jones 1994, 16). Earlier Conzen suggested that in order to be able to view the landscape historically, it would be necessary to acknowledge that nature, symbolism and design within a landscape are both non-static and cumulative and therefore are indicative of how a place has been acted upon over time (Conzen 1990).

<sup>14</sup> Simon Sharma, “Landscape and Memory,” interviewed by Eleanor Wachtel, *Writers and Company*, Canadian Broadcasting Corporation, fall 1995.

**Figure 9**



**The Human Condition**  
(*magritte* by suzi Gablik 1985, page 85<sup>15</sup>)

Landscape is then both a psycho-social apprehension and physical manifestation of human presence and experience in the environment. As Cosgrove notes the landscape is “the external world mediated through subjective human experience” (Cosgrove 1984, 13).<sup>16</sup> This definition has been refined by suggestions that external spaces result from deliberately created synthetic systems designed to meet the needs of a particular community (Jackson 1986). Further, these deliberate actions on the environment are seen as being directed at speeding up or slowing down the processes of nature (Ibid.). If in fact actions on the landscape are essentially a means of controlling nature, selecting natural area park land as a favoured use can be seen as an attempt to make nature stand still. That is, landscape manipulations can be used to preserve a certain kind of space with a certain meaning as a marker or symbol of meaningfulness attached to it collectively by

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<sup>16</sup> Porteous (1990) points out, too, that the physical reality of land needs to be combined with the image of “scape” – or projection of consciousness of the human mind – in order for a landscape to be brought into being.

the community. In understanding that human interactions with the environment produce certain landscapes, it is possible to see how natural area parks can be an expression of contemporary relationships with nature.

It has also been suggested that the landscape that we see at any given time represents what everyone who has come before has agreed upon (Jackson 1986). This taken-for-granted assumption that there has been collective agreement on decisions related to changing the land does not attend to the politics of reality or the reality of politics. Others, too, have proposed that there is agreement on what is an acceptable physical expression of social space (Rapoport 1984). Although neither point of view suggests that such agreement is necessarily unanimous, it does give a false sense of social cohesion not to identify that a certain understanding of meaningfulness is being represented in any given case. Perhaps it is understood that these would be expressions of the dominant elements in a culture; however, contemporary analysis needs to take into account the fact that many times in history there were significant numbers of disenfranchised people in a community, not the least being women. The feminist discussions on the constant, often subtle pressure of the dominant culture to constrain the activity of women so that it is limited to private rather than public space (Walker 1990; G. Rose 1993) is one example of rethinking the idea of “whose ideals” are being expressed in the landscape.

A more astute observation is noting that while every landscape clearly has its own message to relate, each is grounded in a social context of a particular land use, which is in itself indicative of particular power relations in a community (Penning-Rowsell 1986). In such matters, most power is situated in small groups of elites who make the choices which everyone must live with (Ibid.). Although Penning-Rowsell makes this to comment on the oft-times misguidedness of prevailing tastes, rather than as a comment on the political inequities of the distribution of power, it nonetheless raises the issue of who gets to decide what in terms of landscape development. This question becomes particularly important when there are a variety of competing interests in and understandings of a landscape such as a local sloped area that has meaning as both an economic and aesthetic opportunity.

It is possible furthermore to combine both practical and aesthetic aspects in a landscape, which results in what Bourassa sees as a “mix of art, artifact and nature” (Bourassa 1991, 21). The

potential of the landscape to accommodate multiple meanings (not necessarily simultaneously) is also suggested in the view that the landscape, as the largest perceptual unit in the environment, is not just scenery but a setting (or environmental context) which engages human activity of all sorts and senses (Berleant 1992). This conceptualization is representative of the experiential approach to landscape assessment, which is an approach to analysis that “views people as active participants” (Allesch 1990, 20) in their environments. Attention is on the experience generated through interactions between a person and the environment. Other approaches are more concerned with independent analyses of the various psychophysical components of people and place, or perceptual and cognitive processes (Ibid.; see for example Ulrich 1983).

In the experiential approach to landscape assessment, it is understood that a cultural framework provides the social parameters for an individual to perceive and interact in a purposeful way, within a certain environmental context, in order to come to know a particular landscape as meaningful. These three dimensions – social context, private purpose and social meaning – are essential to looking at meanings in landscapes (Thayer 1994). In Thayer’s view they contribute to the formation of “an affective response to a particular utilitarian or technological landscape” (Thayer 1994, 110).<sup>17</sup> These dimensions contribute as well to understanding how each individual constructs personal meaning from her or his experience with nature in the city.

As noted, personal interpretation of experiences with the environment is based in a social context which, in this case, defines a range of possibilities for meaningful relationships with urban nature. In the enormous body of work concerning the meaning of nature, there are two main ideas germane to this study of nature as experience. First is the seminal issue of the intellectual self-exile of humans from the natural world (Rochberg-Halton 1986; Evernden 1992), which sets up the natural environment as an object of human will. Second is the culturally sustained nostalgia for a romantic image<sup>18</sup> of the wild, which creates an anticipation of perfection in the pursuit of nature experiences. In general terms, the objectification of nature carefully regulates the relative positions of humans and the natural environment as separate and apart prior to the commencement of any

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<sup>17</sup> Thayer (1984) also believes that the interaction between these three aspects – perceptual, functional, and symbolic – of evaluation contributes to the public’s assessment of what might ultimately come to be considered an undesirable or intolerable landscape.

<sup>18</sup> See Budiansky (1996) for one succinct summation of the essence and effects of this romanticization.

interaction between the two. The romanticization of nature, on the other hand, provides the ideal notion for a collective impression of the anticipated and desirable outcome subsequent to any human/natural environment interaction. Contemporary manifestations of social context are reflected in these contrasting ideas about nature, the environment, and the human condition.

### **3.3 The Idea of Nature**

Throughout the history of civilization, the meaning of Nature has been a central concern in all cultures in terms of pondering the question of the proper order of things in the world (Lease 1995). Due to changes in the understanding of both physical and social reality, every culture or era in a culture may look upon nature quite differently, making it a concept that eludes precise definition (Nichols 1994; Phelan 1994). The situation is compounded by works, ideas, and circumstances that do not distinguish between the political theory of Nature and the explanation of human responses to the functions and processes of the physical world of nature. The consequence is that these concepts come to be viewed as variations on a theme, or as essentially interchangeable. Written commentary and verbal deliberations literally and figuratively tend to blend and mix the notion of Nature/natural impulse as a normative model and a moral imperative for human life and behaviour with discussions of Nature/natural environment as a physical object of human worship, pleasure or utility (Olwig 1984; Simmons 1993).

In general, the intensity and volume of both classical and contemporary work that sets out to chronicle human intrigue with N/nature is incredibly exhaustive in terms of depth, breadth, intellectual rigour and candour. The intention here is to trace three particularly influential threads of thought in order to form an impression of how various bits and pieces of knowledge and conjecture come together in shaping today's perspectives on human/environment relationships. As represented in the more recent interpretations, these are: nature as a process for defining reality, as an object of human enterprise, and as an ethical obligation.

#### **3.3.1 Nature as Process: Defining Reality**

Knowing about the history of an idea helps to clarify the present understanding (Bowler 1993), although it is necessary to acknowledge, too, that "once born ideas pursue a life of their own"

(Worster 1977, 345). The history of the theory of Nature<sup>19</sup> shows that thinking about nature's role in the process of defining reality has moved through stages that have seen Nature being viewed as everything that there is in the world; Nature as the domain of the divine; Nature as the template for all matter and physical impulse; and Nature as social system (Evernden 1992; Bowler 1993). In the extremes of these philosophical debates over what constitutes Nature, even life itself at times has been excluded from the definition, as human consciousness can be shown to be merely a function of neurochemical reactions (Evernden 1992). At the same time as the theory of Nature has become more disassociated from human life, human lifestyles have created a greater distance from experiences with the natural environment. The physical world of nature has become at once progressively more objectified and ultimately more romanticized. With each transformation in the understanding of N/nature, one or two fundamental beliefs survive or are re-constituted in subsequent incarnations. The first part of this discussion considers each of these changing views on the reality constituting process of Nature in terms of the formative ideas that continue to have influence today.

Part of the idea that Nature is everything in and of the world is the notion of kinship with the earth. Merchant speaks about the reverence and respect for Mother Earth<sup>20</sup> and for the father of the cosmos which together put constraints appropriate to kinship on relationships with the natural environment (Merchant 1980). This holistic perspective was also part of the medieval outlook on the world (Jolly 1993) in which knowledge was based on metaphysical understanding, myth, dreams and other kinds of socially produced information. But even back at that point in the history of humanity, no single idea about Nature prevailed. For some it was a force to be struggled against and for others it was a source of contemplation and pleasure (Oggins 1993). The idea of kinship is still a part of contemporary views on human/environment relationships, but rather than arising from a fundamentally integrated philosophy of Nature, it is based in the strength of individual sentimental impulse.

Perhaps the most enduring historical conceptualization of Nature is found in the theological

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<sup>19</sup> See Leiss 1972; Evernden 1992; and Bowler 1993 for excellent historical analyses, also Merchant 1980 for the best consideration of the consequences of the theory of Nature on relationships with the natural environment.

<sup>20</sup> Merchant's (1980) discussion is specifically tied to the historical record of oppression in the feminine/female experience.

interpretation (Bowler 1993) in which Nature in general and the natural environment in particular are seen in the context of divine force and inspiration. Divine design raises the possibility of a universal natural order of things, over which human life has dominion. Implicit in the divine order perspective is the clear separation of humans from other life forms into a different plane of existence and importance. In setting up the natural world as an object of creation, the theological view also provides for the eventuality of a sense of awe and wonder to arise from the appreciation of the natural environment as an expression of divine work. Public concern for the physical world of nature tends to focus, as a result, on aesthetics (Ibid.), which in turn helps to sustain the romanticization version of nature still strong today.

If divine purpose sets humans apart, the divide has been widened with changes in understanding brought about by science. In the scientific interpretation, knowledge and truth are identified as external ideals that await discovery (Evernden 1992). Nature becomes knowable and the natural environment is increasingly seen as material to be studied and pressed into service to enhance the human condition. With a more widespread and intimate insight into previously mystifying and unexplainable functions of nature, there comes a decline in reverence<sup>21</sup> for the natural environment (Fuller 1988). People see their free will and capacity for reason as being superior to the automatic, instinct-driven processes of the natural world. As a new understanding of reality informed by science takes away the mystery of nature (Borgmann 1995), people come to view the physical world as being there primarily, and naturally, for the use and benefit of humankind (Bowler 1993).

In viewing the natural world as matter and physical impulse to be used primarily for the good of humanity, and in not assigning it the same sanctity as human life, it is with a clear conscience that society seeks to exercise its perceived right to control and dominate nature. Further, there is a great sense of pride in people's ability to bring the natural environment under the influence of human progress and industry (Marx 1988) in order to excel at improving the quality of human life.

Arguably the two most influential factors that ultimately legitimize the massive exploitation of

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<sup>21</sup> Seschachari (1992) disputes that reverence for nature has ever been a part of Western "religiocultural heritage," noting that cultural values of the West specifically do not include "non-hierarchical and egalitarian" approaches to a climate of mutual respect between humans and the natural environment, but instead are steeped in a heritage of "misogyny and patriarchy" (Seschachari 1992, 164) obvious in the exploitation of the natural environment.

natural resources common today are mechanization of the production process combined with the secularization of Nature (McLaughlin 1985). Science has been instrumental in both cases, first by providing explanations that demystify what was once profoundly sacred and secondly by contributing to the development of technology capable of large scale manipulation of nature. In this process the dominant social outlook has changed from one of passively contemplating the place of the natural environment in Nature to one of aggressively striving to master the environment in order to effect as Leiss suggests, a “social transformation” in Nature (Leiss 1972, 87).

An essentially mechanistic (as opposed to organic) system of knowing, in which “things” are more of a reality than relationships (Merchant 1980), also insinuates into the human psyche normative aspects reflected in the pursuit of social ideals thought to have a basis in the laws of Nature (Evernden 1992). People are comforted when they have science to seek out and define the certainties of Nature. Finding and following natural laws of behaviour is preferable to bending to the whims of human discretion. Human agency is suspect for its susceptibility to the politics of circumstance (Ibid. 1992). In a restructured world where Nature is considered to be, as Salisbury describes, a “rationally understood phenomena” (Salisbury 1993, xvi), mattering less for its meaning than for its laws predicting cause and effect behaviour (FitzSimmon 1989), the stage is set for the modern era with its predominately utilitarian human/environment relationship.

Challenges to the modernist understanding of social reality have been increasingly forthcoming. Pseudo objectivity has constrained and excluded certain groups from contributing to or benefiting from the authentication of knowledge. But the privileged status of scientific fact as the verification of knowledge is being questioned (Bennett and Chaloupka 1993a). Logic that has in the past been held up as value free is more often seen in the context of rhetoric masquerading as scientific fact (Ibid.), especially in cases of embittered environmental disputes. Leiss (1972) suggests further that in many ways, society has yet to recover from the “crisis in modern ethics” (Leiss 1972, 209) that has resulted from the role of science as the arbitrator of all knowledge, especially as it pertains to understanding and relating to the natural environment.

The mechanistic and material view of Nature and natural environment promoted by science and technology removes much of the opportunity for creation of personal meaning in nature (Jolly 1993). But as people come to see that the rationalization of Nature leads to estrangement from it



(Von Maltzahn 1994), contemporary understanding of both Nature and the natural environment is re-orienting itself away from the mechanistic view of knowledge and knowing nature towards a more inclusive approach. Imagination, art, music, dance and so on are increasingly considered as legitimate guides to understanding nature. Some have suggested, for example, that storytelling has been a particularly neglected form of this kind of knowledge (Raglon and Scholtmeijer 1996).

Although the evidence suggests that contemporary understanding of the natural environment is becoming substantially more informed by a variety of stimulating sources, a lingering influence of the normative aspect of Nature and natural laws remains. The seemingly irresistible urge to continue to attribute moral ideals to the functions of Nature (Shepard 1991; Bennett and Chaloupka 1993a) continues to bear upon popular notions about the goodness of all things natural. But these parameters are fairly confining. They do not include, for example, pestilence or natural disasters. The moral imperatives of innocence and purity have been a part of all earlier conceptions of Nature. The idea that Nature is all encompassing, that it is a product of the divine, and it is the one true order of things, all implicitly sustain this illusion. The notions of innocence and purity continue as strong influences today in ideas about the artificiality of human presence in the natural environment.<sup>22</sup> Further, in defining N/nature as “purity, freedom, mystery, . . . growth, change, [and] continuity” (Gallagher 1993, 210), the idea of naturalness continues to set standards for or precipitate conflicts over identity, tolerance, sexuality and so on (Connolly 1993).

Moving modern science away from its privileged status (Keller 1990) reduces the objectivity with which we are prone to view the natural environment and may also serve to lessen the moral authority of Nature and the idea of natural. However, a new moral imperative for an ideal social system is arising in the ecosystem model of understanding Nature. Certain ecological processes acting within the natural environment are seen to represent the proper order of things in terms of human/environment relationships (Merchant 1992). In suggesting an ecological perspective as a prototype, a new normative standard is being forged in which unity, stability, and harmony among life forms are introduced as the moral imperatives for social processes as well.

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<sup>22</sup> It has been suggested that world views that contrast Nature as pure and good with Nature as base and brutal are at the root of a fundamental inability to resolve conflict through reasonable debate, in that these are two virtually irreconcilable viewpoints (Evernden 1992, 19).

Some however question the validity of the ecosystem model (Smith 1979), suggesting that there is no moral judgment inherent in the process of succession and further that competition, domination, conflict and change are also part of an ecological context. In other words, as Smith observes, the “primitive rhythms of life are not all peaceful and harmonious” (Smith 1979, 197). Still, as contemporary ideas concerning Nature and the natural environment are products of our current understanding of the world (Wohlwill 1983) which includes popular (mis)conceptions, what people believe to be so is just as important as what actually is (Evernden 1992). In any case, moral imperatives for defining reality are now increasingly being grounded in an ecology in which we are urged to see Nature as the model for appropriate social relationships and the environment as an essential condition of life (FitzSimmons 1989; Berleant 1992).

### **3.3.2 Nature as Object: Dualistic Legacy**

A second theme important to the history of human relationships with nature is the seating of nature as an object of human enterprise. The dualistic thinking style of mechanistic systems promotes this outlook. Ultimately ideas about the natural environment and human/environment relationships have been shaped by how N/nature is and is not conceptualized. This is/isn't way of classifying information creates a distinction between natural and not natural. As Evernden (1992) notes, as soon as the idea of nature emerges, there is not nature, which he suggests essentially has come to mean humanity.

Writers and thinkers blame the nature/not nature way of thinking on the human propensity to classify and identify “self” in relation to “other.” Contained in the dualisms of mind/body, nature/culture and so on, there is again the subtle suggestion of normative influence. Rather than being an equally matched union, one element in the combination is seen as more rightfully “natural.” The “other” has its definition in relation to the ideal as a thing that is not present (Massey 1993). This valuing of natural as superior, in combination with increased urbanization in which the majority of people no longer make their living directly from nature (Mannila 1996), serves to loosen connections between humans and the environment (Platt 1994, on Mumford). While this initially has the advantage of releasing humanity from some of the random impulses of nature, it eventually results in the natural/built distinctions (Hartig and Evans 1993) that stigmatize

the urban environment as not natural and celebrate a nature without the presence of humans.<sup>23</sup>

Recently there have been calls to recognize and move away from thinking in dualities that devalue the “is not” side of a dualism,<sup>24</sup> marginalize the “other,” and threaten the possibility of the emergence of third, fourth or fifth dimensions of a combination (Soja and Hooper 1993). For example, it has been suggested that by dropping the natural/built bipolar conceptualization, a continuum of landscapes, which includes the cultural manifestations of environment in cities as part of our natural way of life, would have an opportunity to take hold in the collective imagination (Cronon 1996). This idea is fundamental to the existence of nature in the city and the discussion will return to this later.

A further legacy of dualistic and dichotomous organization of phenomena is the formation of paradoxical imperatives. The point of paradox is that while a natural/non-natural dichotomy produces a moral valuing of natural over artificial categories, the world viewed in terms of another duality – that of human/non-human, reinforces the objectification of nature and subsequent subordination of the natural environment to the will of humanity. The paradox creates an irresolvable conundrum that continually pits human sentiment<sup>25</sup> against human enterprise in the establishment of human/environment relationships.

It has also been suggested that in any given time and place human/environment relationships inevitably fall into one of three kinds of circumstances that are grounded in the dualistic separation of humans and the natural environment. Relationships between humans and the environment are based either on human subjugation to nature; human incorporation into nature; or human domination over nature (Hartig and Evans 1993). This may be the result of our historical process, but it is not necessarily inevitable (Ittelson, Franck and O’Hanlon 1976). There are alternatives to

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<sup>23</sup> Hartig and Evans (1993) note that Tuan (1974) has pointed out that this kind of thinking has existed since ancient times.

<sup>24</sup> Shepard (1991) blames the persistent division of “man and nature” on the tendency of science to reduce human existence to abstract and depersonalized statistics. Implied in this is that a rehumanization of the physical body is needed in order to bridge the human/natural, nature/natural duality gulfs.

<sup>25</sup> See Neiburg (1984, 14) for a good description of the differences between belief and sentiment.

the objectification-based oppositional dualism.<sup>26</sup> For example, a dialectical type of dualism (Westkott 1990) could generate interaction and connections that would be more collaborative. A collaborative style of interacting would precipitate different understandings not only about human relationships with the natural environment, but about relationships between natural and built environments. While the future holds the possibility of mutually enhancing dualistic embodiments, contemporary understanding of the place of people in relation to the natural environment is firmly grounded in the dualistic notion of natural/not natural that results in the objectification of nature and the non-naturalness of humans.

This objectification of nature and subsequent intellectual and emotional isolation of the natural environment has had at least three significant effects on contemporary human/environment relationships. First an objective attitude towards the natural environment encourages the illusion that it is possible to “transcend our bodies” and somehow live only in the realm of thought (Hayles 1995, 56). We become outside of not only nature, but outside of our body dispassionately looking on. A well-known example of this detachment is the NASA image of the blue-green poster view of Earth (Raglon and Scholtmeijer 1996) in which the viewer is outside and above, looking back and down on, the planet-as-globe hanging in space. The mind-body dualism demonstrated by this blinds us to the connections that actually exist between humans and the natural environment (Berleant 1992). The disassociation or reliance on our thought and intellect manifests in a confidence in our ability (with the help of technology) to overcome whatever the natural environment might toss in our way. It seems that so long as we manage to keep nature in its place, it is possible to perpetuate a “manipulative stance toward the world of physical processes and social structures” (Tribe 1976, 75).

The second effect of objectification of the natural environment is entrenchment of an emphatically anthropocentric orientation with respect to human/environment relationships. Anthropocentric and biocentric ideologies are fundamentally irreconcilable. One is based on the understanding of the central place of humans in the world, the other on undifferentiated status for all living sentient

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<sup>26</sup> The ecofeminist perspective suggests partnership models (Eisler 1990) to define relationships between such things as nature and culture, as opposed to the present domination models in which one part of any given duality is viewed as somehow inherently more superior.

things. This difference forms the basis for conflicting views concerning ideas about the best way to live in the world.

Anthropocentrism views humans as having a privileged place on earth (Rubin 1994). Human beings are considered to be at the centre of all transactions, elevated to the special status as impartial observer (Coles 1993). From this perspective it is possible to see the origins of a “physical theory of nature” (Von Maltzahn 1993, 127) manifested in human control and manipulation of rational space (Dizard 1993). Through ordering and categorizing,<sup>27</sup> power is extended over the environment (Simmons 1993). This has been the dominant way of socially organizing relationships with the environment (Raglon and Scholtmeijer 1996), both natural and built.

The third way that the objectification of the natural environment shapes human/environment relationships is by de-contextualizing the physical world of nature. Placing the natural environment separate and apart from more critical and therefore more universal concerns of humans implies that it is not essential to the human condition. Consequently there is a greater tolerance for a broader range of contexts from which to establish meaningfulness. The “external reality” of the natural environment can not be denied (Von Maltzahn 1994, 4; Cronon 1995a). But granting that an understanding of nature is socially constructed, an unusual situation is created. Because of the latitude in interpreting its significance, the natural environment – while having an actual physical form – is understood differently at different times and places or circumstance (Wohlwill 1983; Berleant 1992). Science is non-judgmental in the definition of the natural environment in concrete, biological naming and identification.<sup>28</sup> But contemporary, culturally influenced, aesthetic and ethical views inject symbolism and meaning into the physical reality of nature. In this respect the natural environment is extremely dynamic both in terms of natural and psychological processes (Pickett, Kolasa, and Jones 1994). The dynamism is fuelled in part by

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<sup>27</sup> Chaloupka & Cawley (1993) suggest that names for nature are in fact codes for identifying appropriate human/environment relationships. So that in classifying something as “wilderness,” for example, a certain expectation for interaction is encapsulated. It is humanity’s attempt, as the authors say, “to create out of our own will or representation, the other we choose to encounter” (Chaloupka and Cawley 1993, 4).

<sup>28</sup> McLaughlin (1985) suggests that this allows for the absence of ethical barriers in interaction with the natural environment.

projections of our “innermost longings and anxieties” (Dizard 1993, 112) on to nature,<sup>29</sup> of which the phenomena of stewardship is a prime example.

### **3.3.3 Nature as Obligation: Stewardship Impulse**

In the idea of stewardship, the human propensity to both sentimentalize and manipulate nature finds an ideal outlet. The stewardship impulse is, as well, indicative of the “nature as obligation” theme that forms the third and final strand of influential thought considered here as formative to contemporary views on the natural environment. Originally a theological concept<sup>30</sup> arising from what was seen as a divine decree for humans to be masters of the earthly domain, stewardship is seen today as the belief that humans have an obligation to manage and control natural resources in a responsible manner (Kellert 1995). The paradox of dualisms is resolved in this secular notion of stewardship in that the goodness of the natural (in the natural/not natural dualism) comes under the guardianship of human authority (in the human/non-human dualism) in what seems to be a comfortable union based on righteous benevolence.

The view that the natural environment needs taking care of shapes both social understanding and personal interpretation of the human/environment relationship. In a social context, the contemporary conceptualization of stewardship is at the very heart of mainstream environmentalism. Based upon the conviction that we are doing the best that we can to make wise decisions for the good of all life on earth, traditional environmental ethics focus on experience with nature, rather than the theory of Nature. As such it establishes a cultural manifesto for human experience with nature that allows, and perhaps even encourages, highly personalized interpretations of what constitutes appropriate interaction between people and the natural environment. Further, it is suggested that the high level of tolerance for personal discretion in judging what constitutes acceptable interaction with nature is based on the understanding that any given human/environment relationship is not viewed within the broader context of social consequence but rather is judged to be primarily a matter of individual conscience.

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<sup>29</sup> See also Schroeder (1991) regarding the difficulties that can result when individuals fail to realize that this kind of projection of expectation is taking place.

<sup>30</sup> See Beavis (1991) for a good discussion of the secularization of stewardship and its application to planning and public policy.

This tacit seating of responsibility for establishing appropriate human/environment relationships at a personal level is reflected in the privatization of action directed at reducing environmental damage. While the enthusiastic embracing of household and industrial recycling and other forms of resource conservation practice does contribute to creating a collectively clear conscience, it nonetheless deflects attention away from what radical environmentalists see as the “structure and relations that have brought about our current crises” (Sandilands 1993, 46).<sup>31</sup> This is not to suggest that such personal initiatives are totally futile or misguided but rather that there is a need to attend to the broader context of social change.

In this respect non-traditional environmentalist thought has as its focus the promotion of a particular social theory grounded in a certain philosophy of Nature. Personal experience with nature is of secondary concern to social context or is not at issue. The principles of appropriate interactions with the natural environment are well defined and not a matter of individual prerogative. For example, the philosophy of deep ecology<sup>32</sup> which emphasizes a deeper, more spiritual approach to understanding the place of both human and non-human life in Nature (Devall and Sessions 1994), proposes “the reorganization of politics and society along bioregional lines” and a return to the “ritualization of human life” through a “re-enchantment with nature” (Rubin 1994, 193). The theory being put forth in this is that in organizing administrative jurisdictions necessary to conduct civil society, it makes more sense to use natural boundaries, such as watershed areas, rather than artificial boundaries arbitrarily created by human society.

Implicit in this philosophy is, once again, the moral imperative that “nature is best” and not surprisingly, deep ecologists reject the notion of stewardship as being counter to the natural order of things and propose instead a return to a non-hierarchical relationship with Nature (Rubin 1994) in which the human species takes its place along with all other species thereby allowing the harmony of Nature to prevail. This biocentric philosophy as a consequence suggests certain kinds of political organizations and perspectives on public policy (Devall and Sessions 1994) such as the

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<sup>31</sup> Sandilands’s (1993) point is also that in making environmental concern a home or consumer-based, rather than political matter, the brunt of the responsibility for accountability is deflected away from governments and big business towards women.

<sup>32</sup> According to Devall & Sessions (1994), the term “deep ecology” was coined in 1973 by Arne Naess, a Norwegian philosopher, in an article for *Inquiry*, titled “The Shallow and Deep, Long Range Ecology Movements.”

downsizing and decentralization of human settlement included in the idea of bioregionalism, but which critics observe are not necessarily inherently more ecological (Bookchin 1994).

Critics of the deep ecology philosophy suggest too that such a view deflects people who are concerned over the environment away from recognizing the need for radical social change (Oelschlager 1991, 304, on assessing Bookchin's view). They feel that it puts forth a view of the world that tends to be "devoid of human presence" (Merchant 1992, 103) and that it is especially disrespectful of the experience of aboriginal peoples in living with the land (Ibid.).<sup>33</sup>

Proponents of social ecology,<sup>34</sup> on the other hand, are adamant in the view that the world is above all else social (Bookchin 1994). In stressing that the roots of ecological problems lie in the way a society is organized, social ecology "draws its inspiration from . . . [those] who have challenged society's vast hierarchical, sexist, class-ruled, statist, and militaristic apparatus" (Ibid. 1994, 229). Furthermore, fundamental to the social ecologists' philosophy is the understanding that to be human is to be natural (Ibid.). In honouring the idea that thinking human beings have evolved out of nature, social ecology rejects the biocentric notions of deep ecology.

While purporting not to support any kind of "centrism," the stewardship model of human/environment relationship is implied in the social ecologist view that human beings have a natural capacity to rationalize the use of environmental resources. What social ecologists take exception to is the fact that this rationalization presently takes place within the context of capitalism. In their view society fails to acknowledge that the capitalistic perspective has been fundamental to precipitating the current environmental crisis. They call for a social solution to a social problem that can be effected only by a political and economic restructuring of contemporary society.

Ecofeminism<sup>35</sup> is also about recognizing the seeds of environmental crisis in contemporary social

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<sup>33</sup> Nabhan (1995) cautions, though, that it is tempting to sentimentalize the idea of aboriginal peoples "living in harmony" with the land, noting that in the case of North American plains over the centuries there have been millions of indigenous people, speaking a variety of languages, modifying the land to their needs.

<sup>34</sup> Social critic Murray Bookchin is closely associated with the political philosophy of social ecology. He is described as "a severe and irreverent critic of deep ecology" by Van De Veer and Pierce (1994, 214).

<sup>35</sup> Archambault (1993) and others attribute the term "ecofeminism" to Francoise d'Eaubonne who is believed to have first used it in 1974.



structure and practice. Drawing from the theory of ecology which in part emphasizes the interconnectedness of all life forms in an ecosystem and feminist analysis that links the oppression of women with the domination of nature, ecofeminist philosophy “seeks to integrate personal, social, and environmental issues that are often separated, [thereby] providing directions for a potential transformation of social institutions” (Lahar 1993, 444-5).

Although ecofeminism is first and foremost a political philosophy concerned with ensuring the incorporation of feminist and ecological perspective in social problem definitions and analysis (Archambault 1993), it also includes an element of spirituality centred on personal relationships with nature (Lahar 1993). The overriding concern of ecofeminist thought, and the thinking in deep ecology and social ecology as well, is with the creation of an alternate social context from which to consider the philosophy of Nature in terms of guiding the realities of human interaction with the natural environment.

The ideas coming out of various radical environmental movements are beginning to influence traditional views concerning how environmental issues are defined. However, the way in which solutions to environmental problems are framed shows little evidence of either a change to the underlying social organization or a desire to change this organization. It appears that this is the case even though it has been suggested that the greening efforts of household recycling and so on, while personally based, have the potential to alter public opinion and eventually influence political action (Burgess 1990) concerning human/environment relationships. If a transformation does begin to take place it will for quite sometime likely continue to be within the context of influencing individual consciousness rather than reforming social structure.

### **3.3.4 Summary**

In discussions related to human/environment relationships the course of environmental thought marks a great divide between reflection on major philosophical perspectives concerning a political and social theory of Nature and consideration of pragmatic concerns related to experiences with the physical world of nature. Although both radical and traditional environmentalism have their roots in the evolving ideas about the physical world of nature, a point of departure is evident when talk focuses on social theory as opposed to personal experience with the natural environment. For example, accusations that proponents of the traditional conservation-oriented stewardship model of

environmentalism are an elitist special interest group, with concerns that are seldom relevant to poor, non-white populations in the city (Marx 1988), and that they are more concerned with nature than with human life (Gottlieb 1993), move critical analysis of human/environment relationships into the realm of social theory.<sup>36</sup>

The discussion here will continue to explore the idea of personal experience with the natural environment in relation to defining appropriate human/environment relationships. As well, in order to consider its contribution in shaping contemporary views on the meaningfulness of experiences with urban nature, the wilderness idea is used as the framework to demonstrate the evolving character of human interaction with the natural environment.

### **3.4 The Wilderness as Process/Product of N/nature**

The convergence of social theory and personal experience with the natural environment is evident in a number of contemporary situations. For example, studying changes in the role and meaning of gardens<sup>37</sup> or examining the history of agriculture in our society would provide compelling perspectives on the dynamics of human/environment relationships. But the idea of wilderness, although not unique in its ability to illustrate the coming together of metaphysical and physical ideas of N/nature, is of particular interest<sup>38</sup> – not only because it provides an avenue for looking at the expression of experience with nature, but also because it has influenced understanding about what constitutes a legitimate natural environment. This is surprisingly true even in terms of creating expectations within an urban context.

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<sup>36</sup> Regrettably it is not within the scope of this study to pursue further in depth analysis of social theory, as such the reader is directed to Bowler (1993) and Gottlieb (1993), two excellent historical analyses of environmentalism.

<sup>37</sup> Riley suggests that the wilderness has replaced the garden as the favoured form of symbolic nature, mainly as a consequence of a “traditional American preference for remote and spectacular grandeurs [combined with a] growing dismay over our power to rework nature” (Riley 1988, 141).

<sup>38</sup> As mentioned previously, the stewardship model of human/environment relationships is primarily concerned with the experience of nature in that the enthusiasm and intentions of stewardship are directed at a specific image of the theory of Nature. Consequently the “wilderness” and its preservation is a central issue to mainstream environmentalist concerns. For radical environmentalists the priority issue is the need to fundamentally alter the politics, economics or basic social structure of a place so as to provide a new context for healthy human/environment relationships, of which personal experience with the natural environment, including the wilderness, is a part. Indications are, however, that even mainstream environmental practice may be moving away from preserving wilderness for its own sake towards preserving wilderness for its role in contributing to holistic habitat health (see Dave Foreman [1996] founder of EarthFirst! and a director of the Sierra Club for a critique of present conservation practice which creates islands of wilderness rather than integrated environments).

### **3.4.1 Transforming the Wilderness Idea**

Throughout ancient history the idea of wilderness changed continually in response to the influence of myths, superstition, religious beliefs and social customs (see Merchant 1980; Oelschlagel 1991; also Salisbury 1993 and Schama 1995 for particularly rich, detailed accounts of prehistory and medieval times). However during this time wilderness was more likely to be viewed with fear than with affection (Nash 1982, and McKibben 1989). Subsequently in modern history three factors combined to create a situation in which the wilderness is no longer viewed as being distasteful or threatening, but is seen instead as awe-inspiring – through increased familiarity with wild settings, an aesthetic sensibility that canonizes the wild, and alarm over environmental degradation, the wilderness has become something to be cherished and revered for its wildness.

The first factor to affect this fundamental turnaround in social understanding was the influence of science and technology in causing the wilderness to be both intellectually and physically more accessible. When no longer seen as intimidating (Fleischner 1992), the wilderness became an exhilarating place in which to experience direct contact with the natural environment. Participation in outdoor recreation pursuits grew as a consequence. It is likely that the more privileged class had the time and the money to take part in nature activities. In this manner the scene was set for an influential constituency of avid outdoor enthusiasts to both exert social pressure to conserve wilderness areas (Booth 1994) and promote the virtues of experiences with the natural environment by including elements of nature into the urban environment in the form of parks.

The second factor that altered the way in which the wilderness is perceived was the tendency to closely associate nature with the work of a divine creator. Viewed in these terms, a certain notion of nature – conceived primarily as a pastoral landscape emanating peace and tranquility – was seen to afford a special opportunity to commune directly with a higher power. As Cosgrove explains, this was very appealing to people bound by “the context of a religious tradition which stresses individual salvation” (Cosgrove 1984, 185). Even within this context, however, the enthusiasm for the nature experience did not necessarily extend to the more rustic and untidy settings of wilderness. It took popularization of work by naturalists such as Thoreau, who emphasized the

theme of transcendence through striving to become one with nature (J. Bennett 1993),<sup>39</sup> to extend the romanticized idea of nature into the realm of wilderness. The influence of Thoreau is strong. It was he who suggested that what was to be valued most in nature was its wildness (Raglon 1991). This view effectively linked the notion of freedom with that of purity and goodness into the idea of wilderness.<sup>40</sup>

The increase in personal comfort with wild nature and the emergence of the ethos of freedom of the wild were joined by the general insinuation of technology into community of life in enhancing the wilderness idea. The impact of this third significant condition has been twofold in that both lifestyle and the natural environment have been affected. Modern transportation and communication technology have allowed vivid evidence of the deleterious consequences of human industry and commerce on the land to be brought fully into the awareness of the average person.<sup>41</sup> More direct encounters have resulted from an increase in travelling to and through disturbed landscapes. Second-hand accounts provided by newspapers, photographs, personal testimonies, and more recently computer simulations, have become more readily available. As a consequence, even the most remote situations are able to offend people's sensibilities and concern has arisen for protecting impressive wild environments (see Figure 10).

Pigram sums up the fundamental change that has taken place in the wilderness idea as follows:

For much of history, wilderness held a negative connotation either as wasteland, or as some vast hostile and dangerous place to be avoided . . . or else to be tamed, controlled, and exploited. Today, people in many parts of the world have come to think more positively of wilderness as something to be valued, used and managed with care and respect, and preserved for a future world in which it could become increasingly rare (Pigram 1993, 415).

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<sup>39</sup> Bennett (1993) reports that Thoreau recounted an occasion in which he insinuated himself so completely into nature that for an instant he did not notice his own human presence and was able to practice the "delicate and deliberate act of forgetting . . . (as in the relaxation of self-consciousness)" (J. Bennett 1993, 261).

<sup>40</sup> The famous, often misquoted (according to Cronon 1996) saying by Thoreau is that "in Wildness (not wilderness) is the preservation of the World" (Penguin reprint of Thoreau 1995, 25), through which he surmises "all good things are wild and free" (Ibid., 36).

<sup>41</sup> Laituri and Kirby (1994) suggest that it is "urbanism in capitalist societies (which transforms) our understanding of, and our relationship to, nature" (Laituri and Kirby 1994, 124). I wanted to include the idea that technology has contributed to the decreased time required for images and information to reach people and so have used the notion of industrialization instead.

**Figure 10**



**WILDERNESS PRESERVE**

*A day may come when experiencing wilderness is a thing of the past. Needing to satisfy their instincts, people will only be permitted to look through the glass of an untouchable "wilderness preserve." They will know from the habits of their ancestors that any direct human contact with the preserve will destroy it. Set aside by our now ancient culture, the preserve represents all that remains of a once vast and pristine wilderness and serves as a powerful reminder of the destructive capabilities of humankind. Obviously, our present ecological ethics must evolve to guarantee the existence of future wilderness and biodiversity.*

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EXPLORE JUNE/JULY 1995

**A world in which the wilderness is increasingly rare  
(concept by Tim Yearington, *EXPLORE* June/July 1995, page 74)**

### **3.4.2 Layering the Meaning of Wilderness**

In the two hundred years or so since this initial complete transformation in the understanding of wilderness, changes to the idea have been less radical. Rather than being substantially altered, over recent time the idea of wilderness has instead been subtly reshaped by layers of accumulated meaning. Accumulation implies that each new layer does not supersede the previous one. New elements augment existing ones so that at any given time a variety of meanings are retrievable.

Specifically this means that although the original idea of wilderness was very place-based, it rapidly came to include a generalized expectation concerning relationships with wild nature (Chaloupka and Cawley 1993). The feelings generated by compelling site-specific characteristics

such as a spectacular natural form and features, and little or no indication of human influence<sup>42</sup> (Kaplan and Talbot 1983 cited in D.Bennett 1994),<sup>43</sup> set the standard for imagining what a nature experience should be like.

The wilderness experience has also come to include situations that are not necessarily bound to a particular place. They are based on highly planned and contrived interactions with the natural environment where the activity, rather than the place, is the point. The expectation is that the experience will provide a simulation of the return to more primitive circumstances in which there are fewer artificial demands placed on one's behaviour (Bullock and Newton 1992) and more opportunity for self-discovery through direct contact with the real world of nature (Ibid.). Whether through undertaking deliberately constructed situations designed to challenge one's ability to be self-sufficient in the wild or through engaging in intentional quests to find connections with the natural world, contemporary wilderness experience in many ways is a secularization of the salvation and transcendence themes in the wilderness idea that have as their goal achievement of a joyous sense of purity (or renewal) and freedom.

The most recent layer of meaning to be incorporated into the idea of wilderness is an elaboration of this pursuit of a personal sense of fulfilment. Contemporary understanding is that not only is wilderness a place and an experience, but it is also a state of mind<sup>44</sup> (Dizard 1993; Cronon 1996), achievable through evoking memory and imagination, as well as through direct contact with both wild nature and natural settings closer to home (Cronon 1996). This state of mind was aptly described by a participant at a recent symposium on the wilderness when she declared "Ah

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<sup>42</sup> Although as Berleant (1992) notes, it is unlikely that there is any wilderness left in the developed world today that has not in some way been subject to human agency. As he explains, the landscape at any given time and place reflects all previous and ongoing human interaction with it. McKibben (1989) takes this further when he cites the fact that humans have even managed to change earth's climate in making his case for how it is that primal nature has come to an end.

<sup>43</sup> The citation provided by Bennett (1994) is: R. Kaplan and J.F. Talbot. 1983. Psychological benefits of a wilderness experience. In *Behavior and the natural environment*, eds. I. Altman and J. Wohlwill, 148-149. NY: Plenum. The original source was not consulted.

<sup>44</sup> It is the assumption throughout this discussion that the idea of wilderness is in fact subject to the influence of a greater social context which defines our understanding of nature (Oelschaeger 1991) and shapes our perception of the natural world (Nash 1982). The state of mind here refers to individual contemplation rather than the more general social construction of reality.

wilderness, after all these years, I think I've finally achieved it" (Henderson 1996, 31, quoting Deborah Freeman, who was speaking at the *Wilderness Canoe Symposium* held annually in Toronto, Ontario).

### 3.4.3 Contemporary Views on the Wilderness

Ms Freeman's undeniable expression of fulfilment of arriving at a symbolic place is the very essence of all meaning accumulated to date in the wilderness idea. Each layer added over time has brought progressively more abstract dimensions to the idea, which in many respects has become more and more distant from the physical reality of the natural environment. That is, in reworking our understanding of wilderness to incorporate not only the original concept of place, but also to include certain kinds of relationships with places, and eventually to encompass the special feelings generated through relationships with places, the idea of wilderness has become grounded less in a specific setting and more in the affective response to a generalized and perhaps even idealized vision of the wild.

There are two aspects in particular that have contributed to this trend in the way nature is experienced by people. First, most people in the world either are not in the position to appreciate nature<sup>45</sup> or do not have the resources to pursue the kind of leisure activity that brings them into contact with authentic wilderness environments. The opportunity to directly experience the breathtaking majesty of pristine, virtually unpeopled, wild nature is a privilege accorded to only a small minority of earth's citizens. Consequently for much of humanity a pleasurable encounter with the wilderness is either not an issue or more commonly takes place in a highly mediated situation such as a park or a movie theatre, in which a certain image of nature is simulated. Further, the experience with a facsimile of wild nature seems able to conjure up the anticipated affective response just as well, if not better than, the real thing.

The other aspect of contemporary experience with nature that contributes to a reduced need for direct contact with wild places is the suggestion that while people generally seem to have a high

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<sup>45</sup> For example, Gallagher cites Csikszentmihalyi noting that (in making his case that appreciation of nature is a luxury of the affluent) "[p]eople trying to survive in a garbage dump in Mexico City do not care about beauty and nature" (Gallagher 1993, 217). Csikszentmihalyi may in fact be taking a liberty in speaking for others, however during times when particularly harsh living conditions prevail it is doubtful that the aesthetic aspects of life would be a major concern.

level of awareness of the natural environment, most encounters with nature are superficial<sup>46</sup> and tend to be influenced by a stereotypic view of both the physical form (Mech 1992) and psychological benefits of nature. The survey conducted as part of this study confirms that for the most part people's perspective on nature is both constrained by the formal organization and administration of space (McGinnis 1994) and conditioned by conventional expectations.<sup>47</sup>

This preconceived notion of nature is manifest in the fact that people do not accord the same degree of attention or attachment to ordinary, mundane or unattractive features of nature as they do to those which are more compelling either by virtue of their uniqueness, beauty, or appearance of naturalism (i.e. devoid of human interventions).<sup>48</sup> Encounters with controlled natural environments and with wildlife such as deer or ducks in the city are predictable in their focus. Experiences that encourage feelings of peace, tranquillity and personal fulfilment dominate descriptions about the meaningfulness of nature close to home (for example, see narrative responses in subsequent chapters). For the majority of people the joys of urban nature do not include the biodiversity of species thriving in vacant lots and overgrown boulevards, or pigeons in the downtown. In fact the narrow band of tolerance for what counts as nature is such that thistles at natural area parks are problematic.<sup>49</sup>

Partly as a function of the history of the idea of nature which has culminated in this particular view (Sinden and Worrell 1979), but also as a consequence of seeing past relationships with the natural environment from our current place in time (Nichols 1994), the romanticized version of nature has fashioned a strong hold on our collective imagination. Although it has been suggested that few people actually think that it is possible to achieve the romanticized state in which unspoiled nature

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<sup>46</sup> Cobb (1977) suggests that for children "nature . . . is sheer sensory experience" (Cobb 1977, 28); Mech might agree that for children the experience is different.

<sup>47</sup> The Nature in the City survey results are less supportive of the idea that most encounters with the natural environment are superficial in that there was a wide range of both psychological and physical involvement with nature reported by survey respondents.

<sup>48</sup> These features, along with an organism's resiliency and contribution to support of human life, are what Brooks (1976) describes as "themes in the valuation of nature" (Brooks 1976, 122).

<sup>49</sup> The thistle issue is an example of an institutionalized judgement on nature in that as per the Provincial Weed Control Act, Canada, the thistle is categorized as a weed which is controlled in Calgary (Calgary Parks & Recreation unpublished *Draft Integrated Pest Management Policy, November 1996*).



flourishes (Worster 1995), people have an exceptionally strong tie to traditional views and expectations concerning the natural environment (see survey results discussed in detail in subsequent chapters). Perpetuation of the romantic ideal of nature however is perilous for a few reasons.

A case in point is the consequence of a stewardship model of human/environment relationships that is founded on extending human guardianship only to those “natural objects and environments that are . . . conventionally pretty” (Thompson 1995, 295) or that are naturally wild (Cronon 1996). The fundamental dilemma arising from this approach to caring for nature is to figure out whose specifications and sensibilities are to prevail in the definition of worthiness. An obvious example of this would be the noxious weed status currently assigned to dandelions.<sup>50</sup> Another example is the recent prohibition of bird feeders, put up in past winters by people enjoying the Weaslehead area in Calgary. The practice is discouraged on the grounds that it encourages the sparrow, considered to be a pest species, to thrive. It has been suggested that it will not be possible to have a meaningful environmental ethic unless we can move beyond using these mainly visual quality and antiquated hierarchies of value as indicators of the worthiness of any particular natural environment (Thompson 1995).

But perhaps the most compelling reason for trying to get past the romanticized notion of nature as our benchmark of quality in experiences with the natural environment is the shadow it casts on humans and human enterprise. As Rubin (1994) describes it:

The ethic of human withdrawal from nature, of maximizing “wilderness,” depends on a highly artificial pretence that human beings are somehow so “unnatural” – one might even say unworldly – that we need to be ghettoized lest we compromise nature’s purity (Rubin 1994, 249).

The traditional stereotype of wild nature, in which human agency is considered to be a liability, could be replaced with a conceptualization of nature that, as Thompson suggests, recognizes its ability to creatively accommodate the eventualities of both human and non-human life processes and in so doing finds human effects to be no less beautiful (Thompson 1995).

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<sup>50</sup> Dandelions are controlled by a Weed Control Unit in Calgary Parks & Recreation, as required under the provincial Weed Control Act. Most of the complaints to the Unit office related to problems with dandelions and other broad leaf weeds (Unpublished monograph, Planning Section, “Weed Control Unit 1996 Customer Satisfaction Survey Report of Results, November 1996,” Calgary Parks & Recreation 1996a).

Relying primarily on the romanticized, stereotypic idea of nature and vicarious or limited direct contact with the wild to inform individual understanding of nature precipitates an increase in abstraction and distancing from the tangible reality of wild settings. It creates a situation in which the idea of wilderness is more real to people than the actual wide range of conditions in the wild. Through this authentication of the metaphysical realm of experience with nature, the cultural context for what counts as legitimate kinds of interaction with the natural environment is almost unbounded, being limited only by individual interpretation of the idea.

When engagement is with an idea rather than an entity, the organizing point of the nature experience becomes one of resolving individual emotional or psychological need through interaction with the natural environment. Such an approach is not overly concerned with accounting for, or maintaining and controlling, the collective impact of the physical consequences of those interactions in any particular encounter with nature. The focus of human/environment relationships is then more likely to be on particularized or personal indulgence as opposed to generalized or social restraint. The cultural imperative that frames human/environment relationships in this context is one based more on the right to gratification than on the obligation for preservation. This may in part explain why even mainstream environmentalism has failed to generate any kind of widespread social agreement on appropriate limits to human/environment interactions.

In addition to providing a weak foundation upon which to build a preservation ethic, the disengagement of affective response to the wilderness from the actuality of wild nature in secluded places permits the generalization of this response to facsimile settings such as one might find closer to home. Research suggests that urban nature is capable of inspiring the same feelings of regeneration, competency and kinship as is vested in the wilderness idea (see survey results in subsequent chapters). Some have suggested that it is the characteristic of wildness, as Thoreau believed (Cronon 1996; Henderson 1996), which is at the heart of our response to nature. But there is evidence to suggest that settings that conform to a certain spectrum of visual and psychological factors, not random or unfettered wildness, are responsible for defining and realizing satisfactory experiences with nature in the city (see survey results).

**Figure 11**



**The urban nature experience**

**(Illustration by Eva Resovsky. *Nose Hill Park Master Plan Review* Calgary Parks & Recreation 1993, 4)**

It is important to keep in mind that as a result of the layering in meaning of the wilderness idea many versions of the seminal nature experience exist coincidentally in the urban context.

Attachment to place, exhilaration in outdoor recreation experience, and achievement of spiritual well-being are more or less meaningful to different individuals. It is nevertheless the case that these are essentially all meeting social and aesthetic goals in the community (Berman and Weil 1992), not necessarily celebrating the presence of wildness (see Figure 11).

It is in finding that most people do not appear to differentiate their expectations of a nature experience on the basis of either proximity or wildness of the natural environment that the idea of wilderness is of most interest to this study. The fact that urban nature is expected to accommodate the same or similar experience goals as the wilderness has several implications for the planning and management of urban natural area park land. Briefly, the most pressing are the need to resolve potential conflicts based on a wide range of experience goals (see Nature in the City survey

results); to reconcile the paradox of artificial naturalism (Simms 1992; Thayer 1994); and to modify constraints of preconceived aesthetic standards (Thompson 1995; Cronon 1996).

There is one final point to make in considering wilderness as an example of how the experience of nature moves in and out of the theory of Nature. It must be stressed that in journeying to and from the place of wilderness, be it in mind or body, the transactions are bounded by a social context (Green 1995). The social context for understanding interaction with the natural environment is extremely broad. As a consequence it has the potential to entertain a vast range of personalized interpretations of the nature experience. Social, psychological and physical environments alike are shaped by the influence of particular cultural perspectives<sup>51</sup> concerning, for example, what is to be cherished and what is to be feared. It is cultural ideals and practice that establish the acceptable and agreed upon parameters for understanding phenomena, evaluating experience, and interpreting meaning.

### **3.5 Conclusion**

The complex meaning systems that are dominant at any given time in any given place are the very essence of culture.<sup>52</sup> Customs and certain ways of thinking form an interpretive framework that is always changing as it is shaped by collective and individual events and experiences (Duncan and Duncan 1984). In providing a vehicle for synthesizing collective experience, our cultural framework structures reality for most people (Agnew, Mercer and Sopher 1984). But viable cultures need to provide more than just a shared understanding of one reality. It is also necessary to have interpretive procedures that accommodate, to some reasonable degree, the different ideas of reality that arise in any diverse society (Bruner 1990). In less diverse societies (or in societies or times when diversity is less tolerated) it might be understood that only one truth is possible and that science plays the most important role in uncovering the truth.

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<sup>51</sup> For this reason, culture also is instrumental in “both defining and solving environmental problems” (Raglon and Scholtmeijer 1996, 36).

<sup>52</sup> This is based on an understanding of culture as described by Geertz (1973), in which “historically created systems of meaning” provide patterns or programs that guide individuation processes (Geertz 1973, 52). Halton (1995) suggests, however, that there are in fact organic influences that shape “human conduct” (Halton 1995, 244), so that for him cultural imperatives can be “biosemiotic” in origin (Ibid., 277). He uses as an example our spontaneous, unconditioned pleasure response to sunshine on our face, although the growing concern over UV rays and melanoma seems destined to infuse even that simple pleasure with more sinister meaning in our culture.

The effectiveness of science in establishing procedures for interpreting what is real is not in question here. However, in our culture, in order for community living to survive, there is a need to augment scientific truth by validating interpretive procedures such as empathy and intuition in truth seeking. It could be argued that the conflict seen over establishing what is meaningful in terms of natural areas in the city can in part be attributed to a lack of tolerance for diversity in interpreting meaningfulness. The conflict could also simply be a function of our culture's tendency to regularly reinvent new symbols and modify old ones, resulting in an essential instability of meanings generated from shared social symbols (Daniels and Cosgrove 1988). This post-modern perspective suggests that the references for our meanings are being changed beyond recognition, so that they are no longer reliable sources upon which to base our interpretation of experience.

The implications are that it may no longer be possible for any symbol that is meaningful in a similar way to significant numbers of people in a community to become stable enough for a public meaning to crystalize. This most certainly would seem to be the case in terms of social symbols related to urban nature as presented in public park development. While Cranz (1982), Jones (1994) and others have had little difficulty in identifying the social symbols being represented in early parks in North America, the underlying symbolism in these post-modern times has been both less evident and less prevailing.

For example, there is less and less agreement on what in fact even constitutes a park. One gets the sense from the focus group work done for this study that in people's minds a "park" means some sort of control or bounds are expected to be put on nature in order to make it safe and accessible for everyone. On the other hand, if something is controlled then it is not seen as natural. Park planning practice that supplies subdivisions with generic open spaces in the interest of the efficiencies provided by uniformity and standardization in design (features which Krampen [1979] notes are inevitable consequences of industrialization) may in part be responsible for losses of potential to create meaning. Context becomes so blurred as to be unusable in the construction of meaning (Coupland 1995).

Not everyone is comfortable with the social constructivist view on shaping reality that is outlined here (Hayles 1995). In suggesting that changes in cultural conditions and ideas result in changes to what gets to be identified as science, nature, or reality, there is something to disturb both

scientists and environmentalists. The notion of the privileged place of science in truth making and the fundamental assumption of the intrinsic value of nature can both be challenged by the social constructivist perspective. However, in trying to reconcile the legitimacy of science, nature and constructivism, it has been suggested that we actually operate in a kind of “constrained constructivism” in which contemporary interpretive procedures and the “positionality” (or the subjective position) of the knower serve to constrain the range of viable options for shaping any given reality (Ibid. 53).<sup>53</sup> By accepting that truth can not always be known in certainty, it is possible to compare certain representations of reality to each other, and not to some superior ideal of universal truth. The ultimate value in positionality is that different representations question the assumptions of the dominant views (Op. cit.). By questioning assumptions, different possibilities emerge and we work with those in shaping our world. The possibility of reproduction of social structure and space such as park land, through knowledge gained in a person’s “everyday interactions with other people” (G. Rose 1993, 20) and with the natural environment, is in any case the perspective that will be employed here in the continuing discussions of the dynamics of finding meaning in human/environment relationships.

In spite of the very personal differences in making meaning that result in part from different kinds of knowledge, it is still theoretically possible to create a common world through negotiations that define social and natural phenomena (Greider and Garkovich 1994). Our way of life depends on the meanings we generate being at least in part public and shared, because we are joined together in culture (Bruner 1990). Bruner suggests, as others have, that the continuance of public meanings depends on “shared modes of discourse for negotiating differences in meaning and interpretation” (Bruner 1990, 12). The development and implementation of park planning policy provides one such opportunity for shared discourse.

It is in the ongoing negotiations that structure our social reality that some symbols and meanings may be reinforced and some may change, or be interpreted differently, as each person or cultural group strives to maintain or reconstruct a certain reality (Greider and Garkovich 1994). In terms of experience with the natural environment, elaboration of cultural understanding of

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<sup>53</sup> Hayles explains constrained constructivism as follows: “[t]he positive identities of our concepts derive from representations which gives them form and content. Constraints delineate ranges and possibilities within which representations are viable. Constrained constructivism points to the interplay between representations and constraints” (Hayles 1995, 53).

human/environment relationships takes place in the physical constitution of the landscape and the social construction of park land as part of any given local context.

The next section reviews the differing perspectives that Calgarians who participated in a recent survey have in terms of elaborating on the meaningfulness of existing representations of urban nature. The section following considers these findings in relation to the influence of social context, or shared reality, on views concerning the provision of natural area park land in general.

## PART III: NATURE IN THE CITY – SURVEY RESULTS

### CHAPTER 4

#### Survey Background and Methodology

##### 4.1 Introduction

The next three chapters consider the results of the Nature in the City public survey. This chapter is a detailed review of the background and methodology of the survey. The next chapter looks at the demographic profile of respondents and the responses to forced-choice questions of respondents' behaviour and opinions concerning the urban natural environment. The final chapter in this Part considers the respondents' narratives about experiences with urban nature. The discussion begins with looking at information that provides a background for the research.

##### 4.1.1 Background

The Nature in the City survey was conducted in the spring of 1995 in Calgary, Alberta. It was undertaken in co-operation with Calgary Parks & Recreation, Planning Section. The primary purpose of the survey was to explore contemporary relationships with urban nature. The survey also looks at views related to the provision of public park land in Calgary. Dimensions of experience such as perceived benefit, meaningfulness, park use patterns, and general outlook on nature are examined for the contributions they make to creating an ongoing relationship with the natural environment. The analysis uses opinions, reported behaviours, and descriptive narrative in the characterization of perspectives on the appropriate use of natural area park land. In order to provide an opportunity for longitudinal comparison of public opinion related to the planning and management of natural area park land, two questions in the survey are replicated from an earlier local study on urban parks – the 1991 Pulse on Parks survey.<sup>1</sup>

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<sup>1</sup> The Pulse on Parks survey was conducted during November and December of 1991. In 1989, as a result of a Provincial Government program designed to promote the provision of urban parks in Alberta, funds became available to plan for the future of Calgary's river valley system. Following City Council's approval of the required concept plan, the "survey was undertaken by Calgary Parks & Recreation in order to establish an objective baseline of information related to the parks and open space needs, preferences, and priorities of Calgarians" (Calgary Parks & Recreation 1992, 1). Questionnaires were provided for delivery to all residential dwellings in Calgary (267,779), as per Canada Post records to November 15, 1991 (Calgary Parks & Recreation 1992, ii). By the January 11, 1992 data entry cut-off date, 46,384 valid questionnaires were returned. This represents a 17.3% response rate (Ibid.). See Appendix VIII for a summary of the methodology for the survey.

The magnitude of participation in the Pulse on Parks survey was such that planners felt confident in applying the results in the preparation of the *Urban Park Master Plan*, which included extensive additional public participation, and the *Natural Area Management Plan*, both approved by Council in 1994 (refer to Appendix IX for an overview of the results of the Pulse on Parks survey).



The replicated questions concern public opinion on the protection and care of open space, and on priorities for open space funding. These questions were included in the 1995 survey for two reasons: to track any changes in public opinion, and to provide a substantial base of comparison for factors in this study important to operationalizing the concept of eco-affect.

The main issue under consideration in this research is the increasing pressure on undeveloped park land in urban areas to be put into other more economically or socially productive uses. Park land is gradually being turned over to other municipal service uses seen to be more pressing, such as roads, or to private residential and commercial development. Recent examples of this in Calgary include the extensive private redevelopment of the river bank area through the downtown core (10th Street to Fort Calgary); disposal of developable public escarpment lots for residential development; placement of an elevated river crossing through an existing park (Bowness Park); a proposed river crossing in the Weaslehead; and the Planning Commission approval of a residential institution development (for Alzheimer's patients) in an area along the river proposed for a future park (Carburn Park). These actions indicate that undeveloped park land or park land with a low intensity of development is not seen as a priority use in highly competitive land use situations.

One way to study this problem is to look at what might influence people and their communities to be inclined one way or another towards supporting natural area park land use. This can be done through searching for cause-and-effect relationships. In this case it would involve exploring connections between experiences with nature and the formation of attitudes toward natural area parks in the city. Experience with nature has the potential to generate perceived benefits which in turn could make a meaningful contribution to the kinds of preferences a person is inclined to express about the appropriate use of urban park areas.

But there are compelling arguments in recent attitude/behaviour literature (Kim 1993) that lead to the conclusion that, in most circumstances, attempting to establish causal links between attitudes expressed in surveys and eventual behaviour remains at best illusive and at worst ill-advised.<sup>2</sup> For researchers who intuitively feel that there is both a logical and empirical connection between certain

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<sup>2</sup> Much earlier Dunlap & Van Liere (1978) observed that causal connections between general attitude towards the environment and specific behaviours are especially unreliable, suggesting it is not perhaps even reasonable to expect people to display consistencies in this respect, as people may be generally unaware that they have views that conflict at some point.

attitudes and behaviours, the literature does allow that the more salient and well-defined the issue, the greater the likelihood that attitude will be a reliable indicator of behaviour (Ibid.; Fiske and Kinder 1981). However, factors such as the tendency for individuals to have more than one view on an issue (Strack and Martin 1987; Tourangeau 1987), or for people in general to have varying degrees of understanding and interest in an issue (Wojciszke 1989) suggest that there is likely considerable difficulty in being able to adequately assess attitude indicators, especially in survey research.

Operationalizing the concepts involved in cause-and-effect relationships can also be problematic. This was illustrated during the initial research phases of this study. When conducting the focus groups interviews to identify response categories for the public survey data collection instrument, the concept of “benefits of nature” did not spontaneously emerge from group discussions (see Appendix I for focus group transcriptions). Participants spoke of what was important to them in experiences with nature in the city, but not necessarily in terms of what is beneficial to them as individuals or to the community as a whole.

Research that helps make sense out of phenomena can generate knowledge as valuable as results from research that tests the truth of theory (Oatly 1978). The positivist tradition suggests that results produced by an explanation method of analysis are not broadly generalizable and that they may even produce explanation and speculation that is “meagre and inadequate” (Patterson 1993, 56). But it has been suggested that with respect to the leisure experience, purely empirical methods do not always provide the opportunity for the depth of understanding of experience that is needed to act on any of the research findings (Ibid.).

As a result, this study uses a research approach that rather than looking for a definitive cause-and-effect relationship, seeks to identify and describe phenomena that have not been previously isolated or explored. The research plan is designed to shift away from the idea of benefit towards expression of meaning as a key factor in the exploration and analysis of experience with nature. The point of the research is not only to make a contribution to the understanding of an issue in general, but also to try to develop a direction in which to begin to resolve a particular dilemma (Erlandson, Harris, Skipper, and Allen 1993).

The intent is to look at experience in terms of what was reported in one open-ended question. Open-ended questions are, however, notorious for their low rate of completion, with rates of non-response typically ranging anywhere from 30% - 75%. Moving away from a singular causal analysis affords more flexibility in operationalizing the dimensions of experience. Looking to identify and describe influences, rather than definitively explain causes, ultimately permits two important procedures to occur: it is possible to explore all variables for their potential contribution to the phenomena of relationships with nature in the city, and to include all survey respondents in the analysis.

Within this framework, the questions guiding this research are: “What factors seem to define relationships with nature in the city?” “How is this relationship expressed in terms of expectations for natural area park land use?” and “What implications do these expectations have for planning natural area park land?” The specific points considered are:

- (a) meanings interpreted from respondents’ experiences with urban nature;
- (b) opinions related to use of natural area park land;
- (c) views on planning urban natural area park land;
- (d) similarities and differences among various categories of respondents; and
- (e) speculation on the source of similarities and differences.

The survey research is also based on the understanding that nature has different meanings for different people in different circumstances; that people display a variety of inclinations towards the use of natural area park land; and that parks reflect contemporary relationships with urban nature. Connections between these various conceptualizations and other aspects of opinions and behaviour are explored in seeking to come to terms with the different expectations that people have concerning use of natural areas in the city.

This chapter looks at the research methods used in conducting the Nature in the City survey. For the purposes of the survey, natural area park land is taken as those natural areas formally identified as Natural Environment Park in Calgary (as per the 1994 *Natural Area Management Plan*), such as the Inglewood Bird Sanctuary and various escarpments throughout the city, along with other undeveloped public land identified by survey participants. Theory generated from this inquiry,

while Calgary-specific, is informative to explorations of similar ideas elsewhere. From a park planning perspective, consideration of the various dimensions of contemporary relationships with urban nature is ultimately reflected in local land use policy and subsequent development patterns of natural area park land. The implications for park planning are discussed in a subsequent chapter.

## **4.2 Study Method**

This section reviews the data collection and processing methods used in conducting the survey. There were two phases to the field data collection: focus group interviews and a two-part, self-administered questionnaire, mailed to a random sample of 1,600 Calgary households.

### **4.2.1 Focus Group Interviews**

A focus group interview is a group interview technique in which a panel of 4 to 12 participants takes part in a moderator-led, structured discussion of a particular issue. This method can help provide preliminary indications about how various types of individuals might feel about an issue of interest to the public (Nieburg 1984; Saykaly 1994). Originally used in market research as part of the product development process, focus group interviewing has recently become popular in the testing and development of public policy. The method was chosen for use in this study for two reasons. First, the focus group interview process was seen as an efficient way to provide the author with an opportunity for face-to-face contact with participants in the early stages of exploring an issue of interest. Second, it has been suggested that the technique has value in terms of providing direction in the development of questions for inclusion in a questionnaire survey (Krueger 1988).<sup>3</sup>

Consequently, focus group participants were secured through recruitment postings at the Calgary Municipal Building, Calgary Public Building, Calgary Public Library and Alberta Vocational Centre. Notice of the need for volunteers was also provided to selected individuals involved with various outdoor recreation groups and to a professor at the University of Calgary, Faculty of Environmental Design. Prospective participants were screened for sorting into gender groups and an effort was made to diversify the gender groups on the basis of ethnicity, age, occupation and

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<sup>3</sup> It should be noted that as Greenbaum (1993) suggests, the quality of the engagement of participants, including the participants' general knowledge, interest in the issue, communication skills and so on, is extremely important to the quality of data produced through the interviews.

ability (physical). Respondents agreeing to participate were mailed a letter of confirmation of their scheduled group, a consent form to be filled in and brought to the session, and if the session was held downtown, a note indicating a light lunch would be provided.

The selection process resulted in 17 people taking part in three different focus groups. One group was comprised of a group of six gender-mixed graduate planning students. The student focus group was held as part of a graduate seminar class in community planning, however, participation was voluntary. A second group of five male participants, comprised mainly of City of Calgary employees, but including a mix of ethnicity and ability, met in a downtown seminar room. The third group of six women, half of which were Calgary Parks & Recreation employees, was mixed in terms of ethnicity, age and occupation; they also met downtown.

Focus group participants were provided in advance with the discussion questions. They were also given a copy of a draft of the first part of the proposed questionnaire for the public survey. Participants were asked to complete the draft and provide constructive criticism as to the design and wording of questions. They were advised that information from their sessions would be used in future drafts of the questionnaire. Each focus group discussion lasted about an hour and 15 minutes. Although the questions were worded slightly differently in each session, each group addressed the issues of:

- o main benefits of nature in the city
- o nature in the city and image of Calgary, and
- o meaning of nature in the city.

All sessions were moderated and tape recorded by the author. The tapes were transcribed and edited transcripts subjected to an independent analysis for thematic content. In preparing the thematic summary, the analyst confirmed the author's view that the types of responses and group dynamics were markedly different for each group.<sup>4</sup> Specifically, the graduate students were fairly non-interactive, tending to address their comments to the moderator rather than to one another. The students called upon abstract ideals and generalized experiences when discussing the various questions put to them. The all-male focus group was even more non-interactive, as each

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<sup>4</sup> The analyst's observations as noted in discussion and summary notes are presented in combination with the author's in this paragraph.

participant spoke in turn throughout. As with the students, experience aspects were based on general situations, but unlike the students, the all-male group respondents included responses based on personal ideas and opinions. In contrast, the all-female focus group was extremely interactive – from the first moment when the participant initiating the discussion turned to the next participant while she spoke. There was a great deal of discussion among the female participants and seldom did anyone direct her comments to the moderator. Instead the all-female group participants asked questions of each other and responded to each other's comments throughout the session. The responses from this group were primarily personal in nature and based on very specific experiences.

Although the group discussions all proceeded differently, in addition to group-specific matters, the discussions generated topics common to all three groups. The following is a list<sup>5</sup> of ideas that came out in various forms in all of the focus group discussions:

(a) Personal experience with nature:

- o convenient escape from city pressures
- o a source of solitude and tranquility, where one is at peace with one's self
- o a unique social setting
- o an important opportunity to educate and expose children to nature (note: did not arise in the student group).

(b) Image of Calgary

- o natural areas provide a visual break from the built environment
- o Calgarians have come to expect natural areas as part of their cityscape
- o natural areas are accessible, no one needs a car or an entrance fee to enjoy them.

(c) Specific features of natural areas:

- o natural areas are dynamic, one can observe the cycles, rhythms of nature
- o natural areas provide opportunities to come in contact with other forms of life
- o natural areas can decrease park maintenance costs
- o natural areas condition aesthetic ideals
- o natural areas need to be treated uniquely, in relation to location and users.

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<sup>5</sup> The original list was prepared from typed transcripts, for the author, by an independent analyst, Ann Dahlberg, Research Assistant, Calgary Parks & Recreation, May 1995.

These results were subsequently used to construct response categories in the question concerning benefits of natural area park land used in the public opinion survey.

#### **4.2.2 Self-Administered Mail Questionnaire**

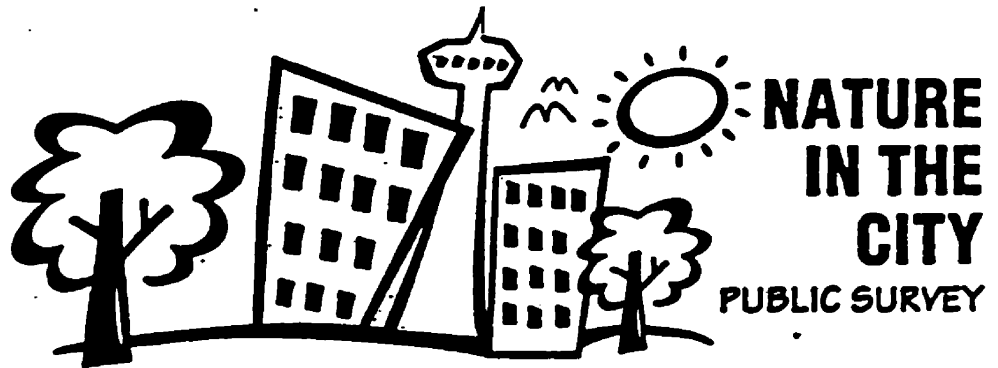
The second phase of the field data collection was the implementation of the self-administered, mail questionnaire. Although there is a continual debate about the accuracy or usefulness of the survey method, particularly in measuring public opinion, the decision to use this method was in part based on the usual considerations of expediency, plus a belief on the part of the author that meaningful, if not definitive, information can be generated through the administration of a thoughtful, well-designed questionnaire on a topic of interest to the public.<sup>6</sup>

Public surveys can provide an indication of the range of opinion, preferences, and priorities that exist in a community concerning issues of interest, as defined by the party undertaking the research (Keeney, Von Winterfeldt, and Eppel 1990). Where the survey method is less effective is in its ability to predict likely behaviour or outcomes. This may be either because the opinions offered have not been thoroughly considered by the respondents (Turner and Martin 1984), or because the researcher fails to appreciate the reasoning behind seemingly inconsistent opinions and behaviours (Fischhoff and Cox 1986), or because the phenomena under consideration simply can not be reduced to one-dimensional, cause-and-effect circumstances. Whatever the degree of confidence concerning the effectiveness of surveying the public, survey research has become “a ubiquitous part of contemporary life” (Turner and Martin 1984, 51), providing a relevant source of data for informing the development of public policy. On this basis, the survey method was selected to explore the capability of a variety of variables to explain the human/environment relationship, and as a consequence to enable the author to contribute knowledge on theory related to the urban nature experience.

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<sup>6</sup> Turner & Martin (1984) suggest that in the classical sense of the term, the aggregate response of individual opinions is not public opinion. They advise that discourse, or the learned exchange of thoughts and opinions, must happen in the formation of public opinion. However, these authors do acknowledge that in contemporary times, public opinion has become almost synonymous with the findings of polls. But it should be noted that with a mail survey such opinion is provided by people with a fixed address, who are literate in the language of the questionnaire, and who are inclined to take part in this kind of research.

Figure 12



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**“A study of the role and benefit of Calgary’s  
natural area park land”**

**Calgary Parks & Recreation is co-sponsoring this project with researchers at the University of British Columbia, School of Community and Regional Planning, to find out what Calgarians think about the role and benefit of natural area park land in our city.**

**Nature in the City questionnaire  
(Developed by the author)**

In designing the Nature in the City data collection instrument (see Figure 12) the first part of the two-part questionnaire underwent numerous minor revisions and one major revision following extensive pretesting by the seventeen focus group participants and ten additional volunteers (five from a men’s recreational hockey team and five female musicians). It is interesting to note that in terms of the open-ended question concerning experience with nature in the city, the 27 pretest responses covered the same range of thematic content as all of the survey respondents ultimately did (see Appendix II for results of the part one pretest).

The final version of part one of the questionnaire was a six-panel, brochure-style form that, along with the second part of the questionnaire, a cover letter and a postage-paid return envelope, could



fit into a regular sized business envelope (see Appendix III). This was an important point in terms of the cost of mailing out the package and in deliveries to apartments that have small mail boxes. Part two of the questionnaire, the referendum-style question, was developed in consultation with planning staff from two City of Calgary departments and a member of the author's supervising committee from the University of British Columbia.

A referendum-style question provides researchers and policy analysts with the opportunity to clearly explain any issue in which the public will participate in deciding the outcome.<sup>7</sup> The question chosen solicits public opinion on whether or not more park land should be left in a natural state either at the time of subdivision or by reclaiming manicured park areas (see Appendix IV for a copy of the forms). Part two of the questionnaire describes the issues, the options and the consequences and includes a ballot for "voting." The instrument was extensively pretested by 25 people. This included six volunteers from the focus group and 19 adult students from an evening market research class and a day-time computer programmer training program, both held at the Southern Alberta Institute of Technology (SAIT). Pre-testers were asked to read the information, vote, and fill-in a comment form that asked:

1. Was the issue easy to understand?
2. Was the explanation:        Too long? \_\_\_ OK length? \_\_\_
3. Were the options clearly different?
4. Were the options different enough to encourage you to vote for just one?

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<sup>7</sup> The form used in this survey is a modification of the structured value referendum (SVR) described by Tim McDaniels, a professor in the Westwater Research Centre and the School of Community and Regional Planning at the University of British Columbia, Vancouver, in an unpublished and undated monograph titled "The Structured Value Referendum: Eliciting Preferences for Environmental Policy Alternatives." In his abstract, Dr. McDaniels describes SVR as a "voting-based method for eliciting public preferences." He suggests that the development and implementation of a SVR "can be viewed as a version of public sector decision analysis, in which problem structuring occurs on a large scale through voter selection among specified alternatives." Professor McDaniels consulted on the development of a question and the ballot for this study.

Prior to settling on the issue of park planning related to supply of natural area park land, two other issues were seriously considered for inclusion in the study. The first was public policy concerning the use of pesticides in park maintenance. This issue was not pursued as Department staff were in the initial stages of preparing to address this issue with the public and there was a concern that a public survey would be premature. Calgary Parks & Recreation subsequently pursued this matter by issuing a call to the public for interested parties to form a task force to conduct an in depth review of pesticide use in parks and recreation areas. At the time of writing, a draft Integrated Pest Management Policy is pending for public review. The second issue of interest to the author was storm water management policy, specifically as it relates to use of dry pond areas. The theory is that when a dry pond is not inundated due to storm water, it can function as a recreation area of some type. The issue is the impact of the kind and duration of inundation on the site's ability to function as a recreation resource. This issue was rejected on the basis of being too technical and from the perspective that it would not provide clear options for testing public opinion specifically related to natural area park land.

Basic pre-tester demographics were also collected concerning gender, age, and frequency of use of natural area park land.

In terms of the referendum-style question pretest analysis, over 90% of the pre-testers said that the issue was easy to understand and this figure included all of the males. Approximately 12% felt the explanation was too long. Further, while 90% indicated that the options were clearly different, 36% said that the options were not different enough to encourage them to vote for just one. This was irrespective of whether the test form contained three or four options (two versions were being tested) and was only slightly lower for women than for men. Interestingly enough, the breakdown on frequency of use of natural area park land by the 25 pre-testers closely resembled the eventual profile of the survey respondents overall (see Appendix IV for part two pretest results).

Two park planners also reviewed the draft of part two of the questionnaire and provided written comments concerning the “explanation” and “consequences” parts of the form. In order to test the viability of comprehension further, four 20-minute, one-on-one interviews were also conducted. Volunteers who previously had no knowledge of the study were asked to read the information and answer questions on its content. The two women and two men, ranging in age from mid-twenties to early-fifties, were asked individually: (1) to explain what it was we are asking about; (2) to describe in their own words the pros and cons of each of the options; and (3) to reiterate what it is they thought they were being asked to vote on. Two commented on the three-option form and two commented on the four-option form.

Two of the comprehension testers suggested that the referendum-style question was asking about whether we need to change our park planning method while the other two described it as asking Calgarians about their park planning priorities. All testers clearly understood the consequences, especially the point that if more natural areas are created, there will be less of other kinds of park space available, but better access to natural areas for more people. The testers characterized what they thought they were being asked to vote on in somewhat different terms. One suggested Calgarians were being asked which “direction to go”; one said they were being asked for “input into how to plan parks in the future”; and one said that they were being asked about this “in order to save money and provide a better quality of life through natural areas.” The fourth tester

characterized the issue in terms of being asked to make a “choice based on your personal value system and your willingness [to accept] moderation.”

Based on all of the testing some minor modifications were made to the wording of the “explanation” section on the front of the form and the “consequences” section on the ballot on the reverse side of the form. The options were not changed, as it was judged that the students’ remarks regarding not being able to make a choice between the options had more to do with not being able to choose than with the options not being clearly defined. In order to address concerns noted in the literature about the way in which choice questions are presented (Payne, Bettman and Johnson 1992; MacLean 1993), two adjustments were made to the ballots. It was decided to test both a three- and a four-option response, and to vary the position of the status quo option on the form. Using this approach, one-quarter of the sample received each kind of ballot.

#### **4.2.3 Survey Sample**

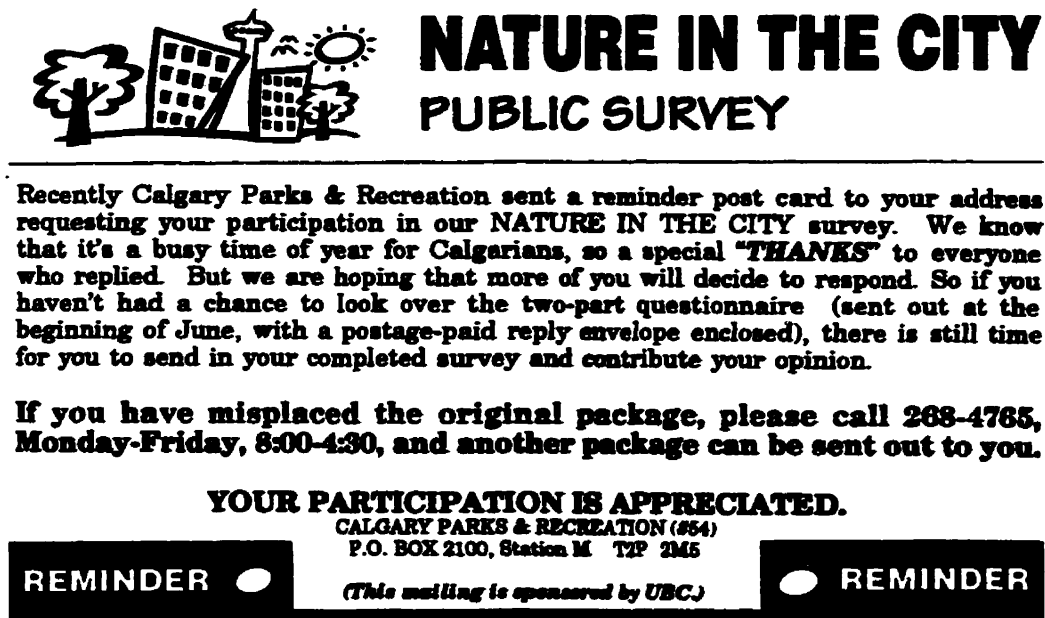
In order to distribute the package containing survey information, a SAS program was used to generate 1,800<sup>8</sup> mailing labels for a random sample of Calgary households. Previous experience with generating a random sample of this nature had exposed a sampling problem that required hands-on, rather than electronic, adjustment. The addresses are generated from the civic census in which enumeration is conducted by households. At locations where there is more than one household, a non-legal address is generated for a tenant. This appears as a “z” suite on the label (the author had discovered this protocol in the past as a result of a number of “return to sender” mailings containing a “z” code) which the post-office does not recognize. For example, family A, on the main floor of a house has an address of 900 - 7th Ave. N.W. while the student living in the basement suite is assigned an address by the census system as 900z - 7th Ave. N.W. This is not a problem when mail is addressed to a particular person, but mailings to “Occupant” at non-legal addresses are usually returned as undeliverable. Because of previous experiences, the author estimated that about 5% of the sample would contain “z” suites. Deleting these addresses from the sample maintained a random distribution by geographic quadrant but may have affected the results

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<sup>8</sup> As the author wanted a data set of not less than 150 cases, a 1,800 case sample was generated in anticipation of a return rate as low as 10%. This is in agreement with Lake (1987), who suggests that it is common practice to “estimate a response rate based on past experience” (Lake 1987, 82), then calculate how big a sample one needs to draw to compensate for the estimated response rate. As noted, the author was aware that other adjustments would be required that would reduce the mail-out to around 1,650, so that an original draw of 1,800 seemed in order.

in terms of homeowners being more likely to receive the mailing. Also deleted from the original 1,800 labels were addresses for which a postal code was unavailable, addresses which could not be confirmed as within the city limits, and University of Calgary student residence addresses (the mailings were sent out in mid-May). This reduced the random sample by 7% to 1,676 households.

Figure 13



**Nature in the City survey postcard reminder  
(Developed by the author)**

It was anticipated that an original sample of 1,676 would have about a 3% undeliverable rate due to vacancies, and in fact 27 items were returned (just under 2%), so that 1,649 became the sample base. Experience had suggested that in a survey of this type one could expect from 10% - 25%<sup>9</sup> of the sample to return completed questionnaires, so that between about 165 and 400 responses were expected. The 263 returned in time for data entry represents a response rate of 16%, which is within the expected rate of return. This rate was achieved with the assistance of two reminder postcards (see Figure 13) sent at one-week intervals following the original distribution.

<sup>9</sup> This is in line with the observation that “[j]unk mail elicits a response rate from 1% - 5% [while] a well-designed survey mailed to the public at large can bring in a 20% - 30% rate of response.” Questionnaires about highly salient issues can result in 30% - 60% (Saykaly 1994, 59).

#### **4.2.4 Data Processing**

All of the responses received by the end of June 1995 were first processed by hand-coding using a code sheet. Data entry staff entered observations from the code sheets into a CMS X-edit file and checked each case for entry errors. The file was initially downloaded onto an OS2 PC and manipulated by various SAS programs written and modified by the author. The open-ended question underwent extensive independent analysis as well as analysis by the author. A combination of SAS and WordPerfect (DOS 5.1) was used to generate copies of initial listings of the various calculations and manipulations. Subsequent analysis was performed using SAS 6.11 for Windows. The following two chapters look at all of these results in detail.

## **CHAPTER 5**

### **A Review of Respondent Characteristics and Opinions**

#### **5.1 Introduction**

This chapter continues the discussion of Nature in the City survey results. It considers the respondent demographic profile and the frequency of responses to all forced-choice questions (Appendix V contains a question by question listing of these results). The discussion starts with a comparison of respondent characteristics compared to those of the Calgary community in general.

#### **5.2 Demographics**

This section reviews the basic demographics of the survey respondents. Respondent age, gender, ethnic heritage, and education are reported and analyzed. Household income and composition in terms of number and type members are also discussed. Length of residency in Calgary was considered along with representation of the respondents' communities. This includes reporting on the overall geographic dispersion of responses, representation by quadrant, style of development of the community, and proximity of community residents to natural area park land.

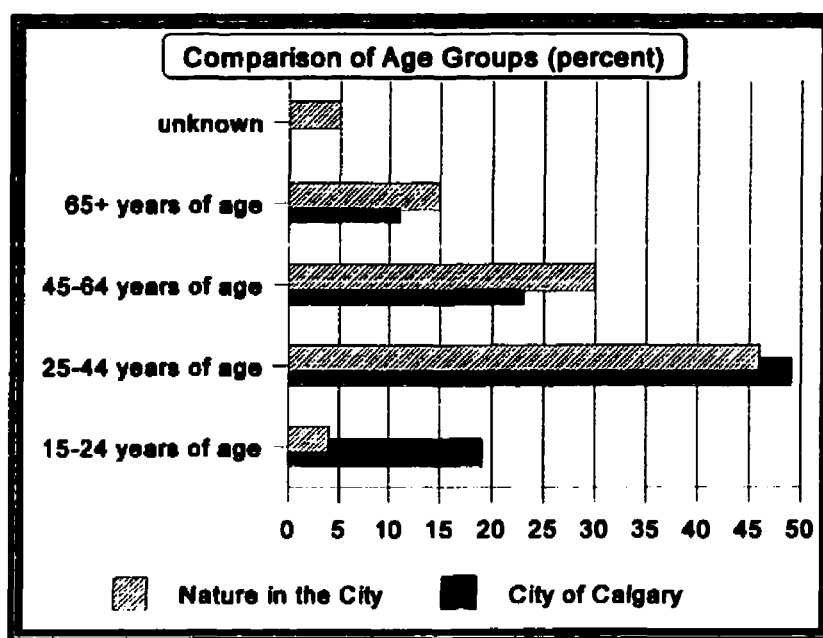
##### **5.2.1 Age**

In order to provide the maximum flexibility in analyzing the age variable, respondents were asked to write in their age rather than check-off a predetermined category. From the written responses three different types of coding were performed. The first procedure coded the age in census categories used to report on the Calgary civic census figures, the second procedure coded respondents into decades ranging from teens to seventies, and the third procedure grouped the decades into two groups of one younger than fifty years and one fifty years of age and older. The fifties decade was selected as a dividing point based on an average age of 46, which was calculated from ages as reported by the returns of the first 155 respondents.

To compare the results of the Nature in the City survey to civic census data, the adult population 15 years of age and over for the city was used as the base figure (581,000) rather than the total population (738,000; figures rounded from 1994 civic census). On this basis, the 4% of Nature in the City respondents in the 15 - 24 years of age category is an under representation in comparison

to this group's 18.5% rate of occurrence in Calgary's adult population.<sup>1</sup> Conversely, the 30% of survey respondents in the 45 - 64 years of age category is an over representation compared to the Calgary rate of 23% of the adult population. Respondents aged 25 - 44 years comprised 46% of the survey, which closely compares to the 49% of adults in Calgary in this age group. The sixty-five years of age and over category makes up 15% of survey respondents but only 11% of Calgary's adult population in general. As well, 5% of survey respondents did not report an age that could be assigned to a census category. Overall, respondents in the Nature in the City survey exhibit an older age profile than the Calgary population in general (see Figure 14).

**Figure 14**



**Comparison of Nature in the City respondent age profile to City of Calgary actual age profile (Developed by the author)**

An analysis of the age coding by decade shows the 30s as the most common category, with approximately 30% of all respondents falling into this group. The teens category (15 - 19 years of age) was the least common category comprising less than .5% of the total number of respondents. The civic census oldest age group is "65 years and older." Coding by decade allows for the separation of people in their seventies and older and in this respect the survey results showed that

<sup>1</sup> This was not unexpected given that younger people in this age group likely live at home with their parents and historically have not been the ones to respond to a household mailing.

8% of respondents are in their 70s. The respondents in their 80s were categorized as “other,” along with responses that were too general to code. No respondents reported ages in the 90s decade.

Although the cell size for the 70s decade is too small (N = 22) for comprehensive analysis, this survey initiates a data base on opinions and behaviours related to parks for this age category.<sup>2</sup> In this respect the results show that respondents in their 70s included slightly more women than men, with half of all the people in this age group reporting that they live alone, and over half choosing not to respond to the open-ended question concerning memorable experiences with nature in the city. The majority (60%) of respondents in the 70s decade category are not regular users of natural area park land, although over one-third have indicated that they are regular natural area park users.

Forming two age categories based on the decade closest to the average age of respondents results in an approximate 60/40 split between those respondents under the age of 50 and those 50 years of age and older respectively. An initial review of the results for these two age groups showed that aside from household and income, where variations from the survey norm were observed with respect to presence of children in the household and percent with income below average, there were not enough differences to warrant a full analysis of the collapsed category age variable. In subsequent data manipulations involving scoring of responses, the variable provides a point of comparison among the various subgroups.

### **5.2.2 Gender**

In terms of gender, 57% of respondents to Nature in the City are female. Male respondents comprise 40% of the survey, and 3% did not respond to the question. This ratio suggests an over-representation of women in the respondent data pool, compared to the Calgary population as a whole. Women also responded proportionately higher to the 1991 Pulse on Parks survey where they made up 54% of the survey sample.

Chi-square analysis of cross-tabulations of gender to other variables in the Nature in the City

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<sup>2</sup> It has not been possible to identify trends in this age group as historically they have been collapsed into the “65 and over category.” This research provides some initial data for these older seniors. Note that “N” refers to the absolute number of respondents in the category.



survey show that for the most part gender is not a significant factor in differences with respect to basic demographic- or opinion-based questions.<sup>3</sup> For example, men in the survey were more likely than women to have attended university, but not significantly more likely to have above average income (chi-square = 4.37, 90% confidence level = 2.71; chi-square = 3.95, 90% confidence level = 4.61.)<sup>4</sup> As well, neither gender is significantly more likely to support preservation strategies or procedures overall. However, the behaviour-based responses show that women are more regular users of natural area park land and tend to find meaning in kinship with nature. Men, on the other hand, are over-represented in both the occasional users category and in the group who did not report on meanings generated from experiences with nature in the city (chi-square = 9.26, 90% confidence level = 4.61; chi-square = 6.61, 90% confidence level = 4.61, respectively).

There is one opinion-based question in which a significant difference on the basis of gender is apparent – the question concerning a particular strategy related to the care and protection of natural areas. Women are more likely than men to express some degree of appropriateness for prohibiting human use as a strategy to preserve natural areas (chi-square = 7.18, 90% confidence level = 2.71, N = 226). This echoes the findings of the Pulse on Parks survey which found that men were less

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<sup>3</sup> Chi-square analysis is used throughout as the test of significance. As Vincent (1995) suggests, “when data are of the nominal or ordinal type, the assumptions of [normal curve performance] are not met, and non-parametric statistical procedures must be used” (Vincent 1995, 195 - 6). As he explains further, “[c]hi-square is used to compare two or more sets of nominal data that have been arranged into categories by frequency counts” (Ibid.). Through a formula that takes into account the difference between an observed frequency and an expected frequency (expected in terms of a known distribution that is in this case relative to the aggregate survey response patterns for any variable or variable grouping), a chi-square value is calculated. To show significance, the chi-square value must be greater than the standardized value for a specific “degree of freedom” (a term for the combination of cells in the cross-tabulation). The standardized value provides a point of comparison from which to judge the likelihood that any observed differences in frequencies are attributable to chance (chi-square calculations assume a null hypothesis that all differences in frequencies are due to chance [Op.cit.]).

<sup>4</sup> The notation “chi-square = x, 90% confidence level = x” is meant to be interpreted as follows: if the calculated chi-square value is higher than the 90% confidence level standardized probability value for differences due to chance, then the finding is significant. In this first calculation, the calculated chi-square value of 4.37 is higher than the 90% level of confidence standardized value of 2.71, so the difference in the number of men and the number of women having attended university is likely not due to chance. In the income comparison, however, the calculated chi-square value is lower than the standardized probability for a 90% confidence level, so the difference is likely attributable to chance and is therefore not significant. Significance can also be calculated at other confidence levels such as 95%. They refer to the probability of the findings being correct (see Vincent 1995, page 78) in repeat applications. A confidence level of 90% means that similar results could be expected 18 times out of 20. Unless the calculated chi-square value is specifically given in this text, either the significance for the reported differences has not been calculated or the differences presented are discussed in anecdotal terms.

likely to view prohibiting human use as an appropriate strategy to preserve natural areas (chi-square = 436.34, 90% confidence level = 2.71, N = 39,800). But differences in responses to the entire set of strategy questions are not significant enough to suggest that one gender or the other is overall more or less likely to be preservation oriented. A subsequent chapter considers this point in more detail. In general, the breakdown in gender mainly provides a point of interest in comparing various subgroups within the study.

### **5.2.3 Ethnic Heritage**

Respondents were asked to write-in their ethnic heritage (or they could check off “prefer not to say”). This question was included in the study for two reasons. First it provided an opportunity to explore the descriptors respondents might offer in terms of personal heritage and second it has the potential to establish a basis for the formation of subgroups in which similarities and differences in response patterns, especially with respect to interpretations of the meaning nature has, could be analyzed. In posing the question, the questionnaire gives the respondents two examples of what is meant by ethnic heritage – European and Asian.

On this basis, responses to the ethnic heritage question were reviewed and coded into one of five categories drawn from the specific and generalized terms that respondents provided. Overall, 37% indicated their heritage as “European” (any individually mentioned European country was coded into this group), 27% stated “Canadian,” 15% gave “British/English” as a category, 4% noted “French-Canadian” and another 4% indicated “Asian.” In addition, 2% were coded into “other,” 4% chose not to say and 7% did not answer the question. In choosing not to answer, a few respondents wrote in questions asking why we would want to know this, or “what difference does it make?” The response to this question illustrates that, as Smith (1984) suggests, factors such as multiple nationalities, different conceptualizations of ethnic origin, and “accidents of birth and geography” combine to make objective measurement of ethnicity extremely difficult (Smith 1984, 125). As a result of this and in view of the lack of diversity in respondents, the question was abandoned after the initial coding.

Although the open-ended response format of the ethnic heritage question was designed to try to overcome the limitations of the survey method in studying this demographic variable, it was not successful. One way to pursue the original goal in the future might be to study differences in the

meaning of nature through focus groups that target specific cultural groups. As well, a better question might be one that asks respondents to suggest if they feel that their views on nature are in any way affected by their cultural heritage. This type of question could be used in a culturally diverse focus group.

#### **5.2.4 Education and Income**

Respondents were asked next to indicate from a list of options the last level of education they had completed. Almost one-third of the respondents checked that they had completed some university. An additional 26% indicated that they had a university degree, 22% had completed high school, and 8% finished a trade or technical training. A further 8% provided a response coded as “other” and 5% did not respond to the question. Data was not available for a direct comparison of education levels reported by survey respondents to the Calgary population in general. However, information gathered by Statistics Canada for the 1991 federal census in the Calgary Metropolitan Area (CMA) indicates that just under one-quarter of the CMA population has completed some university training, 15% have a university degree, and one-third have finished high school. These results suggest that people who responded to the Nature in the City survey have a higher completed level of education than the general population, with just under 60% of the survey respondents having attended at least some university compared to approximately 40% of the CMA population overall.

Cross-tabulation<sup>5</sup> of education levels to basic variables in the study produced some variations in response but none sufficient enough to warrant further analysis of each category. Collapsing the categories into two basic groups, based on whether or not the respondent had attended at least some university, provided more interesting points of comparison among subgroups in the study.

Respondents were also asked to check from a list how their household income compared to the 1991 Calgary average of \$52,000. Just over one-third of respondents reported that their

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<sup>5</sup> A cross-tabulation re-sorts the values of two variables into groups exhibiting the combined characteristics of both variable values. For example, a cross-tabulation of a gender variable with three values to a variable for age groups with three collapsed values produces nine possible new groups – women fifty years of age and older, men fifty years of age and older, women under fifty years of age, men under fifty years of age, unreported gender fifty years of age and older, unreported gender under fifty years of age, women with unreported age, men with unreported age, and unreported gender with unreported age. In this study, if an initial cross-tabulation showed differences greater than the margin of error when comparing cell percentages to the survey norm, an analysis of the significance of the difference was performed through chi-square.

household income was below average, just under one-third indicated it was above average and almost 20% stated that it was close to average. An additional 10% chose not to disclose a response and 5% did not respond or provided an invalid response. These results indicate that in terms of income, the Nature in the City survey sample tends to have a profile similar to Calgary overall. A cross-tabulation of income to other basic variables shows variations mostly in terms of variables also related to age, rather than opinion or behaviour. Consequently an in depth analysis of the income categories was not conducted and the results are used primarily as a point of comparison.

### **5.2.5 Household and Residency**

Respondents were provided with a list of categories describing various household types and were requested to check the category that best described their situation. At 34%, the largest category checked was “Couple, no children/no children at home.” “Couple, children at home” followed closely with 28% in this category, then 24% indicating “Living alone.” The “Lone parent” category had a frequency of 5%. Although not directly comparable, the 1991 census figures from Statistics Canada, for the Calgary area, suggest a couple with children as the dominant household type, comprising 37% of the population. As well, lone parent households occur at a rate of 9% of the Calgary area households. Nature in the City survey respondents therefore have a lower percent of households reporting children at home than the population overall.

A cross-tabulation of the household categories to other basic variables did not show many variations other than might be expected due to age (for example a higher percent than average of couples with no children or no children at home in the fifty years and older age group). No further analysis was performed on the household categories. The variable is used as a point of comparison in the analysis of study subgroups.

A final demographic question concerning the respondents’ length of residency in Calgary was included in order to see if the types of experiences with nature seem any different for people who had lived longer or shorter periods of time in Calgary. Part way through the data collection period 155 responses were reviewed and tabulated to establish the average length of time reported by respondents. The average at that point in the data collection was 24.8 years and the longest reported time was 72 years. On this basis four categories were established – two above and two below the average. All responses were coded accordingly.

An initial review of cross-tabulations based on residency suggested that since most of the variations occur in the group indicating a residency of 46 years or more (N = 25), the differences could most likely be attributed to either the small cell or to age – 44% of the respondents in this category are in their seventies. It is interesting to note that this subgroup of long-time Calgary residents is one of the few which did not identify the main benefit of nature in the city as the “peace and tranquility” it provides. Qualities related to an attractive city, opportunities for family time and no charge to use the natural areas are the benefit categories that received higher frequencies within this subgroup. Interestingly enough, the “five years and less” residency subgroup also identified an attractive city as the most important benefit of nature in the city, just slightly above “peace and tranquility.” With such small cells in both cases, these variations may be due to margin of error.

One other manipulation was conducted on the length of residency data. To provide larger cells, the four categories were collapsed into two, forming one group with a residency of 25 years or less and one group with a residency of 26 years or more. Twenty-five years had been identified earlier as the average length of residency. But frequencies at the end of the data collection indicate that about 60% of respondents fall into the category of having lived in Calgary for 25 years or less. A cross-tabulation of these two groups to meaning categories showed almost no variation from the survey norm. After these initial manipulations, this question was not used in any further analysis.

### **5.2.6 Geographic Community**

Respondents were next asked to name the community district where they live. This information was processed in three different ways. First the community was coded according to quadrant. Calgary’s addressing system divides the city into Northwest, Northeast, Southwest and Southeast. The quadrants produced in this way are commonly used to organize and compare demographic and service-based information. Since the original sample of households was proportional to quadrant, this procedure provides a check to assess how proportional the response sample is in comparison.<sup>6</sup>

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<sup>6</sup> The reader should note that the survey sample is based on households rather than population. The Northeast quadrant in particular is known to have a higher than city average occupancy rate, so that the *population* proportion by quadrant may be different from that of households.

**Table 17**  
**Comparison of Household Distribution by Quadrant**  
 ( +/- 100%, figures rounded)

Quadrant	% Households (1994 data)	Nature in the City mail sample	Nature in the City responses
Southwest	35%	35%	38%
Southeast	20%	20%	11%
Northwest	27%	28%	24%
Northeast	18%	18%	13%
Unknown	-----	-----	14%
N=	+/-278,000	+/-1,600	+/-263

Table 1 shows that, as anticipated, the random sampling approach created a sample for the Nature in the City survey that closely resembled the actual city household distribution by quadrant. However, the response sample is quite under-represented in responses from the Southeast quadrant. This is partly due to 14% of responses being unclassifiable.

The second procedure for analyzing the community variable involved coding responses into categories based on development type. Communities in Calgary were identified in advance as being either “Newer” (built 1980 or later), “Established” (built prior to 1980) or “Redeveloping” (built prior to 1980 and having an approved Area Redevelopment Plan). Table 2 (see next page) shows the comparison of actual distribution of community type to community type of respondents.

As Table 2 shows, the community type of respondents closely resembles the distribution of actual types in Calgary. The question was included to provide a potential point of comparison for the referendum-style question concerning planning for natural area park land. Newer communities in Calgary exhibit very different open space systems from those developed earlier. But initial analysis showed no significant relationship between the type of community in which the respondent lived and his or her choice in the park planning poll and the results were not used in any further analysis.

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<sup>7</sup> All Tables have been developed by the author unless otherwise noted.

**Table 2**  
**Comparison of Community Type**  
 (Figures rounded,+/- 100%)

<b>Community Type:</b>	<b>City rate of occurrence</b>	<b>Nature in the City rate of occurrence</b>
Newer (built 1980 or later)	20%	18%
Established (built prior to 1980)	60%	57%
Redeveloping (built prior to 1980 and/or has an approved ARP)	20%	25%
Unknown	-----	10%
(N=	159	263 )

The third manipulation of this data assigned the 159 communities a code based on proximity to a natural area. Communities with natural area park land as part of their reserve dedication<sup>8</sup> were categorized as “Nature Reserve” (13%). Communities with no natural area reserve dedication but with their total population within one kilometre of a natural area were classified as “Near Nature” (36%). Communities with no natural area reserve dedication but with part of their population within one kilometre of natural area park land were classified as “Part Near Nature” (13%). The remainder of the communities were in the category of “Not Near Nature” (40%). Of the respondent communities that could be classified (N = 237), those categorized as “Not Near Nature” (34%) and “Near Nature” (30%) are slightly under-represented, while those in the category of “Part Near Nature” occur at twice the rate as in the city overall (22%). The “Nature Reserve” category is close to actual at 15% (see Table 3). This question was also included to provide a potential point of comparison for the referendum-style question concerning park planning and also did not show any significance. Initial chi-square analysis indicated an approximately 10% probability that differences in opinion in the poll were due to chance rather than to the sort factor of proximity to community natural areas and the results were not used in any other analysis.

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<sup>8</sup> Land taken into public ownership at the time of subdivision. All undevelopable areas qualify as environmental reserve; up to 10% of remaining area (minus areas for any major freeways) becomes dedicated as municipal or school reserve (public open space).

**Table 3**  
**Comparison of Proximity to Natural Area Park Land**  
 (Figures rounded,+/- 100%)

<b>Proximity to public natural areas</b>	<b>City rate of occurrence</b>	<b>Nature in the City rate of occurrence</b>
Nature Reserve	13%	15%
Near Nature	36%	30%
Part Near Nature	13%	22%
Not Near Nature	34%	30%
(N=	263	257 )

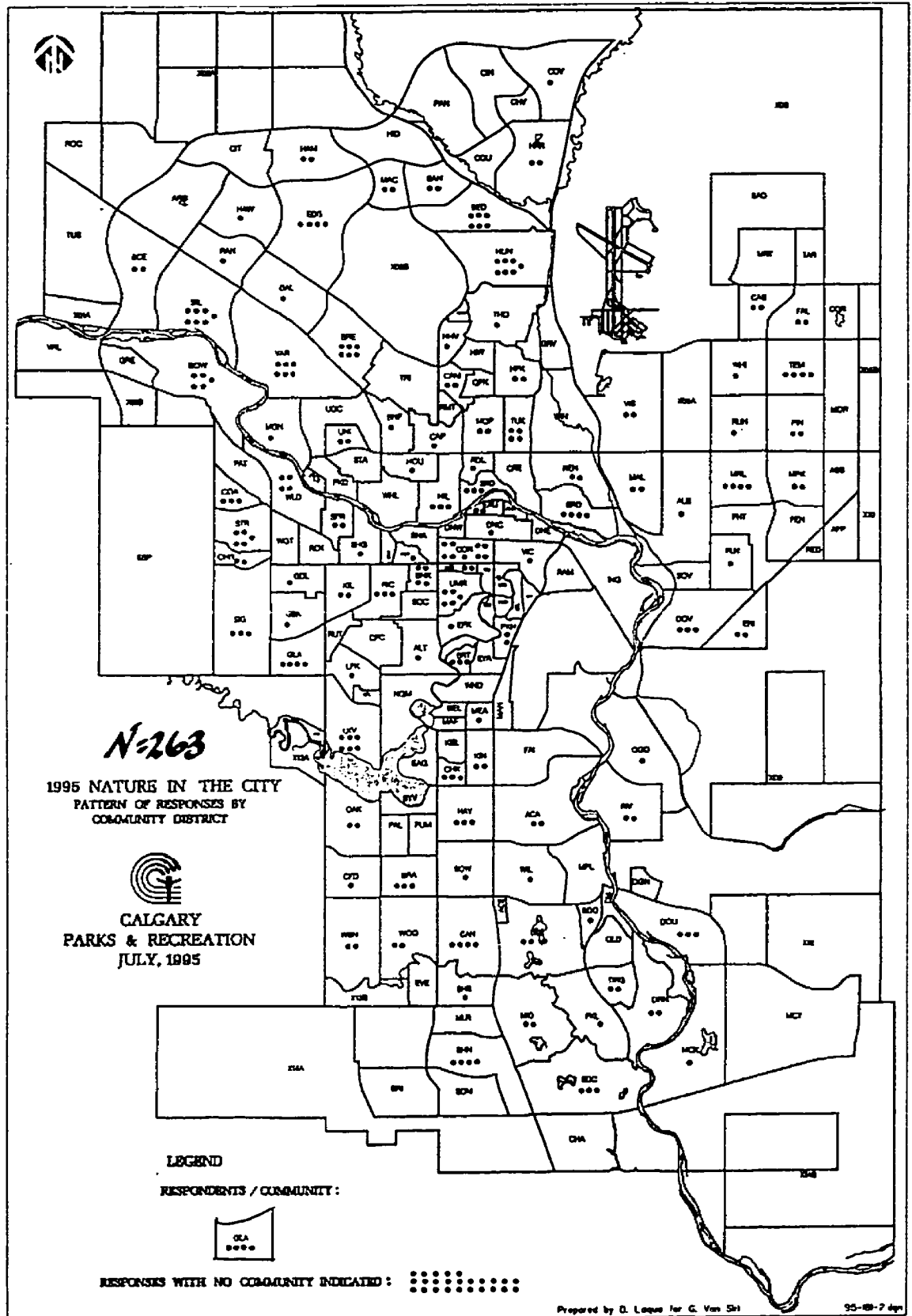
In addition to these three coding procedures, responses to the community question provide a check on the geographic distribution of survey respondents. Figure 15 (see next page) shows the spatter pattern of respondents' communities. Although multiple responses and non-responses in this question result in not all 159 community districts being represented in the response set, there is an excellent geographic representation of households from all areas in Calgary.

### **5.2.7 Demographic Summary**

Overall the demographic analysis shows that respondents to the Nature in the City survey are slightly older and have more formal education than the adult population for the Calgary area in general. It shows, too, that women, as well as couples with no children living at home, are over-represented in the responses in comparison to the Calgary population. The sample maintains a good random geographic distribution of households and is representative of the different types of communities in Calgary. These factors provide a sound basis for analyzing the various behaviours and opinions expressed by respondents and reported on in the next sections.



**Figure 15: Pattern of response by community district**



(Prepared for the author, July 1995, by Calgary Parks & Recreation)

### **5.3 Behaviours**

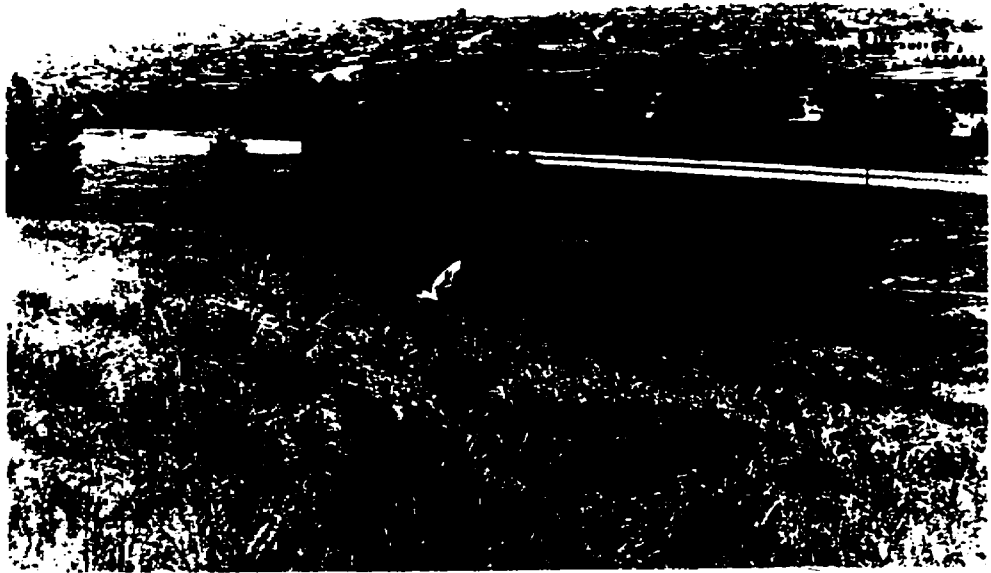
Two aspects of park use behaviour were investigated in this study. The first was to explore which natural area parks were being used the most. The second was to inquire about frequency of use of these park areas. From the responses to the first question additional information can be extrapolated. It is possible to get an indication of which parks people think of as natural areas. The frequency of use responses provide an independent variable for analysis of results in relation to various opinion questions.

#### **5.3.1 Last Natural Area Visited**

Respondents were first asked to give the name of the last natural area park they visited in Calgary. They were next asked to indicate when the visit took place by checking off a response. The response categories ranged from “within the past few days” to within the “past year.” There was also a category which allowed that “No Visit” had ever been made to these kinds of parks. The question was included for two reasons. One was to establish the range of places that Calgarians see as natural area park land. The second reason was to provide a check to the question in which frequency of natural area park use is reported (see next section). As well, the responses in terms of timing of the latest visit to a natural area park provide a point of comparison of reported behaviour among the various subgroups in the study.

Overall, 90% of respondents named the natural area park they had visited last. An additional 5% indicated that a visit took place, but no park was named, and 5% either did not respond to the question (3%) or indicated that they had never visited a natural area park in Calgary (2%). Specifically, one-third of the respondents last visited one of Calgary’s two major natural area parks – Nose Hill Park (see Figure 16, next page) in the northwest (17%) and Fish Creek Provincial Park in the southwest (16%). Over twenty other park areas were listed by the remaining respondents. The areas named range from smaller natural areas along the rivers (Bow and Elbow) to a highly developed land-locked area in an inner-city neighbourhood.

**Figure 16**



**Nose Hill Park - Most frequent natural area most recently visited  
(Photo by Alister Thomas, from the author's personal collection)**

Over 40% of respondents said that their last visit to a natural area park took place in the past few days. Another 25% indicated that the visit was during the past few weeks and a further 20% indicated it was in the past few months (15%) or year (11%). Collapsing the categories shows that just over 40% visited a natural area in the city within the past few days, while for just over 50% of the respondents, this visit took place in the past few weeks or longer ago.

If the responses are broken into subgroups based on the quadrant of the city in which the respondent lives, the role of proximity or easy access to certain natural areas arises as a factor in both the park visited and the timing of the most recent visit. Of the respondents living in the Northwest quadrant (N = 63), 41% named Nose Hill Park as the last park visited, yet only 11% of those living in the Northeast (N = 35) named this park. The fact that the most frequently named last park visited by respondents living in the Northeast is Fish Creek (14%), which is located in the south of the city, can most likely be attributed to the fact that Deerfoot Trail provides quicker and more direct access to Fish Creek than other routes can provide to Nose Hill, even though Fish Creek Park is much further away. However, as respondents in the Northeast quadrant report a

lower than average percent indicating that they had visited a natural area park in the past few days (29% as compared to 41% overall and up to 48% in the Southwest), the general lack of opportunity to visit natural areas is evident for residents in this part of Calgary.<sup>9</sup>

The most frequently named park by respondents in both the Southeast (N = 30) and Southwest (N = 99) quadrants was also Fish Creek (mentioned by 50% and 18% of those respondents respectively). However, the variety of areas available to residents of Southwest Calgary is demonstrated by more park areas being named by a higher percent of respondents than overall. In general, the results to this question suggest that opportunity, perhaps more appropriately described as convenience, is a strong factor in establishing natural area park use patterns and, further, that there is a considerable range in people's understanding of what constitutes a natural area park.

### **5.3.2 Frequency of Use of Urban Natural Area Park Land**

The final question asked respondents to indicate their intensity of use of natural area park land by circling the response that best describes their situation. This question was included in the study in order to provide a sort variable for comparing responses to the open-ended reported experience question and among various other subgroups in the study.

Overall, 35% of respondents indicated that they "Occasionally" use natural area park land in the city; 32% "Frequently" use it and 29% "Regularly" use it. A further 2% of respondents stated that they never use natural area park land and 3% did not respond to the question. A thorough review of the results for each subgroup showed somewhat confusing results. The "middle" group tended to display characteristics that resemble the survey norm rather than displaying values that would indicate a logical progression from "Occasional" to "Frequent" intensities of use.<sup>10</sup> Combining

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<sup>9</sup> The 1991 Pulse on Parks survey asked respondents to identify (from a list) their most common reason for not using the park system in general. The three most frequently chosen reasons were: "poor weather" (19%), "too far away" (18%), and "too busy" (17%). But in one northeast Calgary ward (Ward 5), 41% identified "too far away" as the number one reason (Calgary Parks & Recreation 1991). Parts of Northeast Calgary are considered to be among the more affordable and more ethnically diverse areas of the city. In addition to a lack of opportunity due to a shortage of natural areas in this quadrant, there may be other socioeconomic factors such as automobile ownership that are constraining park use behaviour.

<sup>10</sup> On this basis, analysis of the subgroups was initially abandoned and the question was mainly used as a point of comparison between other data sorts. However, while looking at the results in relation to the Pulse on Parks study (which used different use value labels and provided parameters for the label, i.e. "regular" use = more than 11 times per month), the idea to collapse the categories was considered and implemented.

“Frequently” and “Regularly” categories into a “Regular user” category and grouping the “Occasionally,” “Never” and non-responses into a “Non-regular user” category results in 60% of survey respondents being categorized as regular users and 40% as non-regular users of urban natural area park land. The variations that one might logically expect then became more apparent.

In terms of the anticipated relationships, the variations shown in a cross-tabulation between “use pattern” and “natural area park land care and protection strategies score” are greater than would be expected by chance. The relationship indicates that as one might think, more regular users of natural area park land tend to be more preservation oriented in their support of strategies and vice-versa for the non-regular users (chi-square = 4.93, 90% confidence = 2.71). As well, the regular users tend to take a more ecological perspective on nature in the city than do non-regular users (chi-square = 7.14, 90% confidence level = 2.71).

A cross-tabulation of use patterns to meaning categories (collapsed) generated from the open-ended “reported experience with nature” question also demonstrated variations of significance. Regular users of natural area park land are under-represented, and non-regular users are over-represented, in the group which did not report meaningful experiences with nature. Non-regular users are also under-represented in the group that derived meaning from experiencing a kinship with nature (chi-square = 5.66, 90% confidence level = 4.61).

Age and household situation were shown to be somewhat related to use. A cross-tabulation of respondents grouped in “under 50 years of age” and “50 years of age and older” to use patterns demonstrated that regular users of natural area park land are over-represented in the younger than fifty years of age group, with the opposite being the case for non-regular users (chi-square = 3.66, 90% level of confidence = 2.71). As well, the comparison of frequencies for the different use patterns for survey respondents in a one-person household (N = 62) suggests that people living alone tend to be less regular users of natural area park land (chi-square = 6.18, 90% level of confidence = 4.61).

Although it is not unreasonable to suggest that there would be a relationship between frequency of use of natural area park land and preferred funding options, a cross-tabulation of collapsed categories for funding priorities to park use pattern did not produce any differences of significance.

A cross-tabulation of collapsed categories of benefits of natural area park land to park use patterns also did not show variations greater than might be expected by chance.

It is not possible to directly compare the park use results from the Pulse on Parks survey to the results from the modified use categories in the Nature in the City survey. But there are some points of interest to development of a profile of park use in Calgary. For example, just over 65% of all Pulse on Parks respondents indicated that they used Calgary *parks in general* either “often” or “regularly” (at least two times a month), with approximately 25% of all respondents noting that usually the main reason for their visit is to “enjoy nature.” As well, in terms of using parks specifically for nature appreciation, 50% of Pulse on Parks respondents indicated they engage in this activity at parks or pathways at least two times a month. The results from the Nature in the City survey indicating that 60% of the respondents use *natural area park land* regularly seem reasonable by comparison.

Unlike the Pulse on Parks survey, which was a census sample of all Calgary households, the Nature in the City survey was sent to a random sample of households. It is therefore possible to speculate that between 55% and 65% of Calgary households contain people who consider themselves to be regular users of natural area park land. This point could be an important consideration in planning for the future of natural areas in Calgary in thinking about what kind of participation regular users of natural area park land should have, especially in terms of decisions related to appropriate uses.

#### **5.4 Public Opinion**

This section reports on the results of the questions designed to gauge public opinion on a number of issues related to providing natural area park land in the city. These included views on strategies for preserving natural areas, the funding priority of natural areas, and the benefits of having nature in the city. The results to questions on respondents’ general outlook on urban nature and views on resolving conflicts over human needs and environmental concerns are also included. Results from the poll using a referendum-style question on whether or not park planning practice should be changed are presented as well.

### **5.4.1 Strategies for Preserving Natural Area Park Land**

The questionnaire probed public opinion on appropriate planning strategies for protecting natural area park land. The “strategies” set of questions identified six ways to plan for the protection or enhancement of natural areas. Respondents were asked to indicate how appropriate they felt each of the strategies is by circling a number corresponding with a value on a five point Likert-type scale as follows:

- (1) Not Appropriate
- (2) Somewhat Appropriate
- (3) Appropriate
- (4) Very Appropriate
- (5) No Opinion

The six strategies that respondents were asked to give their opinion on were:

How appropriate is it to . . .

- a) Acquire lands identified as environmentally sensitive?
- b) Acquire lands to complete the river valley?
- c) Develop open space and allow controlled human use?
- d) Preserve open space and prohibit human use?
- e) Preserve open space for wildlife use?
- f) Increase public education programs?<sup>11</sup>

This set of questions was included in the study for two reasons. First, these questions provide a way to operationalize how an individual might be inclined towards the preservation of natural area park land. Second, as noted previously, the questions replicate those in the 1991 Pulse on Parks public survey. The replication of the questions from Pulse on Parks provides a benchmark for comparisons of public opinion expressed in the Nature in the City survey.

In this respect, responses to the set of questions were remarkably similar in the two surveys. Except for four individual cells, all responses are within 5% of each other for all scale items in both surveys (see Appendix VI for a chart comparing results). The four items that differ show a movement from the “Appropriate” rating to “Very Appropriate” for items (b) acquiring river valley land and item (f) increasing public education programs. In both cases the “Very Appropriate” rating is 10% (rounded) higher in the Nature in the City survey than in the Pulse on Parks survey.

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<sup>11</sup> See Appendix I for the exact wording of the question. It is suggested that one is better able to judge the results in a survey if the actual context and wording of the question are given (Turner & Martin 1984).

Since the Pulse on Parks study was conducted to increase public awareness and solicit opinions for the master plan for river valley parks, this slight shift in emphasis in public opinion likely reflects the success of the *Urban Park Master Plan* on both counts.

The fact that results for this set of questions in the two surveys closely resemble each other suggests very little movement in public opinion on the issue of natural area park land preservation. Results in both cases reflect a public opinion that clearly supports strategies designed to preserve or enhance the land base of natural areas but is divided, if not polarized, on the issue of restricting human use as a preservation strategy. In both surveys between 60% and 70% (rounded) of respondents found all the strategies, with the exception of item (d), which relates to the appropriateness of prohibiting human use in natural areas, to be either “Very Appropriate” or “Appropriate.” Only 20% of respondents to both Pulse on Parks and Nature in the City found prohibiting human use to be either a “Very Appropriate” or “Appropriate” strategy for planning natural area park land. An additional 20% in both cases found the strategy to be “Somewhat Appropriate.” This item has the effect of dividing the respondents into two groups in which one group finds limiting use of natural areas to be appropriate to some degree and one group finds such a strategy to be “Not Appropriate,” with between 40% and 45% of respondents in either group.

The groups formed in this manner reflect a basic orientation towards the natural environment. Those who find it appropriate in some way to limit human uses are more environment-centred (46% in the Pulse on Parks survey, 44% in the Nature in the City survey) and those who find it not appropriate to limit human use are more human-centred (42% of Pulse on Parks, 44% of Nature in the City).<sup>12</sup> A third group is formed by respondents who did not respond to the question (12% in both studies). The groups provide a basis on which to compare similarities and differences in ethical orientation towards the natural environment and are used as a key sort variable in a cross-tabulation to establish eco-affect groups (see Chapter 9).

Five of the six items in the “strategies” questions are also used in the Nature in the City survey to

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<sup>12</sup> See Chapter 9 for a more in depth discussion on this variable.



calculate a score<sup>13</sup> which identifies a respondent as more or less inclined towards preserving natural areas. Using the median<sup>14</sup> (or 50th percentile) as a dividing point, those with scores at or below the 50th percentile are judged as being less inclined towards preservation and are labelled “Pro-Use.” Those above the 50th percentile are seen as more inclined towards preservation and are labelled “Pro-Preservation.” Because the groups are based on the median, this categorization results in the formation of two almost equal groups, each comprising 50% of the respondents. These categories provide a point of comparison between various data sub-sorts concerning views towards the preservation of natural area park land.

#### **5.4.2 Priority of Funding for Natural Area Park Land**

The question concerning funding open space initiatives asked respondents to identify from a list their first and second priority areas for receiving funds. This question is a modified replication of one that appeared in the 1991 Pulse on Parks survey. It was included in the Nature in the City survey to provide a comparison to the 1991 baseline and to provide a variable to compare among respondent subgroups.

Respondents in the Nature in the City survey were asked to select a first priority for open space funding from the following six choices:

- a) Regional athletic fields
- b) Local parks
- c) Local walkways
- d) Regional pathways
- e) Regional parks for informal activities
- f) Natural areas.

They were then asked to indicate their second priority.

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<sup>13</sup> The score is calculated by assigning numeric values to corresponding number codes so that circling a 1 provides a score value of 1, as per Likert's (1967) assessment that “for purposes of tabulation and scoring, a numerical value must be assigned to each possible (response) alternative” (Likert 1967, 91). Values are recoded in item (c) so that code 1 = a value of 4 in order to reflect the fact that in the other items, a code of 1 = a value of 1 and is an indication of being less preservation oriented. “No opinion,” “no response” and “invalid” responses receive a score value of “0”. The score for each case is calculated by adding the values for items a - e together, for a possible low score of 0 and high score of 20. The Likert method gives an impression of comparative values but does not allow for judging the differences in value between each scale item (Sinden and Worrell 1979). However, it does provide an acceptable way of measuring the salience and polarization of issues of interest to the public (Nieburg 1984).

<sup>14</sup> 50th percentile = a score of 12 on scores from 0 - 20, N = 263. The mean in this case is also 12 (rounded).

The Pulse on Parks survey included options similar to the six listed in the Nature in the City survey, plus two additional categories – one for local playgrounds and one for informal play fields. It is possible to compare results from both surveys by collapsing each data set into broad categories for regional features, local parks, and natural areas. On this basis, results from both surveys are quite similar. The order of first priority rankings of the categories is the same in both studies and the corresponding frequency percents are within 5% of each other in the three collapsed categories. Natural areas rate third in both cases, with 16% of Pulse on Parks survey respondents and 18% of Nature in the City survey respondents indicating this as their first priority for open space funding.

It should be noted that results for this question are not directly comparable as a result of grouping “playgrounds,” “informal play fields,” “local parks,” along with “walkways,” all into local parks in the Pulse on Parks collapsed categories. Also uncollapsed data in the Nature in the City survey showed that although 40% of respondents clearly support funding to regional parks as a first priority, both local parks and natural areas garnered 18% of respondents indicating these as a first priority for funds. Only when adding walkways to the local open space category did natural areas slip into third place overall in the Nature in the City survey.

When looking at the data for the uncollapsed funding priority categories it is also interesting to note that 28% of the Pulse on Parks survey respondents indicated pathways as their first priority for funding while only 15% of the Nature in the City survey respondents did. The decrease in priority rating for funding of pathways can likely be attributed again to the success of the *Urban Park Master Plan*. The public would be aware of the numerous capital development projects for major pathways that were identified in the Plan and undertaken in the last three years. These include a substantial redesign and renovation of the pathway along the Bow River through downtown Calgary and construction of a pedestrian/cycle overpass spanning Deerfoot Trail freeway, designed to provide residents in outlying northeast Calgary communities with access to the river valley pathway system.

In 1994 City Council also directed that a comprehensive pathway use study be conducted. Over the two-month period of data collection for the *PathWatch '94* study 1,700 pathway users were interviewed and over a quarter of a million trips were documented. Public education programs regarding pathway safety and positive media coverage of the study and programs combined to give

this project a high profile. Finally, the fact that National Infrastructure Program funds were used in some pathway projects also no doubt contributed to the public's assessment that pathways have received a good deal of funding attention in the four years between the two studies.

Participants in the Nature in the City study were asked to indicate a second priority for funding. The top category selected was regional parks, with 21% of respondents choosing this category. However, the second category at 20% was "no response," third, natural areas (18%), and fourth, local parks at 16%. In view of the possible effects of a +/-6% margin of error,<sup>15</sup> only the uncollapsed and collapsed data from the part of the question concerning a respondent's first priority for open space funding were used in further analysis.

### **5.4.3 Benefits of Urban Nature**

The Nature in the City questionnaire contained questions related to the benefits of natural area park land. As benefits-based planning is an area of interest for Calgary Parks & Recreation, a question concerning public views on the most important benefit of nature in the city was included. As noted previously, three focus group discussions were conducted to generate meaningful benefit response categories for inclusion in the survey instrument.

Each of the focus groups had five or six participants who voluntarily took part in the sessions. One group was comprised of mixed gender graduate planning students, under the age of 30, with no visible minority representation. A second group was made up of men only, ranging in age from mid-twenties to late-forties, either employed by the City of Calgary or self-employed; one of the participants was visually impaired, and two were from visible minority groups. The final group was comprised of women only, ranging in age from late-twenties to mid-sixties, either employed by the City of Calgary or self-employed; one participant was retired and two were from visible

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<sup>15</sup> According to Lake (1987) "[a] simple random sample of 200 has an error of +/- 7%" (Lake 1987, 73). Note, however, that Turner and Martin (1984) caution that this might be an under assessment of the actual error rate due to errors other than those precipitated by sampling. In general, as margin of error theory is based on normal curve assumptions, it is popular convention that legitimizes the use of the idea in situations for which normal curve behaviour does not apply, as in the case of polling opinions. (The assistance of Sambhu Nath, former Corporate Statistician, City of Calgary, is gratefully acknowledged for discussing and verifying the author's understanding of conventional practice in terms of application of the margin of error.) Consequently, in accordance with contemporary polling practice, and on the basis of a 263 case sample set, +/-6% is used as the benchmark margin of error throughout the analysis of Nature in the City survey results.

minority groups. Each group was asked to discuss the question: “What do you see as the main benefits of nature in the city?”

Both the student group and the women’s group suggested that not having to directly pay to use natural area parks in the city was a significant benefit. One participant in the women’s group pointed out that the fact that natural areas and parks in general are available to everyone equally, free of charge, is particularly important to people she knows who are new to Canada. The benefit of a “free” attraction was not observed in the men’s group. Both the men’s and women’s groups identified the benefit of fresh air. The men remarked on this in terms of general opportunities to exercise (especially on the pathways). Half of the women particularly mentioned the health and recreational benefit of taking their dogs for walks in natural areas or along the pathways. The student group specifically identified the quality of life that Calgarians have come to expect as a benefit; the women’s group wove the idea of benefits to family and children throughout their discussion; and the men’s group was the only one to discuss the benefits of the sounds of nature. This is likely due to the influence of a profoundly visually impaired participant in the men’s group. All three groups talked about easy access and relief from the built environment as key benefits.

Based on this pool of information, seven benefit categories evolved for inclusion in the Nature in City questionnaire:

- a) opportunities to exercise conveniently out-of-doors in relaxing, refreshing settings
- b) places for people with dogs to go to get fresh air and exercise<sup>16</sup>
- c) chances to appreciate the sights, sounds, and wonders of nature in close proximity to home
- d) contributions to the quality of life in Calgary which make the city attractive to residents, visitors, and people or businesses looking to relocate
- e) chances for children and families to spend time together discovering and learning about nature in safe, convenient locations close to home
- f) availability of wide open spaces for everyone to explore and make use of at no charge
- g) easy access to go to experience the peace and tranquility of nature in contrast to the stress and built form of the city.

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<sup>16</sup> The April 1995 Civic Census counted dog and cat companion animals in Calgary. According to these figures, almost 72,000 dogs were reported (Mitchell 1986), which indicates an average of about 25% of Calgary households with dogs (not taking into account multiple dog households).

Based on responses to these predefined categories, public opinion on the most important benefit is fairly inconclusive. Although 27% of respondents identified item (g) – easy access to peace and tranquility of nature in contrast to the stress and built form of the city – as the most important benefit of urban nature, family time (16%), quality of life (16%), appreciation of nature close to home (15%), and availability of open spaces for everyone to explore at no charge (12%) are within four percentage points of each other as the second most often selected most important benefit. With a margin of error of +/- 6%, the order for these categories could vary considerably.

However, the fact that item (g) – easy access to peace and tranquility of nature in contrast to the stress and built form of the city – ranked first overall is consistent with previous research that suggests one of the most important benefits that interaction with the natural environment has for people, especially in an urban context, is the opportunity to experience a stress-reducing sense of peace and tranquility (Kaplan and Kaplan 1989; Schroeder 1991). It is suggested that this benefit is greatest when one's stress level is high to begin with (Ulrich 1983), and that the benefit is achieved through relieving mental fatigue by reducing the variety of stimuli requiring one's attention (Kaplan and Kaplan 1990; Gallagher 1993). This perspective is also firmly based on our culture's view that the social complexity (Wohlwill 1983) and artificial form of the urban environment are inherently stress inducing.

Cross-tabulations of groups that selected different benefits as the most important suggest that, as one might expect, those who chose the "opportunities to exercise" (item a) category are more frequent users of natural areas. This same group is also less preservation oriented. Almost 75% of the group indicated that it is "not appropriate" to prohibit human use to preserve natural areas, while just over 30% of those who chose "chances to appreciate . . . nature" (item c) as a primary benefit fell into that category. The breakdown for the "appreciate nature" group suggests that as a whole the group is very preservation oriented.

However, the small cells resulting from the cross-tabulations make these findings inconclusive. More valuable results might have been achieved by providing fewer options, and/or by encouraging respondents to write-in their own perceived benefits (an "other" category was not included in the response set). As well, unlike previous work (Ulrich and Addoms 1981 and Pigram 1993, for example) which suggests that the presence of natural areas provides both

personal and environmental benefits, the focus groups discussions used to define the response categories did not include any reference to what could be termed the ecological benefits of urban nature. That is, none of the participants mentioned that natural area park land is important in terms of increased biodiversity in the urban environment or of the potential benefit of addressing urban engineering problems such as storm water management through more natural processes.<sup>17</sup> As both of these benefits have a long history of being cited by park planners and designers (such as Wright, Braithwaite, and Forster 1976; Hough 1984; Whiston Spirm 1984; McColskey 1989; Hierlihy 1990; and Berman and Weil 1992), in retrospect it might have been worthwhile to include ecological benefit categories such as these, even though the focus groups did not generate any, in order to provide a broader range of options for the public to consider.

In an effort to establish more meaningful data, the seven benefit response categories were collapsed into type groupings. On this basis 42% of respondents favoured Psychological benefits, 28% Social benefits, 27% Physical benefits, and 3% were unclassifiable.<sup>18</sup> The strength of the Psychological benefit category, taken in combination with the finding that the pattern of use of natural area park land is not significantly related to reported “most important benefit” (see frequency of use section later in this chapter), supports the notion established in previous research (Ulrich and Addoms 1981; Kaplan and Kaplan 1989) that people likely benefit from the existence of the urban natural environment even if they are not in regular and direct contact with it. Both active park users and “passersby” are able to witness and connect with natural processes such as the changing seasons (Cooper Marcus and Francis 1990, 7) or the foraging of wildlife in city parks. The comments provided by Nature in the City respondents show that imagination and memories serve to keep people in emotionally close contact with their nature experiences so that physical proximity becomes irrelevant to recalling the pleasure that urban nature brings.

The collapsed categories provide a more substantial basis for cross-tabulations, but in general the raw data from this question is disappointing, especially in view of the highly interactive method of

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<sup>17</sup> In view of the fact that context is important to how a survey question is interpreted (Tourangeau 1987), this may have been as a result of the groups being in a recreational mindset when they were thinking about benefits, however, it is surprising nonetheless that the student group in particular did not consider ecological benefits at all.

<sup>18</sup> Johnson (1990) suggests four different categories related to the ways people benefit from nature in the city – emotional, intellectual, social and physical (Johnson 1990, 236). The typology used here combines emotional and intellectual into psychological.

identifying the categories. The development of Calgary-specific data is hindered in this analysis by the ultimately stereotypic character of the pre-established response categories. This narrow interpretation of benefit perhaps speaks to the limitations of the focus group method – the small number of participants provides a relatively small pool of experience and outlooks from which to draw data. However, it also highlights the fact that while ecological, economic or social benefits may have a high profile in the minds of park planners, this perspective is not necessarily shared by the public.

Respondents were next asked to choose a second most important benefit. A further 27% chose item (g) – so that overall close to half of the respondents identified “easy access . . . to peace and tranquility of nature in contrast to stress and built form of the city” as their first or second most important benefit of nature in the city. The tightness of the response spread for the other second-most important benefit categories rendered the results less than meaningful. Respondents’ first and second choice in benefits were combined through re-coding to create two groups that reflect fundamental outlooks on benefits of urban nature. The groups have been classified as being either primarily amenity oriented or affiliation oriented in their perception of the most important benefit of nature in the city.<sup>19</sup> These ratings are used in the analysis of general intensity of involvement with urban nature which is discussed in Part IV.

#### **5.4.4 Basic Viewpoint on Urban Nature**

A “Viewpoint” question asked respondents to look over four different descriptions of possible outlooks concerning nature in the city and to rank the various perspectives in an order that best described their point of view. The question was included to identify within the sample population the prevalence of the various perspectives. In this respect, over half of the respondents (53%) indicated that an *ecological* or idealistic preservation oriented perspective best describes their point of view concerning nature in the city. A further 30% suggested that a wise use or pragmatic *conservation* perspective best represents their viewpoint, 7% indicated that *aesthetic appreciation*

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<sup>19</sup> Cohen (1991) uses a matrix to categorize benefits of leisure in general in which he characterizes benefits as having either a “compensatory function” or an “intrinsic meaning” (Cohen 1991, 441). Matthews (1989), on the other hand, argues that the benefit seen to accrue from involvement with nature, is necessarily instrumental in that something can have value only in relation to human purpose and interest (Matthews 1989). The above categories are chosen to best reflect the character of the original closed-ended responses, with an amenity-orientation most closely corresponding to an instrumental value-based benefit of nature and affiliation relating to the intrinsic value-based benefit of nature.

best describes their outlook, and 2% said that a practical or *utilitarian* perspective best describes their point of view. A further 8% either had no opinion (a category provided) or no response.

**Table 4**  
**Viewpoint on Urban Nature**

<b>Viewpoint</b>	<b>Best Describes</b>	<b>Next best</b>	<b>Third best</b>	<b>Least</b>
Ecological	53%	19%	14%	4%
Conservation	30%	39%	13%	0%
Aesthetic	7%	23%	48%	2%
Utilitarian	2%	1%	3%	75%
No Opinion	2%	12%	14%	10%
No response/Invalid	7%	6%	6%	9%
Total (rounded)	+/- 100%	+/- 100%	+/- 100%	+/- 100%

Of those who indicated that an ecological outlook (N = 139) best described their point of view, over 60% identified the conservation perspective as the next best description, about 20% chose aesthetic appreciation, and none chose the utilitarian perspective. As well, just under 10% of this group refused to identify a second best option. Of those who chose a conservation orientation (N = 80) as the best description, just over 55% chose ecological as next best, close to 40% chose aesthetic appreciation, about 3% chose utilitarian, and 1% did not specify a second best choice. The majority of those who indicated that an aesthetic appreciation perspective best described their outlook (N = 17), selected the conservation perspective as next best (77%). Cells for the utilitarian perspective as the best description (N = 5) were too small to make further analysis meaningful.

The most frequent combination of first and second best descriptions selected by respondents was Ecological/conservation at 30%, next was Conservation/ecological at 17%, followed by Ecological/aesthetic and Conservation/aesthetic at 11% each. Overall, one-third of all respondents suggested that an ecological perspective “best,” and a conservation perspective “next best,” represents their point of view. Further, as Table 4 shows, 48% of all respondents chose aesthetic appreciation as the third best option and 75% indicated that the utilitarian perspective least describes their outlook concerning nature in the city.



While it is perhaps not surprising that the majority of respondents to a survey on nature in the city claim to hold an ecological perspective on urban nature, it is interesting that the claim tends to be substantiated through responses to other questions in the survey. The “strategies” question provides a case in point whereby only 40% of those in the less preservation-oriented group said that an ecological outlook best described their viewpoint. The more preservation-oriented group showed an even greater consistency with 67% of the group claiming an ecological perspective. As the survey norm for holding an ecological perspective is 53% percent, these two groups, although not showing a perfect correlation with the indicator, do exhibit the anticipated direction in their profile.

The responses to the “Viewpoint” question provide a basis for comparison for various other subgroups identified in the study. In addition, the first and second choices are applied in further analysis. The various combinations are assigned numeric values between 0 and 13 and used in the calculation of the affinity index (this index splits respondents into two groups displaying a greater or lesser intensity of involvement with natural area park land in the city). As by far the majority of respondents selected the same “least” category and “no response” or “no opinion” was the second largest “third best” category at 20%,<sup>20</sup> respondents’ third and fourth choices were not used in any further analysis.

#### **5.4.5 Conflicts Over the Use of Natural Area Park Land**

The survey included a set of questions designed to probe how a respondent is likely to resolve conflict over use of park land. The specific question posed was:

In situations concerning natural area park land in the city where a decision must be made between conflicting human needs and environmental concerns, would you say that you:

- a) Tend to put the environment first?
- b) Tend to put human needs first?
- c) Tend to try to find a way to balance both human needs and environmental concerns?
- d) Tend to look at each situation a different way, depending on the circumstances?
- e) Couldn’t really say.

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<sup>20</sup> The order in which the options were listed may have influenced this outcome. Or it might be that the range of viewpoints provided was not representative enough of the actual range of respondent viewpoints (Patterson 1993). It also could be as a function of respondents’ desire to provide socially acceptable responses.

Respondents were asked to circle one response only. This question was included for two reasons. It provides a basis, in terms of aggregate analysis, for checking the logical consistency in responses to a subsequent question in a respondent's basic point of view on natural area park land in the city (see earlier discussion of the "Viewpoint" question). It also provides a point of comparison for subgroups of respondents.

By far the majority (54%) of respondents indicated that they would try to balance both human needs and environmental concerns in conflicts over urban natural area park land. This clearly points out that most people at least like to think that a compromise is possible in conflict situations. The categories of "It depends" and "Environment first" are second in the frequency responses, with almost equal numbers choosing each (19% and 18% respectively). As well, 7% of respondents indicated that they would put "Human needs first." A further 2% did not respond to the question or checked off "Couldn't really say." The low non-response rate for this question suggests that not only is there a high level of interest in the issue, but it is also likely that many respondents have previously given some thought to their views on the matter (Strack and Martin 1987).

Looking at responses broken down by the subgroups formed by the four main conflict resolution groups provides some insight into the way in which the various perspectives differ.<sup>21</sup> The "Human needs first" subgroup (N = 19) is on average older, with over one-third of the respondents in their sixties, and contains a greater percent of men than average (63% as compared to 40% overall). This conflict resolution group is less preservation-oriented (26% compared to 50% overall) and is the only one of the four categories that clearly favours local parks as a funding priority.

The "Environment first" group (N = 48) on the other hand has the highest percent of any subgroup identified in the survey supporting natural areas as a number one funding priority (46% compared to an average of 18% overall). This group is also substantially more supportive of strategies that promote the preservation of open space for wildlife (65% find this strategy to be very appropriate, compared to 37% overall) and is more preservation oriented in general (77% compared to 50%

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<sup>21</sup> Caution is used in interpreting these results due to the small cell sizes, especially in the "Human needs first" category where N = 19.

overall). The group as a whole is somewhat younger than average (59% in 25 - 44 years of age group, compared to 46% overall), but has an average representation of men and women.

The respondents in these two extreme subgroups demonstrate a strong consistency in their opinions and choices related to their stated conflict resolution perspective. However, the “It depends” and “Both in balance” subgroups are less well defined in this respect. In terms of responses to the “strategies” and “funding” questions, these two moderate groups demonstrate very little difference to the overall survey norm, which is not surprising in that together they account for almost three-quarters of the respondents. On this basis their “strategies” responses are also similar to the “Human needs first” group, and their funding priority first choice is regional parks, as with the survey overall.

In addition, it is curious that these two groups do not differ greatly from each other. The main differences are that the “It depends” group is slightly younger and has a higher percent of occasional natural area park users than does the “Both in balance” group or the survey overall. As well, the “Both in balance” group has a majority of respondents (53%) indicating that it is not appropriate to prohibit human use of natural area park land, but is slightly more preservation oriented overall than the “It depends” group (although the difference may be more likely a result of the +/-6% margin of error). A higher percent of respondents in the “Both in balance” group also provided an answer to the open-ended question concerning experience with nature in the city. The results of this “conflict” question are used in further analysis regarding respondent’s intensity of involvement with natural area park land.

The second part of this set of questions asked respondents if they would have a different outlook on conflict resolutions between environmental concerns and human needs if the situation involved wilderness areas. This question was included to begin initial exploration into how perspectives might be different for domesticated nature and for wild nature. The majority of respondents (57%) indicated that they would not change their approach for wilderness situations. Of those who said their outlook would change, the majority (66%) selected “Environmental concerns first.” Taken in combination with those who indicated that they would adopt an “Environment first” approach in both urban and wilderness conflict situations, just over 40% of all respondents stated that in wilderness situations they would tend to put environmental concerns first as compared to the 18%

who said this is their preferred approach to conflicts involving competing needs in urban natural area park land. These results suggest that the majority of the public sees a clear distinction between nature in and nature outside of the city, with the domesticated nature being under more pressure to have its use compromised.

#### **5.4.6 Referendum-Style Question**

The Nature in the City questionnaire included a separate two-sided page detailing the referendum-style question about whether or not Calgary communities need more natural area park land. One side of the form explained both the question style and the issue under consideration. The other side was designed like a ballot, with a box to put an “X” or check mark. The numbered options were listed and a clear statement of the consequences of each option was provided. Respondents were asked to read the complete explanation about the way park land is currently planned in Calgary and then as in a “real” referendum, turn to the ballot on the other side of the page and “vote” for one of the options.

In terms of planning for community park land, the issue is basically whether more, less, or the same amount as is presently left, should be kept in a natural state upon initial subdivision. There is also the possibility of reclaiming existing developed park sites to a natural state. Because it was important to begin to get an idea of public support on the reclaiming option, half the ballots were printed with three options, and half included a fourth reclamation option. To control for the possible effects of positioning, half the ballots listed the status quo option first and half listed it last.<sup>22</sup>

This results in four possible form types, which test all options and provide a built-in check on the randomness of the response sample (see Appendix I for copies of the forms). Listing four options also provides two choices for “more” natural areas in communities and could either “split” the vote on the “more” option or weight the vote to the “more” option. These various characteristics were

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<sup>22</sup> During the final stages of designing the ballot the question arose as to the appropriate positioning of the status quo option. Pretest interviews testing comprehension of the issue specifically asked about whether question order influenced choice of options. Although none of the participants indicated that order was a factor, it was decided to vary the position anyway.

all tracked with coding for form type, number of options on a ballot (three or four), and order of the status quo option (first or last).

Responses were received on forms in which 50% had three options and 50% had four options (N = 253, 4% of respondents did not return a ballot with part one of their questionnaire), indicating that the randomness of the original sample has been maintained in the response sample. Just over 50% of those who returned a ballot submitted forms listing the status quo last, and just under 50% submitted forms listing the status quo first.<sup>23</sup> The difference of 3% is not significant enough to suggest that those who received a “status quo last” option form were more likely to reply to the survey (chi-square = 1.01, 90% confidence level requires 2.71).

To compare the choice of options among respondents across all of these variables, responses were coded in two ways. First the actual option selected was identified. The option was then recoded into one of three categories that represent choices to either maximize the natural area park land provision, keep it the same, or reduce it. In both the three- and four-option cases, the status quo is the single category with the majority of votes (53% of three options, 43% of four options), and in both cases approximately 5% of respondents voted for less natural area park land. However, in the four-option cases (N = 127), 28% voted for keeping more park land in a natural state and 23% voted for reclaiming existing park space so that just over 50% of the four-option group actually voted to maximize natural area park land in some way, rather than to leave it the same. This compares with 40% of the three-option group voting to maximize natural area park land. A chi-square analysis of order of the status quo and the collapsed categories of voting choice suggests no relationship between the two variables. A comparison of the number of options to vote shows a slight likelihood that less choice in options tended to favour the status quo, and more choice favoured the vote to maximize natural area park land (chi-square = 2.88, 90% level of confidence requires 2.71).<sup>24</sup>

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<sup>23</sup> Overall forms received from respondents were close to the original random distribution of 25% of each type of form, with slightly more three-option and four-option status quo last type forms (27% and 26% respectively) and slightly less four-option and three-option status quo first type forms (24% and 23% respectively) eventually being returned.

<sup>24</sup> This is more likely due to the coding method which assigns two of the four choices on the four-option form to the maximizing category.

Chi-square analysis suggests that there is a significant relationship between choice of park planning option and park use, preservation orientation, opinions on funding for natural areas, and general outlook on urban nature. Voting in favour of a change to park planning practice that maximizes the provision of natural area park land corresponds with a higher than average level of park use, propensity to support natural area preservation and funding strategies, and tendency to have an ecological outlook on urban natural environments. Voting in favour of the status quo corresponds with a lower than average level of park use, propensity to support natural area preservation and funding strategies, and tendency to have an ecological outlook on urban natural environments. The analysis suggests, as well, that age and education are possibly related to voting choice, with younger, university educated groups being more pro-change. There is no evidence of significant relationships between choice of park planning option and gender, income, length of residence in Calgary, household type, meaning theme of experience with urban nature or, as noted above, the order of the status quo option on the ballot.

In general, those who voted for the status quo in park planning procedures tend to be in the 50 years of age and older age group, tend not to have gone to university, are non-regular users of urban natural areas, are less supportive of strategies to preserve such areas, and not surprisingly, do not see natural area park land as an open space funding priority. The oldest in the group are typical of this profile. Just under two-thirds of the respondents in their 70s tend to favour the status quo in the provision of natural area park land. Respondents overall are split in their support for change to park planning in that the aggregate response to the referendum-style question indicates that 46% of all respondents voted for the status quo and 43% voted to in some way maximize natural area park land. In addition, 5% voted to change the planning procedures in order to provide less natural area park land, 4% did not return a ballot, and 1% did not respond or provided an invalid response.

## **5.5 Summary**

This chapter reports on the findings in terms of the question: What factors appear to define relationships with urban nature? This initial review of the survey findings from the forced-choice questions suggests two important observations relative to human relationships with the urban natural environment. First, this preliminary analysis shows that factors defining a relationship with urban nature go beyond basic demographic characteristics or individual views on perceived

benefits of nature in the city. The analysis also suggests that various kinds of relationships are reflected in respondents' views concerning preservation of natural area park land, funding priority for natural areas, and planning policy for providing urban nature areas. But more in depth data manipulation is required in order to understand the complex influences that underlie the development and sustainment of different kinds of relationships with the urban natural environment.

Second, the longitudinal comparison of results from the Pulse on Parks survey to those of this Nature in the City survey demonstrates a remarkable degree of consistency concerning the distribution of human-centred and environment-centred eco-ethics in the Calgary public. This suggests that the eco-ethic dimension provides a legitimate starting point around which to pursue an analysis of the Calgary community's relationship with urban nature. Before moving on to consider these factors in more detail, the responses to the open-ended question on experience with nature in the city need to be examined. The next chapter is an extensive review of the responses to this question.

## **CHAPTER 6**

### **Nature in the City: A Review of Public Sentiment**

#### **6.1 Introduction**

This chapter continues the review of survey results. It considers only the responses to an open-ended question concerning a respondent's experience with nature in the city. The methods of analysis are discussed and the responses are analyzed from a number of perspectives. The results provide insight into the meaning, expectations, images and interactions that people have in their contact with urban nature. The results also give an indication of the range of relationships that people have with the urban natural environment.

#### **6.2 Describing the Urban Nature Experience**

Individuals are able to experience both natural and mediated environments in a number of different ways. As the ability to situate ourselves in space is an important part of the human development process, early on we learn to experience environment as separate and apart from our person (Ittelson, Franck, and O'Hanlon 1976). The experience of an environment as a physical place, providing a setting for everyday life, dominates our interaction with local environments. However, people will also experience the environment psychologically, perceiving it as an important part of themselves, defining themselves through sameness rather than through difference. This in part explains why any change in environment tends to provoke uneasiness. For some people, a change in the environment may in fact be experienced as a change in self (Ibid. 202).

In terms of the interactions with the natural environment, an encounter with urban nature involves physical and psychological experiences with aspects of the environment that people accept as natural in appearance, regardless of whether or not human intervention has altered, caused or sustained it. Hartig & Evans (1993) recognized this when noting that in a nature experience, a person wants to be able to direct his or her attention to something that is either not made by humans or is a substitute of something not made by humans. In natural area park land this desire results in very precise expectations of what is to be tolerated as a valid nature experience.

There is an ideal notion being assumed in constructing the nature experience. Although the story is not written down, everyone seems to know how it unfolds. Existing roads or features such as



underground gas lines are selectively excluded from the authentication process, unless new construction threatens the existing boundaries (both physical and psychological) for the experience. Action involving anything contained within the bounds of perceived nature is subject to intense scrutiny. Things that imply the presence of a human hand, such as a paved pathways, public restrooms, and so on, can be seen as intrusions. A grey area arises in relation to natural appearing intrusions such as plantings to re-establish a species, or grading to either encourage or discourage water accumulation. But distasteful or unsightly aspects of nature, such as predation possibilities, scummy, insect infested ponds, remains of natural processes, and the like, seldom, if ever, are included in the expectation of the ideal nature experience (see Figure 17).

**Figure 17**



**The ideal notion of urban nature – Woods Park  
(Photo courtesy of Calgary Parks & Recreation)**

Respondents to the Nature in the City survey were asked to provide a description of what nature in the city means to them. Specifically, respondents were given directions to write down special things that come to mind when thinking about their experiences. The possibility that some experiences might be unpleasant was raised and a few examples of different types of nature experiences were provided. Respondents were then asked to complete the statement, “For me,

nature in the city is . . .” The majority of respondents (69%) chose to provide a written response to this question.<sup>1</sup>

A review of basic demographic characteristics of those who responded to the question and those who did not respond does not reveal any major differences between the two groups. The response providers group includes a lower percent of men than expected<sup>2</sup> and the non-responders group includes a lower percent of couples with children than expected, otherwise most of the variations appear within the +/-6% margin of error. The two response type groups are similar to each other and to the overall survey results with respect to age breakdown, park use patterns, income and education categories.

The two groups do exhibit some differences in the behaviour-based questions. The response-providers group is more preservation-oriented (63% Pro-Preservation) than the non-responders (37% Pro-Preservation). This assessment is based on the scores from the care and protection strategies question, where it is expected that there would be a 50-50 split in preservation orientation. The response-providers group also has almost twice the percent as the non-responders group indicating that they would tend to put environmental concerns first in conflicts involving urban natural area park land (21%, as compared to 12%, with the overall survey showing 18% in this category).

In terms of content analysis<sup>3</sup> for this question, three separate procedures were conducted. First an independent researcher<sup>4</sup> reviewed all cases (N = 263) and coded each case into one of five nature experience theme categories (see Table 5, next page). Although many of the responses were multidimensional, the responses were coded on the basis of predominate theme as follows:

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<sup>1</sup> In comparison, about 40% of Pulse On Parks survey respondents chose to reply to the open-ended question concerning urban parks priorities.

<sup>2</sup> That is, as would be expected by chance, according to chi-square analysis.

<sup>3</sup> Content analysis is the “systematic organization of qualitative information so as to draw some quantitative conclusions” (Saykaly 1994, 95).

<sup>4</sup> Ann Dahlberg, of Calgary Parks & Recreation, Planning Section performed this initial analysis.

**Table 5**

**Preliminary Analysis of Experience Themes  
(Developed by the author, based on data provided by A. Dahlberg)**

<b>Experience Theme:</b>	<b>% of all respondents</b>	<b>% of responses</b>
Nature as a haven	25%	36%
Nature as self-affirming	20%	30%
Environmental aspects of nature	13%	19%
Nature as non-utilized land	5%	8%
No comment/unable to judge	37% (unable to judge only)	7%

It is interesting to note that the themes arising from this analysis of narrative concerning experience with urban nature echo those historically found in analyzing motivations for seeking out a wilderness experience, i.e. “wilderness as a sanctuary . . . as personal gratification . . . [and] as fascination” (Stone and Martin 1957, as cited in Hendee, Catton, & Brockman 1968, 34).<sup>5</sup> This analysis provided an initial assessment of the data from the open-ended question and was not used in any further analysis.

The second analytic procedure involved an independent researcher (the same one who did the initial thematic assessment) reviewing that data in terms of assessing the presence of three different dimensions in any given response. Each text was judged in terms of the relationship with nature that is being expressed (rated as either isolated or integrated); the character of the context of the experience that is being described (judged as either incidental or articulate); and the depth of the meaningfulness of the experience being related (assigned a value of either significant or profound). The primary author also rated all responses on each of these dimensions and a session on inter-rater differences was conducted to come to agreement on the coding for each text.

The assessment of the texts (N = 179) showed an almost equal representation of integrated and isolated relationships with the natural environment (approximately 40% of those who responded to the question in each group). The relationship dimension was judged as isolated if the description suggested that the individual considered him or herself to be separate from nature rather than a part of it, as the integrated dimension suggests. In terms of the context dimension of the respondents’

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<sup>5</sup> The citation provided by Hendee et al. (1968) is: Gregory Stone and Martin Taves. 1957. *Human elements of wilderness*. Society for American Foresters Proceedings, 1956: 26-32. The original source was not consulted.

experience with nature in the city, almost 60% of those who responded to the question were judged as describing an articulate experience, that is, a distinct coherent incident as opposed to an incidental, or casual, generalized circumstance. As well, just over 50% of the responses were rated as relating profound meaningfulness in which the description of the urban nature experience was judged to demonstrate a high impact in terms of an individual's affective response. A "significant" rating of meaningfulness was assigned to 30% of the responses through a negative assessment of profoundness. That is, if there was sufficient text to judge and if the text was not coded as profound in meaningfulness, it was coded as significant.

This assessment of dimensions was included to provide a basis for operationalizing the concept of experience with nature. The approach was not appropriate for two reasons. First, in view of the variety of data available in the responses to the other questions in the survey, using the response to one question to operationalize the concept seemed too restrictive. More importantly, it was not possible to assess an experience profile for those who did not respond to this question. As a result of the initial analysis, the basis for assessing experience with urban nature was broadened to include other variables – benefit, use, viewpoint, and meaning. The open-ended text is used to operationalize only the meaningfulness dimension of experience (the results of which are discussed at great length in Chapter 8).

The coding rationale was reworked in order to accommodate a reassessment of the meaning dimension. All of the responses were reanalyzed and were coded in terms of whether the text seemed to draw its meaning from nature as a place, or from a sense of connection with nature, or through contributing to a sense of self. Texts that were not substantial enough to categorize or expressed anti-nature views were categorized as disaffected. Non-respondents were also given a code for the meaning variable that was categorized as "No Comment." On this basis, 36% demonstrated meaning based on nature as a place, 17% expressed meaning as connections with nature, 9% displayed meaning in nature as coming from the sense of self it provides, 8% were classified as disaffected, and 30% did not comment.

These categories were subsequently assigned numeric values<sup>6</sup> in order to be used in the calculation of the affinity index, which defines whether a respondent has a greater or lesser intensity of

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<sup>6</sup> Values were assigned as follows: Self = 4, Connection = 3, Place = 2, Disaffected = 1, No Comment = 0.

involvement with urban natural area park land. Further analysis suggested that in terms of performing a thorough assessment of meaning subgroups, three categories would suffice. On this basis the five categories were collapsed to form one group that created meaning from experiencing a kinship with nature (26% of all respondents), one group for which meaning seemed to be based in the utility of nature (36%), and one group of respondents who did not report any meaningfulness concerning experiences with nature in the city (38%). These three groups organize the extensive discussion that takes place in the next chapter on how meaning relates to expectations for natural area park land.

A third independent thematic analysis was performed by using SONAR software – an application designed specifically for analyzing qualitative data. This product carries out key word and phrase searches which then provide a quick sort of comment texts. The text for all 179 responses was entered into this MAC-based application, along with key variables such as case number, gender, age group, and park use patterns. The software was subsequently used to generate a sort based on gender only.

The sort showed that consistent with their respective representation in the survey sample overall, women provided 60% of the experience reports and men 40%. These rates, however, indicate that 70% of the women and 64% of the men described a nature experience. As well, women tended to give a response that is on average 10% longer than those provided by the men. These figures taken together suggest a greater participation on the part of women in reporting their experiences with urban nature.

The SONAR application was also used in conducting an overall thematic analysis of all of the responses. This analysis was done by an independent researcher<sup>7</sup> who found the following:

Responses ranged significantly in length and topic areas addressed. Although the responses do not fall neatly into categories, five major themes, five common themes and numerous unrelated topic areas can be identified. Most respondents' comments addressed more than one topic area.

Responses were generally positive and supportive of efforts to retain natural open space within the City of Calgary for the enjoyment of present and future generations. A substantial number of respondents identified specific natural areas in their responses. In

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<sup>7</sup> Nancy Marshall, then a local research consultant, prepared the original text of this analysis in August 1995. Ms Marshall subsequently became a PhD student in the Urban Planning and Development program at New South Wales University, Sydney, Australia.

descending order of frequency, these areas were: the City's riverbanks, Nose Hill, Fish Creek, Glenmore, Bowness, Bowmont, Edworthy and Weaslehead parks, the Inglewood Bird Sanctuary, Prince's Island and Riley Park.

The following summary statements represent an 'order of magnitude' of comments received from the most to least often mentioned.

**Five major themes:**

- (1) Nature in the city is: relaxing, a place for stress release, quiet, peaceful and tranquil.
- (2) Nature in the city is: an ability to see and appreciate flora and fauna in their somewhat natural environments.
- (3) Nature in the city is: a way to balance the effects of the human-built environment. Many people stated that natural open space offers relief from aspects of city life such as traffic pollution, noise and the 'hustle and bustle' of urban living. Park users appreciate the health benefits, fresh air, limited number of park users and the intrinsic value of park open space.
- (4) Nature in the city is: an example of harmonious co-existence of man made and natural settings.
- (5) Nature in the city is: an opportunity to participate in activity outdoors.

**Five common themes:**

- (1) Nature in the city is: an opportunity to spend time with family and to let children play in an unstructured environment.
- (2) Nature in the city is: an opportunity to enjoy nature in general.
- (3) Nature in the city is: natural open space which is close to home.
- (4) Nature in the city is: safe.
- (5) Nature in the city is: a means to enhance quality of life.

The remaining responses covered a wide range of topic areas. Of these, many respondents mentioned that Calgary's open spaces should be protected as parks. Several respondents stated that nature in the city was simply 'unaltered, open space.' Several others stated that nature in the city is not really 'nature' and that it was not possible to have this in an urban setting. In contrast, just as many respondents suggested that natural areas in the city should be kept natural, with as little manicuring as possible.

Smaller clusters of respondents stated that parks should be a safe place to go in the city, that they should be accessible, that public funds should be spent differently within the open space system, and that dog waste in public spaces should be the responsibility of the pet owner.

Due to the small sample size, caution should be used when interpreting the data. This question was structured for qualitative answers and was analyzed accordingly. Responses were not able to be 'closed' into 'like' categories. This qualitative data analysis is not statistically valid.<sup>8</sup>

The primary researcher's own subsequent analysis of content proved to be in agreement with most of the findings of this independent review. However, some differences were observed and the framework used to present the in depth account of meaning themes emerging from respondents'

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<sup>8</sup> Excerpt from original report prepared by Nancy Marshall, August 1995, at the request of the author. To avoid repetition, respondent quotes included in her original are not duplicated here. See the remainder of the chapter for extensive verbatim material.

texts is based on the author's modifications to the ten categories outlined through this first assessment. The following section reports in detail on these findings, including an extensive selection of verbatim excerpts from respondents' texts. The quotes are included in order to provide the reader with an opportunity to experience first-hand the range and depth of responses and to explain various points in the analysis.

### **6.3 Analysis of Meaning: "For me, nature in the city is . . ."**

Approximately two-thirds of the survey respondents provided an answer to the open-ended question about the meaning that nature in the city has for them.<sup>9</sup> An overview of the analysis of responses to the question shows that within the confines of an essentially contrived environment, people have both a physical and a psychological relationship with nature that reflects not only a particular self-identity, but also their expectations for a valid nature experience. Respondents to the survey experienced the natural environment primarily as a setting for an activity, then as opportunity for reflection. They expect to encounter clean, safe nature, tamed for city use. Both the physical and psychological meanings related by respondents are indicative of very traditional and even stereotypic stories concerning our relationship with nature. They tend to portray an ideal and romanticized notion of nature consistent with prevalent social contexts that view contact with nature as an awe-inspiring means to self-fulfilment, wildlife as an endangered oddity, and the outdoors as a healthy haven or refuge from normal city life.

This analysis allows for the identification of multiple meaning themes within a case. The assessment is impressionistic, rather than empirical, as actual word counts were not conducted. The results indicate that overall there are five major themes and two common general types of remarks that respondents consistently report concerning the meaning of nature in the city. The restorative influence of contact with the natural environment is the most often mentioned meaningful consequence of encounters with urban nature. In order of most to least often mentioned, the other four major theme groupings are: nature in the city has meaning as an opportunity to appreciate wild flora and fauna; it has meaning as a way to balance the effects of urban life; it is meaningful as a setting for outdoor activities; and it is meaningful as a focus for

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<sup>9</sup> Of these, about 8% gave a response that was either off topic or not detailed enough to judge a meaning.

family time together. The two common general remarks were related to the convenience and safety of urban nature.

### 6.3.1 Theme 1: Restorative Powers of Urban Nature

In terms of the restorative powers of urban nature, respondents reported that nature had meaning with respect to the ability of the urban natural environment to precipitate a sense of peacefulness and perspective on daily life (see Figure 18). This theme was usually manifest in remarks about nature as a place to relax, relieve stress, and enjoy some peace and quiet. The tone and range of many of the responses with a “restorative” theme are represented in the following comments:

For me, nature in the city is. . . [a]n essential part of living. It’s great to be able to take children out for walks and picnics. It has a very calming effect on all of us and we are then better able to make the rest of the day a positive and productive time. (Case 055: FYR)<sup>10</sup>

For me, nature in the city is . . . I really enjoy walking through the neighbourhood and looking at people’s gardens. Right now the lilacs are in full bloom and their scent is a particular pleasure. Usually these walks take me to Bowness Park, where I head toward the river and walk along it as far as I can (i.e. have time for on a particular day). Walking in an aesthetically pleasing and at least somewhat natural environment is for me one good way of coping with stress, relaxing and regaining perspective and peacefulness. It’s the more natural aspects of the park, and other riverside walks (e.g. below Silver Springs) that I enjoy. (Case 136: FOR)

Cases 055 and 136 are typical of the restorative thematic group in that their responses are highly personal and very conversational in character. The rhythm of the writing seems to mirror the respondents’ sense of tranquility. The responses are typical in their understanding that it is an *urban* experience that is under discussion, a fact which this next example from the restorative theme group demonstrates:

For me, nature in the city is . . . [a] way for me to reduce stress, experience the tranquility and beauty of nature, to see and learn about nature, get exercise for me and my dogs, all this without having to leave the city. (Case 213: FYR)

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<sup>10</sup> The code to identify respondent characteristics is Gender/Age/Use Pattern with F = Female, M = Male; Y = Younger than 50 years of age, O = 50 years of age and older; R = Use More often, L = Use less often; U = Unknown.



**Figure 18**



**Opportunity to regain perspective – a local hiking trail  
(Photo courtesy of Calgary Parks & Recreation)**

It may be that the urban context is responsible for an absence of references to spiritual meanings in the typical restorative thematic grouping response. Perhaps the awe-inspiring aspect of nature which is so strongly felt in wilderness encounters is more subdued in the reduced scale of urban environments. Although there is an underlying sense of spirituality in many of the responses, only the following two cases made explicit reference to involvement of what they see as a higher power in providing the experience. As these respondents note:

For me nature in the city is the opportunity to get away from it all and appreciate the world the way in which God truly intended. It's a sense of freedom and total contentment. It's like a vacation without the expense and actual travel. (Case 131: FYL)

For me nature in the city is a reminder of my CREATOR. A place to meditate. A reminder of my good fortune to be Canadian. The tranquillizer I need when I am stressed. One affordable alternative to the mountains. Any little paradise. (Case 184: FOR)

Although part of this theme group, Case 005, which follows, is also atypical for two reasons. It is not as articulate as the usual restorative response and the respondent specifically mentions the potential for feeling unsafe at times. While safety is a sub theme in some responses and is one of the two common general remarks noted in analysis (see later in the text), this respondent is one of few who personalizes the safety concern:

For me, nature in the city is . . . [t]o walk in parks is best for peace to get rid of anger or frustration and relaxing. Nervous if alone with only one or two strangers behaving oddly. Like police on horseback. Most parks have families, lovers others around. I use parks for exercise and for enjoyment, like to meditate and enjoy nature, flowers, birds, bushes. Fewer and fewer birds in city. No meadow larks for many years. Enjoy parks everyday of my life even in winter. Beautiful nature. (Case 005: FOR)

### **6.3.2 Theme 2: Awareness of Wildlife in the City**

The second most often encountered theme was the meaning that nature has in terms of the opportunity to see other forms of life in the city, with bird watching figuring prominently in the responses (see Figure 19). The first two examples, Cases 152 and 244, are typical of the wildlife thematic group in that aside from birds, the meaningful part of nature associated with wildlife viewing is chancing upon species one would not normally expect to see in the city.<sup>11</sup> No one, for example, mentioned the joy in seeing mice or spiders. At the same time, there were no responses that referred to pests in general or to the use of wildlife as a possible food source (not that we would necessarily expect that kind of comment in an urban setting, but in view of the popularity of fishing on the Bow River, it was surprising that fishing was not even mentioned in any of the

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<sup>11</sup> Raglon (1991) speculates on what is so moving in general about chancing upon a creature from the wild in a non-threatening situation. Drawing on descriptions of an encounter with a mouse in the city, and of meeting a lemming in the wild, she suggests that our own lives are put into perspective through the discovery of dignity in another life of value and interest. As she observes, all contact with wild animals is a way to “defeat reason” (Raglon 1991, 18, citing Lopez\*) by coming “into contact with something greater and more powerful than ourselves” (Raglon 1991, 18).

\* The citation provided by Raglon (1991) is: Barry Lopez. 1986. *Imagination and desire in a northern landscape*. NY: Charles Scribner’s Sons. The original source was not consulted.

activity based responses). Typical of this general orientation are Cases 152 and 244:

For me, nature in the city is [b]ird watching. Seeing a coyote running along the road to the airport with a ground squirrel in his mouth. Watching the ground squirrels. Seeing how many wild flowers I can identify on a walk. Being surprised by skunks, foxes, and deer in my own neighbourhood. Walking my dog in River Park every day of the year. (I pick up!) (Case 152: FOR)

For me, nature in the city is . . . We live across from an open field from Silver Springs Golf course, this open field goes right down to the river. At many times in the fifteen years of living here we have had deer across in the field even in our front yard. There has even been coyotes and a moose. Having this chance to see wildlife up close in the city is awe inspiring. (Case 244: FYR)

In addition to the obvious sensory pleasures and feelings of discovery that viewing wildlife in the city precipitates, the source of inspiration for the wildlife thematic grouping could be related to, as Raglon (1991) suggests, the fact that encounters with wildlife serve to remind us that we share the world with other life. The idea that humans are but one of many life forms whose survival

**Figure 19**



**Appreciation of other life forms – geese along the river  
(Photo courtesy of Calgary Parks & Recreation)**

depends on our treatment of the natural environment is an important point in discussions in

environmental philosophy, especially in those of deep ecology. Case 085, which follows, shows how the meaning generated by contact with particular wildlife might lead to a greater awareness of our place in the world. It also provides a rare example of an expression of a theoretical idea (the idea that people feel connected with nature through changes in the seasons) in terms of a “real life” experience. As the respondent puts it:

For me, nature in the city is sometimes my only connection with the seasons/rhythm/time. I am able to see the changes we cause. Example, where I live I rarely hear birds anymore. Ten years ago I always did. Did they leave? No, they moved to less congested areas. No dummies, as the downtown core filled up. The balance has tipped. Perhaps we should pay heed. The parks remind me to stay humble that I am just a part in the big scheme of things that I am not the only thing with needs. They make me joyous! (Case 085: FYR)

The following wildlife thematic grouping cases are atypical for different reasons. Case 209 is one of the few responses to mention gardening and to refer to actually feeding birds. As both of these activities are common in urban areas, and in view of the age demographics for the Nature in the City survey (46% are 45 years and over, compared with 26% of Calgary’s population in general, and 33% of the Calgary 15 years and older population), one might expect that more people would have commented on gardening in particular as a way to be in contact with living things. For whatever reason, perhaps because of the association of nature with “wild,” gardens were not remarked upon as being part of experiencing nature in the city, with the exception of the following response:

For me, nature in the city is . . . [h]aving a small garden and feeding the birds which come to my yard. (Case 209: UUL)

The next example, Case 069, is unlike others in the wildlife theme group in that many “cityfied” aspects of flora and fauna are included in the enumeration of things that are, for this person, meaningful as nature in the city. In the following, “Inglewood” refers to a public bird sanctuary in Calgary:

For me, nature in the city is . . . [b]ird watching. Inglewood. Flowers and Gardens of Riley park [a local formal flower garden area]. Walking and wildlife in Fish Creek. Conservatory and Animals [live and other] at the zoo. Driving, walking and sitting watching in Glenmore Park. (Case 069: FOL)

Also atypical to the wildlife theme group is Case 193 in which the gratification that the respondent

experiences concerning contact with wildlife is derived not from an episodic encounter based on novelty, but is rather more of an everyday kind of relationship, based on familiarity. As the respondent describes it:

For me, nature in the city is . . . Around our community we are fortunate to have some undeveloped wild land containing areas with bushes and trees too thick to have people walk through which has allowed wild pheasants to survive for many years. We occasionally see them, but I hear them every morning as I walk to work and it gives me great pleasure to know that they're there. It makes me think, how fortunate that right in the middle of the city I can experience this. (Case 193: FYL)

The meaning, perhaps in terms of self-affirmation, that results from being in regular contact with other living things appears to be important to our sense of personal well-being. For example, in a recent study by Balmori and Morton (1993), Nathaniel, a homeless person in New York City, reported that:

I built the tent around a park bench. I had a garden outside. I've got a place, I've got a garden. It came from growing things actually. Two or three big sunflowers came up from seeds. I had a praying mantis there. I found it on the other side of the fence, caught him, and put him in a cage. I would bring him out to play in the garden in the daytime (Nathaniel's narrative in Balmori and Morton 1993, 64).

Further, as Balmori and Morton (1993) inadvertently discovered in their photo documentation of the gardens of homeless people in New York city,<sup>12</sup> in situations where the environment is either socially or ecologically too inhospitable to sustain life, the individual's gardens are enhanced with artificial plants and stuffed animals. This is the case with Angelo, who had two gardens outside of his tent house set up on Pier 84 on the Hudson River, where he has lived for eleven years. As he tells it:

Outside my house I have two gardens, It's not a garden actually, no flowers or tomatoes or eggplants. It's a toy garden. I got a gorilla, Godzilla, a Barbie doll [he got the Barbie doll from a little girl whose life he saved when she fell off the pier], and lotsa, lotsa, toys. A lot of people come by over here. It's like a museum . . . nobody touches it (Angelo's narrative in Balmori and Morton 1993, 82).

It seems that even where there is no other life, people have an urge to create an illusion of it,

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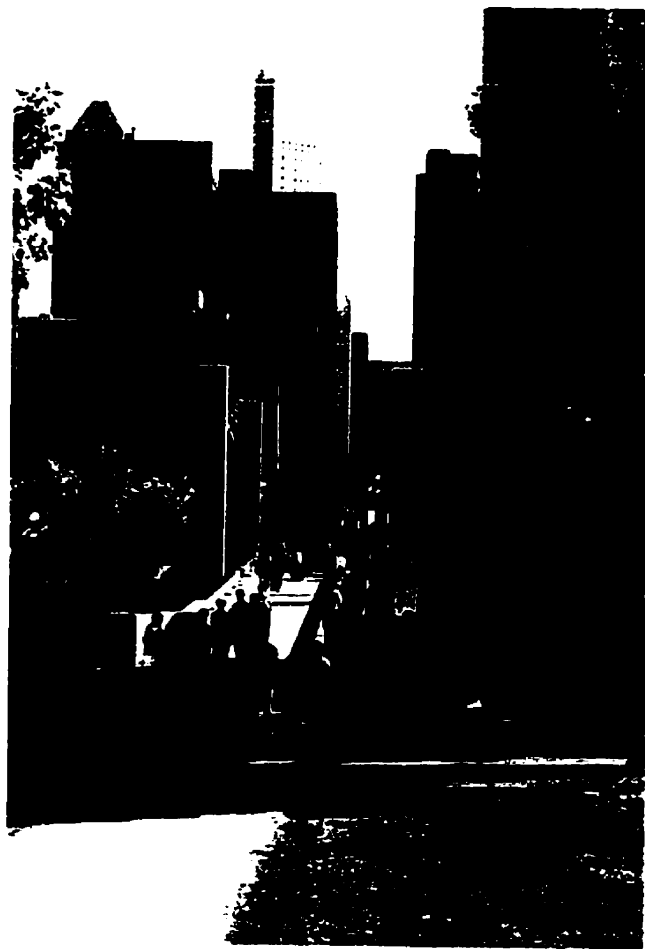
<sup>12</sup> Balmori and Morton (1993) define the gardens created by homeless people in their study as "an exterior composition in space consisting of recycled elements, requiring little expense and maintenance, and creating an imagery that reflects the situation of its maker" (Balmori and Morton 1993, 10).

possibly as a point of reference for self-definition or maybe even as a necessary object of our care and affection.

### **6.3.3 Theme 3: Providing a Balance in City Living**

The third most common theme encountered was that nature is meaningful due to the balance that it provides to the noxious aspects of city living (see Figure 20). The stress reducing capacity of nature figures prominently in this theme group, expressed in terms of the relief it provides from the pressures of the urban environment. This category is representative of perhaps the most stereotypic orientation towards nature. The underlying subtext is essentially that the city is an unnatural environment, even though humans are a decidedly domesticated lot. The stress of life without the conveniences of electricity, plumbing, political organization and so on, is not a factor

**Figure 20**



**Balancing nature and the city – Prince’s Island Park  
(Photo courtesy of Calgary Parks & Recreation)**

in this romantic conceptualization of nature. However, none of the respondents suggested that we need to go back to a more natural way of living. The essence of meaning for most of this group is that nature provides a desirable balance to what they must endure in the city. The following examples demonstrate this point:

For me, nature in the city is . . . The natural areas in Calgary are important to add a sense of balance to the hustle and bustle of city living. I enjoy walking along pathways in Fish Creek Park, or along the Bow River pathway particularly when there is no one else around. The smells, sounds and sights of nature are very relaxing and renewing. City dwellers need to be able to escape. (Case 150: FYL)

For me, nature in the city is . . . [e]ssential to counterbalance the urban development. It serves to remind one that there is a real world existing quite apart from the fabricated one humans tend to create for themselves. Absolutely imperative to have nature/natural areas to refresh one's outlook and relieve day to day stresses. (Case 016: MYR)

For me, nature in the city is . . . [a] chance to leave the human environment. A more relaxed place to meet people. An imperative antidote to the increasing density of the built environment. (Case 214: MYR)

All of these examples are typical of the “balance” group in expressing the belief that the kind of respite nature provides is *essential* to healthy living. Case 214 also profiles a paradoxical characteristic seen in some of the “balance” responses – the statement that the natural environment provides a superior climate for social contact. For example, respondents in this grouping commented that:

For me, nature in the city is . . . [a] retreat away from traffic and noise, a place where people say hello as you pass. (Case 219, excerpt: FYR)

For me, nature in the city is . . . [a] private retreat to escape the stress and hustle of the city, somewhere to go when life doesn't seem too rosy, nature seems to boost a person's spirit. Also parks are an excellent place to exercise and socialize, much better than average meeting places. There is not much in this world left to fully appreciate. We lose our parks, we lose our sense of being human. (Case 017: FYR)

The role that natural area parks play in providing a place for socializing came out as a point of discussion in one of the focus groups that preceded the public survey. In the context of remarking

on what she thought Calgarians would miss most if there were less natural area park land, one of the participants expressed the view that she would feel the loss of special places to socialize. As she explained, being out in Calgary's natural areas provides an important opportunity to meet people who are interested in doing the same kinds of things that you are. She noted that:

[in areas like] Glenmore Park, they have that trail, I was there on the weekend and there was *so* many people doing different types of activities and they were interacting and it was just very pleasant (Student focus group transcripts).

The notion being presented is that people are friendlier when out doing things in parks than they are when walking down a busy city street. In this view, the nature experience is seen to provide a common bond in which people may feel they can more readily talk to strangers (however inadvisable that may be). In addition to being able to meet like-minded people in friendly surroundings, it may also be as Haggard & Williams (1992) suggest, people are truly more themselves when involved in leisure activities. Without the constraints of everyday life, and with an assumed common appreciation of nature, a certain camaraderie may in fact result. This aspect of the nature experience may be especially meaningful to people seeking a balance to an urban environment they view as hostile and impersonal.

#### **6.3.4 Theme 4: Enjoying Outdoor Recreation Settings**

The fourth major thematic grouping identified the meaning nature has as a setting for outdoor leisure pursuits. In this thematic group we see a return to the personal voice as individuals describe favourite activities that obviously are very cherished and infused with personal meanings. The fact that these respondents focus on an activity as being the meaningful experience they wished to relate may be indicative of a more goal-directed type of personality. Or it may be that these kinds of activities generate especially pleasing and therefore more memorable and easily recalled experiences than do experiences which result in the formation of more generalized sentiments. Although the discussion here is on a detailed analysis of the thematic content of responses, the reader may recall that the experience of nature is described as being both a physical and a psychological phenomena, with certain individuals in the survey leaning more or less to one or another of the types. In terms of this study, the physical experience is characterized in the meaningfulness of nature as a place. The study identifies the meanings generated from experiencing nature as a place as the most prevalent mode (experienced by just over 50% of those



who reported an experience), and within that category, nature as a backdrop for a favourite outdoor recreation activity is the most commonly reported meaningful experience with nature in the city. In this respect the following cases are not only typical of the thematic category but also representative of the majority of respondents in their references to specific parks and locations, as for example, in these two cases which note:

For me, nature in the city is . . . [a] walk in Nose Hill. Tubing or canoeing on the Elbow and Bow Rivers. A walk through Bowness Park. Bicycling on all of the river and Glenmore lake and park trails. A walk through Inglewood Bird Sanctuary. (Case 231: FOL)

For me, nature in the city is . . . [f]or relaxation, recreation and exercise. For example. Biking on Nose Hill or cross-country skiing at Fish Creek Park. (Case 243: MYL)

The following example is typical, as well, in displaying the obvious delight the respondent takes even in writing about the particular activity and setting being reported on, regardless of the specific location of the experience. As this respondent notes:

For me, nature in the city is . . . A favourite is paddling down the Bow or Elbow rivers. Not only is it a chance to get outdoors and encounter nature [bird life, wildlife, view park land and wild land], it's a great way to see Calgary from a different perspective. The water is fast, clear and cool. The experience is relaxing, interesting and soul reviving. (Case 006: MYR)



**Figure 21: Nature settings close to home – a short walk home from the Bow River  
(Photo by the author)**

The clarity of the self-image being portrayed by the respondent in this next example, although more explicit than most of the responses in the survey, does show how a person will select a certain image of himself or herself to present in creating (and reporting on) meaning from an experience with nature. In this case, as with others in this thematic grouping, the setting carries with it certain understood meanings that can relate to self-image. In this example the respondent depicts herself as a free-spirited, patriotic Calgarian. The respondent writes:

For me, nature in the city is . . . [b]eing able to saddle up my horse and ride in Glenmore Equestrian Park S.W. That park with the winding horse trails, riding rings and jumps is the reason why I love Calgary. I have had the opportunity in my career to transfer but have not because of my lifestyle with my horse that Calgary offers. [T]his city of the horse, Stampede, Spruce Meadows [a private equestrian facility south of Calgary] is great! (Case 121: FYR)

One would need to be aware of the specific Calgary situation to know that equestrian use at Glenmore Park has been the subject of prolonged and intense public debate. Environmental impact studies in certain areas of the park have recommended limiting this use. Historical precedent and political will have most recently resulted in the approval of a somewhat modified but continued equestrian use. Within this context, the respondent may have an image of herself as a defender of individual rights and freedoms, resisting interference from park planners and overbearing government restrictions in general.

In all of the more comprehensive responses provided in this survey, each respondent not only sets forth a particular image of her or himself, but also offers a sense of the relationship that she or he feels they have with nature. Comments such as “Nature is part of our Being!” (Case 182, excerpt: MYR); and “[nature in the city] is important because we are made of the same stuff and there is enough man made stuff around that I don’t feel we need anymore. . . [w]e must do our best to keep as much natural areas around us to keep us all in balance with our natural forces.” (Case 179, excerpt: FYL) are evidence of this fact. Although respondents in the outdoor activity thematic grouping do not provide a more explicit self image than do any of the other groupings, the images are perhaps easier to access, at least by a local who has a shared sense of what it means to canoe down the Bow River (see Figure 21, previous page) or an idea about what someone might be like who chooses to go walking on Nose Hill.

### **6.3.5 Theme 5: Focus on Family Time**

The final major thematic grouping found in the content analysis was the meaning that nature in the city has as a special environment for families, that is, mainly as a pleasant setting for leisure pursuits, but in some cases also as an opportunity to demonstrate certain values related to the natural environment. While this grouping could be considered a sub-theme of the outdoor recreation grouping, respondents seldom mentioned a specific activity, describing meanings instead that were clearly in relation to experiencing nature as a family (see Figure 22). These first two responses are examples of the setting aspect. As the respondents note:

For me, nature in the city is . . . [q]uality family time together in a natural surrounding. (Case 181: MOL)

For me, nature in the city is . . . [b]eing able to go for a short drive to enjoy nature by taking a long walk away where it is peaceful and no cars, etc. . . . I spent many wonderful hours in the parks when my family was young and I feel they also enjoy nature as I do now they are grown. They have good memories of our hours spent in the natural and free parks. (Case 143: MYL)

**Figure 22**



**Family time – walking through Confederation Park in the fall  
(Photo courtesy of Calgary Parks & Recreation)**

Case 143 also introduces the first of the two common general remarks made by respondents – that nature in the city means places close to home. With regards to differences in expectations for

proximity of urban nature, Case 151 speaks for many respondents in noting that:

For me, nature in the city is . . . [t]o be able to go and walk preferably with my dog, within a short distance of my house, and whenever I have some time available (fifteen minutes to a few hours). I like to be able to walk directly from my house to a park nearby, several times a day. But if I want to see real wilderness, I drive to the National Park [Banff], which is there for this purpose. (Case 151: MOR)

In terms of family time meanings, Case 211, which follows, shows the importance of the proximity of natural areas to the respondents in this grouping. The convenience aspect is definitely a factor in encouraging families to find time to spend in the natural environment. As this respondent describes it :

For me, nature in the city is . . . [h]aving the freedom to enjoy the outdoors how I choose with my family at no cost. Also, the convenience of not having to travel long periods of time to be able to enjoy the parks. We have to keep as much nature or natural surroundings as possible. This is the history for our children. (Case 211: FYR)

Case 211 also touches on how values can be communicated through family involvement in nature. It would be fair to assume that in choosing to suggest that we have an obligation to future generations in the way we relate to the natural environment, this is a notion that has a significant meaning for the respondent. As such one might expect that she imparts the idea to her children as they are involved in nature together. Other examples which imply that values are being handed down in a family's experiences with nature are provided by the following:

For me, nature in the city is [a] chance to connect with this aspect of our lives on a regular ongoing basis, without having to leave the city. Its very pleasant to leave the hustle and bustle to enjoy quiet time in peaceful surroundings. My children have monitored baby owls in a nest just a short bike ride from home. We consider this a privilege. (Case 146: FYR)

For me, nature in the city is . . . [g]reatly appreciated. It allows my family and I to enjoy and we're careful not to destroy so others can enjoy. (Case 073, excerpt: FYR)

Safety concerns in urban nature – the second common general remark referred to earlier – also appears either overtly or implicitly in relation to the family time theme. Although the issue of safety is seldom mentioned first by respondents, as the following comments suggest, it is perhaps implied as a given in all experiences noted as meaningful by the family time grouping of

respondents. Both these next examples illustrate cases in which safety was actually mentioned, but as Case 037 points out, others are likely assuming that any experience must be safe in order for a family to even consider engaging in it. In other words, there is an understanding or expectation that the experience of nature in the city will be safe. As the respondents suggest:

For me, nature in the city is . . . [h]aving a safe park like Bowness or Nose Hill, parks where families can enjoy walks, cycling and peaceful recreational activities. Parks which are clean, close to home and well-lit at night where people can walk their dogs or go jogging without worrying about crime and violence in the park. (Case 126: FYR)

For me, nature in the city is . . . [a] place to relax and get rid of the stresses of daily life but it must be safe for children and adults or it defeats the purpose. (Case 037: FOL)

The expectation of safe, controlled opportunities to experience urban nature (see Figure 23) is demonstrated in general comments related to safety that extend beyond the family time thematic meaning group. For example, Case 064 notes:

For me, nature in the city is . . . [e]njoying walkways and developed park land. If I lived close to a natural wilderness park I would enjoy that too but sometimes I am afraid to go to a wilderness area park alone. (Case 064: FYL)

**Figure 23**



**Safe and controlled urban nature – Prairie Winds Park  
(Photo courtesy of Calgary Parks & Recreation)**

With the exception of this case, in which safety appears to be the main criteria for a meaningful experience to take place, not enough references occurred to include the idea of safety as a major thematic grouping. The sanitization of nature in the city appears to be accepted by many respondents who acknowledge, and even prefer, the structure that is imposed on the urban nature experience. Respondents in the the following two cases explain it as:

For me, nature in the city is . . . [a] place to go which is green and restful. I used to live by Nose Hill Park and only went a couple of times as I prefer the more structured areas of trees and picnic areas. These areas, such as Bowness Park provide for a variety of interests, so draw more people. (Case 208: FYL)

For me, nature in the city is . . . [p]eaceful outdoors. Getting close to nature in a secure and safe venue. (Case 236: FOL)

One respondent in particular summed up the realities of what one can expect from the urban nature experience by noting that:

Nature in the city is a different kind of nature than in a less populated area. Since we do live in a city we have a responsibility to make the city a safe and pleasant place for people - and people and nature (large numbers of people) do not go well together because people are very destructive by sheer numbers. Therefore it is difficult to keep anything in a city natural without restricting the use so we must get used to having altered natural areas as they must be used by people seeking enjoyment in the out of doors as they personally can enjoy it (within reason of course!) (Case 210: FYR)

This comment was one of the few to actually suggest that our expectations for nature in the city ought to be different than for nature elsewhere. However, about 5% of respondents overall expressed the view that our expectations for nature in the city should be non-existent (see Figure 24). For these respondents experience with urban nature is not meaningful and their responses have been categorized as “disaffected.” The following two cases are examples from this type of response:

For me, nature in the city is . . . [n]ot all that important. A city is a place to live and work. Only a very small percentage of the population ever use parks and natural areas. What we already have is quite adequate for the small use and limited suitable weather we have for their use (About 4/12 [4 out of 12 months] of the year at the most). (Case 012: MOL)

For me, nature in the city is . . . [a] waste of space and in Calgary, usually not very attractive. There are plenty of areas outside the city. (Case 022: MYL)

**Figure 24**



**“Wasted space?” . . . vacant land along the Bow River  
(Photo courtesy of Calgary Parks & Recreation)**

This type of disaffection was in the minority for respondents, but in view of the fact that the original distribution for the survey was to a random sample of all Calgary households, it is not unreasonable to suggest that at least 5% of the adult population in Calgary might be similarly inclined towards such a view. This was also the percent of respondents who indicated that Calgary could do with less natural area park land in the referendum-style poll that accompanied the survey. But for the most part, even while not specifically stated in their texts, most respondents seem to be in agreement with the following respondent who suggests that:

For me, nature in the city is [v]ery different from nature outside the city. It is a more structured nature which pulls the benefits of beauty and combines it with usefulness (sports, exercise etc...). (Case 206: MYM).

#### **6.4 Summary**

These examples from the content analysis of responses provide a sense of the scope of individual meanings created from experiences with nature in the city. But while the intensity of meanings generated is the result of individual interpretations of experience, the scope is a function of the social context in which our culture currently understands the human/nature relationship. As the

narratives show, there was no thematic category of meaning resulting from menacing or threatening experiences with nature. This is the case even though there have been local natural disasters in the past such as widespread flooding and extremely destructive hail storms. It seems clear that for urban nature at least, the scope of social meanings does not encompass the notion of nature as being dangerous. Instead it is tightly focused on the understanding that being in a natural environment is less socially demanding and more personally rewarding than the circumstances offered by our regular environments (Knopf 1987, cited in Hartig & Evans 1993, 449).<sup>13</sup> The fact that there is a common belief that urban nature is able to provide such opportunities is based on a romanticized notion of wild nature common in our culture today.

These results suggest also that perspectives regarding the natural environment in general have application to environments as specific as urban natural areas – even though the nature in question may be highly compromised or essentially a surrogate of ideal wilderness.<sup>14</sup> Although the respondents clearly recognize that there are differences between nature in the city and the wilderness, it is significant that the themes arising from their narratives are similar to those expressed by people engaged in wilderness experiences (see the discussion of the wilderness idea in Chapter 2). For example, Bullock & Newton (1992), in their study of stories about wilderness rivers, identified three main themes that relate to the attraction that nature holds for people. As is the case in this study, they found that being able to get back to a simpler existence, having a chance to make spiritual connections, and seeking relief from the stress and structure of one's usual environment are common expectations for an experience with nature. Thematic connections such as this allow for the significant body of knowledge related to building an understanding of a wild nature experience to be generalized to helping to explain the dynamics of an urban nature experience.

The results of this analysis also suggest that there is a high degree of common understanding

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<sup>13</sup> The citation provided by Hartig and Evans (1993) is: Knopf. 1987. Human behavior, cognition, and affect in the natural environment. In *Handbook of Environmental Psychology. Volume 1*, eds. D. Stokols and I. Altman, 783-825. NY: P. Wiley. The original source was not consulted.

<sup>14</sup> Bennett (1994) points out that the Kaplans (1989) suggest that in many respects the *experience* of local nature parallels that of wilderness. However, the question of the transportability of philosophical perspective between “big-E” environmental issues and non-wilderness natural area concerns in an urban context has not been well-documented.



regarding public expectations of urban nature. The narratives provide an understanding of the variety of intentions that people have when active within the urban natural environment. They also suggest that in terms of experiences with nature in the city, individuals are typically seeking respite, communion, aesthetic enrichment, exercise, or fun in safe and convenient circumstances. It is in the interest of looking more closely at the similarities and differences in expectations that a more complex analysis is required. Specifically, there is a need to explore whether variations in social context can offer some degree of explanation. This initial analysis indicates that both a culturally influenced eco-ethic and an individually defined eco-experience with nature likely influence inclinations toward the urban natural environment. The next Part of the dissertation is an assessment of these factors in terms of what they have to offer towards developing a better understanding of situations regarding the appropriate use for urban natural area park land.

## **PART IV: DIMENSIONS OF THE URBAN NATURE EXPERIENCE**

### **CHAPTER 7**

#### **Ethical Perspectives on Urban Nature**

##### **7.1 Introduction**

The question by question review of the Nature in the City survey results suggest that the diverse points of view of those who responded provide a good cross-section of public opinion on natural area park land. All of this data also establishes a rich source of information for exploring factors that contribute to developing a relationship with the urban natural environment. What does this survey of public opinion and sentiments say about collective and personal relationships with the urban natural environment?

Considered in the theoretical context outlined in the literature, the results suggest that two important factors contribute to the creation of an acceptable and appropriate human/environment relationship. These are ethical inclination toward, and affective engagement with, nature. Ethical inclinations are culturally conditioned. They are reflected in disposition towards the integration of human and environmental interests. Affective engagements are personally experienced. The intensity of psychological and physical involvement that one has with nature is reflected in this dimension. For the purposes of this study, each factor is operationalized through data manipulations involving various recodings, collapsed response categories, cross tabulations, and/or numeric scaling of scores.<sup>1</sup> The idea of integration of human/environment interests is considered in terms of a respondent's environmental or eco-ethic.<sup>2</sup> This is represented by the response to one of the questions concerning views on strategies for the care and protection of urban natural area park land. One's intensity of involvement with the natural environment, or eco-experience, is viewed in relation to a person's response to past experience with nature in the city – as indicated by an

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<sup>1</sup> In the case of scaling, calculations are used to produce a scale in which the score closest to the median, or 50th percentile, is used to create two groups upon which to base a comparison of results. (Preliminary analysis suggested, as Heywood [1991] found, that at this level of analysis, using two groups, as opposed to three or more, provided the most robust data.) Using this method, the lower half of the scores exhibits a lesser tendency toward a phenomena under consideration, while the top half of the scores exhibits a greater tendency towards the same phenomena. The results for each group can then be compared to each other and to the survey norm or average overall.

<sup>2</sup> This is based on Golany's definition of ethics as "the norm and standards constituted by society to retain order and healthy management in its social and environmental setting" (Golany 1995, 1). Taylor adds that environmental ethics are "concerned with the moral relations that hold humans and the natural world together" (Taylor 1986, 3).

individual's answers to a group of questions assessing affinity for urban nature.<sup>3</sup> The eco-ethic is associated with socially prescribed perspectives on nature while affinity is indicative of an individual response to interaction with nature. Ultimately the survey results support a typology of views on nature which define public expectations concerning natural area park land and which, by association, are representative of collective and personal interpretations of culturally conditioned relationships with the urban natural environment.

This chapter considers the influence that the eco-ethic dimension has on human/environment relationships. It introduces the study results related to viewpoints on urban natural area park land preservation strategies. The discussion also considers that while people may have similar intentions for their experiences with urban nature, different ethical perspectives result in different styles of engagement. The next chapter looks in detail at the dimension of affinity for nature. It reports on the analysis of the meaning and benefit of urban nature as two important aspects of affinity. The final chapter in this section presents a model synthesizing how the dimensions of eco-ethic and affinity generate different relationships with the urban natural environment. The discussion suggests that social context is fundamental to this construction.

Interaction with the natural environment is one of the areas of behaviour in which our culture permits a high degree of individual judgment. Consequently, personal interpretations of socially determined ethics play a central role in establishing and guiding appropriate interactions. Without widespread agreement on the need for strong social controls on human/environment relationships, there is a tendency to expect the right to do whatever we see fit with our private property and with public property in which we have an interest. The discussion begins by looking at the influence that environmental ethics have in defining relationships with urban nature.

## **7.2 Interaction with the Urban Natural Environment**

Theory suggests that in human/environment relationships there are fundamental differences in the degree to which everyone is prepared to accept personal constraints in the interest of a vital and viable natural environment. Philosophical positions are essentially based on the strength of belief

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<sup>3</sup> This is measured in terms of rating the responses to the open-ended question concerning the meaning of experience with urban nature, perceived benefit of urban natural area park land, use of natural area parks and outlook on urban nature in general. Responses are rated and totalled to produce an ordinal scale of intensity of experience scores which provide an indication of a respondent's affinity towards natural area park land.

in a species hierarchy of right to survival, degree to which the rights of and obligations to the other are recognized, and overall tendencies towards egoistic/altruistic behaviours. Some propose that one's perspective on the ethics of human/environment relationships are the outgrowth of a fundamental world view, that is, one's most deeply held beliefs "about the world and the place of humans in it" (Schroeder 1995, 261).

Most work identifies two, or sometimes three, basic human/environment perspectives, variously described as environmental ethics (Matthews 1989), grounds for environmental ethics (Merchant 1992), value orientations (Stern and Dietz 1994), viewpoints (Roessler 1993), motivational domains (Axelrod 1994), paradigms (Kuhn 1985) or philosophical perspectives (Virden and Brooks 1991; Armstrong and Botzler 1993). Each is characterized so as to explain, rationalize, and challenge historical and contemporary ideas about the ethics of human interaction with the natural environment. The most common distinction made concerning different philosophical perspectives on environmental ethics is in the precedence of interests. Bipolar taxonomies describe perspectives in which interest is either primarily human-centred or environment-centred, although it has been suggested that such a distinction is "false" in that humans are "unavoidably anthropocentric" in their outlook (Campbell 1996, 301). Most work remains based on the premise that in theory such a differentiation can and does occur. It suggests that a human-centred, or anthropocentric, perspective assumes human needs and interests are of highest, and even exclusive value and importance (Armstrong and Botzler 1993, 275)<sup>4</sup> and that "[h]umans are stewards and caretakers of the natural world" (Merchant 1992, 72).<sup>5</sup>

The environment-centred perspective<sup>6</sup> is traditionally referred to as a biocentric outlook and is based on the view that all life forms are of equal value (Thiele 1995). More recently the term

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<sup>4</sup> As Callicott explains, other life forms are seen to have value only to the extent that they serve human purposes (Callicott 1984).

<sup>5</sup> In discussion of the anthropocentric perspective there is sometimes a distinction made between highly self-centred and egoistic outlooks and social or homocentric outlooks (Merchant 1992; Bonnes, Aiello and Garcia Ardone 1994; and Stern and Dietz 1994).

<sup>6</sup> Values typically attributed to an environment-centred perspective include an ecosystem approach to resource consumption, humility regarding the importance of human interests, long-term timeframes in assessing consequences of behaviour and a "non-material basis for . . . self-esteem" (Paehlke 1993, 46).

ecocentric has come into popular use,<sup>7</sup> bringing with it a subtle shift in emphasis away from debates about species hierarchy towards maintaining healthy natural systems in general as a priority concern (Merchant 1992). Discussions of the various ethical positions on human interaction with the natural environment tend to be grounded in “big-E” environmental concerns such as the prospects for the continuing viability of life as we know it on earth.

Research suggests that the pro-preservation ethics brought to bear on these “big-E” concerns are generalized to wilderness park issues (Virden and Brooks 1991). But concerns over “big-E” environmental issues may not necessarily be evoked to the same extent in situations involving local natural area park land. This is reflected by the fact that only a small group of people (20%) in this study tended to put the needs of the environment first in conflicts involving urban nature.

These results may also be indicative of the actual level of ecologically-oriented individuals in the general population. This is suggested by the finding that although the majority of people (approximately 60%) are consistent in using the same principles to guide their reasoning in environmental issues, they do not automatically take an ecological perspective on conflicts involving the natural environment. Instead they either seek to balance human and environmental needs, prefer to evaluate the situation case by case, or always see human needs as the priority. These findings suggest that irrespective of whether or not the situation involves wilderness or urban nature, most people hope to achieve a balance of interests in conflicts involving the natural environment.

It is interesting that the study also found that while only a small group of people are prepared to put the environment first in conflicts involving urban nature, twice as many are prepared to make it a priority in wilderness situations. The fact that the more marginal environment-centred individuals

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<sup>7</sup> Armstrong & Botzler (1993) and Thiele (1995) also make distinctions within the environmentalist perspective. Both note that one stream of ecocentric thought grounds deep ecology with its firm belief in the inherent and intrinsic value of the natural world (Armstrong and Botzler 1995). Thiele further defines a category of “sociocentric ecologists” (Thiele 1995, 172) which he suggests proposes a more “enlightened form of anthropocentrism that broadens utility to include ecological health” (Ibid.), while Armstrong & Botzler note that the more moderate form of ecocentrism is one based in the “land ethic” (Armstrong and Botzler 1993, 369) which suggests that “humans have an ethical responsibility towards the natural world” (Ibid.). As well, in his defence of the anthropocentric perspective, Matthews (1989) proposes that humans, as the only self-conscious (though not necessarily self-centred) species, simply can not have anything but an anthropocentric viewpoint. He suggests that it is possible to espouse an environmental ethic while at the same time believing in the special status of humanity.

say that they would tend to consider wilderness areas differently supports the notion that the environmental movement has been successful in influencing individual understanding of appropriate boundaries regarding human interaction with wild areas (McDonald and Brown 1995).

At one time the fundamental issue in wilderness area management was the need to accommodate human uses while protecting the natural environment (Viriden and Brooks 1991). This issue is still of great concern. But, more recently, research has shown that both public sentiment and management interests have begun to emphasize the biophysical resource needs as the more important consideration (Barns and Krumpke 1995). Perhaps the development of a somewhat greater accord in terms of appropriate use of wilderness recreation areas has precipitated even more pressure on urban natural areas. Is it more likely that, as a result, the needs of human use would be seen as more important in urban circumstances? Within this context one of the key questions guiding analysis of the Nature in the City survey results is “what do the response patterns suggest in terms of ethical perspectives on urban nature?”

### **7.2.1 Preservation Strategies**

The responses to the five questions concerning the appropriateness of certain strategies for the care and protection of natural areas were used to calculate a score designed to provide an indicator of relative support for strategies oriented towards the preservation of urban natural area park land. Using the median as a dividing point creates two approximately equal sized groups that provide substantial subsets of data from which to characterize the more preservation-oriented (Pro-Preservation) group in contrast to the less preservation-oriented group (Pro-Use).<sup>8</sup>

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<sup>8</sup> As per the advice in Vincent (1995), who explains that when quantifying the coded responses on a Likert-type scale (such as is used in the strategies questions) it is most appropriate to use the median, rather than the mean, as a point of reference for further non-parametric statistical procedures (Vincent 1995). This is because “[t]he calculation of the median does not take into consideration the value of any of the scores. It is based only on the number of scores and their rank order” (Vincent 1995, 47, which does not necessarily indicate how much better one score is than another (i.e. how does a score of 9 in preservation orientation compare to a score of 15). As the median is actually the 50th percentile, and percentiles are one way to convert raw scores into workable data, the median is used as the dividing point in the preservation orientation scores data. Vincent also advises that when there are duplicate scores within a rank order distribution, “the percentile is computed for the highest possible value of the duplicate score” (Ibid., 38). That is, if the 50th percentile is case number 135 (out of 270) and that score is 10, then all cases scoring 10 must be included in the count so that the groupings created by the 50th percentile might not represent 50% of the cases. In the 1991 Pulse on Parks survey the score of 12 was used as the dividing point because the 50th percentile score of 13 was embedded in a duplicate score grouping that ran over into the 60th percentile. Since the object was to create two relatively equal sized groups from which to draw a comparison, 12 more evenly divided the data even though it was the 48th percentile. This procedure results in a slightly higher percent of cases in the Pro-Preservation group in the 1991 data (52%) as compared to the 1995 data set (50%) in which a score of 12 was the 50th percentile.

Chi-square analysis suggests that, in terms of basic demographic features, there are significant relationships between views on preservation of natural area park land and age group, education and natural area park use patterns. The Pro-Preservation group is comprised of younger people who have attended at least some university and are more regular users of local natural areas than the less preservation-oriented group.<sup>9</sup> This is not to suggest that any one of these factors causes a certain orientation to prevail, but rather that they can be indicators of likely outcomes, especially when joined with other influences such as public sentiment and individual knowledge. Age, education and park use are all likely interconnected as a matter of lifestyle. The individuals in older age groups may have been less inclined to attend university as a consequence of growing up in a different time and circumstance in which education was either not as accessible nor as much of an imperative as it is today. Those respondents under the age of 50, on the other hand, would have been either toddlers, teenagers or young adults when the first Earth Day was held over 25 years ago.<sup>10</sup> People in this category have never known a time when our culture was not steeped in the subtext of images and rhetoric emphasizing the need to be mindful of the consequences of unchecked human prosperity and industry on our finite and fragile environment.<sup>11</sup> But those respondents in the youngest age group, who for whatever reason are less preservation oriented or those in the older group, who are more preservation oriented remain as evidence of two influences at work on aggregate data. First is the sway of individual disposition and second is the relative authority of competing cultural scripts.<sup>12</sup> These two factors serve as a caution on the ability of

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<sup>9</sup> Chi-squares as follows: age-groups 5.18, education 7.98, use pattern 4.93; (2.71 required for 90% level of confidence in each case). The results of the 1995 Nature in the City survey suggest no significant relationship between views on the preservation of urban natural area park land and household income, length of residence in Calgary or, perhaps surprisingly, proximity of respondent's community to natural area park land.

<sup>10</sup> The first Earth Day was held April 22, 1970. It was designed to "promote the ideas of ecology, encourage respect for life on earth and highlight growing concern over pollution of soil, air and water" (the *1996 Canadian Encyclopedia Plus* on CD-ROM, Earth Day article, Earth Day subject entry in SmartSearch). Gottlieb (1993) points out that critics feel that Earth Day has instead deflected attention away from addressing systemic sources of environmental pollution towards preoccupation with "individual lifestyle issues" (Gottlieb 1993, 107).

<sup>11</sup> Stern, Dietz and Kalof (1993) suggest that effects on opinions expressed about environmental concerns which are attributed to age "are likely to involve both value differences rooted in formative experiences and changes in beliefs resulting from different information" (Stern et al. 1993, 341).

<sup>12</sup> Script theorists feel that even in responding to questions in a survey concerning opinion or behaviour, individuals activate a script in order to provide a context in which to respond (Abelson 1981; Tourangeau 1987).

survey data to be definitive in proving causal links. The strength of survey data is in describing and explaining generalized trends.

The finding that younger, more educated people tend to be more supportive of natural area preservation strategies is consistent with established trends research that has found age and education factors contribute to one's awareness of and concerns over "big-E" environmental issues (Dunlap 1975; also Tognacci, Weigel, Wideen and Vernon 1972). It also supports the notion that cultural context is in a large part responsible for framing an issue for public consumption. The results are as well consistent with the 1991 Pulse on Parks survey which found a significant relationship between frequency of park use in general and support for preservation strategies for environmentally sensitive areas. Those respondents in the 1991 survey who attended parks twice a month or more showed a greater tendency to be classified in the Pro-Preservation oriented group than did those who attended parks less frequently.<sup>13</sup>

Comparing preservation orientation in subgroups of data shows that respondents are fairly consistent in their views. For example, those who think that it is important to keep as much undeveloped park area as possible in and around the city so as to have a healthy urban environment are more Pro-Preservation than those who think that it is important to make decisions about those undeveloped park areas based mainly on economic principles. As well, almost 80% of those who indicated natural areas as their top priority for open space funding are Pro-Preservation oriented. Those who favoured local open space as a funding priority tend to be Pro-Use and those who favoured regional areas as the priority show a 50/50 split in preservation orientation. Finally, it is interesting that of those in the Pro-Use oriented group (this is the group having preservation strategy scores below the median of 12 out of a possible 20 points), just over half did not respond to the open-ended question concerning experience with nature in the city. Of those who did answer the question, over 70% express the meaning of the experience in terms of the utility of nature.

Respondents in general who are categorized as finding meaning in the utility of the nature experience display a split of 50% Pro-Preservation and 50% Pro-Use. But of those categorized

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<sup>13</sup> Chi-square = 822.59, 2.71 required for 90% confidence level; N = 46,384.



into the group which finds meaning in the kinship aspect of the nature experience, almost three-quarters have a Pro-Preservation orientation towards urban natural area park land.

These results suggest that taken as a whole, the preservation profiles offer a moderately robust way to gauge differences in respondent orientations toward the natural environment. They confirm that responses to the five questions about strategies to enhance urban nature are a suitable and reliable indicator of expectations for the use of natural area park land in the city. In a modified form, the preservation profiles provide one of three key points of comparison in assessing the various relationships people have with the urban natural environment (see Chapter 9).

### **7.2.2 The Integration of Human and Environment Interests**

A closer examination of these five questions shows that for four of the five questions there is a high level of agreement among respondents that the strategy is to some degree appropriate. One of the questions, based on the identification of levels of tolerance for human inconvenience or, conversely, support for environmental integrity, profiles the typical bipolar philosophical positions in environmental ethics – the question on the appropriateness of prohibiting human use as a strategy to preserve open space.

While exploring various ways to sort the survey data this question on the advisability of constraining human interests displayed an interesting response profile. Of those respondents who answered the question, approximately half indicated that they felt it was “Not Appropriate” to prohibit human use in order to preserve open space, while the other half indicated that they to some degree felt this strategy was appropriate. In addition to providing two substantial subsets of data to explore through comparison, the response pattern provides evidence of the theoretical concept of bipolar philosophical perspectives in environmental ethics. Those respondents finding it “Not Appropriate” to limit human use are representative of a more human-centred eco-ethic, while those respondents who are willing to accept various degrees of limitations to human activity in the interests of the natural environment, demonstrate a tendency towards an environment-centred eco-ethic perspective.

The human-centred eco-ethic group (44% of all respondents) is characterized by a higher than

expected percent of men and a tendency not to view natural area park land as a priority, while the environment-centred eco-ethic (44% of all respondents – 12% did not provide an opinion) is comprised of a greater than expected percent of women, with 30% of the group overall indicating that funding for natural areas should be the number one fiscal priority for urban open space planning. As this question is one that was replicated from the 1991 Pulse on Parks survey, there was an opportunity to go back to that data and compare it to the results of the 1995 study. This establishes a basis for trend analysis and provides a larger sample to examine in terms of the response pattern (as noted, the 1991 study involved over 45,000 respondents). The comparison shows that, much like in the 1995 study, respondents in the 1991 survey divided themselves into two almost equal groups by their response to the question on the appropriateness of prohibiting human use of natural areas as a preservation strategy. In the 1991 study the human-centred eco-ethic perspective was exhibited by 42% of respondents overall, while 47% fell into the environment-centred eco-ethic perspective group. The differences between the two studies suggests that there has been a slight drop in support for environmental interests. Because this question vigorously tests the intensity of commitment to the preservation of natural areas – by stating implications for human use – it can be used as an indication of prevalence of integration of human interests with those of the natural environment.

#### **7.2.2.1 Integration of Interests: Gender Differences**

This question concerning opinion on the appropriateness of prohibiting human use as a preservation strategy for urban natural areas is an anomaly in two respects. First is that the response is essentially polarized. Second is that there is a significant relationship suggested between gender and eco-ethic. The results show that women are more likely than men to find some degree of appropriateness in prohibiting human use (chi-square = 7.18, 2.71 required for 90% level of confidence). The 1991 Pulse on Parks echoes these results for the “prohibiting human use” question, finding zero probability that differences in opinion expressed by gender groups were due to chance (chi-square = 436.34, N = 39,837). But while this one question in the cluster used to identify orientations towards preservation of urban natural area park land shows a gender bias towards women, the two groups formed by scoring all five “strategies” questions show no significant relationship between gender and tendency to be more or less preservation oriented.

The findings that gender is significant in some case, but not others is consistent with recent research in gender and “big-E” environmental concerns. For example, Stern, Dietz, and Kalof (1993) found no gender differences in strength of value orientations concerning environmental issues, but they suggest that women are more likely than men to believe that deterioration in environmental quality has harmful consequences for “personal well-being, social welfare and health of the biosphere” (Stern et al. 1993, 338). Hill (1994) suggests, too, that although she found that “women bring a different style of moral reasoning to decisions regarding environmental policy” (Hill 1994, 150), women may not value the environment differently than men, but may instead be more aware of connections or care more about consequences than do men. In this study women as a group did not display a stronger orientation than men as a group towards the preservation of urban natural areas in general. But women do exhibit a greater tolerance for personal inconvenience in order to accommodate the “greater good” of preserving local natural area park land. This tends to support the notion expressed in the research that as a consequence of being more alert to connections and more aware of relationships, women seem to care, or at least worry, more about what happens to the environment.<sup>14</sup>

Stern, Dietz, & Kalof (1993) note, in citing recent meta-analysis into inconsistencies in findings of gender effects on environmental issues, that it has been suggested that women may have stronger concerns than men about local environmental issues (Mohai 1992 cited in Stern et al. 1993, 331). But the results of the survey done for this study do not support this assessment, even though the entire focus of the research is on *local* urban nature. The study’s findings are in greater agreement with the ideas of Gilligan (1992) who suggests, as explained by Hill, that women and men have different reasons for being concerned over environmental issues.<sup>15</sup>

If different reasons for general concern over the environment manifest into gender differences in understanding regarding appropriate human/environment relationships, there are serious ramifications for natural area management at the municipal level. In so far as both administrative

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<sup>14</sup> Stern, Dietz and Kalof (1993) discuss the concept of women caring more through reference to ecofeminist works such as those by Griffin 1978; Merchant 1980; and Diamond and Orenstein 1990. Hill (1994) cites the work of Gilligan in establishing that while women and men both employ the ideas of care and justice in the moral reasoning, women tend towards the “care voice” and men to the “justice voice” (Gilligan 1992 cited in Hill 1994, 146).

<sup>15</sup> That is “women are more likely to align their view of themselves with (ways of reasoning) based on sustaining relationships, and men with standards of fairness” (Hill 1994, 146, citing Gilligan 1992).

and political decision-making frameworks are not usually balanced with respect to gender representation, we could expect the dominance of a human-centred eco-ethic perspective, in which human, social and economic needs take precedence in terms of natural area park land use. Research suggests that recreation opportunities, particularly outdoor recreation activities, are already gender biased in that substantial tax dollars are directed at the operation and maintenance of golf courses, formal play fields, cycling paths and indoor arenas, all of which benefit a predominantly male user group (Cordell, Lewis and McDonald 1995; PathWatch 1994). A singularly focused activity based approach to planning natural area park land would likely serve to increase this imbalance in terms of creating opportunities for a particular kind of experience, more or less preferred by a gender group. However, in this study, aside from the one issue of willingness to accept limits to human activity in the interest of care and protection of open space, gender differences are not apparent even in such fundamental areas as funding priorities, expectations for natural area park land supply or frequency of park use. Where the gender effects of differences in eco-ethic are most strongly seen are in assessment of one's general affinity with the natural environment (see Chapter 8).

This indicates that while differences in the way gender groups might analyze environmental issues are apparent, the public opinions expressed in the study are not organized along gender lines. The contrast in expectations for the human/environment relationship, expressed in terms of more or less favouring preservation of natural area park land or desire for more or less natural area park land in communities, is more likely produced by fundamental differences in personal inclinations shaped by a variety of social influences and individual circumstance. So that while gender is part of this script, it is not in this case the defining factor. It is reasonable to expect, therefore, that public policy in this area will similarly impact both women and men, recognizing that certain avenues would tend to extend already existing inequities.

### **7.2.3 Summary**

These results show, as theory concerning generalized environmental concerns might suggest, public opinion related to micro-level environmental issues such as local urban natural area park land use has a tendency to polarize around the two basic ethical perspectives on the natural environment. In reality, individuals are likely to operate along a continuum of interests (Viriden and Brook 1991; Stern, Dietz, and Kalof 1993), activated in response to the specifics of any given

situation, including the salience an issue has for a person (Dunlap 1989). The variety of individual responses in turn creates a public spectrum of concern (Ibid.), varying from highly oppositional to neutral to highly supportive. Within a broader social context, a person's individual circumstance will either reinforce a particular cultural perspective or move the person to one of the more marginal but still acceptable philosophical positions. The idea of world views would suggest that, in any given situation, individuals still tend more or less towards one of the two philosophical extremes described here and further that they would not be willing, or perhaps even able, to appreciate someone else's point of view (Schroeder 1995). The results of this study support this notion in that public opinion is polarized on the issue of restricting human access to natural areas in the interests of preserving the viability of such areas.

In terms of the way ethical perspective has been expressed in the relationship that Calgarians have with the urban natural environment, the thematic analysis of the respondents' written descriptions of experience with nature in the city shows that although people have different orientations towards preserving the natural environment, they may have similar intentions for their interaction with urban nature. The next section considers the range of intentions expressed by survey respondents.

### **7.3 Intentions to Relate to Urban Nature**

Four primary intentions for engaging in experience with urban nature have been identified through analysis of the narrative responses in this study. These are intentions related to communion with nature, to enhancing nature awareness, to achieving a degree of relief or respite from the stresses of urban living and to have fun or take part in recreation out-of-doors. These intentions to relate to nature are emulated through different styles of interaction or engagement with the urban natural environment. This results in the production of a variety of possible human/environment relationships that are either mainly functional or mainly ecological in character. The characterization of these factors is based not only on the subjective assessment of the thematic analysis of respondents' narrative responses, but also on theoretical conjecture. Table 6 (see next page) outlines these findings while the excerpts that follow provide examples of responses that illustrate these differences.

**Table 6**  
**Intentions in the Urban Nature Experience**

<b>INTENTION</b>	<b>STYLE OF ENGAGEMENT</b>	
Communion	episodic -----	holistic
Nature awareness	sensory -----	aesthetic
Respite	kinetic -----	contemplative
Recreation	amusement -----	affiliation
<b>RELATIONSHIP</b>	<b>FUNCTIONAL</b>	<b>ECOLOGICAL</b>

The intention to commune with nature is shown in Case 076, which demonstrates the profound effect that contact with the natural environment can have on restoring personal balance. This description is an example of a self-transcending experience that Sadler and Carlson (1978b) suggest is the epitome of human aesthetic response to the physical world. In terms of the context for personal meaning that emerges from communion with nature, it displays an engagement that is specific, or episodic. The respondent describes the experience as:

For me, nature in the city is getting out and forgetting your problems for awhile and enjoying the fresh air, the birds and animals and watching things grow. It was my salvation when I lost my husband. (Case 076)

Although this respondent obviously values contact with nature, her responses to other questions in the survey show that she is less supportive of strategies to preserve urban natural areas. In the case which follows, which is also an example of an intention to commune with nature, the respondent shows a more holistic and nature-centred outlook on seeking to commune with the natural environment. Although this respondent is also in the group that is less supportive of strategies to preserve existing natural areas, her responses indicate that unlike the previous respondent who feels that the primary benefit in urban nature is amenity oriented, she finds the primary benefit in affiliation. The circumstances she describes may be somewhat less profound than in the previous case, but the engagement is judged to be more holistic. As the respondent describes it:

(For me, nature in the city is...) I grew up on a farm in southern Saskatchewan, so I love the feeling of peace that being outside, close to nature, gives me. I love the trees, the birds singing, the squirrels. I love to take my kids on walks to Edworthy Park, North Glenmore Park. They love to explore in wooded areas and I love it

too. I feel more at peace when walking through a natural area. One has a feeling that they are away from the city and it's great even for a little while. I must say I love the trees. The more trees there are, the happier I am! (Case 192)

The intention to develop an awareness of nature<sup>16</sup> ranges from a sensory pleasure type of engagement to one involving a wider spectrum of aesthetic appreciation.<sup>17</sup> As Carlson and Sadler (1978) explain, the sensory level of environmental awareness is a response to a localized perception, while the aesthetic level of appreciation involves not only perception, but symbolic and cognitive assessment as well. Case 103, which follows, exhibits a visual focus that Carlson and Sadler would describe as “less consummatory” kind of experience (Carlson and Sadler 1978, 161), while the respondent in the second case (078) displays a deeper sense of aesthetic response to urban nature. As the respondents say:

For me, nature in the city is being able to watch and learn about the plant, bird and animal life in the different types of natural spaces. Any wet forest. Importance of visiting and viewing these in the four climatic seasons we have in Calgary. To try to preserve the species, plants and life cycles unique to the western prairies. Places to visit to observe, sketch, paint, walk, read and reflect. (Case 103)

For me, nature in the city [is] a priority. My family uses natural areas two or three times a week. There are different things to see and appreciate in every place. Sitting on a fallen tree by Fish Creek, the sun on my face, I can watch deer and coyote, eagles and hawks, birds, bees and flowers. It is heaven on earth, life at its most serene. If I didn't have that opportunity I would be diminished. (Case 078)

Sensory perception and aesthetic insight are dimensions of aesthetic quality which all individuals experience, depending on the depth and relevance of a particular encounter with nature (Bourassa 1991; Sadler and Carlson 1978a). For example, although the person in the first case (103) goes to natural area parks less frequently than the woman in the second case (078), each clearly carries vivid impressions of past visits. However, the respondent displaying a more profound sense of aesthetic impact is also more supportive of natural area park land as a planning priority. It should

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<sup>16</sup> Intentions with respect towards enjoying or developing an awareness of nature are operationalized in terms of interpreting the thematic meaning category involving an interest in wild flora and fauna.

<sup>17</sup> This is meant to be taken in terms of Berleant's idea of “participatory” aesthetics in which aesthetic appreciation is a dynamic process (Bourassa 1991, 15), as opposed to the classical philosophical perspective requiring a “disinterested and contemplative” attitude (Berleant 1992, 161).

also be noted that regardless of the specific style of engagement there is likely to be some aesthetic component (Gallagher 1993). For as Gallagher suggests, because many of the rewarding aspects of a nature experience can be achieved in other ways, such as spending time on a hobby, the aesthetic component of the natural environment must be especially meaningful to people irrespective of their primary intention (Gallagher 1993, 210, remarking on Kaplan).

The intention to experience the natural environment primarily as an antidote to counteract the ills of urban living is demonstrated by looking at those cases in which respondents identified relief from the stress of city life as being the most meaningful aspect of their experiences with urban nature.

The following respondent explains the situation for her and others in general as:

For me, nature in the city is [e]ssential! wonderful! The more exposure people have to nature, I think the more they realise how important it is to protect it. Natural areas look, feel and smell beautiful unlike the noisy, gritty, exhaust-ridden downtown core. After spending time in a natural area, I feel relaxed, happy, and hopeful about the world. (Case 216)

The fact that this respondent supports changing planning practices in order to provide more natural area park land in communities suggests that she feels that, as the city continues to grow, people need the ongoing opportunity to take refuge through regular contact with the urban natural environment.

In terms of seeking respite, the respondents in general display engagement styles that ranged from kinetic or activity-based, through to engagements that are more contemplative, that is, involving personal reflection (see Figure 25, next page). The “doing” rather than “feeling” aspect is more common in this study. Case 260 is an example from the more typical activity focused, or compensatory, approach to establishing a balance in one’s life between interactions with built and natural environments. As he says:

For me, nature in the city is being able to be close to nature, grass, trees, valleys, birds, etc. without having to travel 100 kms out of town. Walking, cycling in a natural area is important to me. The stress of life in my neighbourhood stems from sirens, trucks, lawn mowers, (on Sunday). I think we need a noise by-law badly before we all get stressed out - after a day or week of stress at the office! (Case 260)



**Figure 25**



**Intention to seek respite – contemplative and kinetic styles  
Sitting in the sun at Prince’s Island/Playing “beach” volleyball at Fish Creek Park  
(Photos courtesy of Calgary Parks & Recreation)**

This person sees the primary benefit of urban nature in its amenity, as opposed to affiliation, function. He is in the 50 years and over age group and is less supportive of preservation strategies. As we might expect from a kinetic-oriented individual, he supports an open space system that allows for a variety of options to engage in specific activities in the natural environment that are capable of reducing his stress level.

In terms of the intention to recreate,<sup>18</sup> there are two main types of interaction. The first is an engagement that focuses on the diversion provided by the novel but generic outdoor setting in which an activity takes place. The second interaction emphasizes the nostalgic or sentimental

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<sup>18</sup> This is an interpretation of the description of outdoor pursuits and family time thematic meaning groupings.

desire for familiar or special natural places in which to take part in an activity.<sup>19</sup> Although it has been suggested that the outdoor recreation activity itself is not as important to people as the psychological benefits they receive from participation (Knopf 1983), the findings in this study indicate that the activity is in fact more significant for some than for others. For example, in both of the following cases, the recreation activity aspect of the nature experience is strong. But the second case (218) displays an awareness of the natural environment in relation to other life experiences. This is an example of what Carlson and Sadler call a “peak phase” in appreciation of the environment (Carlson and Sadler 1978, 161). As the respondents describe it:

For me, nature in the city is being able to take the family, or bike to a close proximity large-natural or planned, (park) frequently. It’s also very important to our family to enjoy the bike path together. I think Calgary has an excellent bike path system to the natural parks and along the river system. (Case 009)

For me, nature in the city is the ability to leave my home and be in Edworthy Park walking with or without my dog. This park has everything I could want in a park. Some natural area. Developed area for families with children as well as joggers and bikers. Wonderful place to watch the fire men and Police practice rescue procedures on the river. Ducks, geese, beavers, snakes, all kinds of birds, deer. I’ve never seen a sad face in Edworthy Park. It really lifts the spirit to take a walk in a park like this. (Case 218)

As we might expect, both of the women in these cases support planning strategies that would continue to provide a variety of recreation opportunities in the community. The strong activity focus of the person in the first case (009) is reinforced by her less preservation oriented outlook; and, even though she reports that she does not regularly visit parks, she has an intolerance for limiting human use in natural areas. Respondent 218, on the other hand, is more preservation oriented and more prepared to accept limits to human use, in spite of (or perhaps because of) reporting frequent visits to natural area parks.

The contrast in these experiences is that while some people are using nature as a backdrop to enhance a favourite activity, others are using a favourite activity to spend more time with nature. People care about *particular* places and for many the experience that a special urban natural area or

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<sup>19</sup> It should be noted that particular places do precipitate sentiments based on previous experiences or memories (Schroeder 1991). The recreation intention refers to a tendency to use a generalized natural environment as a backdrop for an outdoor recreation pursuit.

recreation setting provides can “embody a sense of belonging and purpose that give meaning” to their lives (Williams et al. 1992, 45). These results suggest that those involved in open space planning, design and management need to understand that the creation or preservation of a natural area park land opportunity is not always a matter of providing and arranging generic features in convenient (i.e. easily consumable) locations.

### **7.3.1 Intentions, Ethics and Expectations for Urban Natural Areas**

Respondents may have different eco-ethic perspectives but similar intentions with respect to interacting with the urban natural environment. The most common intentions in this survey population are communing with nature, viewing wildlife, seeking respite from city life, and taking part in various outdoor recreation activities. In a style of engagement that approaches the natural environment with the intent to take part in kinetic, episodic encounters, primarily motivated by amusement and sensory stimulation, people require parks where they are able to use nature to enhance self-awareness and build self-confidence. The affiliation motivated, holistic style of engagement, aimed at aesthetic and contemplative nature experiences, requires places where people have the opportunity to feel a sense of self-fulfilment through bonding with the natural environment. Both types of interaction reinforce a certain image of one’s self and involve different levels of appreciation and consumption of the natural environment.

It is also suggested that the differences in the style of engagement that respondents express echo the differences apparent in ethical perspectives related to urban nature<sup>20</sup> and further that the respondents’ customary style of engagement with the urban natural environments fosters different expectations for the provision of natural area park land in the city. Previous research on the role of urban parks has shown that expectation may be an important factor in creating meanings (Francis 1987). The findings in this study provide some insight in this regard – the results show that while people may have the same intention in mind when experiencing nature in the city, they generate different meanings through different kinds of engagement.

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<sup>20</sup> This is consistent with the research that suggests different paradigms are at work in shaping the ways we relate to the environment. For example, Cotgrove (1982) contrasts the characteristics of the dominant paradigm with that of the new environmental paradigm (so named by Dunlap and Van Liere in 1978). He notes that the paradigms differ in key dimensions such as core values and outlook on nature and that while the traditional predominant views look to dominate nature, the new environmental paradigm includes living in harmony with nature (see Cotgrove 1982, 92; see also Bosso 1993, 88 for observations on how characteristics of political regimes shape system response to the environment).

The human-centred eco-ethic is evident in a functional style of engagement in which the focus of a relationship with the natural environment is fulfilling human interests and enhancing human enterprise. Human-centred respondents hold a view similar to this woman who says that:

For me, nature in the city . . . gives us the opportunity to express ourselves more fully. Our children get a chance of throwing a ball without belonging to an organized group or organization or without being exposed to the constant complaints of adults [older] who have forgotten what it was like to be a child. Furthermore, nature provides the eyes with a wholesome expanse of green colour which never fails to greatly reduce stress build up. (Case 259)

The majority of human-centred respondents do not support strategies to protect urban natural areas, preferring instead to maximize opportunities for land use as seems appropriate to the circumstance. Respondents exhibiting a human-centred eco-ethic are considerably less likely to support funding for natural area park land; and of those respondents supporting local open space as a priority for funding, the significant majority are human-centred. The human-centred respondent is also more likely to support the status quo in planning community park land. Present practice converts existing natural areas to formal parks in order to accommodate traditional school yard and play field configurations, both examples of a functional approach to park design and management.

People oriented towards this functional relationship with the urban natural environment expect to be able to have natural area park land close to home that is clean, safe and accessible. They expect to be able to undertake a variety of activities in these parks. They also expect that other types of park land will be conveniently located and available for use. A natural area environment is essentially viewed as one that can be either encouraged or discouraged in a particular location, depending on other priorities for land use.

The environment-centred eco-ethic, on the other hand, is reflected in an ecological style of engagement in which the focus of a relationship with urban nature is the connection between people and nature experience expressed through mutual enhancement of human and environmental circumstance. As this respondent notes:

For me, nature in the city [is] like the ballet...I may not go often but I wouldn't want to live in a city where you couldn't experience it. Growing up here, there is no doubt my most profound thinking and happiest moments were wandering around Glenmore Park. Don't develop our parks anymore. Don't put up signs and tot lots and exercise areas. Just let them be parks. (Case 250)

The majority of environment-centred respondents support numerous strategies to preserve urban natural areas. These respondents are considerably more likely to see funding for natural area park land as a priority. In fact, in comparing those who selected “Natural Areas” as the top funding priority with those who chose “Local” park land as the number one priority, environment-centred and human-centred respondents are represented in almost exactly opposite proportions in each group, with the environment-centred respondents comprising the significant majority of “Natural Area” park land supporters. The environment-centred respondent is also more likely to support a change in current planning practice that would have more park land remain in a natural state. Supporting such a change is indicative of an ecological relationship with urban nature where the land ecology of the community is placed before convenience of access to opportunities provided by other kinds of park land.

People oriented towards an ecological relationship with urban nature expect natural area park land to be treated as a sanctuary, with only appropriately non-invasive artifacts and activities permitted. They expect to experience wild nature in safe, controlled circumstances. Ecologically-oriented people expect that land identified as natural area park land should remain as such in perpetuity, seeing such areas as irreplaceable. They are willing to be inconvenienced somewhat, as they expect more land left in or reclaimed to a natural state in local communities.

There are two key aspects defining current relationships with the urban natural environment. This consideration of culturally determined ideas concerning the ethics of appropriate integration of environmental interests with human interests is one of them. The other fundamental dimension in the process is intensity of involvement with nature. This study uses questions about personal experience with nature (or one’s eco-experience profile) to assess this involvement and reports it as an affinity index. The next chapter looks at various aspects of experience that serve as an indicator of affinity for the natural environment.

## CHAPTER 8

### Past Experience with the Urban Natural Environment

#### 8.1 Introduction

Studies, such as a poll taken in Canada in 1993 that found that “one third of all Canadians said their experience in national parks shaped their appreciation of the environment” (Deacon 1995, 19) suggest that past experience influences one’s ongoing relationship with the natural environment. One of the ways this happens is that past impressions work with present circumstances to establish a particular state of readiness from which a person perceives and assesses the effects of any new interaction (Ulrich 1983). The initial position of readiness from which to interpret a new experience defines what attracts and holds our attention (*Ibid.*) and is indicative of a preferred, or perhaps habitual, style of relating to the natural environment.

In order to explore aspects of past experience that have the potential to influence a person’s initial readiness to engage in a certain way with the urban natural environment, this study analyzed the urban nature experience in terms of one’s primary orientation both towards creating meaning from contact with the natural environment and towards assessing the benefit of those encounters. Of interest here is the psychological aspect of meaning and benefit that involves the ongoing interaction between society or the cultural framework from which meaning is drawn; self, or the knower and repository of personal history; setting or the changeable environmental context of the knowing; and situation, or the specific experiential encounter from which meaning is being made.

This discussion is based on consideration of the dynamics of interpreting human experience with the environment and understands the environment as :

a fusion of organic awareness, of meanings both conscious and unaware, of geographical location, of physical presence, of personal time, pervasive movement . . . a full awareness focused on the immediacy of the present situation, an engaged condition that encompasses richly inclusive perceptions and meanings (Berleant 1992, 34).<sup>1</sup>

It is informed by acknowledgement of the fact that it is possible for the environment to have many

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<sup>1</sup> Although Steele (1981) puts it somewhat more succinctly in writing that the “environment is made up of a combination of physical and social features” (Steele 1981, 9), Berleant’s description attends more to the psycho-social aspects that comprise the idea of environment.

meanings (Greider and Garkovich 1994) – for different people at the same time and for the same people at different times (Fishwick and Vining 1992;<sup>2</sup> Soulé 1995) and that spatial meanings are historically contingent (Rotenberg and McDonogh 1993) – grounded in the context of the present situation and knowledge of past events.

In the past, individuals may have had a greater array of opportunities in which to experience nature in the city. Not so long ago private wood lots dotted residential areas. Roads commonly had side ditches that provided impromptu streams containing an abundance of urban wildlife such as tadpoles, frogs and so on. “Real” nature was closer, especially in Calgary, where growth in a twenty-five year period has doubled the population, requiring more of the land for housing stock. As the women who participated in the focus group for this study observed,<sup>3</sup> true nature likely used to be almost right at everyone’s door step.

A sense of nostalgia for nature in the “good old days” came out, too, in the women’s discussion, and is evident in writing made popular by authors such as Sharon Butala (1994). Her two books of prose about her own experiences of moving from a rural area to the city and back play on the theme that as city folks we lose touch with the earth. The results of this study suggest, however, that one does not necessarily need physical proximity to nature to feel a sense of connection.<sup>4</sup>

The perception that we are no longer in direct contact with nature because of intense mediation by urban lifestyle and technology (Augaitis 1991) does appear to contribute though to the feeling of personal diminishment that urban dwellers who enjoy nature seem to be trying to alleviate. As suggested in Chapter three, this romanticized notion that nature is the perfect and preferred antidote

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<sup>2</sup> This study also found that meanings related to preferred recreation environments were “heavily influenced” by one’s past experience (Fishwick and Vining 1992, 62).

<sup>3</sup> The reader will recall that three focus group discussions were held as a prelude to the development of the questionnaire used in this study.

<sup>4</sup> As Beringer (1994) suggests, the connection with nature is achieved, in part, through caring, which can be manifest both in thought and action.

to the real or imagined ill effects of urban life produces an extremely stylized image of nature.<sup>5</sup> In contemporary urban cities public park land is expected to be the primary source of realizing this collective ideal, especially concerning the physical appearance of a satisfactory representation of nature in the city.

The results of this study show that direct and ongoing contact with the natural environment is not necessarily an indicator of how an individual will be disposed towards urban nature. In some ways this confirms the observation that “a few units of experience” with nature can be “profoundly affecting” (Gallagher 1993, 214), especially in terms of developing “respect and concern” for the natural environment (Weston 1985, 334). In another way it suggests that no amount of increased exposure to the natural environment will necessarily move individuals not already predisposed towards environmental concern to become that way.

It is not possible, nor advisable, to reduce the assessment of the idea of experience to a single indicator. Experience is multidimensional, comprised of complex motivations and situations (Berleant 1992). Based on this understanding, this study looked at a number of factors around which to organize an analysis of the contribution that past experience makes to defining relationships with the urban natural environment. The primary elements in the analysis are an assessment of the meaningfulness of the urban nature experience and consideration of the benefits provided by being able to experience nature in the city. These two factors are discussed in detail in the following sections. They are subsequently considered in relation to respondents’ park use patterns and general outlooks on nature in the analysis of general affinity that comprises the final section in this chapter.

## **8.2 Interpreting Meaning in the Urban Nature Experience**

Researchers in human/environment interactions have reaffirmed that previous experience in both natural and built environments is important to determining a person’s future satisfaction with any particular environmental experience (Relph 1976; Steele 1981; Fishwick and Vinning 1992; Shaw-Jones 1992). Satisfaction is relative to the things that have been discussed throughout – one’s

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<sup>5</sup> Butala also remarks on this unrealistic notion of nature, pointing out that she had come to view people not close to the land as “romantic dreamers, nit wits from the city, people raised in the lap of luxury who did not know about Nature’s nasty side, who had never done a day’s real work in their lives and thus had no idea of the grinding labor a life in Nature demand(s) for mere survival” (Butala 1994, 12).



culture, personal history and perceptions (Relph 1976; Ladd 1977). Gallagher reports that, according to Stephen Kaplan, “the more experience a person has in nature, the stronger the pull to it” (Kaplan as cited in Gallagher 1993, 214). But the findings of this study suggest that in developing an affinity for the natural environment, the intensity and orientation of an experience may be a more significant factor than frequency or duration of involvement. The way in which a person wishes to define her or himself in relation to the natural environment at any given time may be a factor as well.

The leisure experience is a good example of this self-definition process. Pursuit of leisure is characterized as creating a sense of separation from the everyday world. It provides freedom of choice and usually results in feelings of exploration, pleasure, and self-realization (Gunter 1987). Engagement in leisure behaviour “allows us to choose what general aspects of ourselves we wish to focus on at any given time” (Haggard and Williams 1992, 3). The self-affirmation that results from a leisure experience can precipitate a desire to continue to organize and activate beliefs in such a way as to allow a particular sense of self to arise from everyday encounters with the environment (Williams, Haggard, and Schreyer 1989; Jeffres and Dobos 1993). Furthermore, direct experience may not be necessary to generate and sustain an imaged sense of self (Williams, Haggard, and Schreyer 1989). Research suggests, for example, that the wilderness experience in our culture represents abstract human values that an individual can access through memory or imagination (or vicariously through a pseudo nature experience, such as attending an IMAX theatre event). The implied self-images generated through these encounters can provide a sense of the individual as “being more or less rugged, self-sufficient, adventurous, hardy, or appreciative of scenic beauty,” and so on (Ibid., 170). In writing about the meaning of the urban nature experience, many of the individuals responding to the Nature in the City survey do seem to present a certain sense of self that is indicative of their own interests and intentions, yet solidly situated in the idealistic view our culture holds of nature.

Theory concerning the meaning people find in experiences with the natural environment is interested in asking about which things have meaning and why (Cummins 1989).<sup>6</sup> The meaning factor in this study is realized through analysis of responses to the open-ended question in the

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<sup>6</sup> This is the psychological perspective. Another group – physiologists – are concerned with the neurological aspects of the creation of meaning or the chemical and cognitive processes that occur in the brain as part of making meaning.

Nature in the City survey where respondents reported on their experiences with urban nature. The purpose of including the open-ended question concerning experiences with nature in the city was to identify what, if any, variation might exist in orientation of reported meanings. The analysis has been based on a subjective assessment of the respondents' interpretations of meaningful urban nature experiences. The basic assumption is that as different expectations are at the root of increasing conflict over the appropriate provision of urban nature opportunities, looking at the interpretation of meaning provides another way to consider the array of expectations.

Based on a subjective assessment of respondents' interpretations of meaning from experiences with nature in the city, three specific meaning orientations have been identified. These are: respondents whose orientation towards nature appears to be grounded mainly in kinship; those who appear to derive meaning mainly from a utility orientation towards nature; and those for whom it is not possible to classify their nature experience.<sup>7</sup>

If respondents did not answer the question on meaningfulness of nature in the city, they were grouped into an "unclassified" group, along with those whose responses were either off topic, or too brief to classify. In order to be able to make generalizations about the expectations that these three groups have for nature in the city, an aggregate analysis was done for each group, comparing the responses for every question to the overall survey responses.

Of the 263 respondents to the Nature in the City survey, 68 cases, or 26%, were included in the kinship oriented meaning group. The utility-oriented meaning group comprised a further 95 cases, or 36% of all respondents, with the remainder (100 cases or 38%) forming the unclassified

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<sup>7</sup> As Michael Patterson (1993) suggests, the first two categories would be considered respectively as expressive and instrumental types of meanings. He identified four different types of meanings that can be applied to describing how different individuals interpret their experiences with nature in the city. He suggests that meanings that "focus on cognitive structures used to organize and define relationships" (Patterson 1994, 8) are a taxonomic system of identification whereby the inherent property of an object gives it meaning. Symbolic meanings are generated by cultural influences (Ibid.). Meanings that are "highly personalized and related to self-identity" (Ibid.) are categorized by Patterson as expressive meaning, and meanings that are derived from goal-oriented activities based on the "satisfying properties of an object" (Ibid.) are classified as instrumental. In terms of experiences with nature in the city, individuals are most likely involved in creating all of these types of meanings to different degrees, in different circumstances. The meaning orientation approach used here is not suggesting that the orientation is the only one an individual uses, but rather that the experience which was reported on in this survey appeared to be primarily oriented one way or another. Further, Dent and Rader (1979a) have suggested that the functional kind of relationship produces only a primitive kind of meaning. In this respect, many of the Nature in the City survey respondents that were categorized into the utility orientation tended to present less well-developed assessments of the meanings that nature had for them.

meaning grouping. To put it another way, of those who responded that experiences with nature in the city were in some way meaningful to them, approximately 40% were predominately kinship-oriented and 60% were predominately utility-oriented. The kinship group creates meaning from experiences that generate a feeling of being connected with nature, while meaning for the utility-oriented group comes from specific functional relationships with nature. As well, the kinship group shows indications of creating meaning related to the establishment of an individual's sense of self.

The kinship group profiles the tendency of people to see the environment more as a totality, rather than as site-specific locations. In this context, the individual considers him or herself to be a part of the reality of the environment, rather than a separate observer. Such an orientation forges the feelings of connection and integration with the environment (Carlson and Sadler 1978). For some the implication of an "egalitarian relationship between humans and the rest of nature" (Berlinger 1994, 104) is an important aspect of their feeling of connection with the natural environment. Ultimately this feeling of connection helps define for a person the way in which he or she wishes to behave towards nature (Ibid.).

Where the kinship group sees nature as being meaningful as an expression of tangible evidence of our connection with the natural environment, the utility-oriented group sees nature as a setting in which to carry out favourite activities. This grouping confirms the perspective that certain people have a tendency to see the environment as a setting or stage for engaging in activities that fulfil very particular personal goals (Ittelson et al. 1976; Rapoport 1984; Williams, Patterson, and Roggenbuck 1992; and Pigram 1993).<sup>8</sup> The majority (58%) of survey respondents who answered the question fell into this utility-oriented meaning theme group.

Although the results show numerous variations in the responses to demographic questions for the three meaning orientation groupings, chi-square analysis indicates that only the differences with respect to gender are more than would be expected by chance. The kinship-oriented group differs demographically from the survey norm in that females are significantly over-represented and males are significantly under-represented in this group, with the opposite being true for the unclassified

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<sup>8</sup> It is important to note that as Relph observes, "[t]he meaning of places may be rooted in the physical setting and objects and activities, but they are not a property of them – rather they are a property of human intentions and experience" (Relph 1976, 47).

group. As Table 7 shows, the utility oriented group gender distribution is similar to that of the survey as a whole.

**Table 7**  
**Gender Comparison of Meaning Orientations**  
 (Figures are rounded, margin of error + or - 6% )

<b>Gender</b>	<b>SURVEY</b>	<b>MEANING ORIENTATION *</b>		
	<b>NORM</b>	<b>KINSHIP</b>	<b>UTILITY</b>	<b>UNCLASSIFIED</b>
	(N=263)	(N=68)	(N=95)	(N=100)
Female	57%	66%	59%	49%
Male	40%	29%	38%	50%
Unreported	3%	4%	3%	1%
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	+/-100%	+/-100%	+/-100%	+/-100%

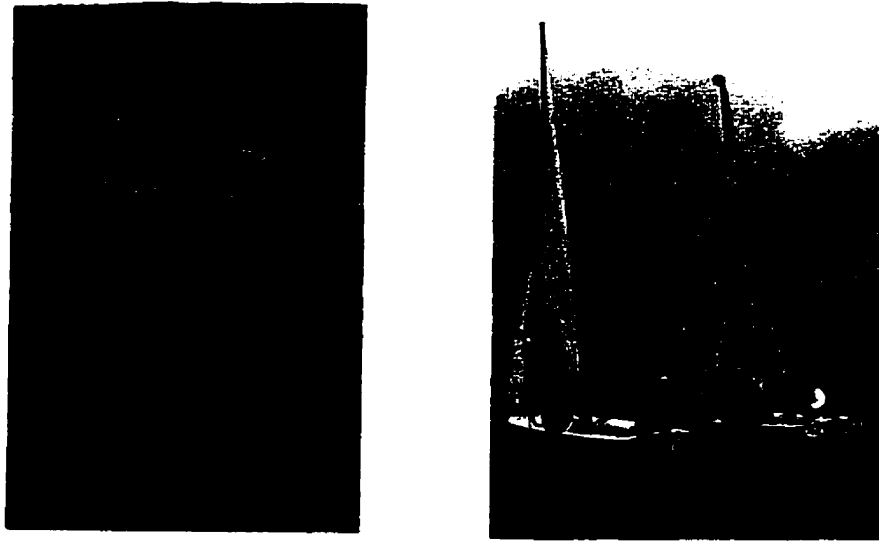
(\* Chi-square analysis suggests a 4% probability that differences from the norm are due to chance)

Table 7 also shows that while those reporting a kinship-oriented experience with nature are more likely to be female and those not providing a classifiable response are more likely to be male, the tendency to report an experience which is utility-oriented in meaning is not related to gender. This is true even though the utility-oriented group has a larger percentage of women because the survey in general has a 60%-40% split in favour of women respondents.

Overall, the kinship-oriented group is characterized by more people than expected by chance reporting regular use of natural areas; almost twice as many as expected stating that they would favour the environment in conflicts over use of urban natural area park land; and also almost twice as many as expected selecting natural area park land as the top funding priority. This group is significantly more preservation-oriented than the survey respondents overall (the norm is 50%; it is closer to 75% in this group).

The utility-oriented group, on the other hand, closely resembles the norm with respect to natural area use pattern, opinions related to conflict resolution, and tendency towards preservation of natural area park land. However, the utility group has a lower proportion than expected by chance favouring natural areas as a funding priority, which probably reflects this group's interest in supporting more diverse recreational functions for urban park land (see Figure 26).

**Figure 26**



**Interpreting meaning – kinship and utility:  
Weaslehead natural area, Elbow River  
Sailing on Glenmore Reservoir, Elbow River  
(Photos courtesy Calgary Parks & Recreation)**

The unclassified meaning group also tended to place funding of natural area park land as a lower priority than the survey respondents overall. The group displays characteristics that are opposite to the kinship-oriented group with a significantly lower proportion of both those who regularly use natural area park land and those who said that they would put the environment first in conflicts over the use of natural area park land in the city. In fact, this group has almost twice the percent overall who said they would tend to put human needs first instead. This unclassified group is also considerably less preservation-oriented than respondents overall.

Because the respondents are classified in relation to the responses they provided to the open-ended question concerning the meaning that nature in the city has, the most typical response in the unclassified meaning category was “no comment” – 84% of the respondents in this group did not provide an answer to the question “For me, nature in the city is . . .” On this basis, it is possible to speculate that nothing meaningful came to mind for these respondents at the time that they were completing the questionnaire. It may also be that there is a literacy problem that limited the

comprehension and writing abilities of 32% of the respondents overall. But low levels of literacy are probably more likely responsible for non-return than for non-response.<sup>9</sup> More probable is that there are some people who, even though they may find pleasure and meaning in contact with nature, either may not be aware of, or are not able to articulate, the ways in which it affects them (Kaplan and Kaplan 1989). For whatever reason there are always some individuals who do not complete open-ended narrative style of questions on surveys.

This fact is reason to give pause to grouping these respondents together. However, the analysis of demographics and key variable shows that the group does appear to share a lower level of interest in the urban natural environment. Curiously, while the unclassified group as a whole (about one-third of all respondents) do not differ markedly from those who responded in terms of reported demographics and observed tendencies in responses to other questions, when combined with the uncategorizables into the unclassified meaning grouping and compared to the two other meaning groupings, the noted differences do arise. In terms of those grouped into the unclassified category who did provide a response, the following case is typical in showing an aspect of disaffection seen in the longer responses:

For me, nature in the city is too luxury [sic]. Provincial and National parks are natural areas. Please make use of them. We need to sell more lands for urban development so that the money can be used to lower the property tax, improve the road and transportation. Fight crimes. (Case 105)

The respondent has expressed the view that it is unreasonable to expect a city to provide a nature experience.<sup>10</sup> A common concern about city government financial priorities is also expressed. Nonetheless the results show that while one-third of respondents exhibit a degree of ambivalence towards describing their experiences with urban nature, the majority of respondents do find the

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<sup>9</sup> A recent Statistics Canada report on a nationwide study, *Reading the Future*, found that "about one in five Canadians in [the] survey had serious difficulties dealing with printed material" (Dare 1996, A12). However, the study also found that "Alberta had the highest proportion of people with top-rated [literacy] skills" (Ibid.). The fact that the study also indicated that 31% of Canadians "had a limited capacity to absorb and analyze information from written material," even though they could read it (Dawson 1996, A4), suggests that respondents with lower level literacy skills may feel comfortable checking off answers, but not writing out a narrative response.

<sup>10</sup> This perspective may also reflect the backlash views attributed to the "wise use" movement. Various described as "grassroots . . . arch-conservative . . . anti-environmental" (Knox 1992, 108) and "a loose consortium of conservative, anti-conservation, commercial interests" (Soulé 1995, 155), proponents of the movement feel environmentalists have gone too far in their lack of concern for human interests (MacLean 1993).

experience meaningful enough to provide a personal testimony (although some are more detailed than others).

These results suggest that those in the kinship-oriented meaning group are more likely to exhibit consistently pro-environment opinions and behaviours. This could be a function of the tendency to utilize a principle-based outlook on resolving environmental concerns. In not exhibiting predictably strong or weak environmental opinions and behaviours, those in the utility-oriented meaning group could possibly be displaying a situational-based outlook on resolving environmental concerns. Fundamental differences regarding appropriate relationships with the urban natural environment will arise when some people start from a non-negotiable principle-based perspective on resource allocation and others build a case point-by-point based on particular circumstance.

In subjective terms the open-ended responses provide a basis for speculation that differences arise concerning expected relationships with the natural environment. In reality no individual would be expected to exhibit a pure type with respect to a particular meaning orientation. But in terms of experiences with nature in the city, a person would be more or less inclined to one interpretative perspective (Hartig and Evans 1993). The following cases provide examples of the kind of overall expectations which could be manifest in natural area park land based on a combination of influences in the different orientations.

The first case, 051, shows how the kinship-oriented group has a generalized expectation of a quality natural environment in the city. The focus is on opportunity for discovery in an unstructured environment and is grounded in the idea of sharing the earth with other life forms and times. As the respondent expresses it:

For me, nature in the city is [t]aking a relaxing stroll along a pathway surrounded by the beauty of green grass and trees and the natural aromas from nature, along with listening to the sounds of nature and knowing there's all kinds of other forms of life breathing the same air. It really allows me to escape from the stress of day to day life and letting me get in touch with myself and my son, as he learns about bugs and birds and his future environment, he's only one year old and my present is his future to enjoy. (Case 051)

As might be expected, this young woman uses natural area parks often, favours strategies designed

to preserve urban nature, and feels that local open space should be a funding priority.

The expectations for the utility-oriented group are also based in a certain understanding of quality. Yet with this group there is the added dimension of requirement for a structure to accommodate a variety of experiences in the natural environment.<sup>11</sup> This respondent describes it as:

For me, nature in the city is a mix of more and less developed public access areas, enabling a variety of uses. Pathways for cycling, walking etc. . . . Picnic and playground areas. Intact forest/prairie river valley natural areas with hiking access only. Sports fields. I am strongly opposed to policies which would eliminate public access to public lands except in cases of extreme need. ( Case 185)

This young male respondent also uses natural area park often, but is predictably less supportive of strategies to preserve the integrity of these areas, especially if there are limits to human use or to the variety of recreation participation options available.

Responses from the unclassified group demonstrate this grouping's expectation, or lack of it, for urban natural areas. This next case, from the unclassified grouping of respondents, shows another aspect of disaffection common to most of the respondents in this category. The disaffection for him, and other respondents like him, seems to be based on the belief that domesticated nature is not the real thing. This respondent is 50 years of age or older, uses urban natural area parks only occasionally and is generally not supportive of strategies to preserve these areas in the city. As he says:

For me, nature in the city is manicured park areas. A city is not the place for undeveloped wild lands or natural parks. The city surrounding and encroaching on such areas eliminates the possibility of them being wild or natural. A city park is a city park and the concentration of population will not permit them to be wild or natural. Calgary is surrounded by wilderness and nature but we can not reverse the procedure and have the city surround the same wilderness. (Case 186)

As this case illustrates, the unclassified meaning orientation group is likely composed of a mix of people with interpretation styles that range from those who for whatever reason are not motivated to report on their nature experiences to the cynics who view urban nature as an oxymoron.

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<sup>11</sup> Pigram (1993) believes that all individuals select the setting for an activity with a particular goal in mind, however, others such as Patterson (1993) would disagree, suggesting instead that benefits of a leisure experience evolve incrementally. It is suggested that these factors both likely play a part in establishing the relative importance of setting for each individual.



For those in the unclassified group who did not provide a response, it is not possible to assess the influence that the meaning aspect of past experience has on forming an ongoing relationship with urban nature. However, cross-tabular analysis does show a few trends for this group as a whole. For example, the group tends to be less inclined to be willing to limit human use of sensitive natural areas. It is also more inclined to believe that the present system of allocating community open space provides sufficient natural area park land. This analysis suggests the unclassified meaning group is characterized by an unsentimentalized relationship with urban nature in which natural area park land is seen as providing only one of many opportunities to enjoy life in the city. Natural areas are not seen as having any special place among a variety of desirable urban amenities.

On the other hand, the meaning aspect of past experience of respondents in the kinship-oriented group appears to contribute to forging a nurturing relationship with urban nature in which natural area park land is viewed as being precious and requiring special care and attention. This relationship is characterized by a strong tendency on the part of this group to be willing to forgo personal goals regarding contact with nature so as to protect natural areas. The group favours maximizing the provision of natural area park land in neighbourhoods, even though it would mean having less of other kinds of recreational park space available close by.

In the utility-oriented meaning group the influence of the meaning aspect of past experience is less clear. Although the group has a common functional view towards urban nature, there are no decisive trends indicative of specific kinds of human/environment relationships. For example, as is the case with survey respondents overall, while half of the group favours limiting human use if necessary in order to protect natural areas, the other half does not. Also as with respondents overall, slightly less than half of this group favours maximizing the provision of neighbourhood natural areas, while just over half sees the status quo as being adequate. These results suggest that the utility-oriented meaning group has a fairly situation-specific, functionally oriented, relationship with the urban natural environment.

As this analysis of respondents' descriptions confirm, people do have different orientations toward interpreting meaning from experiences with the natural environment. The analysis suggests further that only those respondents exhibiting a kinship-orientation in meaning interpretation seem predisposed to relate to nature in a particular way. It is possible that a state of readiness to engage

with nature that is inspired by a kinship-oriented ecological outlook is more durable than one arising from a utility-oriented functional outlook. A utility-oriented meaning is by definition more malleable – kinship-oriented responses have a tendency to be evoked irrespective of circumstance, while utility-oriented responses are more likely situation specific. Utility-oriented individuals, while somewhat sympathetic to the pressures that the natural environment is facing, nonetheless expect that with proper management the supply of natural area park land should be able to both sustain itself and accommodate the recreation needs of Calgarians, irrespective of the fate of particular sites.

The quality of respondents' meaning orientation as an indicator of the influence that past experience has on relationships with the urban natural environment is variable. This is likely due in part to both the method of collecting the data, which provides a generalized statement about meaningful experiences, and of analyzing the data, which provides a generalized assessment of content. However, the response patterns for the meaning categories, including the non-respondents, demonstrate sufficiently different and consistent profiles to include meaning orientation as one of the elements in indicating a respondent's affinity for urban nature. Another element used to compile the affinity rating is the respondent's view on the primary benefit of urban natural area park land.

### **8.3 Benefits of the Urban Nature Experience**

The benefit component of urban nature experiences is operationalized in this study through analysis of the responses to questions concerning the respondent's perceived "most important" benefit and "second most important" benefit of natural area park land.<sup>12</sup> Respondents chose one item from a list of seven in each case (see Chapter 4 and Appendix V). As mentioned previously, the benefit categories used in the survey were developed through focus group discussions and included: exercising out-of-doors; places to walk your dog; appreciating the wonders of nature close to home; an attractive city; chances for family time to discover nature together; no charge to use; and

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<sup>12</sup> Responses were scaled by assigning values to each pair of possible response categories, with the highest values given to the benefit categories concerning psychological benefit and the lowest to physical benefit. This results in possible scores ranging from 0 - 25. As the 50th percentile is embedded in the score groups of 18, the 51st percentile was selected to divide respondents into two groups (variable "code new"). The amenity benefit group comprises the bottom half of the scores and the affiliation benefit group comprises the top half of the scores.

easy access to the peace and tranquillity of nature. Depending on the combination of items selected, respondents were labelled as selecting either amenity or affiliation kinds of benefits.

Although the descriptions that respondents provided of their experiences with urban nature were not used in categorizing cases into perceived benefit groups, it is possible to identify responses representative of each benefit group's outlook on urban nature. It should be noted that while extreme cases are presented for consideration here, in many instances respondents exhibited hybrid tendencies so there is not a 100% correlation between meaning orientation (based on categorization of written descriptions) and resultant benefit groups (based on categorization of responses to the closed-ended benefit question).

In Case 253 that follows, the amenity benefit outlook is demonstrated in the activity focus of the description where nature provides a pleasant backdrop or setting for favourite activities. As this respondent notes:

For me nature in the city [is] what makes a city beautiful. I recently worked in Japan and noticed that they had far less parks and natural places in their cities. Natural areas are pleasing to the eyes as well as other body senses. They provide excellent exercise facilities to those who can't afford or simply don't like gyms. I love to bike ride at Nose Hill park in Calgary with my dog running along side me. This gives both of us good exercise and on bike is the only way to keep up with him. Now we can't let him off leash so the park is no longer attractive to us. This park is huge and I think there is room for everyone. (Case 253)

In Case 059, the outlook on nature is one in which interaction with and being a part of nature is of paramount importance. The respondent explains it as:

Parks are for feeling, living, and viewing wild plants and animals in its raw state. Humans (also animals) mentally and physically need to return to wildlife settings for health purposes, so that we may reflect and participate in the activities our ancestors may have done countless years ago. Anyone who puts money ahead of nature reduces the whole concept that man is an animal that thrived and still thrives because of the resilience of natural habitats. (Case 059)

In both cases, the respondents are male, are regular users of natural area park land, have not attended any university, and view regional open space as being the first priority in terms of funding options. Case 253 is younger than 50 years of age while case 059 is 50 years of age or older. Both respondents demonstrate consistency in their preferred benefit selection and meaning

orientation, with Case 253 being amenity- and utility-oriented and Case 059 being affiliation- and kinship-oriented. As is expected from the trend in the results overall, the amenity-oriented case (253) is less preservation-oriented, while the affiliation-oriented case (059) is more preservation-oriented. The fact that both of these men voted for a planning approach that maximizes the amount of natural area park land provided in Calgary suggests that while they have a similar desire for more of this kind of park land, their individual views are grounded in different relationships with urban nature. The differences can perhaps best be characterized as being a “challenge versus cherish” approach towards interacting with nature.<sup>13</sup>

The younger man (24 years old) in Case 253 displays a challenge or skill mastery based profile in that he is exhilarated by his ability to excel at outdoor activities. In the extreme this way of interacting with the natural environment takes the shape of a “big game syndrome” in which a nature experience is “bagged.”<sup>14</sup> In a more moderate guise, it reflects the pride of survival that is part of the pioneer spirit of triumphing over the travails of nature. The older man (51 years of age) in Case 059 displays the characteristics of a cherishing or bonding style of interacting that is grounded in a fundamental empathy for nature. Rather than wrestling with the forces of nature, it is a way of relating to the natural environments that is content to let it be. The empathetic mode of interacting with the natural environment requires an appreciation of the similarities and differences between humans and other life forms (Evernden 1992). Although both of these men would likely describe themselves as nature lovers, a challenge versus cherish style of relating to the natural environment ultimately involves the immolations of a different sense of self.

A mastery based relationship is self-enhancing through favouring behaviour that develops and tests competencies in an environment (Pigram 1993) – a practice which calls for a high sense of independence and through which the ego is strengthened. A person’s confidence may become so well-developed and the sense of mastery may be so profound that the individual feels he or she need not be subject to regulations designed to protect the environment. People may think that they have a complete understanding of what is really precious or believe that their use in no way stresses the environment beyond its ability to recover.

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<sup>13</sup> The responses of the two cases are used here to illustrate benefit orientations and do not necessarily include all elements of the challenge-cherish approach.

<sup>14</sup> See for example Johnston and Edwards (1994) discussion on the mountaineering experience.

A case in point is a recent incident in which Scout leaders, who took a group of older Scouts into the backcountry without following proper procedures, were fined by Parks Canada officials “for camping and fishing without a licence, illegal fires, and damaging the flora in Banff National Park” (Dolik 1996, A1).<sup>15</sup> Although parents felt that the Park warden had “come down too hard” on the campers, one local paper’s editorial supported the need for “rules for the safety of backcountry hikers and for the protection of vegetation and wildlife” (*Calgary Herald* 1996, A18). As this incident illustrates, an egoistic nature lover will tend to favour maximizing opportunities for interaction with nature but will not easily tolerate fettering human use.

The sense of self that a nurturing relationship with the natural environment encourages is vastly different from that supported by a challenge based way of relating. In this bonding based way of relating, one’s self-concept is reinforced through altruistic, as opposed to egoistic, behaviour. Hence a person feels good about his or her willingness to limit personal use of a park in order to protect a sensitive natural area. Thoreau took great delight in being included as a part of nature when a bird lit upon him in the woods. Those striving for sense of connection with, rather than control over, nature will feel similarly satisfied at being virtually indistinguishable from nature. They will, as well, take great comfort in the transcendental quality of special nature experiences.

This unique combination of solitude and oneness that many strive to achieve through contact with the natural environment is expressed well by a solo canoeist who, while on a long journey, said that at times “there was less me and more not me than I was accustomed to expect.”<sup>16</sup> People who are drawn towards a cherishing mode of relating to nature would favour maximizing the provision of community natural area park land, happy to know that these areas simply are.

It should be noted that there are a few respondents who even though they, like the next case shows, chose a preferred benefit for urban natural areas, gave responses to the open-ended question on meaning that suggest that they view natural area park land as a liability rather than a benefit. For some, land left in a natural state may be offensive because it is seen as an untidy area prone to fires and home to vermin and weeds (Ross, 1989). In the case shown here, it is also a

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<sup>15</sup> The Park warden said that there had been “repeat occurrences” of these infractions (Dolik 1996, A1).

<sup>16</sup> Robert Louise Stevenson, *An Inland Voyage*, 1878, quoted by Henderson 1996, page 30.

matter of being afraid. Based on the disaffected tone of her response, Case 252x, which follows, has been categorized as being in the unclassified meaning group. She is younger than 50 years of age, has attended at least some university, and her response to the benefit question puts her in the object-oriented, amenity-based group. Curiously, while she indicated that the most important benefit of urban nature is the contribution it makes to having an attractive city, she reported the following views concerning her experience with urban nature:

For me, nature in the city is [the] expense to provide and maintain parks [which] is always an issue. Also safety in these areas is a big concern with the growing number of violent and uncaring people in our society. (Case 252 x – “x” denotes no referendum-style ballot received)

Not surprisingly, this respondent is a non-regular user of natural area parks and overall is less inclined towards favouring strategies that preserve natural area park land. Although her concern for personal safety is in the minority for this survey, the results of the 1991 Pulse on Parks survey indicated that approximately 7% of adult Calgarians, and almost 10% of adult women in Calgary, do not use urban parks because of concerns over personal safety (N = approximately 45,000). This concern suggests that there are likely a number of individuals for whom a relationship with the urban natural environment is at best distant and uncomfortable, characterized by wariness and unease. Taking this fact into consideration, it is likely that there is a group of people who do not see a benefit in protecting natural area park land and are, as a consequence, apathetic towards, or have a general lack of interest in, the fate of urban natural areas. Overall, however, the vast majority of respondents to the survey, and likely the population of Calgary in general, sees a variety of benefits to having natural area park land in the city.

In depth analysis of respondents' benefit preferences shows that, as some researchers have speculated, “nearby nature” can fulfil the same needs for people as nature in “more remote and primitive settings” (Kaplan and Kaplan 1989, 171-2). In fact, the results of this study indicate that there is a definite expectation on the part of urban dwellers that the benefits most commonly attributed to being in a wilderness setting will result from contact with nature in the city. This is most true for the benefits seen as arising from the firmly established belief that nature provides an

escape or refuge from the stress of city life and is an essential source of aesthetic appreciation.<sup>17</sup>

It is less true for the kind of benefit that contributes to the development of a positive self-concept which arises from coping with the challenge of natural elements in the wilderness (Scherl 1989). Experience with urban nature does not appear to be as motivated by the self-testing aspect of interaction with the natural environment as the wilderness experience sometimes is. An exception is the self-confidence apparently arising from the pleasure of competently executing outdoor physical recreation activities in general. Further, the list of benefits generated for the survey did not include any specific reference to the benefits of self-development that could be realized through interaction with the natural environment. But as has been suggested in another study on urban greens (Bonnes, Aiello, and Grazia Ardone 1994), it appears that the opportunity that contact with urban nature affords for self-fulfilment (Manning 1979) is a fundamental assumption for some people in the creation of meaning of experience with urban nature.

Although most of the benefit categories in the survey can be termed as being based on the instrumental value of nature (Booth 1994), for 20% of respondents the enhanced sense of self-awareness that comes from the urban nature experience reflects the intrinsic value of nature. Rather than seeing improvements in self-awareness as being a direct benefit of contact with nature, for some respondents the self-enrichment that occurs through encounters with urban nature is what creates meaning from the experience. This moves the contribution to the self-awareness aspect of contact with nature from the realm of benefit to that of essential component in interpreting experiences with the natural environment.

The benefits reported in this study displayed another interesting characteristic. Respondents and focus group participants rarely mentioned the potential environmental benefits of nature in the city even though the ecological benefits are a central concern to park planners, designers and managers (Calgary Parks & Recreation 1994; Planning & Building Department 1996). This tends to confirm the suggestion that it is the “eco-experience” and visual impact that are of most concern to the

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<sup>17</sup> Jones (1994) describes this as a culturally constructed preference for benefits arising from an “agrarian lifestyle” situated in an “idealized pastoral landscape” (Jones 1994, 34). Also, Suzuki (1995) observes that, in discussions with terminally ill people about the importance of “being in nature,” humans have a natural inclination towards wanting contact with nature – based in a genetic need for contact with other living things (Suzuki 1995, 1). He notes that this phenomena is part of Edward O. Wilson’s idea of “biophilia” (Ibid.).

public when taking into account the influence that the “greening movement” is having on parks and recreation services (Balmer 1991, unpaginated).

The absence of interest in ecological benefit could also be a result of the nature experience not being goal driven. The general lack of vigour in participants’ discussions associated with the idea of benefit and the lack of environment-specific responses seems to indicate that the pursuit or realization of a specific benefit is not the point of experiencing nature. It is rather the agreeable and dynamic process of interacting with the natural environment that is valued and sought out – the journey rather than the destination, as it were.

Analysis of the tendencies of the two different groups created by scoring the questions on benefits does not generate anything other than what one might intuitively expect. The group which finds the amenity benefits of nature in the city to be the most important is less likely to be kinship-oriented in generating meaning from experiences with urban nature. It is also less likely than the survey norm to put natural areas as a funding priority, and more likely to be less preservation-oriented. The group that finds affiliation benefits to be most important is more likely than the survey norm to be kinship-oriented in meaning. It is also more likely to put priorities on funding natural areas, and more likely to be more preservation-oriented. Neither group is, however, more or less likely to support changes in planning for community open space. Each group resembles the norm in this respect in that public opinion is fairly evenly split with regards to support for the status quo and support for an approach that would maximize the provision of natural area park land. Table 8 summarizes these findings.

**Table 8**  
**Comparison of Benefit Group Expectations**

<b>ELEMENTS OF EXPECTATION:</b>	<b>BENEFIT CATEGORIES</b>		
	<b>AMENITY</b>	<b>AFFILIATION</b>	<b>NORM</b>
Kinship-oriented meaning	18%	34%	26%
Natural areas as a funding priority	10%	26%	18%
Support for preservation strategies	39%	62%	50%
Plan to maximize natural area supply	39%	48%	43%
Plan to keep natural area supply the same	50%	43%	46%



The two benefit groups also do not demonstrate any strong trends or differences in terms of demographic characteristics. The fact that there is little relationship between such demographic variables as gender, age, and frequency of park use and preferred benefit indicates that the benefits any one person gains from interaction with the urban natural environment are highly personalized. It has been suggested that in order to adequately evaluate benefits of leisure in general, it is important to consider context, specific behaviours and affective response (Orthner 1991). Such factors are highly dependent upon both personal and situational circumstances and consequently are difficult to assess adequately in a survey checklist format. Further, as the benefits of interaction with the natural environment are essentially related to individual perception (Pigram 1993) and interpretation, a person is likely to be involved in situations that generate a wide variety of benefits – from the physiological to the social and psychological (Mannell and Stynes 1991) – even though she or he may have had a certain kind of transaction in mind at the onset. This means that it is not possible or perhaps even desirable to speculate on the kinds of benefits certain types of people expect to gain from urban nature.

By considering respondents on the basis of their combined reported benefit and meaning orientation that arise from past experience with urban nature<sup>18</sup> it is possible, however, to draw a conclusion in terms of views related to the appreciation of urban natural areas. One can surmise that, in terms of extremes, experience with the natural environment is more or less grounded in the objectification of nature, with the more object-oriented, amenity and utility-based perspective being less inclined to appreciate urban natural area park land, and the less object-oriented kinship and affiliation-based perspective being more inclined to appreciate natural area park land.

The following quotes illustrate both the similarities and differences in respondents whose past experiences with urban nature indicate a tendency to be more or less disposed to objectify the natural environment. Case 158, which follows, is typical of an object-oriented style of engagement in that the respondent is situating himself as an observer or spectator in relation to the environment. As the respondent says . . .

For me, nature in the city is [t]aking the family down to the river and ride bikes, walk, fish, let the dog go for a swim. Watch the birds and ducks and geese and other animals that might go by. A place to relax on a nice day. (Case 158)

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<sup>18</sup> A variable “extratex” rates benefit and meaning categories, scores the total and divides the group into two (variable “newex”), based on the median (3 = 48th percentile).

This comment illustrates the central importance of enjoyment of immediate gratification that is anticipated from exposure to the variety and novelty of urban nature. In the next case (098), which profiles a typical less object-oriented, appreciation style of engagement, the respondent also obviously takes delight in the novelty of nature, but for him it is important that the experience is integrated into a broader sense of connection between himself, history, humanity and natural process. As he puts it:

For me, nature in the city is an opportunity to see and experience areas where there is minimal human interference in natural processes. They come with a sense of anticipation – maybe today I will see something unique or unusual, a bird or animal. I find them a stir to the imagination as well is this what Calgary looked like a hundred, two hundred years ago before being developed. It helps me think of Calgary as a unique place. Buildings and lawns are pretty much the same in any city. Natural features are mostly what distinguishes one from another. (Case 098)

Respondents in this survey, whose past experience seems to precipitate a more object-centred, amenity-oriented, utility-based perspective on the natural environment, are more likely to say that they would put human needs first in conflicts concerning natural areas in the city. They are also less likely to put funding natural areas as a priority; less likely to support preservation strategies in general; and more likely to favour the status quo in considering how natural area park land is provided. Respondents with a past experience profile indicative of a less object-centred, more affiliation-oriented perspective on their experiences with urban nature are more likely to say that they would put environmental needs first in conflict over urban natural areas. They have a greater tendency to select natural areas as the number one open space funding priority and overall are more supportive of strategies to preserve natural area park land in the city. This group is also more likely than average to find strategies to address the needs of wildlife in the city to be appropriate. As well, the group shows considerably more support for changing planning practice so as to maximize the provision of natural area park land in Calgary communities.

The tendency to more or less objectify, or detach oneself, from various embodiments of nature is in part an indication of the degree of affinity a person displays for the natural environment – the less objectification that takes place, the greater one's affinity with nature. Other indications of affinity are the degree of psychological, emotional and physical involvement one has with the natural environment. The next section examines affinity as a composite of these aspects of past experience with nature.

## **8.4 Affinity for Urban Nature**

Affinity is a reflection of how past experience with nature precipitates different kinds of individual readiness to engage with urban natural area park land. In this study, the comparative strength of a respondents'<sup>19</sup> involvement with urban nature, or eco-experience, is used as an indication of affinity. Respondents' commitment to urban natural area park land relative to expectations for the provision of natural area park land in the city are used to test the effects of affinity. The survey data was manipulated to produce a score for each respondent. The scores were then scaled to create an index of affinity. To facilitate a descriptive analysis, two points were selected along the continuum that resulted in respondents being grouped into low, medium, and high affinity groups.

By virtue of the scoring system,<sup>20</sup> the groups exhibit certain attributes that arise from the method of categorization. Each group also displays demographic features that are independent of the scoring system. However, only age was found to be significantly related to affinity. The groups' views on preservation strategies, priority of funding for natural area park land, and choices in terms of park planning policy were chosen to reflect respondent commitment toward the urban natural environment. All of these factors were shown to be significantly related to affinity group. The various attributes and characteristics of each group are described in the discussion that follows.

### **8.4.1 Attributes of the Categories**

The response values for meaning orientation, benefit perspective, pattern of use, conflict resolution

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<sup>19</sup> Responses to the questions on benefits, meaning of experience with nature in the city, priority in situational conflicts, and views on the role of urban natural park land were coded, weighted equally, and scaled to produce a score. The calculation was done with and without the rating for frequency of use of natural area park land. The discussion here relates to the totals including a use score. The scale range was from 0 - 20; points of comparison divide the group at the 33rd percentile and the 70th percentile so that 33.5% of the respondents fall into the lower affinity group, 36.9% into the medium affinity group, and 29.7% into the higher affinity group. When sorted on the basis of gender, and keeping the dividing points constant, percents in each category shift so that the lowest category of men is comprised of 39% of the respondents compared to 29% for women; medium is 35% and 38% respectively and the highest affinity category contains 26% of the men and 33% of the women. The rating system is designed so that the higher the score, the greater the affinity for urban nature.

<sup>20</sup> Responses to benefit, meaning, conflict orientation and use are a function of the scoring system in that the ratings from these variables were used to score individuals. For example a respondent who selected an amenity benefit, who did not provide an answer to the open-ended question, who indicated a non-ecological outlook on urban nature and who reported infrequent use of urban natural areas, would receive a score that places her or him on the lowest end of the scale. All demographic characteristics are independent of the classification system, as are the opinion based responses to preservation inclination, funding priorities, and voting choice for park planning.

preference, and basic outlook on nature produce different profiles for each of the affinity groups. In the group composed of scores on the lower one-third of the affinity scale more than half of the respondents did not provide a response to the open-ended questions on experience with urban nature. Of those who did respond, over 85% gave a utility-oriented response to the meaning. The majority (75%) have an amenity perspective on the benefits of urban nature, with almost one-quarter selecting an attractive city as the most important benefit. As well, over two-thirds of the group are non-regular users of natural area parks.

In the medium intensity affinity group attributes show that, as with respondents overall, just over one-third of the group did not respond to the question on experience with nature. Also as with respondents overall, of those who did respond to the question, the majority were classified into the utility-oriented meaning group. The majority of this medium intensity group expressed affiliation-orientation benefits as being most important, with family time and peace and tranquillity of nature in a close tie for the most important benefit. Almost two-thirds of these medium indexers are regular users of natural area park land.

Unlike the survey sample overall, everyone in the top one-third of the affinity scale responded to the question concerning experience with nature in the city, with over 60% reporting kinship-oriented meaning. About two-thirds of the high intensity affinity group selected affiliation-oriented benefits as the most important kind of benefit provided by urban nature. Almost 90% of the group are regular users of natural area parks.

The demographics profiles for each of the groups on the affinity scale show that the lower one-third on the affinity rating scale (N = 88) is comprised of a fairly even split in gender representation (47% male/50% female) and age groups (48% under the age of 50/46% 50 years of age and older). Slightly more than half this group has attended at least some university. As with respondents overall, the breakdown in households is evenly distributed between the three main types, with slightly more falling into the living alone group than the other two circumstances (couples with children and couples with no children at home). The medium grouping on the affinity scale (N = 98) has a lower percent of men and a higher percent of women than does the low index group. It also has a greater percent of those younger than 50 than does the low index group. However, in both cases, the medium group resembles the survey norm overall. Like those in the low affinity

group and respondents overall, the majority of those in this medium affinity group have attended some university. This mid-range group also has a much lower percent of those living alone than does the lower affinity group, and like the survey overall, couples with no children at home are the largest single household category. The top scoring affinity group (N = 77) has the highest percent of women and people under the age of 50 years. It also has the highest percent of those who attended some university and of a household situation involving couples with no children at home.

#### **8.4.2 Affinity Profiles**

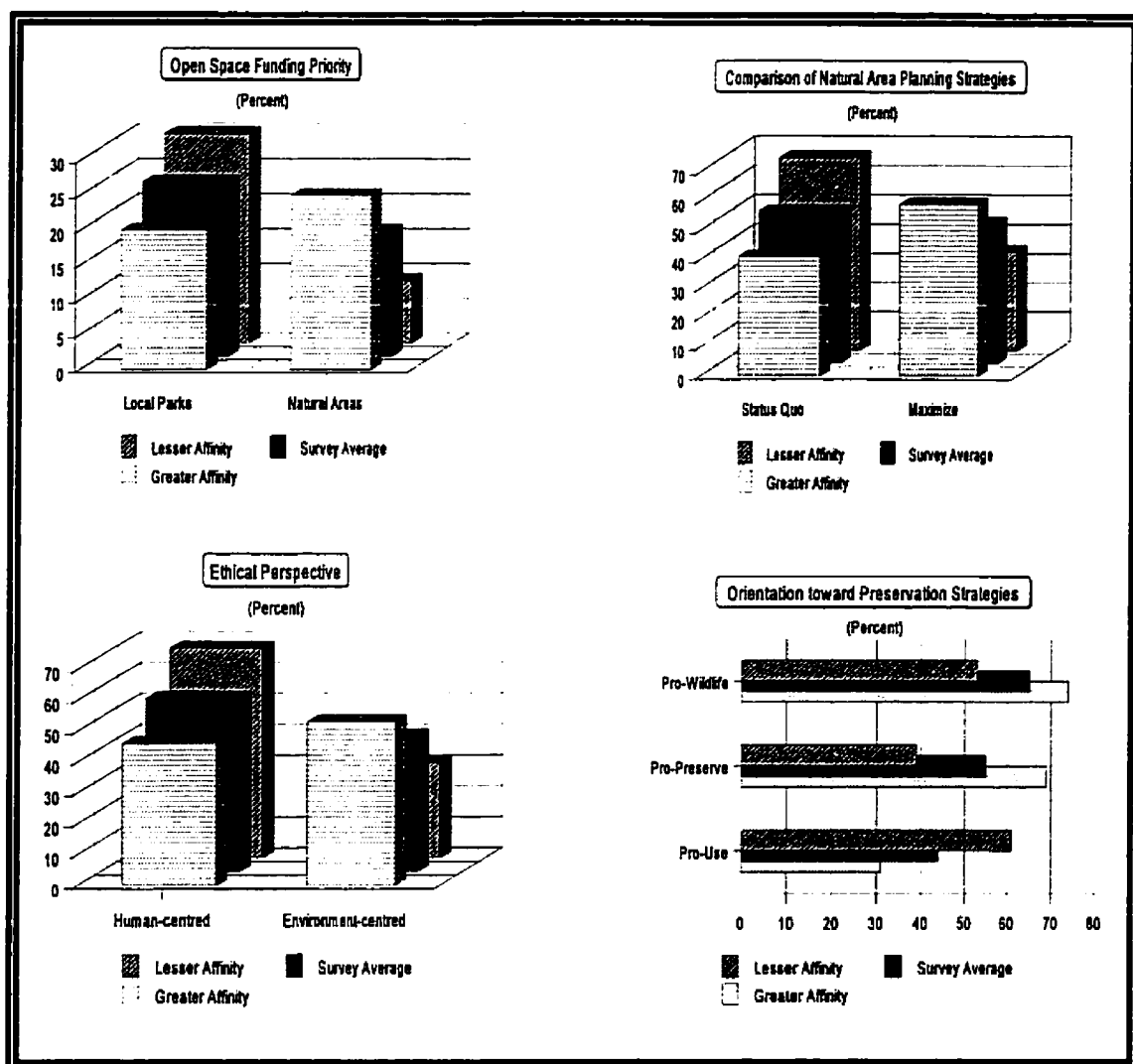
Differences are evident in each affinity group's expression of commitment toward the urban natural environment. In the lowest affinity group almost 75% are less preservation-oriented, with just under 50% saying it is not appropriate to limit human use in order to protect natural areas. As with respondents overall, over half of the group identified regional open space as the highest priority for open space funding and the majority favours the status quo in terms of planning for the provision of natural area park land. In the medium affinity group, on the other hand, there is a slight majority of more preservation-oriented individuals. But almost one-half of this group also feels that it is inappropriate to limit human use to protect natural areas. The majority views regional open space as the number one funding priority, as with respondents overall, although close to 20% chose natural areas as their first priority for funding. Curiously, a greater percent than respondents overall favours the status quo in planning for natural area park land.

Results for the highest affinity groups show that approximately 70% of the group are more preservation-oriented, with 60% saying it is appropriate to prohibit human use to protect natural areas. Further, over 75% suggested that it was more appropriate to take the needs of wildlife into consideration when planning urban natural areas. As with respondents overall, the majority selected regional parks and pathways as the number one open space funding priority, however over 30% also chose natural area park land as their top priority. Almost 70% of the top rated affinity group favour changes to park planning procedures in order to maximize the provision of community natural area park land.

To test the significance of the connections between affinity and key indicators of inclination toward interactions with the urban natural environment, the affinity index was bisected at the median. This

creates two groups displaying relative positions of greater or lesser affinity. Chi-square analysis showed that affinity is significantly related to preservation orientation, natural area funding preferences, and choice of park planning approach. Figure 27 summarizes these findings. The results clearly indicate that affinity is related to inclinations to support natural area park land in the city. They also suggest that the affinity index is a valid way to assess the influence of past experience on forming relationships with the urban natural environment.

Figure 27



**Connecting affinity and expectations for interaction  
with the urban natural environment  
(Developed by the author)**

### **8.4.3 Notes on Gender and Affinity**

Although chi-square analysis shows that gender is not significantly related to affinity group, anecdotal profiles of gender in each of these groupings show some interesting variations. For example, the lower affinity women (N = 44) are one of the groups least likely to comment on experiences with nature in the city – over 60% did not comment, as compared to 40% of the lower affinity men (N = 41). Although the women in this group are considerably more likely than their male counterparts to not object to limiting human use to protect sensitive areas (40% compared to 60%), they are also one of the groups least likely to choose natural area park lands as a funding priority (2%).

The men in the lower intensity affinity group are atypical in that they have a much higher percent than the women's lower affinity group of respondents living as a couple with children (39% compared to 16%) and are considerably more likely to be non-regular park users. The men's lower affinity group also has a higher percent than the low affinity group overall choosing natural area park land as a funding priority (10% compared to 6%).

In the medium intensity affinity grouping the most noticeable difference in gender is that considerably more of the men have attended some university. In the men's group 78% attended university, compared with only 47% of the women in this group and 68% of respondents overall. The men's group (N = 38) also tended to live alone less than women in the category (N = 57), or respondents overall. Again a higher percent of the medium affinity men than medium affinity women, and than respondents overall, found it not appropriate to limit human use in order to protect natural areas. In terms of preservation orientation and funding priority for natural areas, the gender groups in the medium intensity affinity rating are similar to each other and to the norm overall. However, a greater percentage of the men did indicate that they prefer the status quo with respect to planning for the provision of natural area park land.

The demographic trends for those in the highest intensity affinity grouping are similar for both genders. The women's higher intensity affinity group (N = 49) does however have one of the highest percentages of those under the age of 50 (71%), and where the women's groups show a tendency for affinity to increase while age decreases, the men's groups do not show the same strong trend. Overall the women in the top one-third of the affinity scores show stronger affiliation

and kinship trends than do either respondents overall or men in the same category. But while women may have higher affinity scores resulting from this tendency, the high affinity men show a stronger indication of willingness to act on these feelings. The higher affinity men (N = 27) not only demonstrate a strong preservation orientation (79% pro-preservation compared to 50% overall, and 63% of the higher affinity women), but they also show some of the highest support for funding natural areas as a priority (39% chose this as a top priority) and for changing park planning practice to maximize the provision of natural area park land (75% voted for this option).

The most interesting aspect of the trends in the men's higher affinity group is the slightly lower than average support (and extremely low for the high affinity grouping) for limiting human use of natural area park land in order to protect any sensitive areas. A possible explanation for this is that in the different social experiences of men and women, men are less accustomed to having to accept or tolerate external controls on volitional behaviour. It could also be that it is an incorrect assumption to equate a high score on the experience intensity scale with a high affinity for the natural environment. One's appreciation of nature could be based in respect for the essence of the natural environment or it could be based on valuing a commodity in anticipation for consumption (see previous discussion on "bagging an experience").<sup>21</sup>

Although these findings may seem surprising in terms of gender differences discussed earlier, they are not unexpected when considering response patterns overall. Analysis throughout this study repeatedly shows that the extremes on any of the scales yield more consistent and predictable relationships between various phenomena. This trend is likely indicative of the existence of what has been termed "the attentive public" (Schumaker 1991, 164). Respondents of this type are very aware of the issues and have consequently established strong views, one way or the other, on preferred outcomes (Ibid.). For example, all of those in the top 5% (N = 14) of the affinity scale are in the more preservation-oriented group and 57% of this group identified natural area park land as their number one funding priority. This compares with a strong trend in the other direction in the part of the bottom 5% of the scale (N = 14) in which only 14% selected natural area park land as their first priority for funds. As well, while 85% of the top group voted to change planning practices in order to maximize the provision of natural area park land, 71% of this lowest 5%

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<sup>21</sup> As is the case with organizations such as those that promote habitat conservation in the form of wetland for ducks in order to provide a supply of ducks for sport hunting.



voted to keep planning practices the same. These two groups differ demographically in that the majority of the top group attended at least some university, while the majority of the bottom group did not. The top extreme group is comprised of 85% women, while at least 50% of the bottom extreme group is male.

### 8.5 Summary

Overall analysis of respondents' past experience with urban nature confirms that individuals displaying a greater degree of affinity for the natural environment are more likely to favour strategies that support natural area park land in the city. Tables 9 summarizes the various aspects that contribute to this profile.

**Table 9  
Summary of Affinity Profiles**

	<b>AFFINITY</b>	
<b>Indicators:</b>	<b>LESSER</b>	<b>GREATER</b>
Meaning Orientation	Utility	Kinship
Benefit Perspective	Amenity	Affiliation
Use Profile	Occasional	Regular
Conflict Approach	Balance Interests	Environment First
Outlook on Nature	Recreational	Environmental
<b>Expectations:</b>		
Funding Priority	Recreational Areas	Natural Areas
Management Strategies	Pro-Use	Pro-Preservation
Park Planning Preference	Traditional	Sustainable
Relationship Orientation	Functional	Ecological

The results of the analysis of past experience also suggest that the tendency towards more intense involvement with the natural environment is not related to generic demographic characteristics. Just as is the case with ethical perspectives on the natural environment, affinity seems to be a function of personal responses to the more subtle and complex influences of social context. The final chapter in this consideration of dimensions of the urban nature experience is a discussion of how social context is reflected in different combinations of ethical inclinations and affective engagements. It suggests that a specific kind of orientation – or eco-affect – toward the natural environment is apparent in the respective human/environment relationships.

## CHAPTER 9

### Social Context and Views on Nature

#### 9.1 Introduction

The discussion in Chapter three noted a number of factors acting on contemporary society to reinforce a certain view of the natural environment. As the results of this study confirm, and as public debate suggests, people assume a wide range of emotional and psychological positions in terms of relationships with urban nature. How is it, then, that individuals who are located in the same cultural context come to such vastly different conclusions concerning the natural environment?

#### 9.2 Grid/Group Model

Much has been written concerning the identification of causes of variations in individual perception and interpretation of meaning – especially as it relates to environmental concern. There has been considerable speculation on the influence of underlying belief systems (Axelrod 1994; Finger 1994; Kuhn 1985), of class structure (Buttel 1975; Cotgrove and Duff 1981) and of the media (Burgess 1990). There have also been explanations based on depth (or Jungian) psychology (Schroeder 1991a) and productive hermeneutics (which looks at the idiosyncratic, rather than generalized, production of meaning [Patterson 1993]). Researchers have, with limited success, been striving to establish what factors might be responsible for fundamental differences in orientation towards the natural environment. It is suggested that the overall similarities in outlook that people display are likely to do with culturally conditioned social factors, while the differences arise from the innumerable combinations of individual social circumstance.

It is culture which creates and favours one belief system over another, but it is individual disposition that makes enough sense of it all for a person to be able to appropriately function within any given social system (Anderson 1996). So it is that while people have similar wants and needs, they have a vast array of ways of satisfying them (Ibid.). The grid/group model of cultural diversity, originally developed as a tool to type cultures in anthropological research<sup>1</sup>, suggests further that certain kinds of social organization foster different kinds of personal assumptions about the natural environment. Numerous authors have speculated that in addition to establishing a way

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<sup>1</sup> Rayner (1992) credits Mary Douglas (1985) for her ongoing development of grid/group cultural theory. (See her *Risk and acceptability according to the social sciences*. NY: Russell Sage Foundation. Original was not consulted.)

to examine different world views that various cultures may have, the theory offers some insight, at the micro-level, into how organizational culture can influence views on nature (see Buck 1989).

In grid/group theory, social organization is defined in terms of two key cultural conditions: social interaction (labelled grid) and social integration (labelled group). Both are measures of social control acting on individual choice (Spickard 1990.)<sup>2</sup> A culture exhibits high social control by constraining interaction between various members of the society, prescribing permitted options on the basis of various roles (Milton 1991) – for example gender, socio-economic status, political position, and so on. It exhibits high control on social integration through the degree to which collective goals are more compelling than individual interests. In less compelling circumstances individuals are highly independent in thought and behaviour. By combining the two dimensions in a matrix format (see Figure 28) four possible prototypes of social organization are formed at the intersections as follows:

A) Intersecting low control on role interaction and weak goal integration produces a social climate in which individualism and independence flourish. An individual is likely to feel empowered to use his or her judgment most of the time. This kind of organization is labelled **entrepreneurial** (Milton 1991), in that individual benefit is the priority (Buck 1989).

B) Intersecting high social control on individual interaction and low social control on integration into collective goals creates a social climate in which there is little agreement on direction for individual goals but strong constraints on allowable interaction. Individuals are likely as a consequence to feel socially alienated and manipulated by the system (Rayner 1992). This kind of organization is labelled **fatalistic** (Milton 1991) in that individuals feel that they have few choices in life.

C) Intersecting high social control on role interaction and high control on collective goals creates a hierarchical social climate in which individualism and competition are not necessarily absent, but are highly regulated (Rayner 1992). **Hierarchical** social

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<sup>2</sup> As Rayner explains, “cultural theory is not a psychological theory of personality types . . . it is a social theory that views social organization as presenting patterns of opportunities and constraints . . . in a particular social context” (Rayner 1992, 107).

systems “favor institutionalized authority” (Buck 1989, 103) in making judgments. Individuals know the rules, and highly regulated structure is believed to produce social stability.

**D)** Intersecting low control or constraint on roles, or conversely enabling a high degree of interaction among group members and high collective goals, fosters a social organization in which members may be highly independent in exercising judgments, but also agree, without coercion, to collective consensus on goals (Buck 1989, citing Wildavsky 1987).<sup>3</sup> This **egalitarian** type of social organization (Buck 1989; Milton 1991; and Rayner 1992) is common in ad hoc groups that are relatively small and temporary in character (Buck 1989); however, it is also present in some environmentalist organizations (Rayner 1992). Individuals exhibit a high level of agreement with group values, and are suspicious of the motives of those outside of their group.

Researchers have suggested numerous typologies concerning the view of nature that would correspond to each type of social framework (again, see Buck 1989).<sup>4</sup> The theory is that certain views of the world would create and maintain certain myths about nature. It is suggested here that a group’s ideas concerning relationships with the natural environment are most likely to do with group members’ understanding about control over and obligations towards each other, including other living things in the environment which comprises the group entity.

### **9.3 Views on the Natural Environment**

In this respect, the highly ego-centred view of the world inherent in the entrepreneurial model requires that the natural environment be viewed in terms of an “honourable opponent,” able to hold

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<sup>3</sup> The citation provided by Buck is: A.Wildavsky 1987. Choosing preferences by constructing institutions. A cultural theory of preference formation. *American Political Science Review* 81 (1), 3-21. Original source not consulted.

<sup>4</sup> Buck’s interest is in the application of cultural theory to the development and analysis of environmental management policy such as regulation of grazing. By way of background to this issue she provides an overview of research connecting cultural theory and views on nature.

its own in a competitive situation. Nature is considered to be robust<sup>5</sup> in that while particular elements may not survive intense competition, the force continues to prevail nonetheless.

Interaction with the urban natural environment is activity-based involvement designed to enhance a sense of personal well-being.

The alienated positioning of individuals in a fatalistic social system in which group members are highly limited in terms of permissible interaction and have a low sense of group identity is likely to create a situation in which people are somewhat wary of each other's motives and behaviours. At best, the strongest view of nature that would prevail is apathy (Buck 1989) or indifference towards the plight of the natural environment; at worst an attitude of hostility may dominate. Lacking a sense of personal empowerment, the myth that dominates in these individuals' circumstances is nature as capricious,<sup>6</sup> or unpredictable. This view arises from the belief that irrespective of whatever interaction or intervention may take place between human society and the natural environment, nature will take its course. However, being influenced by a social context that is not sympathetic towards environmental issues does not necessarily preclude individuals from indulging in consumption of nature experiences. Such individuals will likely feel most comfortable interacting with highly contrived and orthodox manifestations of the urban natural environment, where hazards are minimal and quality of the experience predictable.

The highly rationalized structure of hierarchical social organization generates a social context in which individuals clearly know what is expected of them in terms of social functioning. This lack of ambiguity or conversely, a reliance on the comfort and certainty of order, endorses a view of nature that suggests that, given adequate regulation, the natural environment can be managed properly. This perspective justifies a view of nature as resilient, able to balance and adjust itself in response to stress.<sup>7</sup> Interaction with the urban natural environment is based on a conventional

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<sup>5</sup> Kay Milton matches the entrepreneurial social framework with a myth of nature as robust on the basis that an entrepreneurial social system encourages the "exploitation of nature for personal gain" (Milton 1991, 6).

<sup>6</sup> Buck (1989) explains that nature is viewed as capricious by those who see themselves as being at the mercy of external forces. Milton (1991) also matches the fatalists with a capricious view.

<sup>7</sup> Milton suggests that hierarchist social groups see nature as "robust within limits" (Milton 1991, 6) in that there is a confidence that through science and controlled use nature will continue to stabilize itself (Ibid.). Buck (1989) reports on nature as resilient being equated with its adaptability.

place-based approach in which individuals have a well-defined, firmly established understanding of what constitutes a fitting nature experience.

With minimal constraints on social interaction and a strong commitment to group goals, the egalitarian social system values equality (Buck 1989) and the collective good (Milton 1991). The natural environment is considered to be a finite entity within the system, entitled to the due regard and concern of any member of the group. The idea of nature that prevails in this context is that all life forms in nature are as fragile as human life is known to be and as such proper respect and care are required to sustain them.<sup>8</sup> Interaction with the urban natural environment is highly sentimental, based on emotional and aesthetic response to actual, imagined and remembered experiences with domesticated and wild nature.

It is suggested that each of these perspectives on social organization and views of nature also defines a particular kind of relationship with the natural environment (see Figure 28). In an entrepreneurial social climate, the tendency is to exploit nature in order to maximize personal benefit of the resource. A social organization which generates a climate of social ambivalence will result in a situation in which, through lack of interest or predominance of a view that only others will benefit from how resources are treated, people tend to consume nature. The belief in stability through control of institutional structure, which is characteristic of a hierarchical social organization, leads to a relationship in which people seek to manage the natural environment in order to appropriately distribute the benefit of the resource throughout the system. An egalitarian social system, in seeking to have everyone and everything, including the natural environment, benefit equally from human contact with nature, fosters a concern oriented relationship in which people feel that they need to protect the natural environment.

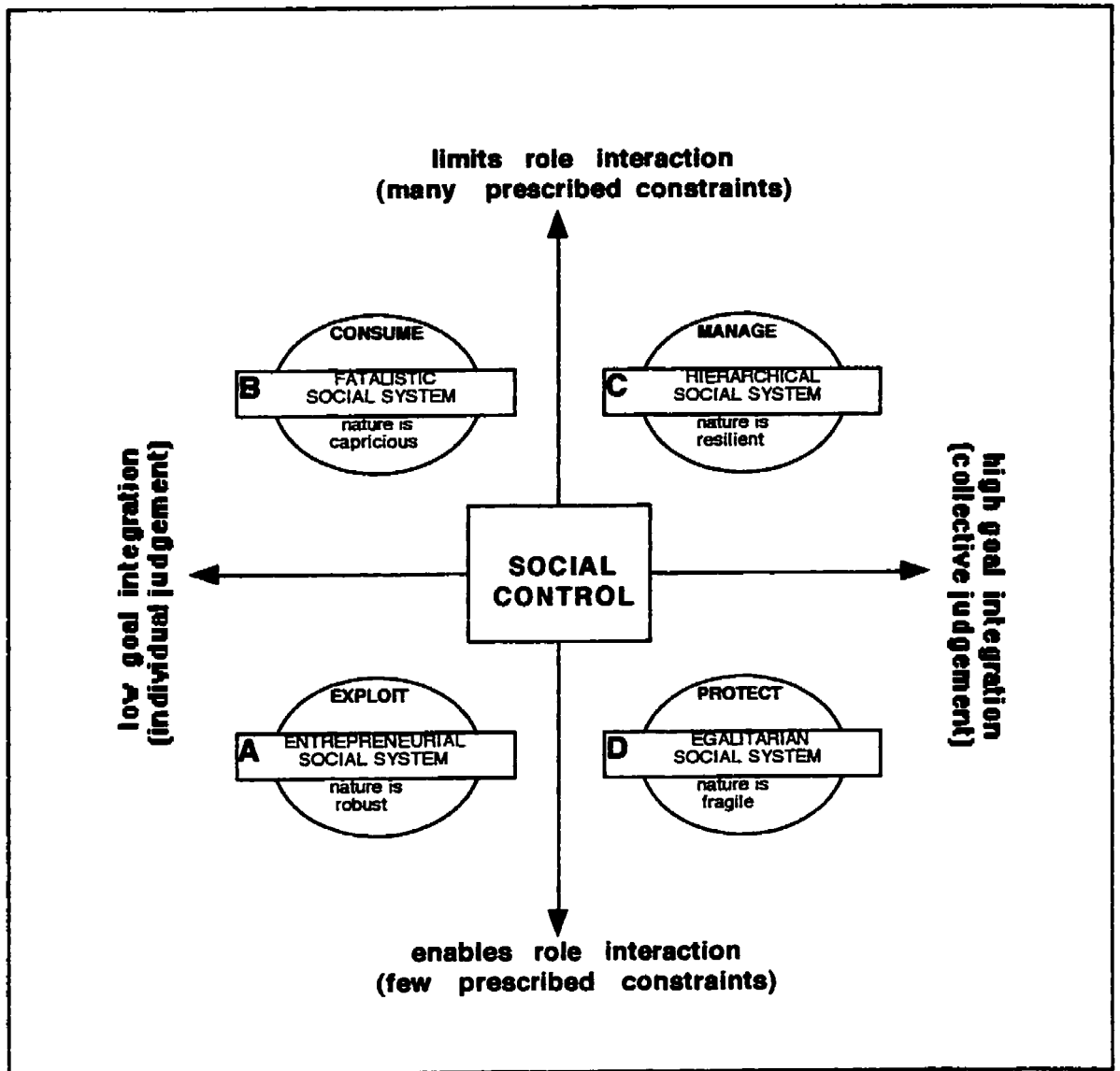
Figure 28, which follows, illustrates how the research on grid/group cultural theory and beliefs

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<sup>8</sup> The nature as fragile view attributed to egalitarian by Milton (1991) is based on the belief that it is not easy to re-establish stability in the natural environment once it is lost. Buck describes the egalitarian myth of nature as ephemeral, requiring “self-sacrificing human behaviour and . . . effective group sanctions” (Buck 1989, 106).

about nature relates to suggested relationships with the natural environment<sup>9</sup> that arise in this study.

Figure 28



Grid/group theory and relationships with the urban natural environment  
(Adapted by the author from Buck 1989, Milton 1991 and Rayner 1992)

Applying this idea that different social systems produce different views about the natural environment, the data from the Nature in the City survey was examined for its potential to describe similarities and differences in relationships with urban nature that could arise from different social

<sup>9</sup> It is interesting to note that Rayner (1992) suggests that, at a very fundamental level, people living within a specific social context utilize these ideas about nature as a metaphor to rationalize many of their moral and legal approaches to public life.

contexts.<sup>10</sup> Using the survey results, the groups formed by expressed views regarding socially prescribed environmental ethics, especially as they relate to supporting a greater or lesser tolerance for restricting human ability to maximize benefit from interaction with nature, and personal responses to experience with urban nature reflected in the profiles of affinity for nature, have been compared. This cross-tabulation<sup>11</sup> creates a matrix of four cells representative of existing relationships with the urban natural environment. It is suggested that in the cross-tabulation of the interest integration scale (as indicated by environmental ethic) with the intensity of involvement scale (as indicated by affinity profile) the resulting groupings typify the range of eco-affect<sup>12</sup> modes that establish a community's framework for ongoing interactions with urban nature.

#### **9.4 Eco-affect Modes and Psychographic Type**

These eco-affect modes, viewed in relation to grip/group theory, further suggest four basic psychographic<sup>13</sup> stereotypes indicative of the current range of ways individuals in Calgary relate to urban nature. Psychographic analysis uses respondent interests and opinions, in addition to demographic variables, to build characterizations of groups. In this case the categorization is based on eco-ethic and affinity (derived from past experience) viewed in relation to the implications of social context. The groups that result are shown in Table 10.

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<sup>10</sup> Previous research resulting in typologies of the nature experience have been based on wilderness feature preferences i.e. spartanism, anti-artificialism, etc. (Hendee, Catton, Marlow and Brockman 1968, 31); and remoteness, naturalism, etc. (Kliskey 1994, 203); attitudes toward nature i.e. utilitarian/ecologicistic, scientific/humanistic etc. (Eagles 1980, 30-31); personality type, i.e. socialite, introspective, etc. (McIntyre, Cuskelly, and Auld 1991, 16) and attitudes towards wildlife, i.e. naturalistic, ecologicistic, moralistic, etc. (Kellert 1995, 108).

<sup>11</sup> The eco-ethic factor was created by grouping all those who responded that it was NOT APPROPRIATE to limit human use in order to preserve natural areas into one group (including the 12% that did not respond to the question) and all those who responded that it was to some degree appropriate to limit human use in the other group. These two groups were cross-tabulated to the two groups created by dividing the affinity index, as previously described, in two, using the score closest to the median as the dividing point (in this case 13, which was the 45th percentile).

<sup>12</sup> In so far as emotional impact is considered to be an important part of all environmental experience (Ittelson, Franck, and O'Hanlon 1976), the term is based on the idea that an emotional, as opposed to intellectual or physical, response mode is likely the most significant in terms of experiencing nature in the city.

<sup>13</sup> Psychographics refers to the market research technique of studying market segmentation trends by quantifying indicators of abstract dimensions of consumer behaviour (Heath 1995; Demby 1994).



**Table 10  
Eco-affect and Psychographic Type**

<b>ECO-ETHIC/ ECO-EXPERIENCE (AFFINITY)</b>	<b>ECO- AFFECT</b>	<b>SOCIAL CONTEXT</b>	<b>PSYCHOGRAPHIC TYPE</b>
<b>Low interest integration/ Low intensity of involvement</b>	<b>Apathetic</b>	<b>Fatalistic</b>	<b>CONSUMER</b>
<b>Low interest integration/ High intensity of involvement</b>	<b>Egoistic</b>	<b>Entrepreneurial</b>	<b>ADVENTURER</b>
<b>High interest integration/ Low intensity of involvement</b>	<b>Sympathetic</b>	<b>Hierarchical</b>	<b>STEWARD</b>
<b>High interest integration/ High intensity of involvement</b>	<b>Empathetic</b>	<b>Egalitarian</b>	<b>GUARDIAN</b>

Table 10 shows that the eco-affect modes produced in the analysis of ethics and affinity closely resemble the orientations of the four prototypes for social organization discussed earlier. In a social framework where there is a low integration of personal and environmental interests both the apathetic and egoistic eco-affect modes are produced. These correspond with the fatalistic and entrepreneurial prototypes respectively. One orientation results primarily from non-interest while the other type is based in self-interest. Combining disinterest and a low involvement with nature suggests an apathetic mode characterized by a Consumer relationship with the natural environment. A self-interested orientation combined with a high level of involvement suggests an egoistic mode characterized by an Adventurer style of relating to nature.

In a social framework where there is a high level of integration of human and environmental interests both the sympathetic and empathetic eco-affect modes are produced. These modes respectively correspond with the hierarchical and egalitarian social system prototypes. Again the reasons for the level of interest differ. The sympathetic hierarchists integrate human and environmental interests out of sense of duty and obligation, while the empathetic egalitarians do so out of care and concern. A high interest integration combined with a low involvement with nature suggests a sympathetic eco-affect mode characterized by a Steward style of engagement with nature and a high interest integration combined with a high involvement suggests an empathetic eco-affect mode characterized by a Guardian style of relationship.

The psychographic groups each display characteristics that are a function of the methodology that created them. Responses to the question on constraining human access to protect natural areas and to all of the questions used to assess affinity formed the basis of this methodology. In terms of group characteristics,<sup>14</sup> all of those in the Consumer group feel that it is not appropriate to limit human use in order to protect natural area park land. The majority are non-regular natural area park land users who have a pragmatic outlook concerning how natural area park land in the city should be used. As one respondent in this group remarked, “[nature in the city is] adequately served [and I] would like to see more park funds allocated to upgrading boulevards, etc.” (Case 020).

Although the majority of people in the Consumer group did not respond to the open-ended question on the meaning of nature, those who did either reflected views similar to those of the gentleman in Case 20 or reported on experiences commonly associated with the use of formal park areas. Many described, as the following respondent does, that nature in the city is “an opportunity to walk and cycle in natural surroundings [and to] relax, get away from stress; it is a chance to sit by the water or exercise or walk in beautiful surrounds.” He continues, “I like the walkways through residential areas so I can take different routes on my walks” (Case 225). This is consistent with the majority of the group selecting an amenity type benefit as the most important benefit of urban natural area park land. The group is composed equally of males and females. There is also an almost equal proportion of those younger than 50 years of age and those 50 years of age and older. As is the trend throughout all of the eco-affect groups, most have attended at least some university.

All of those in the Adventurer group also feel that it is not appropriate to limit human uses in order to protect natural area park land in the city. However, the majority of this group use natural area parks regularly and have an ecological view of uses of urban natural areas that puts the environment ahead of economic considerations. Respondents remarked, as this woman does, that for them nature in the city is “space that all people can easily enjoy and [that can] accommodate walking dogs, bikes, rollerbladers, runners, walkers etc. easily . . . [it is as well the] feelings of well-being [that result from] letting fresh air, physical activity and soothing sound[s] of nature aid

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<sup>14</sup> These profiles are only descriptive in that most of the attributes mentioned are a function of the method used to categorize the groups. Gender and age are independent of the classification system however, but only age showed a significant relationship to eco-affect group type.

in stress relief” (Case 075). The Adventurer group is evenly divided in finding meaning based in the utility of and kinship with urban nature and most selected an affiliation type of benefit as the most important. As is the case in the survey in general, there is a higher proportion of females and those younger than 50 years of age in this group.

The Steward group all feel that it is to some degree appropriate to limit human use in order to protect urban natural areas. The group is fairly evenly split between regular and non-regular users of natural area park land and between a pragmatic and idealistic outlook on natural area park land use. The majority of this group did not answer the question on experience with urban nature, of those that did, by far the most reported a utility-based meaning. Consistent with this, the majority selected an amenity type of benefit as the most important. It is interesting to note that this is also the only group that selected making the city attractive to tourists and businesses as the most important benefit of natural area park land.

There are those, however, in this group who do exhibit a kinship-oriented concern for the natural environment as this person does when he says, “I am disturbed at the apparent lack of respect that some people show towards our environment, especially nature. Littering and dog feces are totally inexcusable” (Case 084). For him and other Stewards like him, visiting urban natural area parks is “a way to appreciate nature on a regular controlled basis.” This group has almost double the proportion of females to males. Those younger than fifty years of age are also almost twice as prevalent as those 50 years of age and older.

All of the Guardians feel, too, that it is to some degree appropriate to limit human use in order to protect natural area park land. This group has the highest proportion of frequent natural area park land users, and not surprisingly, the majority favour an ecological or idealistic perspective on natural area park land use. A typical response to the question concerning the meaning of urban nature experiences contains elements similar to the following respondent’s observation. For her, nature in the city is “the conservation of natural park and wilderness areas which – if turned over to land developers can never be recovered.” She continues, “in my opinion, Calgary is second to none in the the way it sustains its formal areas, such as parks and recreation areas. However, I do feel we must preserve natural and wilderness areas as well, in order to retain the heritage of this area, in this province. There is no shortage of land and green areas – both natural and formal are

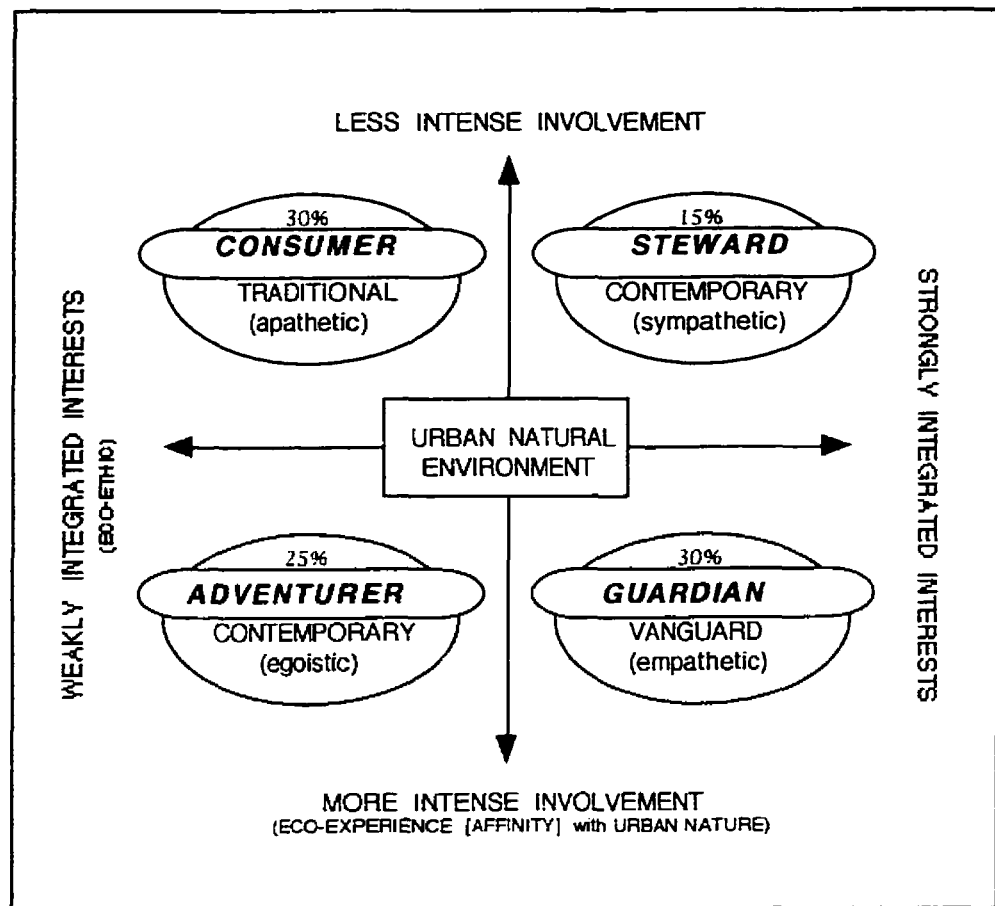
essential” (Case 026). In general, most of the Guardians responded to the question concerning experience with urban nature, with the majority expressing kinship-based meaning interpretations. This is consistent with the majority of the group selecting affiliation types of benefits as the most important. As well, the majority of members in this group are female and most are under the age of fifty.

Although the gender and age characteristics are independent of variables used to compose the groups, chi-square analysis shows that only age group is significantly related to eco-affect. Consequently it is possible to suggest that those in the Consumer group are more likely to be fifty years of age or older and those in the Guardian group are more likely to be younger than fifty years of age. The Adventurer and Steward groups display age profiles similar to the survey respondents overall, which is that a higher percent of respondents tend to be in the under 50 years of age category.

Eco-affect is a significant concept arising from this study in terms of contributing to the understanding of human/environment relationships. It forms the basis of the discussion concerning speculation on the manner in which the various modes could theoretically influence or define expectations for relationships with urban nature. Figure 29 (see next page) illustrates how the grid/group cultural theory informs this psychographic analysis.

By categorizing respondents on the basis of responses to questions designed to provide an indication of basic orientation toward the urban natural area park land, it is possible to test each group’s response profile to questions which suggest a specific kind of relationship with urban nature. These key indicators are: degree of support for strategies for the care and protection of urban natural areas; views on the funding priority of natural area park land; and voting choice in the referendum-style question on park planning practices. In all of the following cases, chi-square analysis confirms that the variations in response are more than would be expected by chance. The results suggest that in terms of relationships with the urban natural environment, the Calgary population is comprised of a mix of groups that hold views related to urban nature that range from ultraconservative to moderately radical, with the two extremes comprising about 30% of the population each and the middle moderates combining to form the most prevalent view.

**Figure 29**



**Psychographic Types and Eco-affect:  
Modes of relating to the urban natural environment  
(Developed by the author)**

At the conservative end of the spectrum, the psychographic profile of the Consumers suggests a consumption oriented relationship with urban nature in that almost three-quarters of the group are less inclined to support strategies that plan for the protection and provision of natural area park land. The group is, as well, comparatively non-sympathetic to the needs of wildlife in the city. This group does not see natural area park land as a funding priority and a significant majority of 60% feels that the current planning approach to providing community open space in Calgary provides an adequate supply of natural area park land. This stereotype profile accounts for approximately 30% of the respondents overall and is indicative of a traditional relationship with the natural environment in which nature is highly objectified.

For people grounded in a social context that is apathetic towards the natural environment, the experiences and resources of nature are used or consumed from the functional perspective of satisfying human wants and needs first and foremost. This is consistent with a view of nature as capricious in which individuals are not necessarily concerned with the fate of the natural environment, believing instead that nature is capable of looking after itself. In so far as respondents to the Nature in the City survey obviously have some interest in issues related to the natural environment, the placement of this group into the apathetic quadrant of the matrix is relative to the profiles of the other groups identified in the study. The truly disinterested likely declined to participate in the survey. Those who did respond are probably at the high end of the unconcerned population, but nonetheless are less concerned about and in some cases actively opposed to, human obligations towards maintaining the integrity of the urban natural environment.

The radical Guardians, on the other hand, see the natural environment as being in grave danger and feel that humans have a tremendous obligation to address such an intolerable situation. This is confirmed by the psychographics of the Guardians which suggest that they are the most pro-preservation of all of the groups. Approximately 80% of this group are classified as pro-preservation. The group displays a relationship with nature in which the natural environment is cherished. This nurturing orientation towards the urban natural environment is evident in that by far the majority of respondents support strategies to protect and provide natural area park land in the city. Members of the group especially, and overwhelmingly, endorse strategies to provide for the needs of wildlife, a fact that bears out the suggestion that an egalitarian social framework (which views entities of the system, or in this case an ecosystem, as having equal rights) fosters an empathic outlook on nature. As well, the Guardians show twice the support as respondents overall, three times the support of more moderate groups, and six times the support of the Consumers, for natural areas as a top open space funding priority.

In addition, the fact that this group demonstrates significantly more support for changing planning procedures in order to leave more park land in a natural state during the subdivision process puts this group at the vanguard<sup>15</sup> in terms of willingness to alter current leisure and lifestyle patterns.

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<sup>15</sup> Buttel (1975) used the term "vanguard" to describe those at the leading edge of environmental interests (Buttel 1975, 56). Axelrod (1994) would classify such individuals as having a "universal value orientation" in that his work shows only people with such an orientation would be "willing to incur personal sacrifice in order to protect the natural world" (Axelrod 1994, 103).

This ecological position is consistent with an outlook of nature as fragile in which there is serious concern about the long-term viability of the natural environment, especially in terms of its wildness. There is, as well, vigorous personal vigilance in seeing that every effort is made to provide as much opportunity as possible for the natural environment to flourish.

The middle moderate perspectives are less environmentally centred, believing instead in the inherent durability of the natural environment. The Adventurer group psychographics suggest a relationship with the natural environment in which the primary focus is contact with urban nature as a form of self-expression. Experience with nature is aimed at generating feelings of personal competency. In this respect the relationship is challenge oriented<sup>16</sup> and involves the commodification of the natural environment. The nature experience is considered to be a consumable product with an exchange value of self-esteem. This assessment is in part based on the group's ambivalence towards strategies to promote natural area park land as a land use and indecisiveness in favouring environmental, as opposed to activity, based opportunities for interaction with urban nature.

Comprising 25% of respondents, the profile of this group nonetheless most closely resembles that of the respondents overall. In this respect the Adventurer group is the most representative of the Calgary norm. This is consistent with Calgary's social climate being predominantly entrepreneurial, in so far as it is suggested that an entrepreneurial social context tends to precipitate an egoistic orientation towards the natural environment. In this context, nature is viewed as robust and able to withstand exploitation in the sense that everyone has the right to maximize and gain from interaction with the natural environment. The resource-based economy of the city, combined with easy access to a wide variety of outdoor pursuits, works with this normative position to establish the Adventurer perspective as one of two basic components in Calgary's mainstream or contemporary view of human/environment relationships.

The perspective represented by the Steward psychographic group comprises the other basic component of Calgary's contemporary relationship with the urban natural environment. Although sympathetic towards environmental concerns, as indicated by being more supportive of

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<sup>16</sup> This is readily apparent in a recent *Calgary Herald* article that notes the younger aged "adventurous males" accounted for all of the fatalities and most of the rescues in Banff National Park in 1996 (Andreeff January 03, 1997, page A1).

preservation strategies in general (and ones designed to aid wildlife in particular), Stewards favour the status quo in planning for natural area park land and do not see funding for natural areas as a priority. This is indicative of a desire to maintain a variety of outdoor recreation options, including, but not unduly emphasizing, opportunities for contact with nature in the city. Such a view is consistent with a social context that depends on hierarchical control to facilitate social functioning (and which is to some degree a basic characteristic of contemporary western society) in that the control-oriented approach to a relationship with the natural environment suggests that with proper management, nature is resilient enough to tolerate or accommodate a variety of human demands. At approximately 15% of respondents, the Steward psychographic type blends with the 25% of the population displaying an Adventurer psychographic profile to constitute a group that at 40% of the population is the most dominant perspective. The combined view is consistent with a moderate mainstream or contemporary understanding of appropriate relationships with urban nature which is reflected in support for the current management-oriented, market-based practices related to the provision of natural area park land.

In summary, the psychographic analysis shows that the current understanding of what constitutes an appropriate relationship with the natural environment varies in relation to the strength of integration of environmental interests with those of human interest and with the intensity of emotional and psychological experience with the natural environment (see Figure 29). Individual responses range from indifference to pressures acting on nature in the city to indignation over our failure to protect these natural areas from over or inappropriate use. Contemporary mainstream viewpoints co-exist with the traditional utilitarian outlook and the radical ecological perspective of the environmental vanguard. The radical vanguard are willing to make fundamental lifestyle changes in the interests of sustaining urban natural environments, while the traditionalists seem to be generally unconcerned. The contemporary moderates, although mindful of the harm that can result from inappropriate use of the natural environment, are nonetheless not willing to significantly change current planning practice in favour of creating more natural area park land that would be potentially less accessible and recreationally functional.

The concept of eco-affect that results from combining ethical perspectives on preservation of natural areas and general affinity for nature (as demonstrated through experience) data has implications for theory with respect to describing manifestations of relationships with urban nature



and for practice in terms of suggesting public expectations for park planning. In both cases it is not possible to take the liberty to say that the survey data shows that these factors cause a certain relationship or expectations to evolve. In fact, as cultural theory suggests, the reported behaviour and opinions may rather be as a consequence of preconceived understandings about urban nature that arise from the influence of the formative social environments of each respondent.

## **9.5 Conclusion**

In general, the results from this study suggest that aside from gender and age, which are indicators in some of the relationships tested, basic demographic factors such as education and income, and lifestyle indicators such as location of residence, household composition and park visiting behaviour, are not related to one's views concerning relationships with urban nature. This is consistent with previous research that suggests that due to the fact that concern for the environment has become so pervasive (Van Liere and Dunlap 1980),<sup>17</sup> most demographic variables are not very useful for explaining variations in attitudes towards environmental issues (Rodgers 1987). Overall the results of this study support the notion that in displaying a range of understanding about appropriate interactions with the natural environment, people are being influenced by different views of the world (Jolly 1993, Shaw-Jones 1992).

The idea behind this cultural analysis of social organization is that certain belief systems tend to generate certain kinds of social actions (Spickard 1990) and further that people with similar social experiences are likely to hold similar views of how the world works, or ought to work (Ibid.). In this view, the influence of social context provides a plausible explanation for why it is that individuals within the same culture display widely divergent views on appropriate relationships with the natural environment. Pluralistic societies such as is the case in Canada, and Calgary, have components of all of these kinds of social systems occurring simultaneously. But individuals find themselves in either personal or professional circumstances that more strongly resemble one or the other of the four basic orientations.

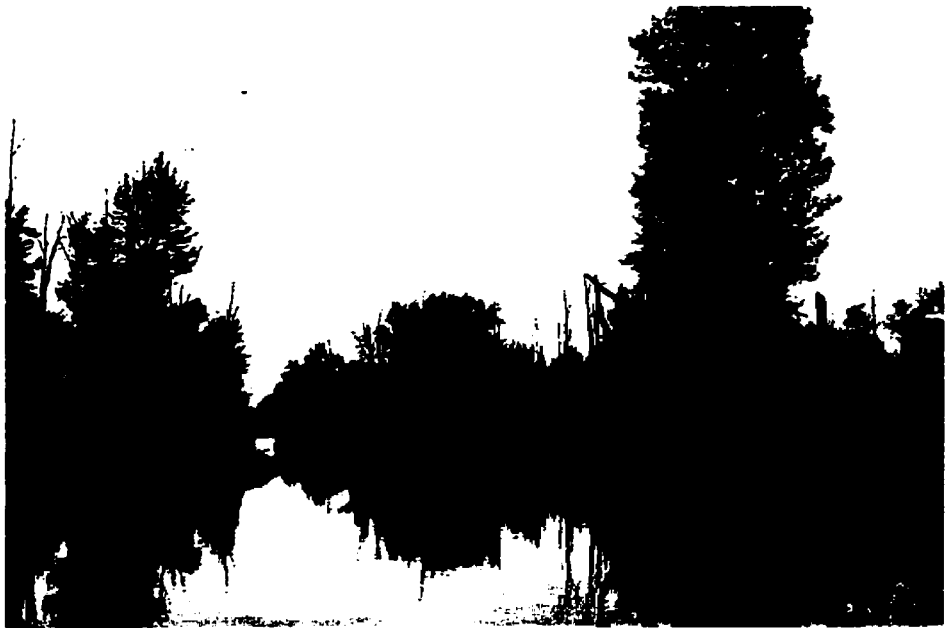
Keeping in mind that those who responded to the public opinion survey are at least somewhat interested in the state of urban natural areas, and noting that the majority of respondents who

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<sup>17</sup> Van Liere & Dunlap observed this in 1980. Luke (1993) reiterates that by 1990 environmentalism had become firmly established as a "legitimate or even mainstream" public concern (Luke 1993, 155).

reported on experiences with urban nature evoke utility-oriented meaning, it is suggested that the dominant human/environment relationship being expressed in Calgary today is a contemporary modification of the traditional object-oriented functional interaction with urban nature that can be termed *cautious consumption*. The traditional hard line utilitarian idea that the fruits of the land are in service to human enterprise has been modified through the generalized influence of widespread unease over the deteriorating condition of the natural environment. The culturally constituted and psychologically enduring tendency to consistently sentimentalize nature (see Chapter 3) also has had a moderating influence.

**Figure 30**



**A relationship of cautious consumption – Inglewood Bird Sanctuary  
(Photo courtesy of Calgary Parks & Recreation)**

A relationship oriented towards cautious consumption of the urban natural environment is typically an activity driven, place-based undertaking involving a fairly narrow range of conventional pre-packaged nature experiences that produce anticipated feelings of satisfaction and well-being (see Figure 30). There may be a willingness expressed to make some concessions that limit human activity, especially in areas believed to be “real nature,” but there is also the expectation that much of the city’s natural area park land will be readily available for people to enjoy. This view is

consistent with public sentiment concerning wilderness areas as well.<sup>18</sup> Differences in opinion over what constitutes a significant and truly natural area can be a source of public discord in monitoring and moderating consumption practices. Disappointment and conflict also arise when the various intentions that people have for their experiences can not be adequately accommodated.

This lack of accommodation may be as a result of constrained space, inadequate supply, differences in public opinion and so on. It may also result from a fundamental disagreement over expectations for a particular park, or for the natural areas in the city in general. For example, the results of this study show that while there is agreement on the part of Calgarians who responded to the survey that there should not be less natural area park land provided in communities, the general feeling of respondents is divided in terms of the way planning practices should provide public natural area park land. Almost equal percents (43% and 46% respectively) indicated that either current planning practice provides an adequate supply or that practice needs to be changed in order to provide more park land in a natural state.

As has been pointed out, and as the results of this study confirm, for some people at least, nature is not seen as being confined to a place, but is rather envisioned as being fully integrated into everyday life experiences in the city (Raglon 1991). The traditional objectified view of nature predominates still, but nevertheless exists side by side with both the kinship-based ecological perspective and the disaffected or disinterested view in which providing facsimiles of nature is seen as a waste of municipal resources. To make some sense of all of this, planners need to attend to the full range of expectations associated with nature in the city (Williams et al. 1992).

Park areas are expected to provide places and opportunities for people to express individual intentions in terms of experience with urban nature. As public places within cities, parks are a primary focus for this intention and as a consequence they precipitate a concentration of specific expectations and experiences (Relph 1976). In looking at the meaning that public space in general has for people who use the space, it has been suggested that for a person to have a meaningful experience, a place must satisfy certain requirements (Carr, Francis, Rivlin, and Stone 1992). As

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<sup>18</sup> The Four Mountain Parks Five Year Plan summary report on public involvement, done for Parks Canada, made the following observation: "While many respondents considered ecosystem based management a positive direction, equally as many people felt it was necessary for Parks Canada to remember that parks are for people" (Parks Canada 1994, 6).

this study confirms, to afford the opportunity for a meaningful experience to occur, places must be able to both encourage patterns of use that will allow bonds to form between the person and the particular environment and they must also be able to provide a high degree of freedom of choice for action in any given situation (Ibid.). In so far as it is able to satisfy these expectations, park land retains its meaning for people (Jackle 1987). In view of the range of inclinations towards interaction with the urban natural environment that this analysis has identified, what kinds of park planning policies are required to ensure that people are able to develop and maintain meaningful relationships with urban nature?

## **PART V: CONCLUSION**

### **CHAPTER 10**

#### **Reflections on Planning the Urban Naturescape**

##### **10.1 Introduction**

This study explored the ways people think about and describe experiences with urban nature. The ultimate purpose of the investigation is to suggest how park planning practice might better respond to contemporary expectations for the provision of natural area park land in the city. In addressing this issue the study sought to identify and explain factors that contribute to building relationships with the urban natural environment. The research question proposed that social context provides a framework in which culturally determined and individually experienced influences combine to create expectations for interaction with nature. The results of the study support this idea that social context is fundamental to shaping relationships with the urban natural environment.

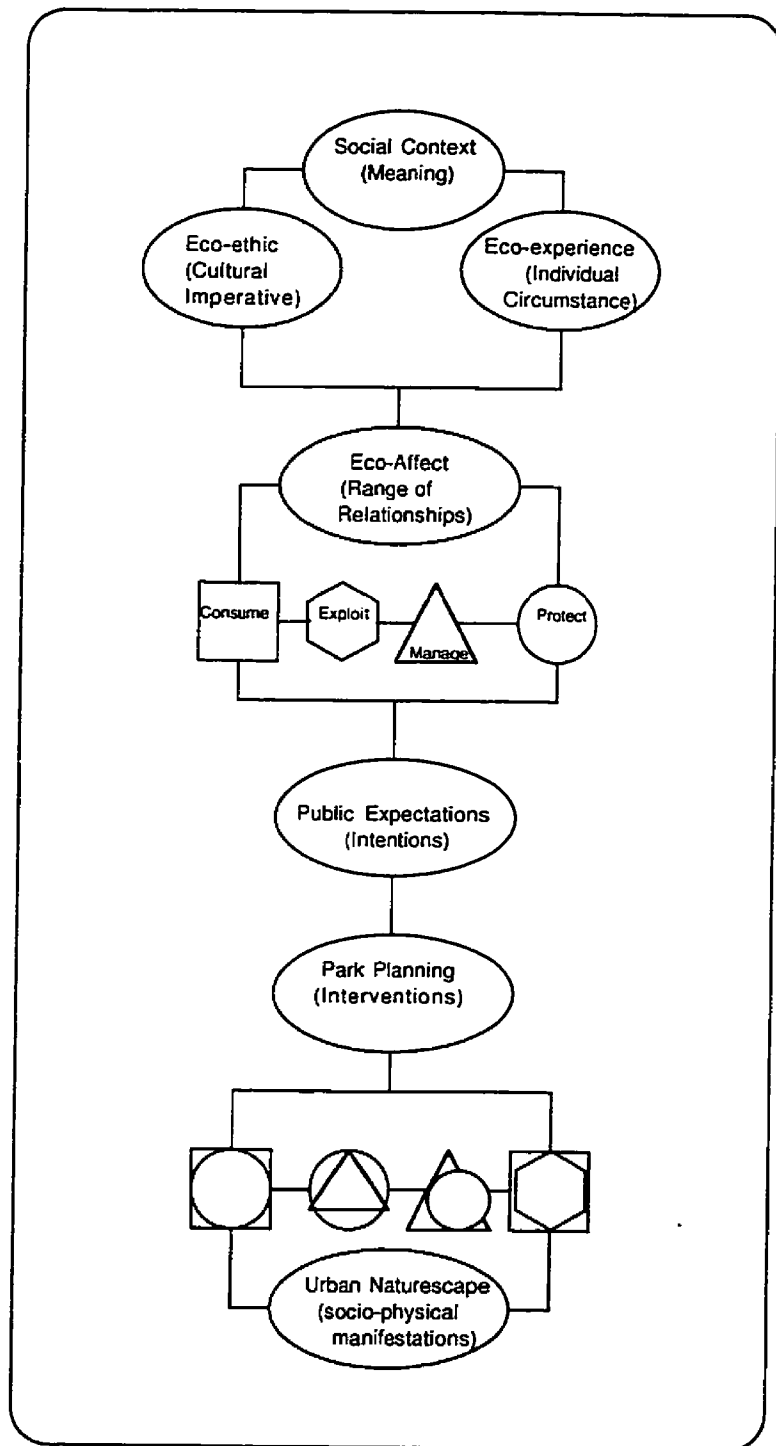
##### **10.1.1 Park Planning Process**

This study found that contemporary understanding of human/environment relationships is a complex product of both cultural imperatives and personal circumstance. This is consistent with the view that while affective bonds that people form with the external environment are more a consequence of investment of collective meaning than a matter of personal inclination (Cosgrove 1984), each person tends to assume his or her own perspective on what constitutes an appropriate way of relating to the urban natural environment (M.C. Rose 1976). It is suggested further that formal intervention is required to create and maintain representations of nature in the city that legitimately balance competing interests and that encourage the expression of relationships with the urban natural environment which can co-exist. Figure 31 (see next page) illustrates how park planning fits in this process.

Through the land rationalization system in place at any given time (McGinnis 1994) the opportunities presented by the physical configuration of the land and the social inclinations of the population come together to generate a community's public natural area park land system (Poracsky and Houck 1994). This relationship between the environment and social processes is reciprocal in that certain kinds of space invite certain kinds of interaction while at the same time a desire for a certain kind of interaction favours a certain kind of space (Dear and Wolch 1989).

Such reciprocity is evident when considering how park appearances and functions have changed over time. In Calgary it is demonstrated by the evolution of land use in areas such as Nose Hill or the river valleys.

**Figure 31**



**Understanding human relationships with the urban natural environment  
(Developed by the author)**

While much of what gives shape to a community's natural area system is initially a matter of chance and circumstance, the ongoing transformation is in no small part attributable to the urban planning process in general and park planning in particular. In the past, park planning has been based on a functional model directed at accommodating a variety of formal recreation activities. More recently it has assumed a biophysical model oriented towards excluding activities considered to be detrimental to fragile natural systems. The results of this study indicate that in order to respond to today's broad range of expectations for interaction with urban nature, park planning needs to move towards a model somewhere in between these two emulations.

In adopting a mid-range approach to park planning, planners will need to accept a few basic assumptions. First, the planner must support the idea that park land is, both literally and figuratively, the expression of common ground in the community. That is, not only are parks an example of land held in common (Martin 1993), but they are also evidence of the expressions of a common understanding (Carr, Francis, Rivlin and Stone 1992) about ways to relate to the urban natural environment. Second, the planner must be prepared to recognize that both social and biophysical factors need to receive adequate attention when attempting to assess the significance of an area. Although the tendency has been to focus on the biotic aspects that are more easily quantifiable, and therefore more measurable, there is a need for methods that take social and psychological factors into consideration as well. Finally, to adequately keep pace with changing public sensibilities, there is a need to keep in mind that generic designs which respond to narrow and exclusive possibilities for interaction are no longer appropriate (Nettleton 1992). Planners must instead be willing to develop an awareness and understanding of a full range of expectations that people have for relating to nature in the city.

### **10.1.2 An Overview of Significant Findings**

The findings suggest that there are four fundamental modes of relating to nature that are a function of different levels of interest and involvement with the natural environment. They also suggest that imbedded in each of these eco-affect modes is an expectation for a certain kind of human/environment interaction. In the extremes at least, ethical inclinations and affinity for nature are related to expectations for the provision of natural area park land. This is demonstrated by the fact that the high end eco-affect Guardian group favours maximizing the provision of natural area park land in a 2:1 ratio, which is almost exactly the ratio to which the low end Consumer group

favours the status quo. The middle ground's tendency towards an even split on the issue of the way natural area park land should be provided is less conclusive in this respect. The difference in preference patterns between moderate and extreme points of view is indicative of the principle vs situational based outlook on motivations towards preserving urban natural areas. The less impassioned moderate position is likely grounded in a more situational perspective in which numerous motivations are at work and in which no dominant principle relative to the natural environment prevails. But while the findings suggest that within a particular social experience interaction with the natural environment is a *reflection* of affinity for nature, the results do not confirm that interaction *defines* one's affinity towards nature. That is, although it seems reasonable to suggest that meaningful contact with nature predisposes one to have a greater appreciation of the urban natural environment, it is not possible to conclude from the results of this study whether people have a certain relationship with nature because of past experience, or whether being pre-conditioned towards having a certain kind of affinity toward nature produces a particular experience profile. Since there is some indication that direct and ongoing contact with the natural environment is not necessarily required to sustain a meaningful relationship with nature, this study tends to lean towards the idea that eco-affect is likely more of an indicator of holding certain views towards the natural environment than it is a predictor of what views will be held.

Together these trends show that, as with the landscape in general, a city's naturescape is fundamentally a social product (Conzen 1990; Dear and Wolch 1989; Massey 1993; Whitehand 1992) resulting from competing ideas on appropriate ways to interact with the environment (Relph 1976; Hersperger 1994; Hough 1994).

It is in developing an understanding of the possibilities for relationships with urban nature that this study makes its greatest contribution. Specifically, the study found that:

1. Urban nature carries with it the same expectations as wilderness in terms of anticipated effects of the nature experience. This implies that urban natural area parks must approximate ideal wilderness to meet these expectations.
2. Traditional romantic images and expectations of nature are strongly insinuated in the psyche of the Calgary public. There is a low tolerance for representations



that stray too far from conventional ideals and consequently the favoured park form tends to be fairly stereotypic.

3. Relationships with urban nature are not homogeneous. In contemporary situations a full range of interaction is acceptable. This interaction is diverse and no one form dominates. As a result of various social frameworks simultaneously occurring in the urban environment, a variety of views on nature co-exist.

It has been suggested that the strength of survey data is in measuring the status quo. It may not be as effective in imagining the reality of what could be.<sup>1</sup> This limitation was apparent in a park planning exercise in one of Calgary's inner city communities. When polled on where to situate a new park, the majority of people identified only the vacant lots in the area. But in an adjacent neighbourhood, planners worked with the community to identify the most appropriate location for a new park. The park was eventually developed in the centre of the community – but it required the purchase and demolition of two apartment buildings. This situation illustrates that planners have a role to play in exposing the public to initiatives that stretch the boundary of what is known. The information gathered from the survey in this study provides an indication of where the public is in its understanding of urban nature. It is a starting point from which to begin to create possibilities. The next section looks at each of the key findings in more detail and considers the implications for planning natural area park land in Calgary.

## **10.2 Re-defining<sup>2</sup> the Urban Nature Experience**

### **10.2.1 Re-orienting Expectations**

The first key finding of this study is that Calgarians expect the urban nature experience to generate the same feelings of well-being as are customarily attributed to being in contact with the natural environment in a wilderness setting. Even though, like many people who live in an urban area, Calgarians may have limited direct experience with wild nature settings (Weaver 1996), they expect to be able to realize the popular romantic notions of the wilderness experience. As with the

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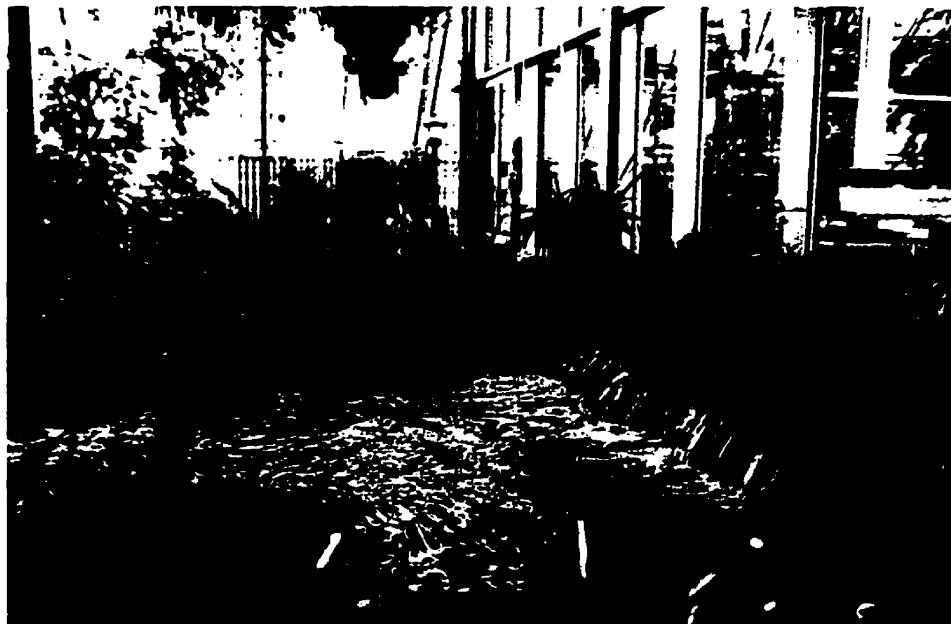
<sup>1</sup> Correspondence from Doug Paterson to the author, June 1996.

<sup>2</sup> The alliterations used in titling this section have been inspired by Green's (1995) use of a "hyphen to open up a word" (Green 1995, 382). She talks about the need for re-placing, re-positioning, re-pairing, and re-directing humans in nature (Ibid.).

wilderness experience, people expect to be able to enjoy a natural environment unmarred by human influence (Hierlihy 1990) and to gain a sense of relief from the mundane aspects of their everyday life (Kliskey 1994). They also expect to have a sense of no obvious intrusion by humans, except for those that discreetly control and contain the experience or selectively enhance the natural imagery.

This contrast between real and imagined sets up the paradox of artificial naturalism in that there is a tacit agreement to screen out the role of human enterprise in providing the opportunity to experience nature in the city. Such practice creates what has been referred to as a hyper-real experience in which “absolute unreality is offered as real presences” (Rojek 1993, 279) as for example is the case at Devonian Gardens in downtown Calgary (see Figure 32). This garden, on the third floor of a mixed use retail-office complex, is an indoor park which was originally planned to accommodate indigenous plant species.<sup>3</sup> The fact that local plants respond to seasonal changes and therefore do not necessarily look the same year-round became a limiting factor in developing the park and a major factor in the decision to use exotic plants instead to represent native species

**Figure 32**



**The hyper-real experience of Devonian Gardens  
(Photo courtesy of Calgary Parks & Recreation)**

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<sup>3</sup> From an interview with the Gardens Superintendent, D. Kroeker, March 1997.

(Schmaltz 1997). The garden is completely contrived but perfectly mimics an idyllic lush island nature experience. It takes six gardeners and close to a million dollars a year to maintain this illusion (Calgary Parks & Recreation 1995), but it provides a good enough simulation to evoke the sense of peace and tranquillity that urbanites so eagerly seek from contact with nature.

Although no one would suggest that places such as Devonian Gardens are real wilderness or perhaps even real nature, it is an extreme example of hyper-realism that can have disturbing ramifications. In providing an essentially perfect representation of an idea of nature, naturally occurring phenomena seem dull and boring in comparison. In this way hyper-realism reinforces the tendency of the traditional romanticized perspective of nature which fails to recognize the broad range of unremarkable yet decidedly uncontrived natural features in an urban environment, including the inobvious yet ubiquitous natural systems of air, wind, hydrology and so on (Whiston Spirn 1984).

The paradox of artificial naturalism inherent in simulation also perpetuates the myth that human agency is out of place in nature. Two important factors serve to debunk this view. The first is thinking that refutes the underlying assumption that nature is somehow more pure without human presence. This assumption fails to acknowledge that as life forms in an environment, human action and artifacts are a legitimate part of an existing natural system (Lynch 1981; Raglon 1991; Scherer 1994). While sentimentally appealing, the notion that there is a more preferred idyllic state that the world can return to is recognized as an essentially unrealistic longing (Dizard 1993). This is not to say that a simpler way of life is beyond possibility. However, even though we admittedly have gone to great lengths to set ourselves apart from forces of nature which we feel limit human potential, any solutions to what is considered a blight-full situation need to take into account the legitimate place of people, if only because it is human enterprise that will effect any changes.

This last point leads to the second factor which challenges the myth that the presence of people is unnatural. The myth ignores the role that humans living on the land have had in shaping the present environment. It has been pointed out that left to its own accord, nature does not need protecting if one considers that the full range of naturally occurring phenomena (from predation and invasion to spontaneous recovery of a species, for example) are a part of the natural process (Larsen 1992). It is more important to realize that it is human assessment and resolve in the past

that has shaped, both in positive and negative terms, the environment we know today. Although at some level Calgarians are no doubt aware of the fact that the city looks as it does due to the past history of human influence, it does not fully register that what is preserved as nature today or indeed what gets recognized as nature at all is a result of social and political action in the past. A case in point is Nose Hill Park.

Over the years Nose Hill Park has been subject to cattle grazing, horse stable activities, gravel extraction operations, utility infrastructure network functions, and proposed residential subdivisions.<sup>4</sup> In earlier times it was an important site for aboriginal settlement. At one time the proposed area of land to be preserved as a park was approximately one-third larger than the present site (Calgary Parks & Recreation 1993). Successive City Councils considered recommendations and finally settled on the present 1127.5 hectares (2,786 acres) as an appropriate sized specimen for preservation (*Ibid.*, ii). The area not included has since been subject to extensive residential development.

It would be arrogant to suggest that it is people who gave life to the possibility of a park at Nose Hill. But it can not be denied that the area was eventually preserved as a park through the efforts of people. Those who looked at the site as it was legally defined in 1973, and envisioned its future as a park, were instrumental in promoting the merits of preserving it for the benefit of the Calgary public. It is ultimately the social context of the time and the orientation of the public towards the particular circumstance that led to the recommendation to preserve Nose Hill in perpetuity. At a significant cost to the Municipal and Provincial coffers, the governments of the day concurred.

The stewardship impulse expressed in the sustained effort to save Nose Hill takes on another form in the example of Inglewood Wildlands. Situated on a reclaimed oil refinery site near downtown Calgary, most of the land in this park has been completely refashioned and given a fresh start by human hands. The impulse in this case is not to preserve and protect what was considered to be contaminated unproductive vacant land, but rather to regenerate an area in order to enhance its contribution to both human and non-human aspects of the environment. In the process it has become vested with purpose and meaning and stands as tangible evidence of the urge to renew human connections with nature (see Figure 33).

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<sup>4</sup> See VanSiri (1987) for a summary of the planning history leading up to the purchase of the land for public open space at Nose Hill.

**Figure 33**



**Inglewood Wildlands – Renewing human connections with nature  
(Photo courtesy of Petro-Canada Communications Services,  
Communications & Research, Calgary)**

It is not possible, however, to ignore the fact that in many respects the Wildlands is every bit as contrived as Devonian Gardens. Both sites confirm the idea that the parks we create serve to represent particular relationships with nature. With their dramatically different form and intent these parks also illustrate the full spectrum of opportunity we have come to expect in terms of relating to nature in the city. But while Devonian Gardens shows how we have sought to contain and make available for consumption a predictable and fairly static kind of experience with nature, the Wildlands demonstrates that we are also interested in establishing partnerships with nature that provide the opportunity for freely formed, dynamic interaction with the natural environment. Furthermore the decorative intent at Devonian means that nature is held captive and exploited for our exclusive enjoyment while the habitat rehabilitation intent at the Wildlands allows for a cogenerative and mutually enhancing relationship. In terms of human presence once the representations have been formed, in the one case as observers we stand separate and apart hoping to be entertained, in the other case as participants we co-exist working to sustain our common ground.

The reputation that humans have for running roughshod over non-human elements as they go about the business of living is, of course, responsible for maintaining the view that human presence in nature is not only disruptive, but wholly undesirable. But as the case of Nose Hill Park illustrates, like it or not, human socio-political influence is very much a defining feature of our shared environment. Furthermore, both Nose Hill and the Wildlands provide prime examples of how, through changing sensibilities, human agency can effect a beneficial and constructive contribution to the natural environment. Such stewarding of natural area park land provides an opportunity to re-orient public expectations that are based on the view that an absence of human influence is the ultimate goal to strive for in the urban nature experience, by suggesting instead, recognition of the role that human enterprise can have in creating and maintaining a viable urban environment.

Although in the past park planning has tended to reinforce the detachment of people from nature by catering to a built form that contains the environment, more recently it has considered ways to integrate the park experience with other urban systems. This move is in recognition of the interconnectedness of not only biophysical aspects of urban living (Hough 1995), but also of the connection between biophysical, social and institutional influences (Luymes 1993).<sup>5</sup> The growing popularity of specific initiatives such as trails and greenways, which serve both as concrete examples of and metaphysical metaphors for connections with each other and with the natural environment (Hiss 1990; see also City of Vancouver, Urban Landscape Task Force report 1992), reflects the shift from planning for providing discrete recreation settings to planning for connecting interdependent community systems (Schroeder 1995).<sup>6</sup>

Viewing the urban setting in what is essentially a habitat perspective allows that in general, but especially in an urban context, the natural and constructed elements of the environment will always co-exist. The important points to consider are how we see fit to balance the altered and unaltered components (Kemmis 1990) and how willing we are to accept the place of people in the overall

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<sup>5</sup> Some include metaphysical influences such as the practice of Feng-shui, which involves reference to the cosmos in siting buildings (Anderson 1996).

<sup>6</sup> Paterson notes that this is not a new concept (note to the author 1997 February). But field practice has tended to lag behind theory. Concern over market response to non-traditional park design and over changes to the standardized park land reserve dedication process may in part be responsible for this.

natural system. Park planning can play a part in attempting to satisfactorily resolve the latter by working to re-orient public expectations concerning human presence in the urban nature experience. This can be addressed by:

1. establishing a habitat approach towards open space planning and urban development in general which recognizes the integration of human and environmental interests;
2. taking into account local history and current sentiment in establishing what nature is to be preserved and acknowledging that while this may appear to be arbitrary, it is grounded in a certain social context and subject to a particular value system; and
3. negotiating to include a human presence as part of what is natural in the city and recognize the role of people in preserving park areas.

Together these factors comprise what has been referred to as an ecological framework (Luymes 1993) for planning urban parks.<sup>7</sup> As well, as is suggested in this approach, Merchant notes that an ecological outlook is fundamentally:

based on human interaction with the nonhuman world, recognition of the imbeddedness of humans in complex biological and social processes, and [acknowledgement of a] context dependence of particular ecosystems in particular times and places (Merchant 1992, 107).

The finding that Calgarians expect the urban nature experience to offer the same benefits a wilderness experience is thought to provide is important for two reasons. First, in establishing that people for the most part generalize their expectations for the urban experience from their idealized notion of the wild, the seeming irrationality of user preferences that exclude human presence is more easily understood. Irrespective of the potential limitations of the actual setting, people want to be able to feel like or imagine that they are miles from nowhere. Park planning initiatives

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<sup>7</sup> There is a similar approach referred to in the planning literature in general as environmental planning which is characterized by attempting to “accommodate human needs without compromising the ecological integrity of the environment” (Hersperger 1994, 26). The ecological framework described here is concerned with the reasonable integration of both human and environmental needs in an urban context.

provide an opportunity to re-orient such an expectation by working to accommodate this need in a way that respects the place of people in both providing and using nature in the city.

Second, in finding that one's outlook on the natural environment is likely generalizable to a range of settings, the results of studies related to wilderness motivations and valuation can be applied to understanding contemporary relationships with the urban natural environment.<sup>8</sup> So for example, the work that has been done in identifying market segmentation of nature travellers (Silverberg, Backman, and Backman 1996) or in speculating on the influence that the idea of wilderness has had on shaping the human condition (see Nash 1982; Oelschlager 1991; and Salisbury 1993), can be extrapolated to the urban setting. It can inform urban park planning by suggesting an array of intentions to relate to urban nature and appropriate facsimile situations in which to indulge in a satisfactory urban nature experience.

### **10.2.2 Re-forming Representations**

Another key finding in this study is that people tend to have a well-defined, fairly traditional idea of what constitutes a valid representation of nature in an urban context. Calgarians have in their mind's eye an image of nature that is somewhat static and stereotypic, characterized by smooth surfaced pathways winding through mature, healthy trees (free of deadfall and beaver gnawings), leading to tastefully mowed meadows, preferably with a breathtaking vista view of the city skyline at an appropriate distance. Aside from the fact that the possibilities for other images to become established may be limited, these are not unreasonable imaginings to hold about nature in a city. However, there is a curious hesitancy to recognize that the urban nature experience accessed as a leisure opportunity by people can be, and is often, essentially contrived to conform in shape and intent to a certain notion of nature. Only a few respondents to the survey done for this study seemed ready to acknowledge that a city confines and defines their possibilities in terms of experiencing nature at its most natural.

Thayer has remarked that our modern day life is so mediated by technology that certain landscapes are in danger of losing their authenticity. He goes on to ponder how is it possible to know when

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<sup>8</sup> Hamilton-Smith has a study in progress in Australia (as of March 1997) that will permit a comparison of self-reported benefits of the nature experience in terms of the type of nature setting. He anticipates being able to provide three types of settings to compare, from urban through to wilderness (correspondence from the author, March 1997).



such a thing has occurred, and more importantly, asks “does it matter?” (Thayer 1994, 86). Indeed, it does not seem to matter to most of the survey participants, as few indicated that the meaning of their nature experience was anything but very personal and based on encounters with real nature. However highly mediated or infused with technology or artificially managed to conform to popular imagery and expectations, Calgarians seem willing to grant natural area park land in the city status of being a genuine imitation of the real thing.

It has been suggested that human beings have in common a physiology that influences perceptual possibilities in terms of interpreting environmental experiences (Hartig and Evans 1993). In saying that the reason why humans prefer certain views is related to some environments being more conducive to species survival strategies than others (Appleton in Hartig and Evans 1993;<sup>9</sup> see also Herzog 1992; and Chipeniuk 1994), regardless of whether they actually make a difference to survival today and, it is implied, that we are genetically conditioned to appreciate certain environments over others. Consequently it has been suggested that physiological reactions to these preferred circumstances precipitate predictably positive affective responses (Kaplan and Kaplan as cited in Herzog 1992, 238).

The traditional positivist perspective is that humans are essentially programmed to prefer certain ways of organizing space – so it must therefore be possible to discover rules (or truths) that allow features of the preferred environments to be reconstructed at will. This creates a sense of control over both an experience and the environment and optimizes a certain view of the rightness of things in the design and management of both natural and built spaces. In park planning the application of the generalized aesthetic guidelines leads to the provision of generic settings and the belief that it is possible to construct a park in any number of ways in any number of locations.

Although researchers are skeptical about this evolutionary perspective, work in environmental psychological landscape assessment has in the past supported the notion that human response to certain environments is to some extent predictable (though not necessarily genetically determined), especially with respect to the North American tendency to prefer natural scenes to built ones (Ulrich 1983). Whether or not one accepts the evolutionary explanation, the cause/effect reasoning

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<sup>9</sup> The citation provided by Hartig and Evans (1993) is: J. Appleton. 1975. *The experience of landscape*. London: Wiley. The original source was not consulted.

is – either by habit, ease, or human need to believe in the rational order of things – at the heart of classic and contemporary approaches to park planning. Although there might these days be some debate over whether it is possible to simulate a “real” nature experience.

One of the reasons that generic park design and stereotypic imagery are able to fulfil a city dweller’s need for contact with nature is that meaningfulness is not merely a function of physical form. The essence of place that is so strong in Calgarians’ understanding of urban nature is consistent with the idea that places grow out of a blending of factors (Steele 1981), such as the unique lay of the land, contemporary iconography, and individual imagination and memories (Jackle 1987). Most of the experiences with urban nature that survey respondents described as meaningful contained aspects of what has been recognized as “The High-Quality Place Experience” (Steele 1981, 202-203). That is, people take immense pleasure and satisfaction in being somewhere that makes them feel good, lets them do the things they like to do, and allows for interaction with others, either in the form of contact with wildlife or being with family or friends. In this respect it is of no great concern that certain aspects of the physical context may be a simulation. For some people artifacts are important only in so far as they provide a focus for the vesting of meaning and for the opportunity they afford to represent ways in which we relate with the world (Csikszentmihalyi and Rochberg-Halton 1981).

The evocative abilities of the mere suggestion of nature in urban parks is likely responsible for the prevalence of traditional aspects of park design and development. With an emphasis on containment, order and access in physical form (Gladysz and Egan 1986), each individual is free to invest personal significance and meaning arising from her or his own particular conditioning and circumstance. Although the multiple function of urban open space has been recognized for some time (Gold 1988), the recent shift in park planning attention from an activity-based to an urban ecology approach (Platt 1994a) may produce space which is less emotionally and physically accessible. For example, areas that are used to manage the flow and aeration of storm water may not be acknowledged as nature. It follows that urban park land stands to lose some of its appeal as a place in which to vest personal meaning. As a consequence, there is a need for park planning practice to re-form representations of nature in a way that recognizes the meaning of the growing diversification in functions of urban park land. It is important that the public come to appreciate

urban nature as more multipurpose, less orderly, and configured differently than is presently the case.

Park planning policy in Calgary has over the past few years begun to seriously address these issues. In terms of promoting the acceptance of multiuse of natural areas, work continues on looking at ways to sensitively combine protection of environmental reserve land with storm water management and the provision of urban wetlands. It is also possible to find community gardens adjacent to traditional manicured parks and a relaxation in the cutting standards for certain boulevard areas.<sup>10</sup> The time-honoured practice of “zoning” park areas for different levels of intensity of use continues to encourage multipurpose uses as well, although the tolerance for the range of intensity has lowered somewhat. This last point is evident in the *Working Draft* of the *Fish Creek Provincial Park Management Plan* where there are recommendations to change legislation in order to ban all off-trail cycling in the park (Natural Resources Service: Parks 1996).

**Figure 34**



**Play field area fully drained**



**Same area after inundation**

**Storm water management – non-traditional park forms  
(Photo courtesy of Engineering & Environmental Services, City of Calgary)**

Perhaps one of the more controversial initiatives aimed at re-forming traditional images of nature in the city is policy directed at park land naturalization. Described as “a process of ecological restoration that encourages the natural environment to return to urban areas” (The Evergreen

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<sup>10</sup> According to Balmer (1991), this move towards more informal environments is expected to have a major influence on the delivery of parks and recreation services in the future.

Foundation 1994), naturalization is championed by both grassroots citizen organizations interested in regenerating urban areas and practitioners concerned over inappropriate and insensitive maintenance practices (Paine 1993). Also supportive are proponents of policies encouraging an active lifestyle. Studies have shown that natural area park land provides one of the better opportunities to take part in popular leisure pursuits such as walking for exercise and pleasure (Granger 1990). Opponents of the practice of park land naturalization suggest, however, that giving free reign to natural forces threatens the cultural legacies of traditional urban park areas (Paine 1993; Berman and Weil 1992). Still others take the middle ground and suggest that while naturalization practices (like those described earlier for the Wildlands) are essentially a form of imitation or replication, they nonetheless make an important contribution to re-establishing relationships with the urban natural environment (Merchant 1991).

**Figure 35**



**Park naturalization process: less tidy, more natural  
A local inner city boulevard, June 1997  
(Photo by Alister Thomas, personal collection of the author)**

Public opinion is divided on the matter as well. In a recent Canada-wide survey, 40% of respondents reported that acceptance of naturalization practice in their community was good and 30% reported it was not well accepted (The Caliburn Group 1995). Although the rate of not being well accepted was lower in the Prairie provinces (at approximately 25%), the level of acceptance was similar at 40%. The Prairie provinces reported that approximately 30% of responding communities had naturalization policies, which was similar to the national average, but below the 60% reported by Ontario communities (Ibid.). Most communities also reported that they did not have a specific public awareness or education program to promote the idea of naturalization. Calgary's *Natural Area Management Plan* recommends a variety of techniques to more appropriately manage natural area park land. It does not, however, advocate the systematic reclamation of previously disturbed or developed areas. It also does not remark on the growing interest in the naturalization of school yards apparent in other cities in Canada (The Evergreen Foundation 1997). So that while there appears to be general support for more sensitive and less invasive maintenance practices, support for a complete reforming of traditional park areas is not widespread. The initiatives deemed to be appropriate do seem to be having an influence on relaxing the public's concerns about how disorderly (or untidy) a more naturalized environment may appear to become (see Figure 35, previous page).

In terms of policy initiatives aimed at a general reforming of traditional perspective on community design, Calgary City Council recently granted trial approval of proposals in a *Sustainable Suburbs Study*.<sup>11</sup> The Study follows the main principles of sustainable communities (see Grant, Manual, Joudrey 1996 for a good summary) that are directed at encouraging more fiscally manageable, socially equitable, and environmentally conscious lifestyles (Planning & Building 1995). For specific open space policy recommendations, it provides guidelines for restructuring community open space in a way that acknowledges the role that natural systems have in shaping community life. But as the results of this study show, public opinion is divided on whether park planning practice should be changed in this manner – with a narrow majority of Calgarians favouring the status quo (46% compared to the 43% who voted for such changes). Even though there is evidence to support the idea that in general people would like to see a more ecologically based approach to urban development, which provides ample opportunity for greater contact with the

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<sup>11</sup> This study won a Canadian Institute of Planners 1996 Award for Planning Excellence.

natural environment (Chenowith & Gobster 1990; Carr, Francis, Rivlin, and Stone 1992; and Thayer 1994), at issue is the potential loss of the traditional variety of park space close to home.

Leaving more park land as a connecting natural system reduces the amount of space that can be claimed for play field and tot lot development if the current reserve dedication guidelines remain the only means of acquiring community open space. Theoretically there is the option of supplementing park space taken at the time of subdivision with direct purchase of additional land for play fields. But current agreements with the school authorities and the development industry favour traditional configurations and present municipal fiscal policy does not favour the routine use of additional expenditure of tax-based funds as a way to provide local open space. However, other recommendations in the *Sustainable Suburbs Study* have proved to be more contentious.

Contained in the Study are approved guidelines from *GoPlan*, the City's new transportation plan which requires more dense residential development (seven units per acre). The Study also has recommendations calling for narrower streets to accommodate such development. Yet when these proposals were brought forward in the context of an actual subdivision plan, they did not sit well with area aldermen.<sup>12</sup> While the development industry has suggested that the change to higher density should be more gradual, they have indicated that narrower roads would allow for more innovative design responses. For the time being Council members remain reluctant to support changes in the current road design. As this incident highlights the success of the sustainable suburbs initiative will depend on a public and political willingness to adapt traditional expectations for both the inclusion and exclusion of the usual kinds of images and artifacts to which we have become accustomed.

### **10.2.3 Reconciling Relationships**

The final key finding of this investigation is that there is no single dominant mode of relating to the urban natural environment. Instead, a range of relationship options simultaneously co-exist in the public domain. What this study suggests is that present day relationships with the natural environment are highly personalized. Further there is no clear cultural imperative defining the most appropriate or acceptable way for a person to relate to the urban natural environment. It seems that

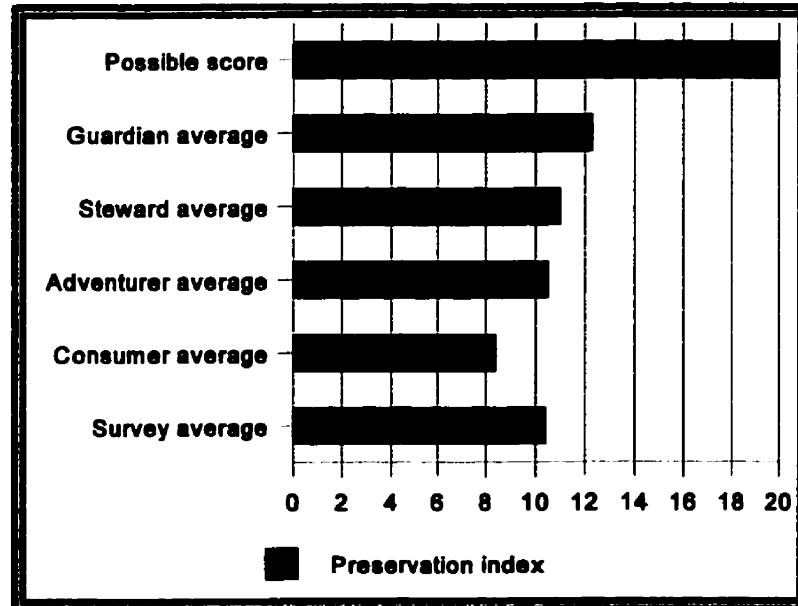
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<sup>12</sup> Article by David Pommer, "Move towards denser suburbs worries aldermen, developers," *Calgary Herald*, March 24, 1997, B3.

volitional behaviour is a second order of magnitude social function that is governed by the cultural imperatives concerning individual rights and freedoms; such relationships with nature are established and maintained through the politics and contingencies of any given situation. So while the range of meaning that nature experiences have for people is culturally defined and fairly narrow, the ways in which the urban environment can be enjoyed or manipulated are to a great extent a matter of personal discretion. As to what any one person sees as an appropriate way of relating to urban nature, it seems to be a consequence of individual orientation and circumstance.

To give shape to these diverse orientations, this study identifies four types of human/natural environment relational modes grounded in the different social context and circumstance of the individual. These are: Guardian, Adventurer, Steward and Consumer. These four ways of interacting with the urban natural environment form a spectrum of interactive eco-affect modes. At one end of the range of relationship profiles are more frequent users with an ecological perspective that feel a sense of kinship with nature and prefer more natural areas. At the other end are more occasional users with a pragmatic perspective on environmental concerns who show less affinity

**Figure 36**

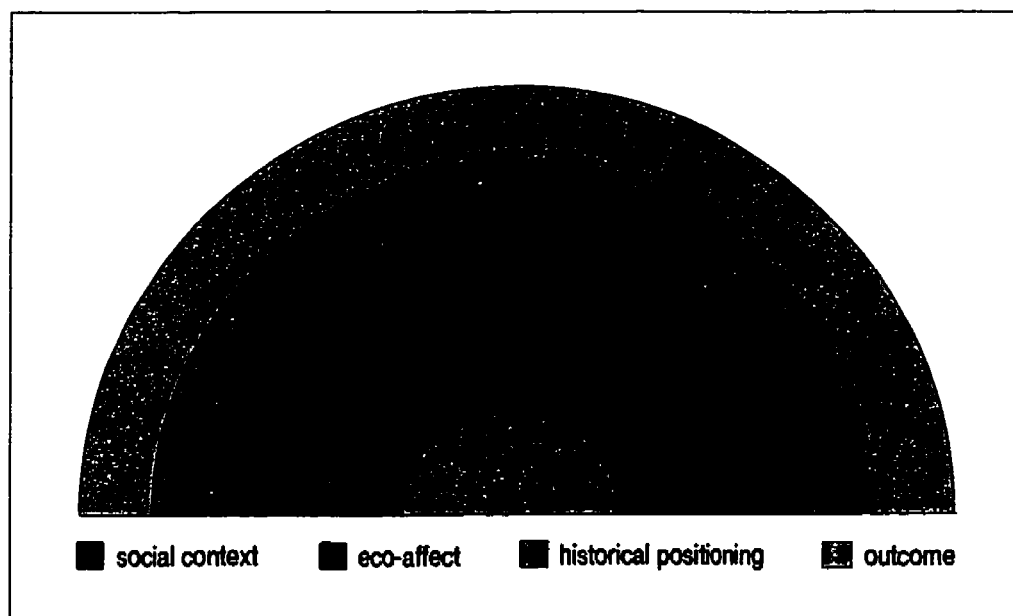


**Comparison of support for preservation scores  
(Developed by the author)**

for nature and have a more personally oriented, utility-based appreciation of natural areas. Figure 36 (see previous page) shows the relative positions of the four groups in terms of ratings on the study's index for the support of strategies to preserve environmentally sensitive areas.<sup>13</sup>

This comparison suggests that while Calgarians in general are not insensitive to arguments in favour of more vigilance in protecting environmentally sensitive areas, like others have found (Dunlap 1989), most do not wholeheartedly embrace a radical environmentalistic approach to regulating interaction with the natural environment. Whether this is due to a failure of the environmental movement to capture widespread support (Friedmann 1989; Dowie 1992) or to related issues involving the specific environments, or to general concerns in community life (Gottlieb 1990), Calgarians tend to adopt a more moderate viewpoint, characteristic of a conservationist perspective. This view is based on the understanding that a balance of interests is not only possible, but preferable to a strict focus on preservation (MacLean 1995). The result is a mindful, though somewhat diluted, eco-ethic shaping interaction with the urban natural environment that can be termed *cautious consumption*. In this way of relating, people individually

**Figure 37**



**Simultaneously occurring relationships with urban nature  
(Developed by the author)**

<sup>13</sup> The responses to five questions were used to calculate the preservation score (see Figure 39). The question concerning the appropriateness of prohibiting human use was not used in this calculation, as it was one of the variables used in the cross-tabulation that established the four groups.



draw benefit from interaction with urban nature in a manner they feel does not compromise the environment's ability to sustain itself. Figure 37 (see previous page) illustrates how the various mode components identified in the study relate to one another in creating a generalized outlook of cautious consumption.

An individualistic consumer orientation towards the natural environment has a number of drawbacks in terms of impact on community life. It inhibits the creation of collective meaning, which is a common problem in deciding what landscapes to conserve (Cosgrove 1984). In catering to popular product preferences, it creates the expectation that recreation settings can and should be manipulated at will (Schroeder 1995) and it encourages self-interest and power struggles in resource allocation (Greider and Garkovitch 1994). All of these factors are potentially conflict-inducing features of a pluralistic system of community decision-making (Bruner 1990) in which elected officials work out what seems to be the most generally accepted way to proceed in any given situation (Schumaker 1991; J. Patterson 1995).

The efficacy of this method of creating communities in terms of establishing an urban natural park land component has been demonstrated over the twenty years it took to secure Nose Hill as a park. The characteristics of the system that initially seem cumbersome – a long and involved approval process; indecision over the relative weight of public vs private interests; and the changeability of any given decision in terms of the influence of public and political opinion – are actually beneficial in a situation where maintaining the status quo serves to achieve the same or better objectives than a formal change in circumstance would. Inaction weighs in favour of keeping natural areas natural from two perspectives. Not only can the area be enjoyed while the decision-making process takes its course, but the longer the process, the greater the opportunity for support to build through more people developing a significant relationship with the site.

This process of balancing interests continues in much the same way in Calgary today as the recent case of an area known as Paskapoo Slopes<sup>14</sup> suggests. The original Council approved conceptual plan for the area including the Slopes identified 189 acres of the total 490 acre area as

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<sup>14</sup> Paskapoo Slopes is included in the Calgary West Area Structure Plan which covers the area west of Canada Olympic Park in northwest Calgary.

environmentally significant.<sup>15</sup> The local preservation society wanted 100% of the significant lands preserved as open space. While some of the sloped area would likely qualify under current legislation as Environmental Reserve,<sup>16</sup> much of the area is developable. Council eventually decided to preserve – either through normal reserve dedication or outright purchase – approximately 60% of the significant lands and put an additional 30% or so under policy review. The remainder was not protected.

This decision produced winners and losers. The local supporters and presumably Calgary's vanguard group of environmentalists were pleased, but developers in general and some land owners in particular no doubt would have preferred to be able to maximize residential development in the area. As one alderman observed,<sup>17</sup> the decision is notable in that no other plan has protected so much area to potentially remain in its natural state. This case illustrates another aspect of decision-making in pluralistic systems. In siding with the half of the population that this study suggests would like to see more natural area park land taken as reserve, the present Council is tipping the balance in favour of instituting a new norm in local park planning.

Theoretically, as the Paskapoo Slopes case shows, in a classic pluralism model every interest has access to the decision-making system designed to promote compromise (Waste 1986). In practice methods such as public hearings can encourage non-cooperative behaviour and solutions (Kemmis 1990). Although in this situation a compromise was worked out that was satisfactory to most parties involved, it was still accomplished in the tribunal model of setting responsibility for decision-making with a judge rather than through a forum in which all parties participate in a dialogue and accept some of the responsibility for coming to a viable solution.

In addition to the constraints that traditional methods such as public hearings place on resolving resource allocation conflicts, outdated objectives hinder urban open space system planning. Traditional approaches seek to maximize diversity in outdoor recreation activities while providing adequate biophysical protection (Wright, Braithwaite, and Foster 1976). However, the range of

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<sup>15</sup> Article by David Pommer: "Council compromise on Paskapoo praised," *Calgary Herald*, March 19, 1997, B2.

<sup>16</sup> Environmental Reserve (ER) requires land unsuitable for development to be dedicated to public ownership.

<sup>17</sup> Pommer, David "Council oks plan to preserve open spaces at Paskapoo Slopes," *Calgary Herald*, March 18, 1997, B6.

relationships identified in this study suggests that while this is still the case for the majority of Calgarians, about one-third are moving towards the ideal of maximizing protection of biophysical resources while providing adequate recreation opportunities.

An alternative way of synthesizing diverse expectations for an appropriate balance of social and biophysical interests is to work at establishing common ground for relating to the urban natural environment. This can be a formidable task in today's politically complex situations.

Nonetheless, a reasonable goal would be to identify a core of agreed upon expectations (Anderson 1996) that at minimum considers possible limitations required to temper the cumulative affects of maximizing individual benefits from interaction with urban nature. An example of this kind of agreement is the decision by Calgary City Council to support citizens wishing to prohibit power boating on the Bow River (except for emergency vehicles). Coming to such an understanding requires drawing on the broad base of experience inherent in diversity (Green 1995) in a way that looks for similarities rather than differences (Geertz 1973). While would-be jet skiers may feel limits on their personal preference for interacting with the natural environment, the public desire for boating access to the river is maintained and a certain quality of experience is preserved for everyone.

Common ground in establishing appropriate relationships with the urban natural environment is important for the contribution that it makes for the idea of community. Shared memories and experiences such as those of a quiet boat ride down the Bow are what essentially constitute a contemporary notion of community (Carr, Francis, Rivlin and Stone 1992; Gurstein 1993). This idea of community in turn is influential in shaping the way we perceive ourselves and our environment (Revill 1993). If our experience in Calgary is enjoyment of a landscape that has been generated in the past by a balance of interests that strive to protect environmentally significant areas while ensuring reasonable human access, we have a collective sense of being environmentally conscientious. Such common ground provides an opportunity for the creation of what has been described as "truly public spaces" (Francis 1988, 57) – "those that have shared meaning, invite access for all, encourage use and participation, and are well cared for by their users" (Ibid.).

Although not entirely smooth and conflict free, the park master planning process utilized in Calgary in recent years has proven to be effective both in contributing to a sense of community and in

reconciling different understandings that people have for appropriate interaction with urban nature. Recent work in natural resource management recognizes that planning processes which involve situation-specific negotiations that attend to a full range of both intangible and material concerns (Patterson 1993), are more appropriate for addressing highly emotional issues such as those precipitated by environmental preservation concerns. Calgary's current park planning process has been reasonably successful at establishing a forum for negotiating suitable resolutions to widely divergent views. It has also served to limit realization of certain individual preferences, such as being able to walk one's dog off leash, in the interests of creating a common ground of a somewhat more constrained experiences. Part of the success of the park planning process is that the process itself produces groups and individuals committed to a plan's way of looking at things (VanSiri 1987). The *1994 Urban Park Master Plan* was particularly effective in this regard. It was also effective in reconciling a wide variety of expectations for interaction with the natural environment in the river valley area of Calgary.<sup>18</sup>

In addition to establishing a vision statement and basic principles to guide development of the river valley park system in Calgary, the Plan proposes "the establishment of a park system along the river valleys that is essentially comprised of three park types" (Calgary Parks & Recreation 1994c, 27). Each site along the various waterways running through Calgary has been designated as one of the following kinds of areas:

- Preservation:** designed to provide protection and maintenance of currently undisturbed natural areas and enhancement of existing natural features. Human access to these areas would be limited.
- Naturalized:** designed to rehabilitate previously disturbed areas for less intensive park use; to create a more natural appearance through the re-establishment of native vegetation, and to reduce long term maintenance requirements.

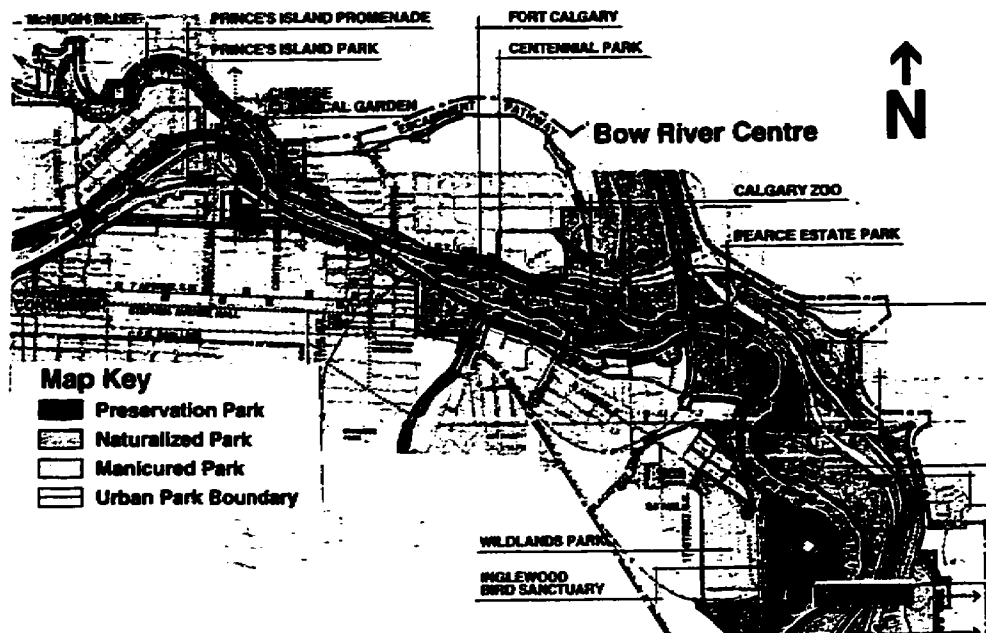
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<sup>18</sup> For the information of the reader, the author was not involved in the development of this Plan. I did work with the consultant who produced the Concept Plan that was the precursor to the project and I consulted extensively in the research design and data collection stages of the public opinion survey (Pulse on Park) used in the planning process. I have worked on various phases of three of the major park master plans over the past five years, but due to the commitments of my program of study, I have not seen one through from beginning to end. The three plans and my involvement were: assistant to the lead planner in the Nose Hill Park Master Plan Review; supervisor and co-conductor of the Inglewood Bird Sanctuary Master Plan public consultation component (consultant prepared plan); and interim planner for the first phase of the Prince's Island Park Master Plan, following Council's rejection of a consultant-produced Prince's Island Park Redevelopment Plan. The Draft Fish Creek Park Master Plan was under the jurisdiction of the provincial government.

Manicured: designed as the traditional high-maintenance groomed park, for areas that will be used intensively for activities such as outdoor sports, picnicking, holding festivals and other gatherings where large numbers of park users are anticipated. (Ibid.)

Figure 38 shows the park types at various locations along a section of the Bow River Centre Segment of the Plan.

Figure 38



**Negotiating interests through park master planning  
(excerpt from page 85: Bow Centre Master Plan, *Urban Park Master Plan*)**

A biophysical assessment, concerned with evaluating the suitability of an area for wildlife habitat, formed the framework for developing the Plan's recommendations (Calgary Parks & Recreation 1994c). However, the balance that the Plan achieves in terms of "preservation and protection of natural resources, and the use and enjoyment of the river valley park" (Op. cit., 27) is a result of reconciling the biophysical assessment with the socio-cultural assessment that is an implicit product of extensive public involvement in a planning process. The *Urban Park Master Plan* (UPMP) had a high public profile with over a thousand individuals and groups involved to various degrees. In addition, more than 45,000 Calgarians responded to the Pulse on Parks public opinion survey, all of which provides a well-defined assessment of socio-cultural significance of the various issues.

The drawbacks of this process are that it can be costly (the public survey alone for UPMP cost over \$100,000), time consuming, and, due to its timelines and specific interest, potentially at odds with existing corporate policy (as the UPMP is in some cases). But there are features of park master planning that nonetheless reinforce its suitability as a process for reconciling different expectations for relationships with the urban natural environment. A strong political mandate to proceed, relevant and reliable technical information, extensive and intensive public participation, and planners committed to principled, yet flexible, situation specific negotiations are all essential ingredients to generating policy that is capable of creating common ground in the reconciliation of diverse interests in the urban natural environment.

The results of this study can serve to establish a starting point for revisiting the urban nature experience in a community. In finding that there is a need to re-orient public expectations so that human presence in nature is appreciated, a need to promote the reforming of parks to accommodate a broad range of functions, and a need to strive for common ground through the reconciliation of a variety of interests, the parameters are set for planning urban natural area parks that can more accurately reflect the realities of city life. While this perspective is by no means revolutionary to park planning, it does provide a basis for examining the underlying assumptions currently directing the process which have not been fully explored. The concluding section, which follows, summarizes the various assumptions that can, do, and should guide park planning and identifies issues that require further study.

### **10.3 Planning the Urban Nature Experience**

#### **10.3.1 Park Planning Models**

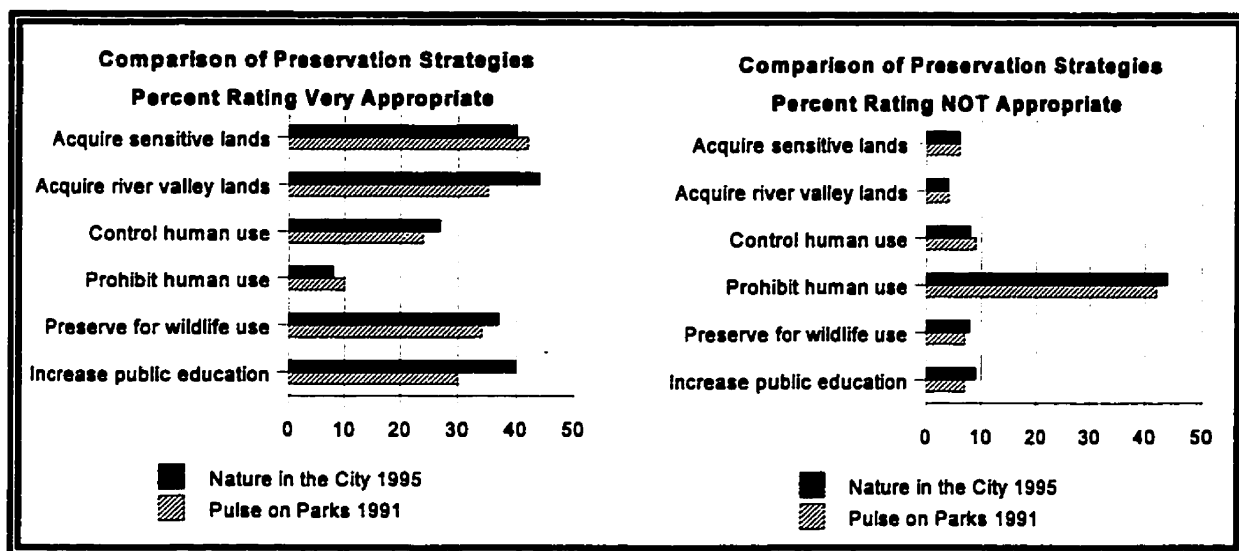
The traditional approach to park planning is an activity-based model that focuses on accommodating a range of specific recreation and leisure interests. It employs a space-based perspective that assumes that any site can be manipulated as required. In reflecting a traditional consumer or spectator/observer relationship with the natural environment, this approach also assumes a fundamental separation between people and nature. The model is subsequently expressed in park planning policy that favours standardized parks created as amenity space in a community.

The more recent biophysical assessment model for planning parks is also based on accommodating

a narrow range of purpose and function. It is oriented towards preservation of selected species and assumes that human influence is detrimental in this regard. It also assumes a fundamental separation between nature and people. The model is expressed in park planning policy that creates highly rationalized and potentially isolated pieces of nature within the community.

These approaches have in common the fact that they represent the typical range of professional priorities concerning ideas about contact with nature (Foresta 1980; Hubbard 1994) and about managing the pace and kind of change in the natural environment (Worster 1995). Furthermore, the results of this study show that the traditional activity-based model and the more recent biophysical model are both, to some extent, meeting the needs and expectations of the public in terms of opportunity for contact with nature. This is confirmed by the wide range of experiences reported on by respondents and by the differences in opinion concerning preservation of natural areas, especially with respect to restricting human access to natural area parks (see Figure 39 ).

**Figure 39**



**Longitudinal comparison of responses to preservation strategies  
(Developed by the author)**

Insofar as public opinion surveys should be used to inform rather than prescribe public policy (Bourassa 1991),<sup>19</sup> the results of this study suggest that although the majority of Calgarians clearly are currently able to satisfy their desire for contact with nature in the city, the underlying

<sup>19</sup> It has been suggested that in terms of quality of landscape preferences, the public may in fact be rather ill-informed and therefore may not be the preferred source of opinion on such matters (Penning-Rowse 1986).

assumptions of planning natural area park land need to be reviewed if the process is to continue to be effective. With increased competition for urban land, less interest in creating and maintaining public systems and greater diversity in expectations for interaction with the urban natural environment, the present land base will not easily be able to accommodate an approach based on the segregation of human and natural processes.

The emerging ecology-based model for park planning has the potential to offer an alternative. Although this model currently tends to be overtly environmental in its outlook (see for example Hough 1994), it is suggested that by emphasizing the habitat aspect inherent in the model, there is an opportunity to consider and balance the needs and interests of both people and the natural environment. The habitat model of park planning assumes a place-based perspective in which the provision of natural area park land is customized to circumstance. Park land is therefore unevenly distributed throughout the community, providing less assuredness in both configuration and supply. This approach reflects a relationship with urban nature in which interests are integrated. Table 11 outlines how the habitat model compares to the activity and biophysical models.

**Table 11**  
**Park Planning Models**

<b>Elements</b>	<b>ACTIVITY</b>	<b>HABITAT</b>	<b>BIOPHYSICAL</b>
Focus	recreation	ecosystem	ecosite
Orientation	space	place	species
Ethical perspective	city/nature segregated	city/nature integrated	nature/city segregated
Relationship	nature excluded	nature/people included	people excluded
Overall approach	prescriptive	adaptive	restrictive

An ecology-based habitat approach to park planning is no less indicative of professional priorities for contact with the natural environment or for expressing management and control of change than are the activity and biophysical approaches. Neither is it suggested that the habitat model replace other approaches. What is being proposed instead is an additional option to round out existing alternatives. This option recognizes the importance of a habitat perspective to maintaining healthy



cities (Balmer 1991; Weaver and Kim 1994; and Grant quoted in Dawe 1996) and acknowledges the influence of a more holistic outlook in reconciling competing interests (Cooper Marcus 1990; Merchant 1992).

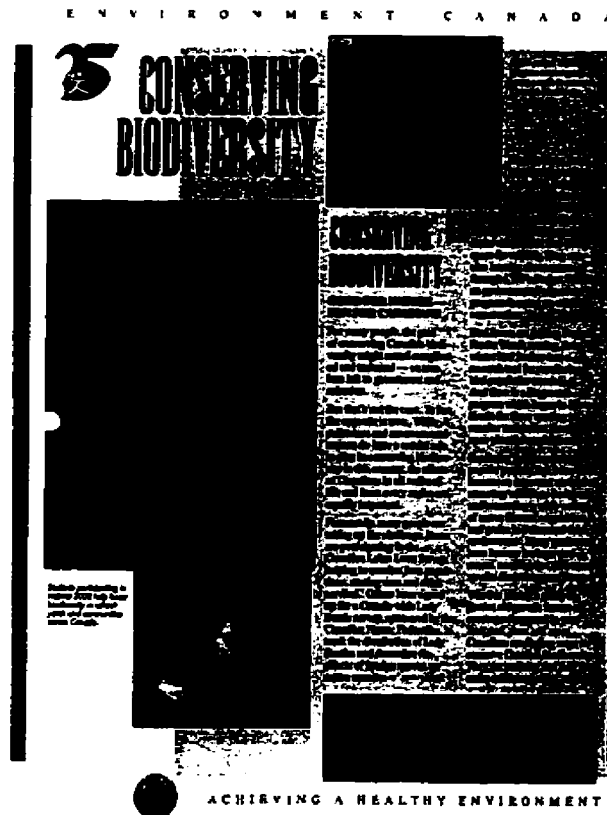
Most planners are likely aware of the fact that the planning approach employed in any given circumstance influences the outcome. In this respect the habitat approach is appropriate for establishing or working towards common ground. Park planners in Calgary appear ready to accept that balance is required in a community's open space system (see Appendix VII for transcripts of the Calgary Planners' Forum). In seeking to establish such a balance, the question ultimately arises as to why natural area park land is deemed to be so essential. Although at the onset of this study it was noted that natural area park land is important for the social, psychological and biophysical contributions it makes to maintaining a viable habitat, the question does raise a few issues that require clarification through further study.

### **10.3.2 Issues Requiring Further Research**

There are three issues arising out of attempting to identify why urban natural area park land is important. Each requires clarification through further research. First is the differing perspectives that planners and the public have on the idea of biodiversity. Although there is a well-informed sector of the public that has serious environmental concerns and understands the finer points of ecosystem management, such people are in a minority. The results of this study show that unlike this environmental vanguard and planning professionals, the general public does not readily identify the natural environment's contribution to biodiversity as an important aspect of community well-being. This is consistent with past work which has found that the public is not generally oriented towards "biospheric" concerns, possibly because they do not make a distinction between "valuing nature itself and valuing nature because of the human benefits it provides" (Stern & Dietz 1994, 78). In order to begin to build an understanding of people's perceptions concerning biodiversity there is a need to query people directly on the issue. This study was remiss in not asking explicit and direct questions about biodiversity. It is also a shortcoming of this study that the question concerning the benefits of urban nature did not include a category for biodiversity, nor did it provide an opportunity for a write-in response. However, a recent study that did use open-ended benefits categories also did not record any self-described biophysical benefits (Hamilton-Smith, in progress). In view of this and in view of the professional and institutional commitment

(see Figure 40) to promoting biodiversity, there is a need to explore directly the public's understanding of and commitment to biodiversity issues in an urban context.

**Figure 40**



**The Federal Government's promotion of biodiversity  
(Environment Canada: Achieving a Healthy Environment brochure, no date)**

The second issue arising from consideration of the importance of urban natural area park land is the need to more clearly identify common views expressed by different groups. The concept of social context expressed in this study suggests that individuals will have different outlooks on nature and this study explored those differences in detail. There is, however, a need to also more closely examine the similarities that individuals may have in terms of views on nature. This would require finer delineation of the various contributions that natural area park land has the potential to make. It would also require a comparative analysis of the assessment of various groups of individuals. From a technical perspective, it would be more effective to use one forced choice question to operationalize the concept of affinity in such an analysis. This would avoid having to scale responses and arbitrarily divide groups on a median point. It would give a better indication of the actual rate of occurrence of the various eco-affect modes in the general population. This would

provide a more suitable way to assess each group's inclinations toward urban nature and may also allow for a more refined comparison of similarities and differences between groups.

There is one final issue arising out of considering the reasons why urban natural park land is important – the assessment of the significance of the tendency to generalize expectations for experiences with nature. This study found that for the most part people expect similar or the same benefits from contact with urban nature as they do from a wilderness experience. There is a need to test this finding by querying people directly on their expectations for experiences in each of these settings. If the findings are verified, there may be a need to direct more attention to the fact that urban natural area park land provides an important and exclusive outlet for contact with nature for those who do not have the opportunity to access wilderness experiences directly.

#### **10.4 Summation**

The results of this study suggest that both social meaning and private purpose are significant factors in establishing relationships with the urban natural environment. The range of contemporary involvements with nature is indicative of the co-existence of a variety of social conditions that emphasize different aspects of these factors in different ways at different times and in different places. Being as these conditions manifest expectations for the provision of natural area park land that are largely a matter of circumstance, there is no indication that it is either feasible or fitting to attempt to promote any one kind of human /environment interaction with urban natural area park land. But the study does suggest that it may be prudent to more clearly define the range of acceptable possibilities for relating to nature in the city. There is in fact evidence that this is already starting to happen.

Since beginning this research into the pressures facing Calgary's natural area park land, an obvious shift in public and political sensibilities towards protecting urban nature has taken place. Two factors in particular can be credited with effecting this transformation. The first is the emergence and influence of what has been called the "community of urban stewards" (Loucks 1994). This committed and highly skilled sector of the population is expert at directing a political agenda aimed at addressing local environmental issues and concerns, many of them related to natural area park land. This sector has consistently been successful in establishing policy for preserving urban natural areas. The second major factor in the transformation of sensibilities has been the

insinuation of the concept of sustainable development into the lexicon of everyday life. It has been interesting to watch the journey of this idea to its eventual place in public policy initiatives. Again, many of the principles involved in this concept have had positive ramifications for the urban natural environment.

Together these two factors have taken much of the pressure off of existing natural area park land, especially if it is considered to be environmentally significant. The issue is now more one of how to fashion an open space system for the future that incorporates natural systems, both significant and otherwise, as a matter of course. This study has shown that public opinion is divided in the matter of making changes to current park planning practice that would keep more park land in its natural state, but leave less land available for traditional park types. It has also shown that urban nature is expected to satisfy a wide range of social, psychological and biophysical expectations. The challenge remains one of integrating an array of interests and imperatives in a manner that enhances our common ground.

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**APPENDIX I**  
**Focus Group Transcripts**



March 1995

Dear Focus Group participant:

Thank you for planning to take part in the focus group interviews for the *Nature in the City* study. Enclosed you will find the following information:

- a) Two copies of A Focus Group Participant Consent Form and
- b) A Draft questionnaire, with envelope.

The Consent Form explains a few details about this project. Please read the form over, and if you agree to the terms, sign the copies and bring one to turn in at the session. The other copy is for your records.

By way of pre-testing the questionnaire for the study, would you also take time to look over and complete the draft questionnaire. If you would rather not respond to all of the questions, please answer as many as you can and write in any comments that you have about the clarity of the questionnaire. Please bring your questionnaire and comments, sealed in the envelope provided, to the session, where they will be collected.

As we had discussed, you will be attending the all female session scheduled for:

Monday, April 10  
12:05 - 12:50 NOON (SHARP)  
TRAINING ROOM, 8th floor, Calgary Public Building.

If something comes up and you can't attend, please call me at your earliest convenience, or if you have any further questions, please call me at 268-4765; otherwise, I look forward to your participation.

Sincerely,

A handwritten signature in black ink that reads "Gae VanSiri".

Gae VanSiri



P.O. BOX 2100, POSTAL STATION M, CALGARY, ALBERTA, CANADA T2P 2M5

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THE UNIVERSITY OF BRITISH COLUMBIA



NATURE IN THE CITY  
"A STUDY OF THE ROLE AND BENEFIT  
OF NATURAL AREA PARK LAND"

April 1995

School of Community and Regional Planning  
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FOCUS GROUP PARTICIPANT CONSENT FORM

The focus group interview sessions are part of a cooperative research project between Calgary Parks & Recreation and the University of British Columbia. The study is being conducted by Gae VanSiri (268-4765), a senior park planner with the Department and a graduate student in the University of British Columbia School of Community and Regional Planning doctoral program. The Faculty Advisor for the project at UBC is Dr. Penny Gurstein (604) 822-6065; the Department supervisor is Will Pearce, Planning Section Superintendent, (403) 268-4757.

Results from the focus group interviews will be used to develop two questions in a city-wide survey of Calgarians concerning the meaning and benefit of natural area park land. The results will also eventually be used in a PhD dissertation and in the development of park planning policy. As a participant in the study you are identified as a "focus group A, B, or C participant" and will be asked to discuss questions about the benefits of nature in the city and about the way in which natural area park land contributes to your image of Calgary. Notes will be taken during the discussion and a summary transcript of the sessions will be prepared on the basis of these notes.

The identity of all participants will be kept confidential in that participants will not be identified by name in any of the documentation, save for a list noting all of the people who participated in the focus group sessions being on file with Calgary Parks & Recreation, Planning Section.

Your participation in the focus group is limited to the interview session, which is expected to take about 40 minutes. No monetary compensation is being offered; a light lunch will be served.

If you have any questions about these procedures, please feel free to ask at any time during the session. Please note, as well, that if you consent to participate, you have the right to withdraw from participation at any time during the session.

On this basis, and if you agree, please complete the following:

I, \_\_\_\_\_, have read the particulars of this consent  
(print name)  
form, have received a copy for my records, and agree with its conditions.

Signed: \_\_\_\_\_

Date: April 95

Thank you.

The School of Community and Regional Planning is affiliated with  
the Centre for Human Settlements and the Westwater Research Centre.

The University of British Columbia requires that all research involving human subjects include a signed consent form from all participants



**Nature in the City: Graduate Student Focus Group**  
**Mixed gender (2F 4M), under 30 years of age**  
**Monday, March 20, 1995**

**Participants:** Six Graduate students in an EVDS graduate seminar class  
**Location:** University of Calgary Professional Faculties Building  
**Time:** 1:00 - 2:00 PM  
**Procedure:** Students had been consulted in advance about their willingness to take part in the interview. All agreed. Consent forms were distributed, filled out and collected prior to beginning the interview process.

**Moderator:**

One of the things that we want to explore today is the types of benefits you see for having natural area park land in Calgary. That is natural areas like along Nose Creek or the escarpment areas... public lands not necessarily with formal park development present. We also wanted to ask you about the meaning that nature in the city might have for you, particularly as it relates to the image that you have of Calgary. We are thinking about this issues as it relates to the naturalization of parks, such as looking at changes to mowing practices for example. Some people have suggested that the way that you think about Calgary, or the image that you have of the city, has an effect on what you think about naturalization practices. What I'd like to start with is talking about what you see as the main benefits of nature in the city; what role you feel that nature might play in the urban fabric.

**Moderator - Question one:**

What do you see as the main benefits of nature in the city, thinking about it as taking the form of natural area park land?

**First male:**

Educational benefit. People become more aware of what natural areas are like- what grows there, how they function, in a way that you don't get in a manicured park. You can experience the way things happen, in a relatively uncontrolled environment and I would think that it would have a benefit of (giving) support of different kinds of animal and plant life that might not otherwise be able to live in the city.

**Second male:**

(Natural areas) also kind of provide a sort of escape from the city, even though they are within the city. They are an escape from the urban aspects, even though alot of the parks are within an urban setting.

**Third male:**

I know for myself that I use Nose Hill. I use it for the dog, when we've gone for a walk and it is an escape like it's tranquillity. You get up there and you don't *have* people all around you. You're by yourself. It is an escape. It's great.

**Moderator:** So would you say (a feeling) of solitude?

**First female:**

And part of that too is the proximity - you can sometimes find pockets that are like a wild area, close by, that don't take a long time to get to, that are good for people who don't have vehicles...

**Moderator - Question two:**

Again, looking at benefit, what would be the result of not having these areas? Suppose we systematically decided to remove natural areas from the urban fabric for whatever reason. In other words, what is the impact of them NOT being there?

**Male 2:** It would take more effort to get the experience than if they wouldn't be available in close proximity.

**Female 1:** For me, I grew up in Calgary so those natural areas are part of the character of the city. It would change my perception of the city if they weren't there.

**Male 2:** Yeah, I grew up here as well, and it's like I couldn't see the city without them. I expect the city to have them, if they were gone it would totally change the character of the city. **Female 1:** yes it would be really sad. **Male 2:** Yeah.

**Moderator - Question three:**

Are there certain words that describe the image of Calgary for you (even if you aren't from here) that relate to the open space it has? If you think about what image you are trying to maintain, what would you miss?

**Male 2:** For me I couldn't just say one word. It's like an experience. It's kind of a holistic experience. I wouldn't just miss one aspect. It would be the whole experience of going into it (the natural area) and using it.

**Female 1:** There are two things that come to mind - the prairie and the river, the two types of settings of semi-natural environments that you find here. A place like Glenmore Park or other riparian areas.

**Second Female:**

i think that a lot of people would miss out on the interaction with other people that are interested in the same activities that they are. For example, what's that park (Moderator: Glenmore Park?), Glenmore Park, they have that trail, I was there on the weekend and there was *so* many people doing different types of activities and they were interacting and it was just very pleasant.

(Moderator: So the social aspect is important?). Yeah - I think that's a very big part of it here.

**Male 2:** It gives you an opportunity to get out as well. **Male 1:** Yeah, think that's particularly important. Calgary has for me a kind of image of a city where there is lots of opportunities to be outdoors. There are a number of areas of substantial size such as Nose Hill, or Fish Creek and things like that. A lot of other cities I don't think have. Calgary to me has got more of a sense that there are lots of places *in the city* that you can go out and be active in the outdoors.

**Female 1:** And also the interconnectedness of those natural areas - the way that you can, at least in the southern part of the city, you can sort of stay - even if it is just a narrow natural corridor, in areas of semi-natural environments (you can ) go from one park to another.

**Male 3:** Indirectly I think that these parks have also caused Calgary to expand in a way by protecting them? We are very... a city that's very large geographically for a population the size we are and I think that we have always taken pride in protecting these areas by these areas by going around them and not developing them. I think that it would be very sad if some places, like say Nose Hill, which is almost getting circled (surrounded) right now, and one day it could be developed ( were developed).

**Moderator - Question four:**

If we think about the fact that we are going to lose some of the natural areas to other pressing uses, what things are important to consider in permitting certain alternate uses? Which sites could go and why?

**Male 1:** (It would be important) to as far as is possible, maintain whatever linkages that may exist.. . A lot of these parks are interlinked either by pedestrian paths so there's sort of a continuity. The continuity is important. ( If these area became) isolated pockets here and there it would be a tremendous loss, even on an ecological grounds.

Female 1: Biologically special areas and large or intact areas (should be kept).

Male 2: The ones used the most should be kept. Obviously they have value to a lot of people who use them.

(Moderator: What types of activities would be permissible or compatible on these natural areas? Or if you can't think of it in terms of a use, what would the criteria be. For example, the idea of a storm water (or dry pond) - it is temporary, it preserves the visual openness of an area, and the runoff water can be seen a natural or part of the natural process.)

Various Comments: No hard surfaces - Control motorized access -

(Moderator : This isn't a hypothetical question. The most common use right now is roads.)

Too dominated by roads already - Linkages to provide better public access walkways... would be OK.

(Moderator: Probing again on criteria for evaluating the appropriateness of uses on natural area park lands - what would you use to make your decision as to what would be acceptable on these lands? Let's use a playground for example...)

Female 1: There are different types of playgrounds.

Male 2: It would become very difficult to decide depending on how big it was, or if it had (other features like a ) wading pool.

Fourth Male:

or a cement playground like you see in New York. (Moderator: So the impact of design?) Yes.

Female 1: environmental impact such as hard surfacing with impervious substance (would also be a factor) (Moderator: So both visual and environmental concerns?) Yes.

Moderator: So if I said Nature Centre...

Female 1: that would be a building? (Moderator: YES) I think that would be good.

Various: But would it be functional? What kind of design? would it be educational?

Male 4: It depends, I think that the concept is good. It would make natural areas more accessible if they were understood, I think that the concept is worthwhile.

Female 2: I think that anything that you propose will depend on the way it is done ... if it is environmentally sound (or not). . . depends on the actual built form.

(Moderator: O.K. but if I said McDonald's?... *laughter all around.*)

Male 2: But it depends if it were just the typical McDonald's that you think of as opposed to some innovative McDonald's that used or tried to incorporate sustainable values or things like that, then maybe. Or maybe a tree house McDonald's.

Male 1: Or it could be some kid pushing a cart too...or also something that isn't altering the landscape that was temporary, (Female 1:Yeah), something that was not altering the landscape, but provided a service.

Female 2: why not facilitate those types of things. But if you are saying "McDonald's -No", things have to change sometime.

(Moderator: So the idea of food service isn't an aversion?)

Male 4: That would apply for anything you are building. It's basically the way it's handled.

Male 2: But it also depends on the size if it's not a large area it's more difficult to put anything in without disturbing the natural area.

Female 1: but also it would bother me from the experiential end to have a McDonald's cart in the Weaslehead. Laughter. It really... I could see it in Sandy Beach or something like that, but again there isn't an experiential value of microcosm AI wilderness in certain areas.

Male 2: But it brings us back to the escape and solitude, if that's one of the prime values of the area, then you don't want to be bringing in -(services)

Female 1: Well, it depends, you're still in the city, I mean, for me personally, when I want solitude, I go out of the city and I go into the wilderness.

Female 1: But what about people who don't have cars?

Female 2: Yeah, but what about people that are using this for their lunch hour where they do want to get - experience the nature, but also eat their lunch to get back to their building on time in an hour. I mean, it's a little bit different. You can't just be so exclusively natural. You have to have some type of interaction that is 'do-able' with people that live in the city and work in the city and that want to use these things as well.

Female 1: well that get's back to the influence of location. The nature at Prince's Island Park or St. George's Island has a different quality to it than the Weaslehead or Fish Creek Park.

Female 2: Right-because Nose Hill Park isn't necessarily easier for someone without a car anyways. Some of those (parks) are on the edge of town, I'm thinking more of right in the city.

Male 2: You also I think have to maintain a range of different types of parks and character. You can't say that these things are all acceptable and that therefore we should put one of them in every natural area that we've got. In some places it would be acceptable and in other places we just don't want to have it the same. Male 4: It is situation specific. Female 2: Oh yeah, yeah that only makes sense, exactly.

**Moderator - Question five:**

I'd like to move on to explore the meaning that nature has for you. Keep in mind that we are talking about nature in the city, rather than in a wilderness area. It might help you to think about a particular experience.

Female 2: For me personally, I don't find wilderness in the city at all. When I want to experience something more *natural* or kind of getting back to basics, in a natural setting, because I don't even consider anything in the city *nature, per se*, according to my definition, it involves lots of people. So there's nothing - there's no solitude about it, like when I went on the Glenmore (park) Trail there was about 2,000 other people on the same trail, and that's how I like it; and when I do want solitude, or a natural setting, like camp, or a canoe, where I *remove* myself from the fact that I can see cars or I can dogs and everybody's pets and bikes and roller blades everywhere. But I do appreciate a natural setting where people are interacting in those types of things and the built area is kept down to a minimum.

Male 2: For me it's - I see the parks as more of an opportunity to do some activities in a different setting than what I'm used to in my daily life, to go mountain biking, or whatever, just to provide

a different setting and it is unique to go out . Because my daily life is in a car, in a building, you know, and experience, all these urban environments - it provides an escape from those urban elements.

Male 1: minimally, wild spots are for the most part recreation facilities, what I like to think of is opportunities for other things than people like other types wildlife like ducks, geese, and beaver. I think that sort of experience is very important in an urban setting, (to come to the realization) that there is a world out there beyond the built form.

Male 3: For myself, my use of the parks would be recreational. The meanings it has for me would be , I can go by myself, - tranquillity - in my own little world, not at *peace* with nature, but at peace with myself. And then I can also go socially, with my wife or with my dog, and friends, and just experience it on a social level... being somewhere different...I think the whole context changes in a group.

Male 4: One of the things that is the most interesting is . . . It's the juxtaposition. The contrast between built and natural environment . . . they're so different, yet quite close.

Female 1: My meaning is in being close to it (nature) even though I am acutely aware that anytime I'm out in a natural area in the city , that it *isn't* the wilderness, and sometimes I find that disappointing, it still does remind me of what's beyond the built and also of our lack of control over certain elements of what is wild, when you see a beaver or an eagle or an owl or hear a coyote . . . (this wildlife ) that manage to make their way into fairly heavily urbanized areas.

(Moderator: In summary would you say that the meaning of nature in the city has to do with the contrast between the built and the natural environments and the opportunity to see other life forms? - agreement but also:)

variety in landscape- fellowship- stimulation - and - minimization of the effects of the built form

*end of side one*

Male 2: It's like now that we've had it you don't want to lose it. We're the ones that will have had the experience of having it with us and then if it's gone, we'll be the ones that suffer, whereas if you're someone- if all of the parks are built over then that generation will not have experienced it and they may not feel the losses directly as much.

**Moderator - Question six:**

One other thing that I'd like to ask about is - what are your thoughts on the naturalization of park land?

Female 1: naturalization, does that involve purposeful replanting or just letting it go?

(Moderator:Both) I think that would be wonderful (Moderator: from the point of view of ...) interesting, I mean it would be always changing, which it isn't now. Now we have green grass, or brown grass, short and trees and some bushes and it never changes. The thing about semi-wild areas that is interesting to me is see how it - what kind of succession that occurs.

Male 2: I agree with you. I lived in Toronto when they were doing it.

Male 3: But it's situational again. Like something like Nose Hill Park , yes, but driving along the Deerfoot, what's the use?

Female 1 : What's the use? It would be beautiful, you'd get wildflowers -

Male 3: Well concrete and then grass and then some more concrete?

Male 1: Well even in terms of maintenance costs, I haven't been in Calgary long, but I was struck by the sense of just the cost of irrigating everything, and cutting everything, the cost must be appalling in that sense, whereas, if you plant towards, say, a climate specific type of theme and you don't worry about those sorts of things.

Male 3: But there are safety issues too.

Female 2: And if people want to go to them (naturalized park areas).

Male 1: Safety?

Male 3: Letting say a park go. Let's just say that there is a bike path established from use of it, ...overgrown roots (could cause) somebody could be thrown from a bike.

Male 1: Oh, those sorts of things; I'm not talking about letting trail maintenance -

Male 3: I'm not talking about a smooth path, but say a natural path that's been developed by use - letting that go- there is a safety issue there that I think could be established.

Male 2: See I think that it would be good for some, but not for all, 'cause then first of all it would provide variety and diversity which I think is good, then second of all, a lot of the reasons that people use these parks you couldn't use them like they do if they weren't grown naturally. Like I wouldn't go to play frisbee or football or baseball or soccer, you know, in grasses 'up to here', but I do think that it is a good idea for some parks, but I don't think that it's a practical (Female 1: all) for all parks.

Female 2: I have to agree.

Male 1: You have playing fields...but a lot of open space isn't designated for any particular purpose, right?

Female 2: Well I'm certainly - oh- Male 2: But I think still make play fields though. . . (Moderator: In some cases the fields are maintained differently, with cut grass within a few feet of the field edge, but longer grass next to that). ..I think that in Christchurch they did that. . . It's kind of neat-it provides variety as well, now that I think about it. (Moderator: What about the boulevards in particular?. . . Everyone speaking at once. . .)

Female 2: I don't mind that though - you're speaking from any ecological point of view, which is great - (Others: This is what I was saying; cut 'em high) Male: I: these are car owners!

Female 1: I think-

Male 3: I'm also thinking from a design point of view too, I think it would look awful.

Female 1: I'm thinking aesthetically as well, as well as ecologically and I think- (Male 2: I think -)

Female 2: I agree with you, but I don't think that the average Calgarian would buy that for a minute (Female 1: No, but-).

Male 2: I think that from a directed sort of sense I think that kind of step is important to trying to change people's sense of what is aesthetically important. To make people realize that just a flat sheet of grass is not the only beautiful thing in existence.

Male 3: But if there is a car coming off an off ramp, I want to see it! Female 2: Good point!

Moderator:

We seemed to have covered the whole array of opinion on this one. That brings the interview to an end. **Thank you for your participation.**

**Nature in the City: Men's Focus Group  
Mixed age groups late 20s to early 50s  
Monday, April 3, 1995**

Participants: P - Peter  
R - Roger (visually impaired)  
E - Emile  
D - David  
W - Will

Moderator: G - Gae

Location: Training Room, Calgary Public Building

Time: 12:05 to 12:55

Procedure: Participants had been consulted in advance about a willingness to take part in the interview. Consent forms were collected prior to commencement of the session. All participants also completed a draft copy of the Nature in the City study questionnaire.

Transcription:

G What we are doing with these focus group is trying to develop a couple of categories on a questionnaire that we are going to be sending out to the Calgary public a little later this spring. What we are specifically looking at are the benefits of nature in the city and what nature means to people and also if we have time we may go into some of our maintenance practices. In these forty minute sessions it kind of depends on how it flows but the priority is the benefits and the meaning. The way the focus group works is like a group interview where I'm the interviewer and you are the interviewees and I might ask a question and ask everyone to go around the table which is the one I'm going to start with or I might just ask a question and whoever feels like answering can answer. But as a warm up, I prefer to go around the table. If you don't have anything you'd like to talk about, you can just say you don't have any comments at this time because I don't want you to feel pressured into talking. So, the questions I'm going to ask are describing what nature in the city means to you and I might have a probe on that. It'll be a standard probe that I'm going to use at the other groups that will be asked the same question. There's two other groups happening with this and then I'm going to ask you what you see as the main benefits of nature in the city are. So are there any questions before we begin? Okay, I think I'll just wait one second to see if Jeff's coming.

P I like to cycle and actually its just you have to enjoy the bike path, the fresh air and sunshine gets to be around lots of trees and parks and to see the different ways that the people interact in that kind of setting because it is very different than other social settings.

R I think walking along the paths sometimes cycling but when I think the of the nature aspect of it I think of walking along the pathway listening to the birds singing, the rippling of the water. I live right by Elbow river and there's a little bit of rapids nearby and I enjoy the rapids rippling along. And the neighing of horses nearby because there's horses on the racetrack and in the stables nearby where I walk, and being away from traffic I think is the big thing is to be able --- that's why I don't like walking on the north side of Memorial Drive because you really hear more of the traffic than anything else; but the parts where its quiet, that's what I think it means to me. And the trees, plants bushes along the side as long as there not overhanging.

G Anything else?

E Nature in the city means to me the ability to look and read and being able to function in a society and energy being charged and I'm a relaxed person - my emotion might be altered. My health in a very general sense; just talk and look around these places, jog with the family, the wife all going.

G David?

D Nature to me is open space, wide open space and (to) touch this land - park - and I like to walk on it, where I want to, instead of going along a path. I can smell it. I can see wildlife, I can hear bird, I can see people enjoying that go around exploring and like basically it's wide open area that's free to move around.

G Okay thanks . Will?

W I think like Emile, the opportunity to recharge is fairly important to myself or nature in the city in a park-like, preferably natural, setting. ... Like Roger, I think sound is very important to myself or the lack of sound and the ability or chance to get away from the sounds of an urban environment. The settings in some areas of Nose Hill to me is much more representative of nature in the city than for example a similar natural setting next to the Deerfoot Trail.

G Okay. In any of those cases, Roger mentioned a particular case, he mentioned the Elbow, is there a location or a particular place that contributes to the meaningfulness? Like when you think of nature in the city, this is in Calgary now, is there some particular place that comes to mind that has a special meaning? This one we don't have to go around the table. This one I'm just looking for the Calgary experience.

P The Nose Hill, for me.

G Nose Hill. Will, you mentioned Nose Hill as well.

W Weaselhead.

G Weaselhead.

R My own backyard.

G Are you on the Elbow, Roger?

R Yeah.

G Right on the Elbow?

R Right on the Elbow.

G Okay.

R That's where I walk most it's just immediately along the east side of the east bank of the Elbow across from the Stampede grounds.

G Okay.

R It's just a nice park, you — It's still city you do hear some city sounds but you don't have any roar of the traffic, you hear Stampede Ground sounds like the horses galloping around and a few people hollering to each other about — related to running the horses I guess, which is sort of semi-nature it's not exactly it's sort of artificial but it's all part of it.

G It's a kind of wildlife.

R Yeah.

G With the characteristics of Nose Hill, Dave has talked about the openness, is this one of the things or is it the fact that there's nothing built on it.



P Primarily for me is because it is wide open. Just the fact that I step in the park and I can just walk in the grass.

G Is Nose Hill on your list as well or did you have one?

E Well I assume it is, but also Fish Creek. Yeah Fish Creek was.

G And Fish Creek meets that criteria for you?

D Yeah.

G Okay. Another go around the table question. Thinking about those special spots or even and even your own backyard, I'd like to think about the specific benefits of nature in the city. You talked about them in relation to yourself, and I think very well, now you can extend and extrapolate into what you think benefits of the city or the general population might be as well, or you can keep it personal. So this time I'd like to start with Will and we'll go around the other side. So I'm looking for particular benefits.

W Well, I like the break, the visual break in the urban setting the residential commercial industrial setting, how the green belts break up the developed landscape. I think there's a great deal of economic benefit to the city and we're speaking about the city as a whole Gae, is that what you want?

G Uhum.

W I think there's a great deal of economic benefit that comes from an attractive community drawing in businesses, the residential neighbourhoods that have a great amount of open space seem to be, tend to be preferred. Which, I guess, a measure of that is the price of the lots out there but that said, again that's just another economic benefit that's a couple to start with and work your way around it.

D Like with mental illness, the functions of parks, if you keep or try to un-touch it or don't try to develop it, in turn it will save money, you can hold it to maintain it. Personally when I think of parks somewhere like Nose Hill park you can go up there and you can think, concentrate, get away from it all - home settings, office settings. and what else.

G Thanks, Emile?

E Cities maybe villains of nature. I suppose in a good parks system you have access to a hierarchy of parks - parks all over the communities become all the more precious. You attract people to Calgary and you have all the good parks around and all the levels, which is a beautiful feeling to have the easy access, something that might be reflected in your decision that Calgary is a place to be a part of. As opposed to living where the crowds are there and you can't have access to nature without travelling and it takes you so long to get out of it.

G So would you say that it's attractive to a certain type of person?

E Actually, I'm thinking more in terms of a picture or country, you want to place Calgary as one of the few cities that's urban and rated highly for the it and make a decision to move to it. You have access to alot of amenities in a good community, very convenient.

G Okay, Roger?

R I'm looking at it from a very sort of a practical point of view. You've got two aspects of the park, and to the park system. You've got specific areas of large parks like Nose Hill, like Fish Creek, like Glenmore park like Prairie Winds park where you can get away from the traffic noise

and get that sense of almost isolation, if that's what you're seeking, but you know, still people around. But the linear aspect of the parks, the river parks that join everything together I think are extremely important because they help to join different parts of the city together. When you're driving in the car from one place to the other you're isolated. When you're walking, or riding a bicycle, or running or riding on roller-blades or whatever, you're much closer to the people that you're with. You're not necessarily going to talk to everybody but you make eye contact with them or you hail them and say hello or good day or whatever as you're going by, in all sorts of different areas of the city. So, you know, I may live in one part of the city but I'm going to communicate with people in all sorts of other parts of the city which I wouldn't otherwise do. And I think these linear parks join the city together.

G Good, thanks, Peter?

P I think from a social aspect and a family context, I think an open space, a park, some open land, allows particularly the children to develop in a more measured, structured kind of way. Structured in that the focus isn't on immediacy like things happening on T.V., but rather by studying the different seasons, the way things grow and die all the time and to be able to contemplate that in a setting that's not four walls and hasn't got those constraints. The extent to which that's possible, and I think that it is possible in a park environment, I think that a family becomes more full, cohesive. I think children become more stable and I think it provides that kind of calm inward — that self-expression, that doesn't focus on that - as I mentioned earlier, the immediate, living your life in half hour kind of blocks, as children tend to do with video games or T.V. or something like that.

G Anybody have any comments on that? We can get a little interactive if you like. It's kind of an interesting point, that haste.

R I think one thing - and I noticed that, and I mentioned it to somebody and I can't remember who, about having these focus groups and they said, "what about children. You don't have a children's focus group on this" and I thought, "that's interesting" because they might have a totally different aspect on this looking at how children look at the wilderness, the wildlife areas and I'm looking back to my own childhood and one of the things I enjoyed most as a child and the other kids around my way did too was an area just across the road from us which was just bush and completely wild and we built dens and we loved dens and we often — adults would have never found them because you had to sort of crawl through little tunnels to get to them and there'd be a little clearing in the middle of the bushes and was where our little den was. And I thought looking at Calgary's wilderness areas and I thought well there certainly are some places where kids could have little dens of their own, you know, where adults didn't know where they were and I don't know whether we looked at that as a sort of specific asset of the wildlife areas.

G Hmm, we often think about doing children. Part of the other problem is the consenting for them to participate in the research. So we'll try to do something maybe with parents and children, it might be an idea...

R Well, you've got to exclude the parents if you really want to include children. I can't think why....

G They'll be there to sign the form then (laughter).

R Quite honestly, I couldn't see why you had a consent form anyway. It didn't seem, it seemed a bit pointless to me

G Well, for this, just to clarify on that, the University of British Columbia requires, and this is relatively innocuous type of thing but there are many types of research involving human subjects such as where I might be telling you - we're having a focus group on special events in the city but

I'm really watching your eye movement or the type of interactions you're having as men; and that's a deception point of view and you would have to be told that. So the reason they have the consent form is to make sure that all the participants know exactly what's happening. And I said in this case, we've all said that in this survey type of research that they should perhaps modify their procedures. It's a bit overdone but at this point they have not...

R Yeah. It strikes me as a bit overdone.

G At this point they have not modified it so we have to go along with it

R I would think you'd get a bunch of kids and they'd love to join in a discussion like this. I don't think you'd need consent forms.

G Yes, I've actually, I still think I'd like to try to do that at least with teenagers if not the very youngest children.

R Ah, go right down to six year olds.

G Okay, I'd like to move on to one more aspect of the benefit before I move on to the third question. That's — we've talked a bit about it and Emile particularly talked about how as an amenity, nature in the city helps people make a decision about living here. I'd like to extend that a bit more and if you can think about what role nature in the city plays in contributing to the image that we have of Calgary in particular. We each would have a certain image of that. I don't know whether we'd extend some of the words that we talked about — would we consider Calgary open and full of nature or would we consider it bejewelled or what types of things would we talk about the image of Calgary that nature in the city contributes to. We don't have to go around on this. I'm looking for a bit of discussion because I'm trying to get what the image of Calgary is.

R I think it's hard to see from the inside. You know. If, I think you need to look at that from people who don't live in Calgary. What is their view, what have we projected outside as to what Calgary is. From sitting inside, those of us that have lived here for twenty or thirty years, we've grown with it. It's hard to get the right perspective, I think.

P I think you have to walk around and you have to, or the image you see of Calgary is the concrete and glass, and high rises. That's the first thing you see, so I think you have to look at the periphery of Calgary, like the rivers and the river system and parks. But you have to walk to do that. I think Calgary is very much built for cars, for getting around by cars. That doesn't lend itself, except for our Fish Creek, to getting in and out of the place, driving somewhere where there is a nature spot, to use that term, other than of course Banff and getting out into the mountains. But (in) the inner city, you really do have to — I think you have to walk around and look at the green areas that are dotted around, because there are some, not enough, mind me but Calgary doesn't — it's not a —

G It doesn't come across as a park city.

P No, definitely not, it doesn't but you have to look for it.

R Maybe we need to advertise it more. You know. We know, I mean, I'm very familiar with the parks, so I know where they are and I know how to get on to them (in) all parts of the city. But a lot of people don't. And they don't necessarily associate driving across a bridge where they say "Oh, there's a few trees there", they don't know that that is part of a linear parkway system that they can get onto and then go for a long distance. My brother had an interesting comment, he lives near Washington D.C.. When I went to visit him one time, he said what would you like to do on Sunday? And I said, well let's just go for a nice walk along some wooded area. And he said, "Oh we don't have anything like that around here". He couldn't tell me where

anything was. Now he visited here and we took him for a bike ride along the Elbow river and he said, "This is marvellous, where does everybody live?" (Laughter)

R Because all we showed him was park, and the backs of a few houses.

G So, would say that part of the image is discovering these places or is it better to know?

R I think making it clearer where the park system interfaces with the road system, for example, where a parkway crosses a road, better signage indicating that this is part of the Calgary parkway system. There may be some signs indicating that, but I know there are many places where there aren't because sometimes it's hard enough to follow the park. It will make it easier to follow. Particularly where it's their route, rather than actual parks, because you're bound to get places that have to be connected by going along a few streets because there simply isn't a park going there; and better signage would adequately do that.

W I don't see Calgary as a lush city *per se*, there are large tracks within the city that are fully developed where you don't have any visual breaks *per se*. If you drive in on McLeod or drive in on Seventeenth or drive around property *per se*, it's unfortunate that we haven't created a more diverse environment.

R I can't figure out why. The North East is the latest part to be developed from scratch, yet it's the poorest part served with parkways and parks.

W It's because most of the land there is developable.

R No river going through there, a nice convenient thing.

W And as a city we haven't chosen to set aside more green space or more open space or we haven't chosen to have a greater diversity in our urban form. It's kind of a shame.

R It is.

W Those areas of the city where we have the force to have that greater diversity, like the Elbow area where you are Roger, really the river forces us to...

R It creates it.

W Yeah. And that's a very attractive neighbourhood. It's a very attractive setting.

R Right.

W The Edgemont ravine system as far as new development goes or Valley Ridge for that matter, we're forced as a city and forced as a developer to leave those green spaces etcetera, to create more diversity and form a function with the residential component.

R Yeah. Flat prairie isn't conducive to it, is it?

W Yeah. It's not conducive to it, but as a city we haven't chosen to make it more diverse.

R Uhum.

G Okay, the second part was an extra one only if we got to this issue. And with two people short we were able to get to it, so it's for a different part of the questionnaire. If you noticed, I mentioned there were two parts to the questionnaire but in the pre-test, you only had part one.

R Oh, that I didn't understand, I thought; you said it was a two part questionnaire and yet there were five sections.

G Right. There's some very fine print somewhere and (Everyone : Laughter) I'll let you know, it says, in the pre-test, part two is not included.

R Oh we didn't see that.

G So part two is its own separate sheet and it's a separate question, and it's a question that will go into — that will go into great detail about one particular issue. So it will be explaining it. I may take the liberty of mailing it out to you or comment if that seems like the thing to do, if not, we'll work through it, but it's got to do with — It's being formed right now but I'd like to work this through the focus group on one aspect of it. It's got to do with the way that we manage our natural area park land and even the way that we originally secure natural area park land. So one of the things that we were talking about in the group that's forming the question right now, is talking about how we acquire natural area park land when we are developing a new community at this point in time. So right now the Department assumes and it hopes rightly, and based on public demand and opinion, that if we have an opportunity to keep an area as natural, when we first come along and take park land in a community then we do that and that's our first preference and we are assuming that this is what Calgarians want. Now, taking the other side, and we just started to go into this with the North East, where there aren't a lot of natural features outside of bold, bald prairie and disturbed prairie at that; what we'd like to explore is what Calgarians might think of how far we should go in making an area natural that isn't natural, whatever that might mean. In other words, is this a practice that we want to see? And what would be important to consider, like what one of these would cost, obviously. But are there other things that we want to think about in making that decision. So the basic question is, how far should we go, if any distance, in creating natural areas or features where there aren't (any) in communities that are newly developed?

R I think you'd have to do the obvious and look for any natural features that might be there such as contours, gullies, ravines, water courses, ponds that can be incorporated. Look for those first. Then look at how you can join them to each other within that community and then how you can join them to neighbouring communities to make your linear park system work.

P Also the city when they're developing a subdivision, they require a developer to set aside some land in certain subdivisions they have, to create an open park or some kind of open space and in some cases to look after that. I think that more could be done there. Clearly the developer's going to add that onto — will likely add that on to the price of the house, but then you can assume that if you want to live an area that has a park, that you are prepared to pay a little more for it, for the house. But I think it has to start with, you know, the responsible building around open space because that's what there was there prior to any houses. I mean, so it's the question of the houses came second and infiltrated the open spaces. So if there can be some kind of managed (pause), management of the open space in conjunction with building around it then I think that should be done.

R Also didn't mention mature trees. I think that's something you need to, you know, if there are mature trees, try to incorporate rather than lop them down and plant new trees which take a generation to grow.

G Uhum. I'll give you an example that's the historic classic one that Emile's probably familiar with, also Will. You go to Central Park in New York city, which, in its natural state was a slough with just rocks and no trees and in the centre of Manhattan Island and it was made into nature at a great expense and into a certain type of nature, too. The way people thought nature should look then. Which is a little different than we might think it should look now, and has been kept that way by the volition of the citizens and the tax dollar and whatever. So, we can certainly see circumstances in some of the areas where we go where we just don't have any features

whatsoever that we could capture as natural, outside of just the land base. Prairie Winds is a good example of a totally created park and there are, and we have statements from our Aldermen that say, "you can make a park anywhere, but the natural areas you have to find."

R But there are, you know -- Prairie Winds does have the advantage of having a little bit of natural contour. One of the hills there, I think is artificial. That little pimple type one. (Laughter and agreement)

R I think the other bit to the north east is a natural hill but what they have done is create with pumps and things a stream running through which is rather nice. The only problem with Prairie Winds park is that you can't get to it without going along an awful lot of roads. We tried cycling to it and we had to cycle up 52 Street and Castle Ridge Drive NE. There's no way across McKnight Boulevard to get there from Whitehorn.

G Well that's a good point. Now the more precise question, if I could try one more time, is whether we should, as a public corporation, be investing money in creating these areas in each community; if a community doesn't have it's own, if you're not lucky enough to have a Fish Creek or be on the Elbow River; should we be spending money to make those opportunities available to the citizen?

P Absolutely.

R Yes, I think so. In the areas where that don't exist naturally, that has to be factored in to the cost of the developing an area. It can be put on the onus of the developer and the cost of the housing in that area is going to reflect that. I think this is a matter of economics and that it will find it's own level. But the city, by zoning, can dictate to the developers what they have to put in.

END OF SIDE ONE

D Yeah, well as long as the whole system can provide good accessibility to the public, may be a five minute drive, a ten minute drive, that maybe is a mixed community whatever because if you incorporate the cost of giving those kind of park lands in a community, you may drive the lot price up to the point that the low income family cannot afford it.

G So you think, and that around ten minutes -- or should be something like that?

D Well, yeah. Keep it as short as possible but...

R But should people have to drive to these areas? You're talking about your low income areas - maybe they don't have a vehicle to drive so I think that these things have to be in walking distance...

D Or cycling.

R ...or cycling distance. And that's where you're linear parks come because you can use your linear park to cycle or walk to the bigger park.

G So, you were going to say walking or cycling?

D Walking, cycling, public transit.

R Yes, that public transit doesn't always serve the parks very well. I think of an example, when I was living just near Chinook and I thought, well I'd like to walk along by Carburn Park. Now there's a bus, a couple of bus routes that go along Glenmore Trail that cross right over to go towards Lynnwood and all that but there's absolutely no bus stop anywhere near that you and get off to go to Carburn park or BeaverDam park for that matter.

G That's true for a lot of others outside, yes.

R They just whiz straight over there and if you ask the bus driver, "well I don't have a stop for the next mile."

G Emile, were you going to have any comment? Thanks.

E Yeah, I was going to say that there's nothing wrong with bald prairies and in creating natural areas. I lived in Regina (Saskatchewan) for two years where they tell me every tree you see standing up around has been planted. There's nothing there. There's prairies more prairies --- It's stark. Now, if you go up to the North East, there's not a hell of a lot of amenities, but creating amenities is part of creating communities and if nature will help us, fine, if nature doesn't help us, we'll do something else. There is part of the city as a corporation --- it's part of its responsibility is to make sure that a community got amenities that they can live with and feel comfortable with outdoors, open space or whatever. What we do when we develop communities, we do take an awful lot of land just totally neutralized big wide open spaces and make very little use of them. So we do have to go through a lot of mileage in creating appropriate open spaces that people can relate to and use and kids come to. It's artificial but there's probably nothing wrong in doing that.

G Okay, well that gets certainly through my question list. Before we close off, are there any things that you'd thought about that you'd want to take this opportunity to talk about and get on the record with regards to the nature in the city issue?

R So about the big slough, just west of, I think it's just west of 52 Street south of 17 Avenue, that would be a great place to move a nice big park around that slough. I think that's where, it might be just further east than that.

G Where did you say at?

R 52nd Street and 17th Avenue. Maybe it's 68th Street that it's just east of --- I'm not sure. I know when you go along 17th Avenue going east there's a big slough on your right down there. Great place for a park. The city's growing out that way anyway.

W You mean the south-east Roger?

R Yeah. East of Forest Lawn sort of.

W Yeah that's the old spillway down there. I know where you are now.

R Nowhere near the western irrigation ditch I don't mean. That's much further south.

W Nope, no. But there's an, the old spillway. There's an old glacial spillway that goes down...

R Oh, yeah?

W ...through there where there's intermittent marshlands.

R Yeah. I know several people that have gone down there say there's a big sort of slew just on the south side of 17th Avenue as you're going out there towards Chestermere. Great place for a park.

W There use to be a big slough just north of W.I.D.Canal in the same spillway by the way, but most of the Western Irrigation District had the wisdom to fill it in.

P Just an observation or maybe a question. Do you find or expect to find that the answers to

the questions will be different given by a male or female?

G Not so much the answers but I do expect the dynamics to be different in the discussion.

P Why? Why is that?

G Laughs.

R Do you expect them to be more laid back or less laid back?

W Laughs.

G Less.

R More animated.

G Yes, more animated and I thought...

R Hmm. Yeah we're not very animated are we? (Laughter.)

G Actually, to tell you the truth, on the actual technique, I mean, part of it is trying this technique because we normally just do questions from books and other studies and so forth, is, to be optimum it should have had a male animator as well, rather than a female, according to the books, if you have a focus group of all of one gender, the leader should, the moderator should also be of the same gender. So I had to compromise on that since I couldn't....

P I always wondered whether it was more of an emotion, more of how nature and emotions kind of interact, or do you expect to see something different?

G Well, literature will say there should be some benefits come up. Like not you --- the word safety did not come up in this discussion at all and I'm expecting that it will come up with the women. That's something that all the literature says. So we'll just see what happens on that.

R Yes, that's interesting.

G It's just not a concern usually of men in the urban context.

R I'm supposed to be the person in charge of education and safety on the Parkway Advisory Council and I never even mentioned it.

W Laughs.

R But if Jeff had been here, he might have said something.

G Yes. Yeah.

R Because that's his field isn't it?

G Okay, I think I'm done, has everyone said what they'd like to say?

P Did you get all of this? (on tape)

G Yes, I'll just end this. Thank you.



**NATURE IN THE CITY : Women only Focus group  
Mixed age groups early 30s to mid 60s  
Monday, April 10, 1995**

Participants: Rosemary (R) Moderator: Gae VanSiri (G)  
Sue (S)  
Jessica (J)  
Pat (P)  
Mumtaz (M)  
Tina (T)

Location: Training Room, Calgary Public Building

Time: 12:05 - 1:05

Procedure: Participants were consulted in advance about a willingness to take part in the interview. Consent forms were collected prior to commencement of the session. All but one participant also completed a draft copy of the Nature in the City survey questionnaire.

Transcription:

G-So I would like to start with each of you giving some thought to the experiences you've had with nature in the city, in our city in particular, but draw on your other experiences as well - and I'd like to go around and ask each of you, when you think about nature in the city, what it means to you - whether there are certain images or places that come to mind whenever you think about nature in the city. So maybe we could start with you, Rosemary?

R-Can I just read what I wrote on the questions?

G-Sure

R- I think what I think about most in the city is it's sort of little pockets where mankind hasn't gotten to and organized and dressed up. I don't necessarily think of structured parks with pathways paved; I think of the stuff that has sort of been left alone.

G-Does a particular spot come to mind when you are thinking of that?

R-Well, the end of Prince's Island that is untouched, but more than that is probably just where I do dog walks, at River Park and Sandy Beach and parts of that are quite organized and parts aren't. The riverbank generally, the whole Elbow river (area) in particular.

G-Thanks, Sue?

S-OK now I've only lived in Calgary nine years, but to me the parks are the most important thing that I have as a retired person. I would say I spend no less than 3 days a week in either - like I live in the South west and Fish Creek is my... it's like where I communicate, where I just think wonderful things are happening. It's not structured, that's the part I like best of all and it's great for family activities. I love on a Saturday morning seeing a father riding his bike with his son, or now it's roller blading too a bit, or a mother doing the same thing or a mother and father both, it's amazing what happens at Fish Creek Park.

G-OK Thanks, Jessica?

J-When I think of nature and parks, I think of Fish Creek Park as well, but in my area is Shannon Terrace and it's to me a little bit of heaven and when I was thinking about what a little bit of heaven means, it's sort of a paradox, because it also means like being grounded rather than being

like distracted, with noise and rush and busyness, it means being able to link up with natural rhythms, and natural sounds and being able to breath and feel that I'm not getting all of these little particles or pollutants that are out in downtown. (G-So fresh air?) Fresh air, but also like, I don't know whether you've ever been to my favourite part of Fish Creek Park, but it's just like a little bit of being in a National Park...it's protected, but it's very beautiful- but it's also wild. Not that it doesn't have like the picnic areas, and the wood chips and the little beds and pathways, things that help- and I like that because it shows me where I go 'til I get comfortable with it.

G-OK,

P- Well I normally use more the pathways than I do the natural parks areas - I guess Nose Hill would be the closest one to me and I seldom go there because of the dogs. The last time I was there I had- no owner in site and this big dog, very aggressive, so I stay away from there- especially if I have my dog with me!...dogs up there are not under anybody's control. (G-So you prefer on the pathways?) On the pathways and I do it just for exercise, feeling calm, peace of mind, whatever, but I never get that at Nose Hill, because I'm always looking over my shoulder for the dogs.

G-Yes it is an issue; Mumtaz?

M-Well, when I think about natural areas, I think about a park just in its natural state and living up in the North east, there isn't too many places. So we- I like to go up to Nose Hill- we go there all the time. I like the kids to see going up a cliff, just the way it is-natural. They get to see all these things like flowers, insects, things like nature intended them to be.

G-Tina, we're just going around the table on this question, please feel free to get some nourishment back at the table, otherwise we are asking about what nature means to you, if you think about when you're outdoors in Calgary- some of the things that come to mind - this particular place or that thing.

T- I live in the North west and we're near Laycock Park [Nose Creek Parkway] and that still hasn't been discovered by a lot of people. So there's a lot of open space, and I like to take my dog - on a leash (others- of course! and laughter). Just off of Beaver Dam road- but I walk from my place- it's a good hike. I like it because I get away from everybody and it's so quiet, and you can- because it is open - you can actually see stars and I'm one of those who I like to be able to just sit there and look out and contemplate and just totally, totally, relax. (G-so you go in the evening?) I do. The dog I have- I've been there at 3:00 in the morning and I don't have to worry about anything. ...he's not big, he's aggressive. People know enough not to come near me if I tell him. He's protective and but he's not aggressive towards others unless he's told to be. I like it because it is clean, but at the same time it is very natural. Actually there's no washroom there which is unfortunate- there is a washroom, but there's no running water, its like an outhouse. I don't need that [anyway] because I'm close to home- but that's the only problem, otherwise, it's yet to be discovered.

G-I'd like to talk a little more specifically about some of the benefits that we see either as citizens or that we enjoy as a city - the idea about having nature in the city. I'm also interested in some of the impact that natural areas have on the image that we have of Calgary. But I want to make sure that I have a list of benefits. So we can go around the table, or someone can start, and we can brainstorm and I can try and get a sense whether others agree that that's a benefit or not. It's not important to get consensus, but I like to just see how prevalent it is. So looking at the benefits, through generating a list, and also looking at what the natural areas have to do with the image that we have of Calgary.

(EVERYONE STARTED TALKING)- J-didn't we just come up one of the top cities to live in in Canada? ( P-number two..) ( X- yeah I read that) (X- it was in Chatelaine) (P- we were fifth in

park space) (G- I have to get that article.) (P-I can bring it to you.) (G-That would be good, great if you could do that) [and she did later on]. (T- And Calgary's one of the best.) (P-The second best place to live in.)

T-I think that one of the benefits- we had company from out of town the other day- and actually one of whom was from Costa Rica and this is her first time up here in Calgary, and the other person that was with her, he's from Vancouver, and he was just floored by the amount of open space we have. And with my dealings with people from different communities, ...it's something that's free, there's no charge to them, they can take the kids out and have a good picnic and enjoy themselves at no cost. And it is available for everyone. That's one of the benefits and of course the openness I think just gives us, even ourselves, a break.

G-Have others thought about the idea that there isn't a charge specifically to go? (ALL AFFIRMATIVE).

P-I consider walking my dog part of my leisure.

S-I think fresh air is practically- I know that there's supposed to be no fresh air left, but I think that you're closer to getting some fresh air in a park than say doing your walk along a busy street and you're inhaling all this stuff.

G- So fresh air, from the health perspective? S-Yeah.

R- think another thing is just the exposure to something that isn't manmade, right in juxtaposition. One of the things I like about the open space Calgary, is that you can be right downtown almost- you can be downtown and you're on the riverbank (M-That's right) R-Or in River Park where we go, it's-you know you're standing looking down at a beaver dam, and the skyline of downtown is right there. You get beautiful skylines of the mountains, but the fact that there this close together, I guess it's the fact that everyone can get exposed to it- to the animals and plants.

M-I think my favourite is Edworthy Park because you can go there for the day and have a picnic and you're so- you're on the river front there and you feel like you're out of town somewhere. You can go for a nice walk and you can relax and have a picnic, plus have a little playground for the kids, you know. It's like a full day you can spend out there- have a nice, relaxing day.

T-The only thing that I don't like about Edworthy is the bikes - you can get run over by them.

G-Would you say that one of the benefits then, is the closeness or proximity?

M-Yeah.

G-That was a different point than yours Rosemary, which was almost the aesthetics of having or being in both worlds almost simultaneously.

R-Without spending alot of money, or having to own a car. You can do it on your lunch hour. To be able to be on a natural river on your lunch hour is really special.

S-That's what scared me when [premier] Ralph Klein was saying that he was going to start charging for going into the parks I said "Oh I hope he doesn't start charging for me to go to Fish Creek!" [note:*Fish Creek Park while in the City limits of Calgary, is a provincially owned site*], you know, and like I'm not only thinking of me, but I'm thinking about all of the families that go there only for an hour, would they want to spend whatever it is?

M-Like even to go out to Banff now, I think its \$8.00 and when you think of the gas and entrance to the park.

J-I just really think that the benefit is to have the balance for the rush and the bustle to - the quiet and the grass and the sounds, it makes you feel wonderful - as opposed to being in a fake park- it's nice, here's a tree and stuff , but you get out in the crunching snow , or with the big trees...and then to see the animals-I just love to look at the animals (others join in Yeah, yes and the deer).

S-Or-you go to Fish Creek- the deer? You know, like one day I thought I saw dogs jumping- and it was ten deer, I counted, by the time they crossed the path in the distance, there was ten of them, little babies and mothers-

G-That's actually a good example of what I'd like to ask a more in depth question on- when you see the wildlife, there's different things that can bring you joy about that . Some people would say it's just to see other living things, (uh uh) around and I'm wondering if you have some feelings about that that you wouldn't mind telling us about. For me it's to see other living things just busily going about their business.

S-Or they look at you like "What are you doing here?" (M- yes)

M-It is so different from seeing them in the zoo, like totally different- this their home. (G- in their natural environment?) In their natural environment,yes.

S-But the other thing, that I think may be it might come in another question, is that I see parents actually stopping and like they're explaining to the little children they have with them, like you know this is this kind of a bird or whatever and these kids are you know- and I think that's important.

M-You never forget, you remember things like that . (G-so you remember by actually seeing or by experiencing it?) Yeah.

P-The park area by my house that they're [animals] in, I enjoy seeing them, I think it's great to see animals, but I'm kind of concerned for them because it's so residential. I mean I don't know how they get to this park or where they go, I mean I guess they're on Nose Hill, but still they have to go through like a tunnel to get actually to Nose Hill. I see them mostly on the pathway system.

T-We had one off 64th Ave- the other day on my way to work there was a deer out there and- oh I love seeing wildlife and I'm one of those that explains it to my kids, eh, give them when we go for walks and stuff, I give them crumbs or pieces of celery and stuff, to gophers- one of them in the backyard, because we're next to a city park- and they get a kick out of it . You know they come up to take something and run back into the house so excited.

J-I think it's really great for kids to have an opportunity to commensurate with nature. My son used to go down in Fish Creek - Snake Hill and he used to go and discover all the snakes, much to his sister's torment (laughter). *[note: this may have been a very painful recollection for J, as her son had only recently died suddenly, although group members were not aware of this ]* I can't - I thought it was really a wonderful thing for him not to be afraid, not to- to be able to engage him in a natural experience...

P-But I see dogs, dogs that aren't on a leash in an area where they should be on a leash, take off chasing a jack rabbit.

T-But they don't catch it-

P-I mean they probably don't, I don't know, jack rabbits are too fast.

R-It may not be that good for the animals, but I kind of like the way that one way or another we're all living together (murmurs of yeah). You know maybe there's a better atmosphere for animals to

live in, but at least they are surviving and I think that's sort of good news about a city if it can make (that happen).

T-That's kind of interesting because on Nose Hill you get a lot of coyotes and I would never let my dog run loose, because coyotes get really mean to dogs. See when we moved into Huntington Hills, we're going back quite a few years, we had to walk through a farm field to get to school and we used to see porcupines, and skunks and stuff like that and people that I talk to now they can't imagine being in the city and being able to see these types of animals that we were, so it's nice that there's still have the open space that if you're lucky enough you can see these-

S-Yes, but don't you find that there are people that never even think of parks, never think of going anywhere unless it's got a little flower bed with pansies in it, you know-

J-that's Ok, there's places for them (laughter).

G-Why do you think that might be? J- I don't know. G-Maybe they feel safer?

T-when we were kids we- S- I think they're missing so much...

G- I just wanted, I'll get back to you Tina, I wanted to just go back to something Pat said, that you have a concern and you were wondering how they're [animals] managing to survive?

P-It's because we're in the middle of the city, in such a residential area, Fish Creek Park I wouldn't feel that way, it's just my pathway that I walk in in the northwest, surrounded by residential, or major roads, so, I don't know whether they make it back to where they sleep at night or they're stuck somewhere.

J-It gives a respect, a mutual respect, I think you really respect each other (P-Exactly) and nature and the relationship we have.

M- Where do you live? (To Pat)

P- In north west, just off Northmount Drive - I'm in the pathway system then I can walk up to Nose Hill, if I wish.

S- Oh yeah, my brother lives in that area, sort of Nose Hill Creek actually, now he still takes the dog, him and I argue about that all the time. He feels that dogs should be able to - but under his control, I mean he doesn't just leave the dog.

P-Not everybody does that though. (X- mmm) (M-Yeah).

P-If you have your dog under control and if they listen to you that's fine- my dog doesn't listen to me, so I keep him on a leash.

S-Does anybody know Carburn Park at all? When you go to Carburn park there's an area where you can park instead of going on the Deerfoot you keep going Southland and then you can park along the fence there and the City was talking about maybe making that into a golf course but they've I think since that community has argued (G-Yes, Southland Park) S- anyway, that first little part is where people can go with their dogs and let them loose and I'm telling you there's like little dogs, big dogs,...but once you get past that and you get into Carburn Park it's fine. It's that little area that's a little scary when you have a dog like that comes up to here, but I always look around if there's [an] owner, I feel they shouldn't be there if they haven't got control of their dog and I've never had anything bad happen to me, so-

G-OK, I'd like to just work a little bit on the idea of the image for Calgary, we started off talking

about, according to Chatelaine magazine at least, we're doing well and I know that they must have some people who are familiar with Calgary, because we've figured in their articles before. I'm looking for some words maybe that we might use. Like would we call ourselves the garden city, I'm not certain. Now when people think about Vancouver, they say lush; when people think about Calgary they say—in relation to the parks is what I'd like to focus on... They say 'pathways', I know that, "what great pathways we have!"

P- You know what we were #1 in in Chatelaine? Our water sewage treatment plant! We have the best treatment of our water sewers, so that 's encouraging.

S-OK, I came from Vancouver and that's where I came from 9 years ago, and I think of Calgary as like sort of what open space- the West should be- I'm not sure what the word would be- you people probably know a better word than I would.

R-What about wide-open, in comparison to Vancouver where you're sort of in the woods or things are closed in, I find alot of the spaces here are so immense. Like Nose Hill is immense, it's-

S-Uh-um. When I first came here I couldn't believe the spaces, I went , what are we going to do with that empty piece of land, driving down 16th Avenue, especially in there and vast, vast spaces.

R- Maybe they are getting filled up now, I don't know.

G-So that's definitely- the sense of openness.

J-Yes and you see I have the opposite, my sense is protected and closed in the parks. Because of the high trees, because of the closed environment, (G-So related to your image of Calgary that you feel there's alot of protected areas.) J- Yes , and the other sort of word to describe it- I think it's like a diamond in the rough- rather than having it like too polished or too perfect., we're such a natural beauty here.

G-I was trying to think when I first came to Calgary, definitely where I live it was the pathways, that I found very different and special and really felt that they were discovery oriented, that I could really explore by going along but in a safe way. Not too many of you have mentioned that, except for the dogs. I'm assuming from that that you do feel safe in our parks, is that-

R-I wouldn't go - like I admire you for being able to go at night (to Tina), and I have a dog to stand behind me and wait for me. In fact, I'm the opposite, I don't worry about the dogs at all, we've got our dog and we've been going for years, all these sizes of dogs and they don't even fight it's just everyone's quite friendly, so I like it.

P-See my dogs been attacked twice, so-

R-Yes I guess if you've had that

P- gives off some kinds of scents that he's a wimp or something.

G-Yes that's life, nice dogs finish last. (laughter)

R-So I don't know I think that you'd be unique in that you go to the park at night. My, -in fact I put on here [survey form] there's place that I wouldn't go at night. When I have to walk the dog alone, I do a different route.

T-I think that ah, with myself, I think because Laycock [park] is pretty well in the valley, we're away from the hustle and bustle, I mean it's just off Deerfoot, so in order to get there you have to come down in through Beaver Dam- it's quite a hike to even get there and I've never seen anybody

that is there really really late, 'cause it is natural there's no real lighting in there and so that's why I wouldn't go in late at night say in Bowness Park, Edworthy I would probably think a couple of times about it before I would go into that park late at night because there is so much more residential in that area- I'm not that trusting of a person for that park, but Laycock, because it's not- it's not busy enough yet? Maybe if they put in running water, started advertising about it and started getting people there, because even from the parking lot to get to the actual river, it's a hike.

G-OK, does anyone else have anything else they'd like to say about benefits or image?

P-Cool and crisp-

T-I feel about Calgary too, I've done alot of travelling and whenever I come back I notice the brightness, the clearness, it doesn't seem so crowded, some of these cities- very open.

R-I know this one's negative, but one of my images is the dryness, the brownness. When you said lush in Vancouver, I tend to think brown. (G-This too is natural, though,) R-Yeah I don't necessarily think that's a bad thing, that's what reminds me of the prairies, actually

P-Or the fires up on Nose Hill. Nose Hill's black right now.

G-Ok the last question I'd like to talk about has got to do with the way we acquire natural areas in Calgary right now, that's both right from when a new community is developing or later on if we reclaim a site that's been disturbed or if we turn a residential site into a whatever. There are certain ways that we as a City do those functions now acquiring natural land and we do them believing that's what the citizens are interested in. So the last question I wanted to ask, and I'd like to try and go around the table. although it is something that everyone might not have thought about in great detail, and that's to find out what are the important things to consider when we're thinking of acquiring natural area park land. So for example, if we're thinking of a new subdivision, one of the things we think about as planners is trying to balance the open space, take as much natural area as we can, but still leave spots for other types of activities to go on. Now we don't have to do it that way, we could just make sure that we take land for activities and if there is natural area there, fine, or we could change areas and so forth. So, what's important there to us is balance, OK?, that's the key to what I've described. So I'm interested in other factors that might be important when we're looking at how we get natural area land or how to keep natural area land .

SILENCE

G-It's not something that you just sit down and often think about.

P-Once something has been designated as natural area, how difficult is it to loose it to the development industry?

G-Well, if it's not called environmental reserve because of its features, it's as easy as any other type of land- we can take park- and the land uses are quite changeable in Calgary.

P-There was a piece behind our house they wanted, but they never did, maybe it was all hearsay.

(G-It's easy.) P-I guess it's been there since the fifties and then to take it away-

G-There's a process, it has to go through due process, but they're held all the time weekly, or monthly, at least I would say, land items (in which) park goes into other uses and land that is other uses goes into park. Wouldn't that be fair to say? (to Rosemary)

R-Probably so much- I guess it's your image, most the environmental reserve I think is pretty hard to get out of, (G- At this point time-)

P-So environmental reserve would be like the natural area?

G-The environmental reserve at this time would be things that for some reason aren't developable.

R-Usually slopes

P-Like Nose Hill?

R-Well, that was one that was threatened.

S-Ya well they were going to sell that-

R-Think more of the river banks, along Fish Creek (general chatter)

G- we're talking really steep slopes, that's usually the criteria. So if you think- you know in Hounsfeld Heights, along- just south of the LRT where the balloons land sometimes? That was considered environmental reserve. That's got a slope on it that's detrimental to any building there- it's not so much to protect the land as is to say "Well we can't really do much else that 's safe for human beings on it", then we get the benefit of being a natural area. We don't have an environmental protection land use at this point in time.

J-It would be important to have a sort of protected percentage of land- rather than having to drive half way across the city to have it accessible and I would imagine something to do with equity. In other - if you have to take some land away, I would expect that there would be some other land, that would be other environmentally nutable, usable land.

G-So when you were talking, you're thinking a percent that's natural or just park?

J-I'm thinking, and I don't know- if I was developing a community, I would want X percent of usable natural land, usable, accessible natural land in that area- So then I'm thinking "well, it's going to cost a bit", there's always a cost to everything, so ways- the other sort of thought that I would have is either community ownership, or corporate sponsorship to be able to create natural park or nurture natural environment. But I would think that that would be a- I know that you need to really protect- I mean what suffers would be the kids, first. They want to get into the land, they want build this bigger building, I find it offensive to think that there's nothing to protect our natural areas.

[End of side one]

G- The subdivisions that come in Calgary are quite big because we are so open, we do have some small ones, but usually they are quite big. So right now we've said well its ...percentage of open space...per community, but as Jessica mentioned, it gets expensive. So are we looking at somewhere we can walk to or bicycle to or what are we looking at?

M-Like see in the north east in the last few years we've just seen all this crowd, it's just kind of mushroomed. But it all seems so structured. Like you go to Monterey Park you see this tons and tons of houses and this little park that's got this little playground, but there's nowhere that- unless I haven't gone, unless I've not seen anything, but just seems that everything is so structured even the open space. (G-Like contrived?) M- Yea, yea, and then you go to the older communities in the north west, [or] close to Fish Creek and its like a totally different perspective. I don't know- I mean there's a lot of land up there [north east], but it all seems to have got houses, commercial, residential,- nothing just open.

R- I think it's an interesting thing- I mean you can almost force say the walking distance which is nice and equitable and low cost for everybody to get to, but there isn't always a place available and



sometimes you end up preserving a really big space that itself a real sort of barrier, because its so hard to walk across or - so maybe your word balance is the right thing. I also wonder if we might in this day and age be really thinking more about reclaiming sites that maybe have lost their first naturalness but actually use it as an experiment to bring land and back after it has been used for another use. We seem to sort of give up on it and get terrified of things like acute contamination, that actually isn't that bad a contamination, that can be easily dealt with. Like I'm thinking of, you know, the discussions about oil leaking underground, well, you know it's not going to kill you to walk over a space that had oil underground. It might kill you if you had your basement and you had fumes coming up - but if you have a really nice park, we tend just out a fence around it and panic. I don't think we're being very creative about bringing that sort of land back.

T-When you say park Gae, do you include like play fields and baseball diamonds, and things like that?

G-In the example I gave you in a 100 hectare community, 10% would cover school yards, play fields, tot lots, connecting corridors between avenues and any area that we might leave trees or grass on. But it doesn't include those severe slopes, that I just mentioned. If they happened to be an addition, like in Edgemont, where there are severe slope, they would have their 10% , plus those slopes. But the 10% otherwise covers everything else, including the school yards, so what it means is alot of the time alot of the space is taken.

S-What about say as far as the GoPlan, aren't they also looking at - they're transportation, I know, but aren't they looking to make sure that they don't put roadways in and stuff where it should be protected?

R-Well they're trying. They've eliminated some of the really controversial ones for now.

G-The original plans did come through with river crossings, because that's public land and that's precisely one of the issues that we're looking at - what is the appropriate use for natural area park land. Is land banking for more pressing public need an appropriate use? There are very many people who think 'yes' and others who think 'no', especially if they live beside it.

R-But they also want to drive downtown - they want everyone else to not drive -

S-Yes, off ramps and all that all this just becomes more polluted and you're trying to walk in that area.

J-I like your idea of reclaiming previous park land- maybe we could do something to recreate-like Fish Creek again, we have the old Mannix House and there used to be a house there and now it's sort of like a natural (S-history [also] that one area where there used to be a woollen mill or something?) J-I haven't found that yet. (S-Oh you haven't been there yet?) J-No, but they have the Mannix house and now its a natural centre. They have kids coming...create parks - Further to that I would like to see- if they're putting up buildings-I 'd like to see some natural vegetation and natural life around them instead of acres of concrete.

G-Ok because we did get into this discussion, I'm going to ask one more particular question. If we think about balancing space, we're talking about there are costs, and that's sort t of thing and we got into GoPlan. Now there is a trade off of providing natural land and that means we spread out more. Now, is this- I'm just trying to get a feel- is this a concern or just a legitimate tradeoff that we can afford with all this open space that we have around? (X-I'm not sure what you mean.)

G-If we're going to make sure that we balance the open space in communities and try an avoid what Mumtaz has suggested, which is very densely packed living and contrived types of open space, we have to spread out and Calgary has to keep growing and we will need more roads to

grow for that . But the tradeoff is each community will be developed in a way that people are happy with because they will have the balance of open space, there'll be natural areas there. but now we're spread out more as a city. The other option is to pack in- have everybody live somewhere and have the open spaces around it, that's the other extreme. You might not have- this is again something you might not have thought about, but it is sort of implied in providing that space at a local level- it means that you have to spread out.

J-The other implication is that the centre of the city is where people go to do their work and now with computers ... operating- now we have more opportunity to operate out of satellite areas. (G- So we won't have to go anywhere?) J- I still see people going (G-but not as much) J-Ya.

R-I'm biased on this 'cause I really think that spreading out is really harmful and I think that there's maybe a medium between the two extremes you suggested where you tighten up the individual space units so that each community can have public open space that's shared and use your streets and alot more publicly so that they're more attractive than just cement- but I think we've got to be cognizant of the fact that every time we spread out we eat up someone else's natural area or something like farmland.

G-Anybody else have any feelings on that?

P-I kind of like the idea of spreading the city- we could have a whole lot of open space. We may be fifth in Canada, but most people are coming here because of how much open space is visible. I'd rather have to live in the suburbs, mind you I don't live too far from downtown but if I did, I'd rather drive 15 minutes longer and have open space. (G-Ok)

T-See I don't mind the spread out but I'm also a person who likes to get from point A to B as quick as possible and I like the natural parks, but you kind of have me there- um - I found that with spreading that the absorption of some of these natural areas has actually destroyed more than what they've given. When Beddington came in there's a place called Split Rock where the kids used to go and collect polluted water and penny frogs and stuff and it's gone -there's nothing there- I can't talk about when we used to do this at Split Rock 'cause it's not there, because it was absorbed into part of the community, they had to go flatten it out or whatever they did there and I think that special attention has to be paid to protect those types of areas. By spreading out we are more likely to absorb them because 'oh we don't need that anymore, we're opening up a park over here'- I think that actually if you were to go for one really nice park in each quadrant of the city- like one large park, such as Edworthy, which you can't duplicate, in the North east and one really large park - you know in different parts of the city, (rather than these) smaller parks, like these ones with tot lots, and play fields on them, that would be more beneficial. It'd cut down too on maintenance.

P-But then you have to drive to get there. I like the idea that our pathway system can be accessed - alot of people- I can anyways- without having to drive somewhere. You just go out your front door and walk a couple of blocks and you're there.

T-See Mumtaz was talking about the North east- 'K. I know that they've got that Prairie Winds park there now. But before Prairie Winds was there, if they really wanted to go for a nice picnic someplace, they had to go either way south or way out to Bowness Park. Now Prairie Winds is for that whole North east and the way it's ballooning done there- I was out there on the weekend- (murmurs of yes) it's just unimaginable. So if they were to put in a nice park which would fall into [a category], like, Fish Creek or Bowness, which had everything which every family's looking for, you're going to cut down on people from the North east having to go way out to the south end. Cut down on traffic that way, you're also opening up a big space which is going to be cheaper to maintain, than having six little small tot lots which alot kids aren't going to use anyways.

P-But, you know it seems that the North east doesn't have as much park space as other areas, so that percentage [10% reserve] is not really- that's not something that's happening?

G-Well, you know what's missing was it's natural, undevelopable feature. (M-Yes, that's it) (P-Which is lots of tot lots, but not ) G- North east looks like what we get when we just get 10%, 'cause we get others [open space areas] through other things. (M-It seems there's a lot more houses than anything else.)

G- Other people have mentioned this fact about driving, Pat. Some people like to drive, others don't, so it is really a fundamental to how you like to get around.

P-I mean I 'll drive to go to a different park if I want to, it's just that if I want to walk my dog, I don't want to get in the car. (M-especially in the evening, if you want to do something you don't want to really drive.) P-No, once I home, I'm home.

J-You're talking about life style.

M-We just use the pathways during the week because it's closer, but on weekends we'll drive (P-Ya.)

G-Ok I'd actually would have loved to go on for another hour and a half, but I put it at the noon hour because I figured everyone had other commitments. So I am really glad that you became so involved, because I've got lots of good information here.  
Thank you.

## APPENDIX II

### Self-administered Mail Survey Pre-test Results

NATURE IN THE CITY  
APRIL 1995 PRE-TEST RESPONSES

CASE #	QUESTION #1: Please list a few benefits of nature in the city:
01	Provide places where I can get away from the rat race of urban life and "meditate". Allow natural wildlife to flourish near (or in) an urban setting.
02	Visible nature for children. Exercise in pleasant stress free setting. ie. walking nature trails.
03	Aesthetics. Improvement of environment. Reminder of relationship between humans/nature. Educational aspects-life cycles, interdependence.
04	No comments.
05	Quiet Places. Wildlife areas.
06	No comments.
07	No comments.
08	Quick access to nature as a stress reliever. Maintains lower population density.
09	Exposure to natural un-landscaped beauty. Access to observe natural ecosystems. Wildlife. Place to retreat.
10	Areas for some wildlife to exist-especially birds and wild-flowers. When I'm in a "natural area". I feel a real sense of relief-a temporary and convenient escape from the contrived aspects of cities.
11	Wildlife-birds, ducks etc... Trees.
12	I think a lot of people get most of their physical activity through their interaction with nature. Those of us who don't want to be closed in for even more hours of the day really appreciate that we can combine witnessing beauty, exercising and an emotional outlet.
13	Fresh air. Family activities.
14	A place to go and relax and forget about the day to day worries. Relaxation. Keeping fit and healthy-going for walks-feeling good mentally and physically.
15	Overall aesthetics-nice to look at survival of diverse plants, animals. Sense of history, perspective. Incentive to get out (get exercise and fresh air) because they are nice to be in.
16	Open space to walk, relax, explore and enjoy. A place for kids and pets to run wild.

CASE #	QUESTION #1
17	Calming. Back to nature.
18	Natural areas provide a peaceful setting for recreation and contemplation. Green spaces are aesthetically pleasing and provide a contrast to inner-city and suburban buildings.
19	A place to relax. An important visual break from urban development. A place for outdoor recreation.
20	Respite from stress of city life. Enjoy nature. Walk-exercise.
21	No comments.
22	Social chances. Separate yourself from built environment but not leave city. Relaxation, no stress of driving.
23	To serve as park land.
24	No comments.
25	Recreation/common space. Ecological preserves.
26	Opportunity to escape urban existence. Provide opportunity to partake in different activities. ie. bike riding, football etc... in a unique atmosphere.
27	Environmental education, learning how nature works. Change of pace; get away from buildings and concrete.

NATURE IN THE CITY  
APRIL 1995 PRE-TEST RESPONSES

CASE #	QUESTION #4: <i>For me nature in the city is ...</i>
01	Walking in Nose Hill park in the spring and seeing the crocuses bloom or biking by the river and smelling the wet mud and seeing the beavers swim or biking to work in the morning down Nose Creek and see a big blue heron standing fishing for his breakfast.
02	Deer and owls and rabbits and spring flowers on Nose Hill, beavers in Fish Creek park, warm summer days at Riley park, walks around Prince's Island, biking along at the Bow. The parks in Calgary are a place to escape traffic and buildings.
03	A combination of things. Watching the change of seasons in the river valleys gives me a sense of well-being and comfort. The beauty of treed areas is important both intrinsically and because of the cleansing effect trees have.
04	The river valley, Prince's Island, Glenmore Park, Weaselhead.
05	No comments
06	Means relaxation, relief of noise and general "unruly" times in the city. It means escape (Heritage, Fish Creek) to a more pleasant atmosphere.
07	No comments.
08	Important for my kids. I live close to Bowmont Park and I hope to obtain information about interesting geologic features plant life and wildlife and take my kids on field trips. I expect that when I retire, I will make more use of this environment.
09	Growing up close to Stanley Park/Sandy Beach developed an expectation that Parks and natural areas were a part of one's normal lifestyle. I've taken Calgary's Park system for granted. However, I've lived in other cities and felt a real yearning for a beautiful, natural and SAFE area. I have been a walker and a runner and never needed much of the developed park area-save swimming and snacking in Stanley Park as a child. I think our pathways and natural areas should be focused on.
10	Losing an awareness of being surrounded by city-even when it is visible. I feel more involved with the changing seasons, for instance watching the colours and flora changing, just below parkhill. Sometimes I feel more relaxed and at peace, others I feel more able to think through problems. The pace changes, compared to walking or biking along a road or downtown.
11	Natural life. Birds, plants, insects. Plenty of green.
12	A real benefit, emotionally and physically. Especially during my early teens Fish Creek Park was a place I spent many hours. It was a real outlet for freedom, where I could go and was safe. I'm, not sure what activities could have replaced riding my bike through those paths. Now walking the paths and hills is a constant in my life.

CASE #	QUESTION #4: <i>For me nature in the city is ...</i>
13	Maintain health. Exercise. Walking with friends, for exercise and networking. Walking with group (Outdoor Club). Love of nature.
14	A place close by to go for walks, relax and spend time with the family. I prefer underdeveloped wild lands so you can see nature as god intended it to be, see wildlife, insects, flowers and enjoy the natural beauty.
15	Some areas we haven't got our hands on. Over-planned, built, organized. A variety of very urban to rural scale, types-not all going to be perfectly protected. Fear at night or when alone keeps me out of areas.
16	Walking in an open park in the late evening with my dog, sitting on a bench and looking up at the stars. Peacefulness. Calmness. Enormity of the Universe. Beauty of the trees. Relaxing-secure. Romantic. Refreshing.
17	Quiet.
18	Cycling, fresh air, sunshine, a feeling of relaxation. Watching the different seasons and the varied colours. Sounds of water; light and shade; the smells of grass, flowers and the environment generally.
19	A chance to get away, relax and "recharge".
20	Is enjoying natural areas that are large enough that you can forget you are in a city, preferably by not being able to even see the city or any reminder of it. Mostly I think of three things listed in question #1.
21	The ability to walk beside the River close to my home. Listening to bird songs, rippling of river and braying of horses at stampede grounds. Opportunity for exercise in a quiet setting (ie. Little traffic noise). Convenience of a paved path to make it easy to walk and cycle amongst nature.
22	Chance for meeting people with same interests (ie. bike and hike). Relax, get away from built form without leaving city and when time is limited.
23	Wide open space. Untouched with wild life.
24	Answered in focus group.
25	Refuge form worse aspects of urban life. Fresh air, solitude.
26	A unique opportunity to escape form the everyday urban life experiences. It provides me with numerous different activities to participate in.
27	No comments.

## Benefits of nature in the city

BENEFIT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Comment	23	85.2	23	85.2
No comment	4	14.8	27	100.0

## Open space funding FIRST priority

FUNDONE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1	3.7	1	3.7
Local parks	4	14.8	5	18.5
Winding walkways	1	3.7	6	22.2
Regional pathway	7	25.9	13	48.1
Regional parks	7	25.9	20	74.1
Natural areas	7	25.9	27	100.0

## Open space funding SECOND priority

FUNDTWO	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Local parks	2	7.4	2	7.4
Winding walkways	2	7.4	4	14.8
Regional pathway	5	18.5	9	33.3
Regional parks	7	25.9	16	59.3
Natural areas	4	14.8	20	74.1
No Response	7	25.9	27	100.0

## Acquire sensitive areas?

ACQUIRE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Somewhat Approp	2	7.4	2	7.4
Appropriate	7	25.9	9	33.3
Very Appropriate	17	63.0	26	96.3
No opinion	1	3.7	27	100.0

## Complete river valley system?

RIVER	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Somewhat Approp	2	7.4	2	7.4
Appropriate	8	29.6	10	37.0
Very Appropriate	16	59.3	26	96.3
No response	1	3.7	27	100.0



Allow controlled human use?

CONTROL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	2	7.4	2	7.4
Somewhat Approp	8	29.6	10	37.0
Appropriate	8	29.6	18	66.7
Very Appropriate	6	22.2	24	88.9
No opinion	2	7.4	26	96.3
No response	1	3.7	27	100.0

Prohibit human use?

NONEUSE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	13	48.1	13	48.1
Somewhat Approp	4	14.8	17	63.0
Appropriate	3	11.1	20	74.1
Very Appropriate	2	7.4	22	81.5
No opinion	5	18.5	27	100.0

Open space for wildlife use?

WILD	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	1	3.7	1	3.7
Somewhat Approp	6	22.2	7	25.9
Appropriate	5	18.5	12	44.4
Very Appropriate	13	48.1	25	92.6
No opinion	2	7.4	27	100.0

Public education programs?

PROG	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Somewhat Approp	4	14.8	4	14.8
Appropriate	10	37.0	14	51.9
Very Appropriate	10	37.0	24	88.9
No opinion	3	11.1	27	100.0

Other appropriate uses?

OTHER	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Appropriate	1	3.7	1	3.7
Very Appropriate	2	7.4	3	11.1
No response	24	88.9	27	100.0

Nature brings places to mind?

PLACE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagre	1	3.7	1	3.7
Disagree	3	11.1	4	14.8
Agree	11	40.7	15	55.6
Strongly Agree	10	37.0	25	92.6
No opinion	2	7.4	27	100.0

Experience with nature has been positive

NATURE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Agree	10	37.0	10	37.0
Strongly Agree	17	63.0	27	100.0

Natural environment is separate?

SEPARAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagree	6	22.2	6	22.2
Disagree	13	48.1	19	70.4
Agree	5	18.5	24	88.9
Strongly Agree	3	11.1	27	100.0

Humans can live in harmony with nature?

HARMONY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1	3.7	1	3.7
Disagree	1	3.7	2	7.4
Agree	10	37.0	12	44.4
Strongly Agree	14	51.9	26	96.3
No opinion	1	3.7	27	100.0

Nature helps form a good sense of self?

CHILD	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Disagree	1	3.7	1	3.7
Agree	7	25.9	8	29.6
Strongly Agree	17	63.0	25	92.6
No opinion	2	7.4	27	100.0

Undeveloped park area are important

NATURAL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Agree	14	51.9	14	51.9
Strongly Agree	13	48.1	27	100.0

Need to keep biodiversity in life forms

BIODIVS	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Disagree	1	3.7	1	3.7
Agree	13	48.1	14	51.9
Strongly Agree	13	48.1	27	100.0

Other types of uses may be important

USES	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagree	1	3.7	1	3.7
Disagree	4	14.8	5	18.5
Agree	18	66.7	23	85.2
Strongly Agree	3	11.1	26	96.3
No opinion	1	3.7	27	100.0

Put natural areas to productive uses

PRODUCT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagree	2	7.4	2	7.4
Disagree	7	25.9	9	33.3
Agree	10	37.0	19	70.4
Strongly Agree	6	22.2	25	92.6
No opinion	1	3.7	26	96.3
No response	1	3.7	27	100.0

Nature balances stress of city life

BALANCE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Agree	2	7.4	2	7.4
Strongly Agree	25	92.6	27	100.0

Nature parks one of many ways

WAYS	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Agree	14	51.9	14	51.9
Strongly Agree	13	48.1	27	100.0

Too much nature in the city is a luxury

LUXURY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagree	7	25.9	7	25.9
Disagree	10	37.0	17	63.0
Agree	9	33.3	26	96.3
No opinion	1	3.7	27	100.0

Land use decisions based on economics

ECONOM	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Strongly Disagree	4	14.8	4	14.8
Disagree	7	25.9	11	40.7
Agree	12	44.4	23	85.2
Strongly Agree	2	7.4	25	92.6
No opinion	2	7.4	27	100.0

Any further comments?

COMMENT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Comment	12	44.4	12	44.4
No comment	15	55.6	27	100.0

For me nature in the city is

EXPERI	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Comment	22	81.5	22	81.5
No comment	4	14.8	26	96.3
7	1	3.7	27	100.0

What nature in the city means to me

MEANING	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Comment	16	59.3	16	59.3
No Comment	11	40.7	27	100.0

Age groups of pretest respondents

AGE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
20s	6	22.2	6	22.2
30s	7	25.9	13	48.1
40s	8	29.6	21	77.8
50s	3	11.1	24	88.9
6	1	3.7	25	92.6
No Response	2	7.4	27	100.0

Gender of pretest respondents

GENDER	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Male	16	59.3	16	59.3
Female	11	40.7	27	100.0

Ethnic heritage of pretest respondents

ETHNIC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Answer	21	77.8	21	77.8
No Answer	6	22.2	27	100.0

Education levels of pretest respondents

EDUC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Answer	25	92.6	25	92.6
No Answer	2	7.4	27	100.0

Household income of pretest respondents

INCOME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1	3.7	1	3.7
Close to average	4	14.8	5	18.5
Below average	7	25.9	12	44.4
Above average	13	48.1	25	92.6
Not saying	1	3.7	26	96.3
8	1	3.7	27	100.0

Households of pretest respondents

LIVE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Living alone	6	22.2	6	22.2
Roomates	4	14.8	10	37.0
Couple	6	22.2	16	59.3
Couple and kids	8	29.6	24	88.9
Lone parent	1	3.7	25	92.6
Other situations	1	3.7	26	96.3
No response	1	3.7	27	100.0

Community

COM	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Answer	24	88.9	24	88.9
No Answer	3	11.1	27	100.0

Length of time residing in Calgary

CALGARY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Less than a year	2	7.4	2	7.4
1 to 15 yrs	6	22.2	8	29.6
Over fifteen yrs	16	59.3	24	88.9
No response	3	11.1	27	100.0

Last natural city park you visited?

PARK	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1	3.7	1	3.7
Nose Hill	7	25.9	8	29.6
Fish Creek	5	18.5	13	48.1
Other parks	12	44.4	25	92.6
No response	2	7.4	27	100.0

This visit took place within the past

TIME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Few days	12	44.4	12	44.4
Few weeks	6	22.2	18	66.7
Few months	5	18.5	23	85.2
In the past year	2	7.4	25	92.6
No response	2	7.4	27	100.0

## APPENDIX III

### Self-administered Mail Survey Questionnaire

#### THE UNIVERSITY OF BRITISH COLUMBIA



School of Community and Regional Planning  
6333 Memorial Road  
Vancouver, B.C. Canada V6T 1Z2  
Tel: (604) 822-3276  
Fax: (604) 822-3787  
May 1995

Dear Calgary Resident:

This package contains a two-part questionnaire and postage paid envelope for the Nature in the City\* community survey being conducted by Calgary Parks & Recreation, Planning Section in cooperation with researchers at the University of British Columbia, School of Community and Regional Planning. Will Pearce, Superintendent of the Planning Section, is the Department contact. Ms Gae VanSiri, a doctoral student at the School and a senior parks planner with the Department, is working under the advisement of Dr. Penny Gurstein, and in collaboration with Dr. Tim McDaniels, to study what Calgarians think about the role and benefit of natural area park land in our city.

The results of the survey will assist in future planning for natural area park land and will be used in the preparation of a doctoral dissertation concerning different perspectives on nature in the city. Your participation will help to provide information on what the Calgary public thinks. If you would like to take part in the study, please look over and complete the enclosed two-part questionnaire. UBC regulations for research require that we draw to your attention that it is up to you to decide whether or not you want to take part; that by returning a completed questionnaire you are assumed to have agreed to participate in the study; and that your participation is limited to filling in and returning the enclosed questionnaire.

Responses to the survey are confidential and anonymous in that questionnaires cannot be traced to a particular address. All returned questionnaires will be coded and analyzed by a customized SAS computer program. It should take approximately fifteen minutes to complete the survey. Once you are done, please return both parts of the questionnaire in the postage paid, self-addressed envelope, by June 26, 1995.

If you have any questions or concerns, please call Will Pearce or Gae VanSiri at 268-4760, or the University of British Columbia researchers (long distance charges will apply) at (604) 822-3276. We hope that you will participate and thank you for your interest in this project.

Sincerely,



(\*Also on back of this letter is a short list and map of some of Calgary's more well known parks and natural areas.)

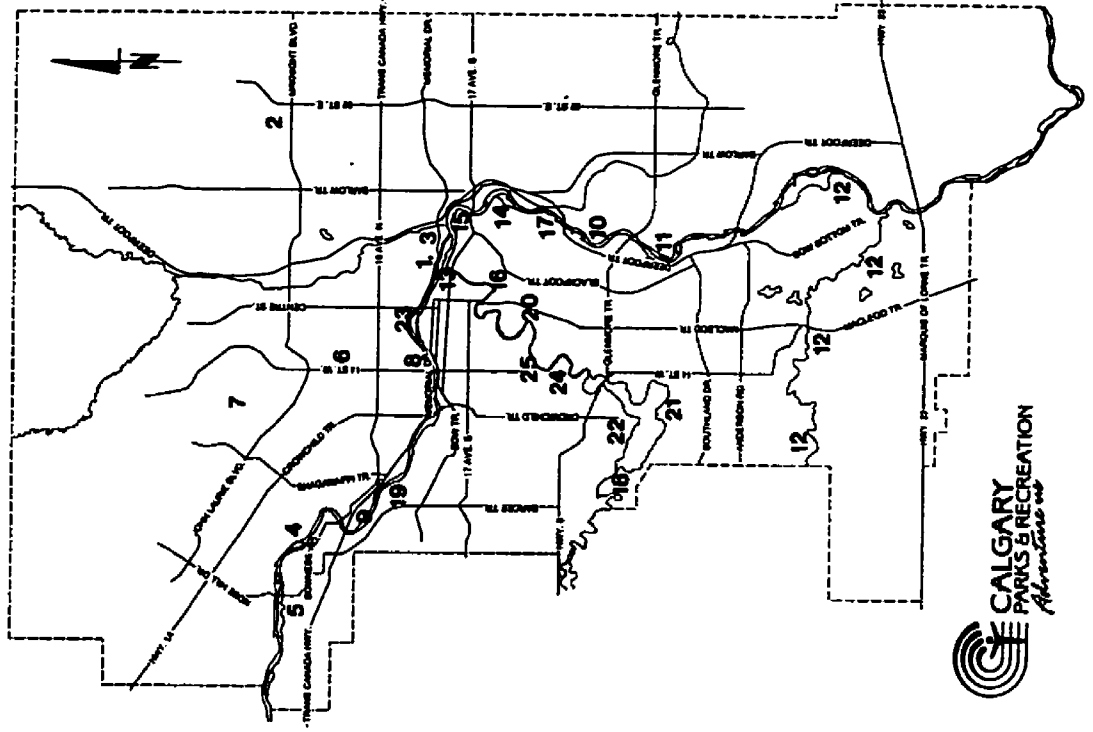
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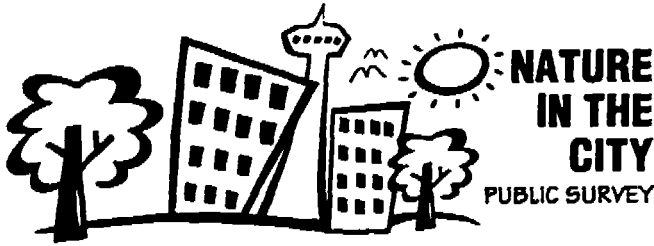
*The School of Community and Regional Planning is affiliated with  
the Centre for Human Settlements and the Westwater Research Centre.*



**A Sample of Parks & Natural Areas  
in Calgary**

	PICTIC TABLES	SHELTERS	BARBECUING	PLAYGROUND	HIKING TRAILS	X-COUNTRY SKIING	FLOWER GARDEN	CANOE ACCESS
<b>NORTHEAST</b>								
1. CENTENARY PARK Access Off Memorial Dr at Balines Dr NE	X		X					X
2. PRAIRIE WINDS PARK Access off CastleRock Blvd NE	X	X	X	X	X			
3. TOM CAMPBELL HILL Access off Memorial Dr NE & 12 St NE					X			
<b>NORTHWEST</b>								
4. BOUNDARY PARK NATURAL AREA Off Silver Valley Blvd, Silver Creek Dr NW				X				
5. BUSINESS PARK Access off 85 St at 48 Ave NW	X	X	X	X	X			X
6. COOPERATION PARK Access off 10 St at 24 Ave NW	X	X	X	X	X			
7. NOSE HILL PARK (Natural Area) Off 14 St between John Laurie Blvd & Westshire Blvd NW				X				
8. RILEY PARK Access off 5 Ave S 10 St NW	X		X	X	X			
9. SHOULDICE PARK Access off 16 Ave at Home Rd NW	X	X	X	X	X			X
<b>SOUTHEAST</b>								
10. BEAVERDAW FLATS PARK Access off Glenmore Tr SE	X	X	X	X	X			
11. CARBURN PARK & NATURAL AREA Off Glenmore Tr at 18 St SE	X	X	X	X	X			X
12. FISH CREEK PROVINCIAL PARK	X	X	X	X	X			X
13. FORT CALGARY Access off 9 Ave SE & 51 St SE								X
14. INGLEDWOOD BIRD SANCTUARY Off 9 Ave S Sanctuaries Rd SE	X	X	X	X	X			
15. PEARCE ESTATES PARK Access off 17 Ave S 174 St SE	X	X	X	X	X			X
16. BEADER ROCK GARDENS 25 Ave SE at Macleod Tr S	X			X	X			X
17. SLATER PARK 2720 19 Ave SE	X			X	X			X
<b>SOUTHWEST</b>								
18. HEASELHEAD NATURAL AREA Access from N & S Glenmore Park				X				
19. EDMUNDY PARK & DOUGLAS FIR TRAIL Access north on 45 St SW to Spruce Dr SW	X	X	X	X	X			X
20. STANLEY PARK 42 Ave & 14 St SW	X	X	X	X	X			X
21. SOUTH GLENMORE PARK Access off 90 Ave & 24 St SW	X	X	X	X	X			X
22. NORTH GLENMORE PARK Access 37 St SW at Cromwell Tr S	X	X	X	X	X			X
23. PRINCE'S ISLAND PARK 1 Ave & 4 St SW	X	X	X	X	X			X
24. SANDY BEACH & NATURAL AREA 14 St S 150 Ave SW	X	X	X	X	X			X
25. RIVER PARK Off 14 St between 18 Ave & 50 Ave SW	X	X	X	X	X			X





**"A study of the role and benefit of Calgary's natural area park land"**

Calgary Parks & Recreation is co-sponsoring this project with researchers at the University of British Columbia, School of Community and Regional Planning, to find out what Calgarians think about the role and benefit of natural area park land in our city.

In other studies that we have done in Calgary, people often indicate that one of the main reasons they visit a park is to "enjoy nature". We are conducting this study because:

- we are interested in finding out more about what natural area park land means to Calgarians,
- we would like to hear about your experience with nature in the city, especially as it relates to the use of public natural area park land along our waterways, such as Nose Creek, the Bow River and so on, and
- we would like to explore your views on environmental concerns in relation to these parks and to other undeveloped natural area park land in the city.

This two-part questionnaire is being mailed to a random sample of Calgary households. If you would like to participate in the study, please take some time now to look over and complete the survey.

It will take about 15 minutes to answer all of the questions. Once you are done, please return both parts of the questionnaire, by **June 26, 1995**, in the self-addressed, postage-paid envelope that is enclosed for your convenience.

Thank you for your interest.



Spring 1995



**ABOUT YOU**

1. Your age is \_\_\_\_\_
2. You are...  Male?  Female?
3. Your ethnic heritage is (European, Asian, etc.): \_\_\_\_\_

OR prefer not to say: \_\_\_\_\_

4. Your last level of education completed is: \_\_\_\_\_

5. Calgary's average household income is \$52,000\* (\*STATS CANADA 1991 Census).

Is your annual household income...

- Close to average?
- Below average?
- Above average?

OR

- Don't care to say.

6. Your household situation is best described as:

- Living alone
- Living with roommate(s)
- Couple, no children/no children at home
- Couple, children at home
- Single/Lone parent
- Living with extended family
- Other (please describe): \_\_\_\_\_

7. You live in the community of: \_\_\_\_\_

8. You have lived in Calgary for \_\_\_\_\_ year(s).

9. Would you say that you use Calgary's natural area land : (Circle ONE only)

- a) Frequently?      c) Occasionally?
- b) Regularly?      d) Never?

For more information about Calgary's natural area parks please contact the Planning Section, Calgary Parks & Recreation, 8AM - 4:30 PM Monday-Friday at 268-4760.



## PRIORITIES

In the 1991 Pulse on Parks survey we asked Calgarians about planning for natural areas. The results were used in the preparation of the Urban Park Master Plan and the Natural Area Management Plan, both approved by City Council. To see if public opinion has changed at all, we are again asking you to please indicate how appropriate you feel the following strategies are by using the scale below and circling your response for each.

1. Not Appropriate 2. Somewhat Appropriate 3. Appropriate  
4. Very Appropriate OR No Opinion (N/O)

a) Acquire lands identified as environmentally sensitive.

1 2 3 4 N/O

b) Acquire lands to complete the river valley system.

1 2 3 4 N/O

c) Develop open space and allow controlled human use.

1 2 3 4 N/O

d) Preserve open space and prohibit human use.

1 2 3 4 N/O

e) Preserve open space for wildlife use.

1 2 3 4 N/O

f) Increase public education programs.

1 2 3 4 N/O

g) Other (please specify): \_\_\_\_\_

2 3 4

We also asked Calgarians about spending priorities for open space in our city. Given limited resources, what do you think our open space funding priorities should now be?  
Please CIRCLE ONLY ONE - YOUR #1 PRIORITY.

- a) Regional athletic fields for formal play and structured sports activities
- b) Local parks, play fields, and tot lots intended for informal play and general use
- c) Long, narrow walkways winding through your community
- d) Regional pathways and trail systems
- e) Regional parks intended for picnics, walks and informal outdoor activities
- f) Natural areas
- g) Other (please specify): \_\_\_\_\_

Which would be your SECOND priority? \_\_\_\_\_

## BENEFITS

Previous studies suggest that our natural area park land provides a variety of benefits to Calgarians. Please look over the following list and indicate which benefit is MOST IMPORTANT to you by circling ONE RESPONSE ONLY.

I think that the most important benefit of natural area park land in the city is that it gives:

- a) opportunities to exercise conveniently out-of-doors in relaxing and refreshing settings.
- b) places for people with dogs to go to get fresh air and exercise.
- c) chances to appreciate the sites, sounds and wonders of nature in close proximity to home.
- d) contributions to the quality of life in Calgary which makes the city attractive to residents, visitors and people or businesses looking to relocate.
- e) chances for children and families to spend time together discovering and learning about nature in safe, convenient locations near to home.
- f) availability of wide open spaces for everyone to explore and make use of at no charge.
- g) easy access to places to go to experience the peace and tranquillity of nature in contrast to the stress and built form of the city.

Which of the above would be your SECOND most important benefit? \_\_\_\_\_

In situations concerning natural area park land in the city where a decision must be made between conflicting human needs and environmental concerns, would you say that you (Please circle one only)

- a) tend to put the environment first.
  - b) tend to put human needs first.
  - c) tend to try to find a way to balance both human needs and environmental concerns.
  - d) tend to look at each situation in a different way, depending on the circumstances.
- OR
- e) Couldn't really say.

In situations concerning wilderness areas would your opinions change?  Yes  No

IF YES, which of the above would apply? \_\_\_\_\_

## EXPERIENCE

Nature in the city means different things to different people - from undeveloped wild lands to back yard gardens. Thinking about your experiences with nature in the city, please describe what it is about the experience that makes it come to mind. (You may like to include comments about your feelings such as a sense of peacefulness you might experience or special aspects of nature that appeal to you like watching things grow; or you might include comments about times when you felt uncomfortable.) Please use the space below to respond.

For me, nature in the city is...

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The last natural park area that you visited in Calgary was:

This visit took place within the past ....

- Few days                       Few months  
 Few weeks                       Year

OR

- I have not yet visited a natural area park in Calgary.

## VIEWPOINT

The following statements describe a few common perspectives about nature in the city:

**A** Natural area park land provides an opportunity to experience nature in city that is important to personal health and community well-being. We need to preserve as many undeveloped park areas as possible in and around our city in order to have a healthy urban environment. *This represents a primarily ecological and preservation oriented outlook on nature in the city.*

**B** Natural area park land in and around our city is important, but other types of uses for these parks may be of equal importance. We need to make sure that decisions about land uses for undeveloped park areas are based on sound economic principles. *This represents a wise use or conservation oriented perspective.*

**C** Natural area park land provides one important opportunity to experience the wonder of nature in the city. As long as we have other chances to see and experience nature, such as through gardening or through having good views of interesting landscapes, we could put some of the undeveloped park areas in our city into other uses. *This reflects a viewpoint that is mainly concerned with aesthetic appreciation of nature in the city.*

**D** Nature in the city is a luxury we can't afford, but there are lots of places outside of the city to go to enjoy nature. We need to keep the amount of natural area park land in our city to a minimum and put other urban land to more intensive use. *This is a practical or utilitarian outlook on nature in the city.*

Please LIST the perspectives in the ORDER that BEST DESCRIBES YOUR VIEWPOINT:

- \_\_\_\_ #1 BEST describes your view  
\_\_\_\_ #2 NEXT best describes it  
\_\_\_\_ #3 NEXT best describes it  
\_\_\_\_ #4 LEAST describes your view  
OR No Opinion \_\_\_\_

**NATURE IN THE CITY : PART TWO**

The second part of this questionnaire is set up in a voting or referendum-style question. Please read through the EXPLANATION section first before proceeding to the question in order to make sure you understand the question and what we need a different amount of natural area than what we have in our community. Note that this is not a legal referendum, but even though this is part of a referendum study, please refer to the question as if you were voting on it. This is to ensure that you are making your own decision and not being influenced by others. If you would return this form even if you do not wish to participate, please indicate so on the back of the form.

**EXPLANATION:** Parks in new communities in Calgary are currently planned by looking at all existing land for its potential as parkland. Approximately 10% of the land which can be developed in a new community is available for parkland.

At present, decisions about what type of parks to provide are based on the idea that the first priority of need is for large multi-use play fields at school and community sites. The next priority is for making sure that there are lot lots within walking distance of most homes. Then the linear connections (local walkways throughout the community) are identified, and finally if there are any more park areas left, natural areas are identified.

Some newly developing communities already have natural areas that will stay as parkland. This is land that is too sloped or unstable to be used for any other purposes. Other communities do not have these types of areas and would not usually have much park space left for natural areas. Also, there are many existing communities which do not have convenient access to any local natural areas.

The question is do you think that we need to change our park planning approach so that there is a different amount of natural area parkland?

Each of the above options has different consequences for our community. Please turn over the page and look through the different alternatives. Vote for the one you think is best for Calgary by checking the appropriate box.

**QUESTION: DO YOU THINK THAT WE NEED TO CHANGE OUR PARK PLANNING APPROACH SO THAT THERE IS A DIFFERENT AMOUNT OF NATURAL AREA PARK LAND?**

**YOUR VOTE**

**OPTIONS:**

**CONSEQUENCES:**

(check one only)

<input type="checkbox"/>	<p>1. NO, LEAVE IT AS IS: WE WILL HAVE NATURAL AREAS WHERE THE LAND IS NOT SUITABLE FOR ANY OTHER PURPOSE.</p>	<p><b>Access:</b> Some people will continue to have to travel to natural areas. There will be the same level of local play fields, lot lots and other parts provided and most residents will have these close to home. Maintenance and park development costs would be the same. The city will continue to look much as it does now. Natural area park land will continue to vary from community to community. Some will not have any, others may have a lot.</p>
<input type="checkbox"/>	<p>2. YES, CHANGE IT SO THAT NATURAL AREA PARK LAND IS A PRIORITY IN NEW COMMUNITIES.</p>	<p><b>Access:</b> Natural areas will be closer to homes, but people will have to travel further to use play fields. The city will have more undeveloped natural areas and fewer play fields, lot lots and other parts available at the local level. Maintenance and park development costs would be less. The city would look less well-groomed. Calgary could become a leader in the area of landscape conservation.</p>
<input type="checkbox"/>	<p>3. YES, CHANGE IT SO THAT THERE IS A BIGGER AMOUNT OF NATURAL AREA PARK LAND IN EVERY COMMUNITY.</p>	<p><b>Access:</b> Each community would have some natural area park land and some play fields and local parts close to home. There would be more natural area park land, but somewhat fewer play fields, lot lots and local parts. In new communities, maintenance and park development would cost less in existing communities. It will be expensive to reclaim developed park land. The city will look a little less well-groomed. This is the only option that creates more natural area park land in existing communities.</p>
<input type="checkbox"/>	<p>4. YES, CHANGE IT SO THAT THERE IS LESS NATURAL AREA PARK LAND AND MORE DEVELOPED PARK SPACE.</p>	<p><b>Access:</b> People will need to travel further to enjoy natural areas as the natural area park land will be only in certain areas of the city. There will be slightly more local play fields, lot lots or other parts in new communities. Maintenance and park development costs would be slightly more. The city will look more well-groomed and probably more developed. More land may be available for other types of uses such as housing and our community landscapes is likely to have less variety.</p>

FORM A (17)

## NATURE IN THE CITY : PART TWO

The second part of this questionnaire is set up in a voting or referendum-style of question. Please read through the EXPLANATION section first before proceeding to the QUESTION section in "vote" for one of four options outlined. The question is about whether we need a different amount of natural area park land in our community. Note that this is not a legal referendum (but even though this is part of a research study, please answer the question as if you were "voting" in a real referendum on this issue. Your views are important to future park planning policy. (We would appreciate it if you would return this form even if you choose not to vote.)

### EXPLANATION:

Parks in new communities in Calgary are currently planned by looking at all existing land for its potential as community open space. Approximately 10% of the land which can be developed in a new community is available for park land.

At present, decisions about what type of parks to provide are based on the idea that the first priority of need is for large multi-use play fields at school and community sites. The next priority is for making sure that there are lot lots within walking distance of most homes. Then the linear connections (local walkways throughout the community) are identified, and finally if there are any more park areas left, natural areas are identified.

Some newly developing communities already have natural areas that will stay as park land. This is land that is too sloped or unstable to be used for any other purposes. Other communities do not have these types of areas and would not usually have much park space left for natural areas. Also, there are many existing communities which do not have convenient access to any local natural areas.

We could change this way of planning parks. The following are possible options:

FORM 8 (4L)

### OPTIONS:

**1.** We could provide as much natural area park land as possible in new communities by making it a priority to identify these areas first. If there is any available park land remaining, then sport or play fields, lot lots and linear parks would be built. Open space in existing communities would not be changed. OR

**2.** We could make sure that each community in Calgary has a specified minimum amount of natural area park land. In new communities we would need to keep this amount of undeveloped land in a natural state. In existing communities, we would need to reclaim some of the developed park space and return the land to a natural state. OR

**3.** We could provide less park land in a natural state by using all available park land in new communities for local sport or play fields and developed parks and pathways only. Open space in existing communities would not be changed. OR

**4.** We could keep on doing what we are doing. In new communities we would have natural area park land where the land can not be used for anything else. The amount of natural area park land in existing communities would not be changed.

The question is do you think that we need to change our park planning approach so that there is a different amount of natural area park land?

Each of the above options has different consequences for our community. Please turn over the page and look through the different alternatives. Vote for the one you think is best for Calgary by checking the appropriate box.

### QUESTION: DO YOU THINK THAT WE NEED TO CHANGE OUR PARK PLANNING APPROACH SO THAT THERE IS A DIFFERENT AMOUNT OF NATURAL AREA PARK LAND?



YOUR VOTE (check one only)	OPTIONS:	CONSEQUENCES:
<input type="checkbox"/>	<b>1.</b> YES, CHANGE IT SO THAT NATURAL AREA PARK LAND IS A PRIORITY IN NEW COMMUNITIES.	<b>Access:</b> Natural areas will be closer to homes, but people will have to travel further to use play fields. <b>Supply:</b> The city will have more undeveloped natural areas and fewer play fields, lot lots and linear parks available at the local level. <b>Costs:</b> Maintenance and park development costs would be less. <b>Image:</b> The city would look less well-groomed. <b>Notes:</b> Calgary could become a leader in the area of landscape conservation.
<input type="checkbox"/>	<b>2.</b> YES, CHANGE IT SO THAT THERE IS A MINIMUM AMOUNT OF NATURAL AREA PARK LAND IN EVERY COMMUNITY.	<b>Access:</b> Each community would have some natural area park land and some play fields and local parks close to home. <b>Supply:</b> There would be more natural area park land, but somewhat fewer play fields, lot lots and local parks. <b>Costs:</b> In new communities, maintenance and park development would cost less. In existing communities, it will be expensive to reclaim developed park land. <b>Image:</b> The city will look a little less well-groomed. <b>Notes:</b> This is the only option that creates more natural area park land in existing communities.
<input type="checkbox"/>	<b>3.</b> YES, CHANGE IT SO THAT THERE IS LESS NATURAL AREA PARK LAND AND MORE DEVELOPED PARK SPACE.	<b>Access:</b> People will need to travel further to enjoy natural areas as the natural area park land will be only in certain areas of the city. <b>Supply:</b> There will be less natural area park land throughout the city. There will be slightly more local play fields, lot lots or linear parks in new communities. <b>Costs:</b> Maintenance and park development costs would be slightly more. <b>Image:</b> The city will look more well-groomed and probably more developed. <b>Notes:</b> More land may be available for other types of uses such as housing and our community landscape is likely to have less variety.
<input type="checkbox"/>	<b>4.</b> NO, LEAVE IT AS IS: WE WILL HAVE NATURAL AREAS WHERE THE LAND IS NOT SUITABLE FOR ANY OTHER PURPOSE.	<b>Access:</b> Some people will continue to have to travel to natural areas. <b>Supply:</b> There will be the same level of local play fields, lot lots and linear parks provided and most residents will have these close to home. <b>Costs:</b> Maintenance and park development costs would be the same. <b>Image:</b> The city will continue to look much as it does now. <b>Notes:</b> Natural area park land will continue to vary from community to community. Some will not have any, others may have a lot.

FORM 8 (4L)

**NATURE IN THE CITY : PART TWO**

The second part of this questionnaire is set up in a voting or referendum-style of question. Please read through the EXPLANATION section first before proceeding to the QUESTION section to "vote" for one of three options outlined. The question is about whether we need a different amount of natural area park land in our community. Note that this is not a legal referendum. But even though this is part of a research study, please answer the question as if you were "voting" in a real referendum on this issue. Your views are important to future park planning policy. (We would appreciate it if you would return this form even if you choose not to vote.)

**EXPLANATION:**

Parks in new communities in Calgary are currently planned by looking at all existing land for its potential as community open space. Approximately 10% of the land which can be developed in a new community is available for park land.

At present, decisions about what type of parks to provide are based on the idea that the first priority of need is for large multi-use play fields at school and community sites. The next priority is for making sure that there are lot lots within walking distance of most homes. Then the linear connections (oral walkways throughout the community) are identified, and finally if there are any more park areas left, natural areas are identified.

Some newly developing communities already have natural areas that will stay as park land. This is land that is too sloped or unstable to be used for any other purposes. Other communities do not have these types of areas and would not usually have much park space left for natural areas. Also, there are many existing communities which do not have convenient access to any local natural areas.

We could change this way of planning parks. The following are possible options:

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**OPTIONS:**

1. We could keep on doing what we are doing. In new communities we would have natural area park land where the land can not be used for anything else. The amount of natural area park land in existing communities would not change. OR
2. We could provide more natural area park land :
  - a) In new communities we would make it a priority to identify natural areas first. We would keep these areas in a natural state. If there is any available park land remaining, then sport or play fields, lot lots and linear parks would be built.
  - b) In existing communities, we would need to reclaim some of the developed park space and return the land to a natural state. OR
3. We could provide less park land in a natural state by using all available park land in new communities for local sport or play fields and developed parks and pathways only. Open space in existing communities would not be changed.

The question is do you think that we need to change our park planning approach so that there is a different amount of natural area park land?

Each of the above options has different consequences for our community. Please turn over the page and look through the different alternatives. Vote for the one you think is best for Calgary by checking the appropriate box.

**QUESTION:**  
DO YOU THINK THAT WE NEED TO CHANGE OUR PARK PLANNING APPROACH SO THAT THERE IS A DIFFERENT AMOUNT OF NATURAL AREA PARK LAND?

YOUR VOTE (check one only)	OPTIONS:	CONSEQUENCES:
<input type="checkbox"/>	<p>1. NO, LEAVE IT AS IS; WE WILL HAVE NATURAL AREAS WHERE THE LAND IS NOT SUITABLE FOR ANY OTHER PURPOSE.</p>	<p><b>Access:</b> Some people will continue to have to travel to natural areas.  <b>Supply:</b> There will be the same level of local play field, lot lot and linear parks provided and most residents will have these close to home.  <b>Costs:</b> Maintenance and park development costs would be the same.  <b>Image:</b> The city will continue to look much as it does now.  <b>Notes:</b> Natural area park land will continue to vary from community to community. Some will not have any, others may have a lot.</p>
<input type="checkbox"/>	<p>2. YES, CHANGE IT SO THAT THERE IS MORE NATURAL AREA PARK LAND IN OUR COMMUNITIES.</p>	<p><b>Access:</b> Natural areas will be closer to homes, but people will have to travel further to use play fields.  <b>Supply:</b> The city will have more undeveloped natural areas and fewer play fields, lot lots and linear parks available at the local level.  <b>Costs:</b> In new communities, maintenance and park development would cost less. In existing communities, it will be expensive to reclaim developed park land.  <b>Image:</b> The city will look a little less well-groomed.  <b>Notes:</b> Calgary could become a leader in the area of landscape conservation.</p>
<input type="checkbox"/>	<p>3. YES, CHANGE IT SO THAT THERE IS LESS NATURAL AREA PARK LAND AND MORE DEVELOPED PARK SPACE.</p>	<p><b>Access:</b> People will need to travel further to enjoy natural areas as the natural area park land will be only in certain areas of the city.  <b>Supply:</b> There will be less natural area park land throughout the city. There will be slightly more local play fields, lot lots and linear parks in new communities.  <b>Costs:</b> Maintenance and park development costs would be slightly more.  <b>Image:</b> The city will look more well-groomed and probably more developed.  <b>Notes:</b> More land may be available for other types of uses such as housing and our community landscape is likely to have less variety.</p>

FORM C (3F)



## NATURE IN THE CITY : PART TWO

The second part of this questionnaire is set up in a voting or referendum-style of question. Please read through the EXPLANATION section first before proceeding to the QUESTION section to "vote" for one of three options outlined. The question is about whether we need a different amount of natural area park land in our community. Note that this is not a legal referendum. But even though this is part of a research study, please answer the question as if you were "voting" in a real referendum on this issue. Your views are important to future park planning policy. (We would appreciate it if you would return this form even if you choose not to vote.)

### EXPLANATION:

Parks in new communities in Calgary are currently planned by looking at all existing land for its potential as community open space. Approximately 10% of the land which can be developed in a new community is available for park land.

At present, decisions about what type of parks to provide are based on the idea that the first priority of need is for large multi-use play fields at school and community sites. The next priority is for making sure that there are tot lots within walking distance of most homes. Then the linear connections (local walkways throughout the community) are identified, and finally if there are any more park areas left, natural areas are identified.

Some newly developing communities already have natural areas that will stay as park land. This is land that is too sloped or unstable to be used for any other purposes. Other communities do not have these types of areas and would not usually have much park space left for natural areas. Also, there are many existing communities which do not have convenient access to any local natural areas.

We could change this way of planning parks. The following are possible options:

FORM D (01)

### OPTIONS:

1. We could provide more natural area park land :
  - a) In new communities we would make it a priority to identify natural areas first. We would keep these areas in a natural state. If there is any available park land remaining, then sport or play fields, tot lots and linear parks would be built.
  - b) In existing communities, we would need to reclaim some of the developed park space and return the land to a natural state. OR
2. We could provide less park land in a natural state by using all available park land in new communities for local sport or play fields and developed parks and pathways only. Open space in existing communities would not be changed. OR
3. We could keep on doing what we are doing. In new communities we would have natural area park land where the land can not be used for anything else. The amount of natural area park land in existing communities would not change.

The question is do you think that we need to change our park planning approach so that there is a different amount of natural area park land?

Each of the above options has different consequences for our community. Please turn over the page and look through the different alternatives. Vote for the one you think is best for Calgary by checking the appropriate box.

### QUESTION: DO YOU THINK THAT WE NEED TO CHANGE OUR PARK PLANNING APPROACH SO THAT THERE IS A DIFFERENT AMOUNT OF NATURAL AREA PARK LAND?

YOUR VOTE (check one only)	OPTIONS:	CONSEQUENCES:
<input type="checkbox"/>	1. YES, CHANGE IT SO THAT THERE IS <b>MORE</b> NATURAL AREA PARK LAND IN OUR COMMUNITIES.	<p><b>Access:</b> Natural areas will be closer to homes, but people will have to travel further to use play fields.</p> <p><b>Supply:</b> The city will have more undeveloped natural areas and fewer play fields, tot lots and linear parks available at the local level.</p> <p><b>Costs:</b> In new communities, maintenance and park development would cost less in existing communities, it will be expensive to reclaim developed park land.</p> <p><b>Image:</b> The city will look a little less well-groomed.</p> <p><b>Notes:</b> Calgary could become a leader in the area of landscape conservation.</p>
<input type="checkbox"/>	2. YES, CHANGE IT SO THAT THERE IS <b>LESS</b> NATURAL AREA PARK LAND AND MORE DEVELOPED PARK SPACE.	<p><b>Access:</b> People will need to travel further to enjoy natural areas as the natural area park land will be only in certain areas of the city.</p> <p><b>Supply:</b> There will be less natural area park land throughout the city. There will be slightly more local play fields, tot lots and linear parks in new communities.</p> <p><b>Costs:</b> Maintenance and park development costs would be slightly more.</p> <p><b>Image:</b> The city will look more well-groomed and probably more developed.</p> <p><b>Notes:</b> More land may be available for other types of uses such as housing and our community landscape is likely to have less variety.</p>
<input type="checkbox"/>	3. NO, LEAVE IT AS IS; WE WILL HAVE NATURAL AREAS WHERE THE LAND IS NOT SUITABLE FOR ANY OTHER PURPOSE.	<p><b>Access:</b> Some people will continue to have to travel to natural areas.</p> <p><b>Supply:</b> There will be the same level of local play fields, tot lots and linear parks provided and most residents will have these close to home.</p> <p><b>Costs:</b> Maintenance and park development costs would be the same.</p> <p><b>Image:</b> The city will continue to look much as it does now.</p> <p><b>Notes:</b> Natural area park land will continue to vary from community to community. Some will not have any, others may have a lot.</p>

FORM D (3L)



## APPENDIX IV

### Referendum-Style Question Ballot Pre-test Results

#### *Nature in the City* PART TWO PRE TEST

*Thank you for agreeing to participate in the pre test of this questionnaire. This is the second part of a questionnaire being sent to a random sample of Calgary households to ask residents their views on natural area park land.*

*Read over the information on the survey form and vote for an OPTION as if you were participating in the study. Then please answer the questions below and seal your completed forms in the return envelope provided.*

*PRE TEST EVALUATION - Please check one only in each:*

- 1) *Was the issue easy to understand?*  
YES \_\_\_ NO \_\_\_
- 2) *Was the EXPLANATION...  
too long? \_\_\_ OK length? \_\_\_*
- 3) *Were the OPTIONS clearly different?*  
YES \_\_\_ NO \_\_\_
- 4) *Were the OPTIONS different enough  
to encourage you to vote for just one?*  
YES \_\_\_ NO \_\_\_

*PRE TESTER PROFILE - Please answer each of the following:*

*You are: MALE \_\_\_ FEMALE: \_\_\_*

*Your age is: \_\_\_*

*You use Calgary's natural area parks:*

*Frequently \_\_\_ Regularly \_\_\_*  
*Occasionally \_\_\_ Never \_\_\_*

*(Please use the other side of the page to make any further comments.)*

**THANK YOU FOR YOUR PARTICIPATION!**

NATURE IN THE CITY  
 1995 Referendum-style Pretest Results  
 ALL RESPONDENTS 11:11 Wednesday, May 17, 1995 1

Change natural area park land?

VOTE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes more new	6	24.0	6	24.0
Yes reclaim	4	16.0	10	40.0
Yes more both	6	24.0	16	64.0
Yes less	3	12.0	19	76.0
No stay as is	6	24.0	25	100.0

Did you understand the issue?

ISSUE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	23	92.0	23	92.0
No	2	8.0	25	100.0

How was the EXPLANATION length?

EXPLAIN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Too long	3	12.0	3	12.0
OK length	21	84.0	24	96.0
No Response	1	4.0	25	100.0

Were options clearly different?

OPTIONS	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	23	92.0	23	92.0
No	2	8.0	25	100.0

Could you choose only one?

CHOOSE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	16	64.0	16	64.0
No	9	36.0	25	100.0

Your gender is -

GENDER	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Male	11	44.0	11	44.0
Female	13	52.0	24	96.0
No Response	1	4.0	25	100.0



Your age group is -

AGE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Twenties	8	32.0	8	32.0
Thirties	9	36.0	17	68.0
Forties	5	20.0	22	88.0
Fifties	1	4.0	23	92.0
No Response	2	8.0	25	100.0

Your use of natural area park land is -

USE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Frequently	7	28.0	7	28.0
Regularly	8	32.0	15	60.0
Occasionally	10	40.0	25	100.0

Any more comments?

COMMENT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes comments	10	40.0	10	40.0
No comment	15	60.0	25	100.0

Your form had -

FORM	Frequency	Percent	Cumulative Frequency	Cumulative Percent
3 Options	11	44.0	11	44.0
4 Options	14	56.0	25	100.0

**APPENDIX V**  
**Nature in the City Survey Frequency Listings by Question**

Gender of Respondents

GENDER	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Male	106	40.3	106	40.3
Female	150	57.0	256	97.3
No response	6	2.3	262	99.6
Invalid	1	0.4	263	100.0

Younger/Older groupings

GROUP	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Younger than 50	152	57.8	152	57.8
50 and Older	98	37.3	250	95.1
All others	13	4.9	263	100.0

Age Group of Respondents

DECADE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
15-19 years	1	0.4	1	0.4
Twenties	24	9.1	25	9.5
Thirties	77	29.3	102	38.8
Forties	50	19.0	152	57.8
Fifties	43	16.3	195	74.1
Sixties	33	12.5	228	86.7
Seventies	22	8.4	250	95.1
No response	8	3.0	258	98.1
Other	5	1.9	263	100.0

Last level of education completed

EDUC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
High School	57	21.7	57	21.7
Trade/Technical	21	8.0	78	29.7
University-some	83	31.6	161	61.2
UniversityDegree	67	25.5	228	86.7
Other	21	8.0	249	94.7
No response	14	5.3	263	100.0

Level of education

UNI	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Unclassified	14	5.3	14	5.3
No university	99	37.6	113	43.0
University	150	57.0	263	100.0

Annual household income of Respondents

INCOME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Close to average	52	19.8	52	19.8
Below average	88	33.5	140	53.2
Above average	84	31.9	224	85.2
Undisclosed	26	9.9	250	95.1
No response	11	4.2	261	99.2
Invalid	2	0.8	263	100.0

Your household situation is

HOUSE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Living alone	62	23.6	62	23.6
Roommates	8	3.0	70	26.6
Couple and kids	73	27.8	143	54.4
Couple no kids	88	33.5	231	87.8
Lone parent	12	4.6	243	92.4
Extended family	7	2.7	250	95.1
Other	6	2.3	256	97.3
No response	7	2.7	263	100.0

RHOUSE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Living alone	62	23.6	62	23.6
Couple and kids	73	27.8	135	51.3
Couple NO kids	88	33.5	223	84.8
Other	40	15.2	263	100.0

Ethnic Heritage of Respondents

ETHNIC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Asian	10	3.8	10	3.8
British/English	40	15.2	50	19.0
Canadian	71	27.0	121	46.0
European	97	36.9	218	82.9
French Canadian	11	4.2	229	87.1
Other	6	2.3	235	89.4
Undisclosed	11	4.2	246	93.5
No response	17	6.5	263	100.0

Development status of home community

COM	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Redeveloping	60	22.8	60	22.8
Established	135	51.3	195	74.1
Newer	42	16.0	237	90.1
Unclassified	14	5.3	251	95.4
No response	10	3.8	261	99.2
Invalid	2	0.8	263	100.0

Quadrant of home community

QUAD	Frequency	Percent	Cumulative Frequency	Cumulative Percent
North West	63	24.0	63	24.0
North East	35	13.3	98	37.3
South West	99	37.6	197	74.9
South East	30	11.4	227	86.3
Downtown	3	1.1	230	87.5
Unknown	21	8.0	251	95.4
No response	10	3.8	261	99.2
Invalid	2	0.8	263	100.0

Collapsed time lived in Calgary

TIME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Unclassified	6	2.3	6	2.3
Up to 25 years	153	58.2	159	60.5
25 yrs or more	104	39.5	263	100.0

Community natural area category

LIVE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Nature reserve	36	13.7	36	13.7
Near nature	72	27.4	108	41.1
Not near nature	80	30.4	188	71.5
Part near nature	49	18.6	237	90.1
Unclassified	13	4.9	250	95.1
No response	11	4.2	261	99.2
Invalid	2	0.8	263	100.0

Natural area park land is-

NEAR	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Unclassified	26	9.9	26	9.9
Close by	157	59.7	183	69.6
Not close by	80	30.4	263	100.0

How long have you lived in Calgary?

YEARS	Frequency	Percent	Cumulative Frequency	Cumulative Percent
5 years or less	37	14.1	37	14.1
6-25 years	116	44.1	153	58.2
26-45 years	79	30.0	232	88.2
46 years or more	25	9.5	257	97.7
No response	6	2.3	263	100.0

Last natural park area visit in Calgary

PARK	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Along the river	9	3.4	9	3.4
Bird Sanctuary	6	2.3	15	5.7
Bowmont	5	1.9	20	7.6
Bowness Park	16	6.1	36	13.7
Carburn Park	6	2.3	42	16.0
Centenary Park	1	0.4	43	16.3
Confederation Pk	3	1.1	46	17.5
Edworthy Park	14	5.3	60	22.8
Fish Creek Park	41	15.6	101	38.4
Glenmore	13	4.9	114	43.3
Lindsay Park	1	0.4	115	43.7
Local Park	3	1.1	118	44.9
Nose Creek area	1	0.4	119	45.2
Nose Hill Park	45	17.1	164	62.4
Pearce Estates	1	0.4	165	62.7
Prince's Island	17	6.5	182	69.2
Riley Park	3	1.1	185	70.3
River Park	3	1.1	188	71.5
River Pathways	8	3.0	196	74.5
Sandy Beach	6	2.3	202	76.8
Stanley Park	4	1.5	206	78.3
Tom Campbell Hil	4	1.5	210	79.8
Weaselhead	12	4.6	222	84.4
Other	13	4.9	235	89.4
No park named	14	5.3	249	94.7
No visit made	4	1.5	253	96.2
No response	9	3.4	262	99.6
Invalid	1	0.4	263	100.0

How often do you use natural area parks?

USE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Frequently	83	31.6	83	31.6
Regularly	76	28.9	159	60.5
Occasionally	92	35.0	251	95.4
Never	5	1.9	256	97.3
No response	7	2.7	263	100.0

Pattern of use of natural area parks

PATTERN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Regular user	159	60.5	159	60.5
Non-regular user	104	39.5	263	100.0

This visit took place within the past

VISIT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Few days	110	41.8	110	41.8
Few weeks	65	24.7	175	66.5
Few months	39	14.8	214	81.4
Year	29	11.0	243	92.4
Other	2	0.8	245	93.2
Did not visit	4	1.5	249	94.7
No response	11	4.2	260	98.9
Invalid	3	1.1	263	100.0



Open space funding FIRST priority

FUNDONE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Athletic Fields	4	1.5	4	1.5
Local parks	47	17.9	51	19.4
Local walkways	8	3.0	59	22.4
Regional pathway	39	14.8	98	37.3
Regional parks	105	39.9	203	77.2
Natural areas	46	17.5	249	94.7
Other features	3	1.1	252	95.8
No response	6	2.3	258	98.1
Invalid	5	1.9	263	100.0

Open space funding SECOND priority

FUNDTWO	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Athletic Fields	8	3.0	8	3.0
Local parks	43	16.3	51	19.4
Local walkways	13	4.9	64	24.3
Regional pathway	34	12.9	98	37.3
Regional parks	56	21.3	154	58.6
Natural areas	46	17.5	200	76.0
Other features	4	1.5	204	77.6
No response	52	19.8	256	97.3
Invalid	7	2.7	263	100.0

Recoding of funding priorities

NEWFUND	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Local, ect	62	23.6	62	23.6
Regional items	144	54.8	206	78.3
Natural Areas	46	17.5	252	95.8
No choice	11	4.2	263	100.0

Most important BENEFIT of urban nature

BENEFIT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Exercise outside	19	7.2	19	7.2
Walk dogs	10	3.8	29	11.0
Enjoy nature	39	14.8	68	25.9
Attractive city	41	15.6	109	41.4
Family time	43	16.3	152	57.8
No charge to use	31	11.8	183	69.6
Tranquillity	71	27.0	254	96.6
No response	5	1.9	259	98.5
Invalid	4	1.5	263	100.0

Also important benefit of urban nature

SECOND	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Exercise outside	19	7.2	19	7.2
Walk dogs	5	1.9	24	9.1
Enjoy nature	50	19.0	74	28.1
Attractive city	17	6.5	91	34.6
Family time	39	14.8	130	49.4
No charge to use	44	16.7	174	66.2
Tranquillity	71	27.0	245	93.2
No response	13	4.9	258	98.1
Invalid	5	1.9	263	100.0

Benefit recode

XBEN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Unclassified	9	3.4	9	3.4
Physical	70	26.6	79	30.0
Social	74	28.1	153	58.2
Psychological	110	41.8	263	100.0

Focus of BENEFIT expectation

NEWBEN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Amenity	138	52.5	138	52.5
Affiliation	125	47.5	263	100.0

Benefit is more . . .

CODENEW	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Objective	135	51.3	135	51.3
Subjective	128	48.7	263	100.0

Benefit new recodes

RBEN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Unclassified	9	3.4	9	3.4
Instrumental	101	38.4	110	41.8
Expressive	153	58.2	263	100.0

View on nature in the city FIRST CHOICE

BEST	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ecological view	139	52.9	139	52.9
Wise use view	80	30.4	219	83.3
Aesthetic view	17	6.5	236	89.7
Utilitarian view	5	1.9	241	91.6
No opinion	5	1.9	246	93.5
No response	16	6.1	262	99.6
Invalid	1	0.4	263	100.0

View on priority of human use

ORIENT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Anthropocentric	116	44.1	116	44.1
Ecocentric	115	43.7	231	87.8
Unclassified	32	12.2	263	100.0

Orientation to Natural Area Parkland

PROVIEW	Frequency	Percent	Cumulative Frequency	Cumulative Percent
PRO Wise Use	132	50.2	132	50.2
PRO Preservation	131	49.8	263	100.0

## View on nature in the city NEXT CHOICE

NEXT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ecological view	49	18.6	49	18.6
Wise use view	104	39.5	153	58.2
Aesthetic view	61	23.2	214	81.4
Utilitarian view	2	0.8	216	82.1
No opinion	31	11.8	247	93.9
No response	16	6.1	263	100.0

## View on nature in the city THIRD CHOICE

THIRD	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ecological view	38	14.4	38	14.4
Wise use view	34	12.9	72	27.4
Aesthetic view	127	48.3	199	75.7
Utilitarian view	9	3.4	208	79.1
No opinion	38	14.4	246	93.5
No response	16	6.1	262	99.6
Invalid	1	0.4	263	100.0

## View on nature in the city LAST CHOICE

LEAST	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ecological view	11	4.2	11	4.2
Aesthetic view	5	1.9	16	6.1
Utilitarian view	197	74.9	213	81.0
No opinion	27	10.3	240	91.3
No response	16	6.1	256	97.3
Invalid	7	2.7	263	100.0

In urban natural area conflicts you put

CONFLIC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Environment 1st	48	18.3	48	18.3
Human needs 1st	19	7.2	67	25.5
Both in balance	141	53.6	208	79.1
It depends	49	18.6	257	97.7
Cannot say	2	0.8	259	98.5
No response	4	1.5	263	100.0

Does your opinion change for wilderness

CHANGE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	99	37.6	99	37.6
No	150	57.0	249	94.7
No answer given	11	4.2	260	98.9
No response	3	1.1	263	100.0

If so, how does it change?

CONCERN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No change	150	57.0	150	57.0
Environment 1st	65	24.7	215	81.7
Human needs 1st	2	0.8	217	82.5
Both in balance	13	4.9	230	87.5
It depends	14	5.3	244	92.8
No answer given	2	0.8	246	93.5
Not applicable	11	4.2	257	97.7
No response	3	1.1	260	98.9
Invalid	3	1.1	263	100.0

Acquire sensitive areas?

ACQUIRE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	16	6.1	16	6.1
Somewhat Approp	39	14.8	55	20.9
Appropriate	80	30.4	135	51.3
Very Appropriate	105	39.9	240	91.3
No opinion	10	3.8	250	95.1
No response	13	4.9	263	100.0

Complete river valley system?

RIVER	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	9	3.4	9	3.4
Somewhat Approp	34	12.9	43	16.3
Appropriate	72	27.4	115	43.7
Very Appropriate	115	43.7	230	87.5
No opinion	21	8.0	251	95.4
No response	10	3.8	261	99.2
Invalid	2	0.8	263	100.0

Allow controlled human use?

CONTROL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	21	8.0	21	8.0
Somewhat Approp	52	19.8	73	27.8
Appropriate	102	38.8	175	66.5
Very Appropriate	71	27.0	246	93.5
No opinion	3	1.1	249	94.7
No response	14	5.3	263	100.0

Prohibit human use?

NONUSE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	116	44.1	116	44.1
Somewhat Approp	63	24.0	179	68.1
Appropriate	31	11.8	210	79.8
Very Appropriate	21	8.0	231	87.8
No opinion	14	5.3	245	93.2
No response	18	6.8	263	100.0

Open space for wildlife use?

WILDUSE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	22	8.4	22	8.4
Somewhat Approp	63	24.0	85	32.3
Appropriate	63	24.0	148	56.3
Very Appropriate	97	36.9	245	93.2
No opinion	7	2.7	252	95.8
No response	9	3.4	261	99.2
Invalid	2	0.8	263	100.0

Public education programs?

PROG	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not Appropriate	23	8.7	23	8.7
Somewhat Approp	44	16.7	67	25.5
Appropriate	67	25.5	134	51.0
Very Appropriate	106	40.3	240	91.3
No opinion	10	3.8	250	95.1
No response	13	4.9	263	100.0



Themes - Nature in the city is

THEME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No comment given	84	31.9	84	31.9
A haven	65	24.7	149	56.7
Self-Affirming	53	20.2	202	76.8
Environmental	34	12.9	236	89.7
Nonutilized land	14	5.3	250	95.1
Unable to judge	13	4.9	263	100.0

Theory Themes - Nature in the city is

THEOTHEM	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No comment given	84	31.9	84	31.9
A condition	45	17.1	129	49.0
A place	83	31.6	212	80.6
A sentiment	40	15.2	252	95.8
Indifferent	6	2.3	258	98.1
Unable to rate	5	1.9	263	100.0

Collapsed MEANING of URBAN NATURE groups

XMRATE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Unclassified	100	38.0	100	38.0
Utility	95	36.1	195	74.1
Kinship	68	25.9	263	100.0

Park planning approach selected

VOTE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
New nature areas	35	13.3	35	13.3
Reclaim areas	29	11.0	64	24.3
More nature park	51	19.4	115	43.7
Less nature park	14	5.3	129	49.0
Stay the same	122	46.4	251	95.4
Selected two	1	0.4	252	95.8
Form not sent in	10	3.8	262	99.6
No response	1	0.4	263	100.0

Change amount of natural area park land?

CHOICE	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes-Maximize	114	43.3	114	43.3
Yes-Less	14	5.3	128	48.7
No-Leave as is	122	46.4	250	95.1
Form not sent in	10	3.8	260	98.9
No response	1	0.4	261	99.2
Invalid	2	0.8	263	100.0

Collapsed Visit categories

RVISIT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Last few days	110	41.8	110	41.8
Few weeks & more	133	50.6	243	92.4
Other	20	7.6	263	100.0

Type of referendum-style ballot

FORM	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Option A4 SQ 1st	61	23.2	61	23.2
Option B4 SQ 4th	66	25.1	127	48.3
Option C3 SQ 1st	57	21.7	184	70.0
Option D3 SQ 3rd	69	26.2	253	96.2
Form not sent in	10	3.8	263	100.0

Number of choices on ballot

BALLOT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
4 choices	127	48.3	127	48.3
3 choices	126	47.9	253	96.2
Form not sent in	10	3.8	263	100.0

Order of status quo

SQ0	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Status quo first	118	44.9	118	44.9
Status quo last	135	51.3	253	96.2
Form not sent in	10	3.8	263	100.0

Eco-ethic orientation

ETHIC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Human-centred	148	56.3	148	56.3
Enviro-centred	115	43.7	263	100.0

Intensity of involvement

ECOEX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Low Intensity	119	45.2	119	45.2
High Intensity	144	54.8	263	100.0

Affinity Index

ECOSCORZ	Frequency	Percent	Cumulative Frequency	Cumulative Percent
4	1	0.4	1	0.4
5	1	0.4	2	0.8
6	2	0.8	4	1.5
7	6	2.3	10	3.8
8	4	1.5	14	5.3
9	12	4.6	26	9.9
10	19	7.2	45	17.1
11	23	8.7	68	25.9
12	20	7.6	88	33.5
13	31	11.8	119	45.2
14	34	12.9	153	58.2
15	33	12.5	186	70.7
16	31	11.8	217	82.5
17	23	8.7	240	91.3
18	9	3.4	249	94.7
19	8	3.0	257	97.7
20	6	2.3	263	100.0

ECOAFPECT Modes

AFFNEW	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Apathetic	80	30.4	80	30.4
Egoistic	68	25.9	148	56.3
Sympathetic	39	14.8	187	71.1
Empathetic	76	28.9	263	100.0

Relationships with urban nature

ECOAFFY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Traditional	80	30.4	80	30.4
Contemporary-Adv	68	25.9	148	56.3
Contemporary-Ste	39	14.8	187	71.1
Vanguard	76	28.9	263	100.0

Psychographic Types

ECOAFF	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Consumer	80	30.4	80	30.4
Adventurer	68	25.9	148	56.3
Steward	39	14.8	187	71.1
Guardian	76	28.9	263	100.0

**Produced by: Gae VanSiri using SAS for Windows, July 1995 - July 1997.**

## APPENDIX VI

### Longitudinal Comparison of Support for Preservation Strategies

VARIABLE/ VALUE (*All percents rounded; total +/-100%)	1991 PULSE ON PARKS (N=+/- 46,000)	1995 NATURE IN THE CITY (N=+/- 263)
<b>Acquire environmentally sensitive lands?</b>		
Very Appropriate	42%*	40%
Appropriate	30%	30%
Somewhat Appropriate	12%	15%
Not Appropriate	6%	6%
No Opinion	4%	4%
No Response	7%	5%
<b>Acquire land to complete river valley parks?</b>		
Very Appropriate	35%	44%
Appropriate	38%	27%
Somewhat Appropriate	13%	13%
Not Appropriate	4%	4%
No Opinion	4%	8%
No Response	6%	6%
<b>Develop open space and control human use?</b>		
Very Appropriate	24%	27%
Appropriate	41%	39%
Somewhat Appropriate	18%	20%
Not Appropriate	9%	8%
No Opinion	3%	1%
No Response	6%	5%
<b>Preserve open space/prohibit human use?</b>		
Very Appropriate	10%	8%
Appropriate	13%	12%
Somewhat Appropriate	24%	24%
Not Appropriate	42%	44%
No Opinion	5%	5%
No Response	8%	7%
<b>Preserve open space for wildlife use?</b>		
Very Appropriate	34%	37%
Appropriate	29%	24%
Somewhat Appropriate	21%	24%
Not Appropriate	7%	8%
No Opinion	2%	3%
No Response	6%	3%
<b>Increase public education programs?</b>		
Very Appropriate	30%	40%
Appropriate	33%	26%
Somewhat Appropriate	19%	17%
Not Appropriate	7%	9%
No Opinion	5%	5%
No Response	6%	4%

**APPENDIX VII**  
**Summary of Planners' Forum Round Table Discussion**  
**Tuesday, October 17, 1995**

Participants:	Bir	Urban Planner	Moderator: Gae VanSiri
	Will	Parks Planner (Municipal)	
	Kathy	Parks Planner (Provincial)	
	Dave	Naturalist/Planner	
	Doug Mt	Parks Operations manager	
	Nancy	Planning Consultant	
	Doug Mc	Subdivision Planner	
	Rosemary	Urban Planner	
	Cathy	Urban Planner	

Process:

The forum was convened to provide an opportunity for collaboration and discussion of two issues arising from the results of the 1995 Nature in the City Public Survey. The participants are planners from various agencies who had an opportunity to think about responses to the questions for a week prior to the forum. Everyone came prepared to state his or her point of view and participate in a discussion. This document presents a summary of each individual's viewpoint as presented at the beginning of the 1 1/2 hour session.

**Question #1: In your professional opinion, how effective is our (Calgary's) current practice in providing urban natural areas?**

Bir - The difficulty is in acquiring natural areas from private owners. There is no umbrella policy at the provincial level, and our own documents (policy reports, ARPs, ASPs) are inconsistent in their language and approach. We need to have the support of the politicians in order to establish a clear and firm policy.

Will - We are in the midst of creating a system, through the natural areas management plan and other policy initiatives such as sustainable suburbs, of creating a system to measure our effectiveness. We do not currently meet all of the recently established expectations with respect to acquiring natural areas, but we could begin to do so in the next few years.

Kathy - Fish Creek specifically is very effective in terms of sensitivity to the public's expressed desires and needs. Surveys like **Pulse on Parks and Nature in the City** are currently providing a new standard with which we can measure our effectiveness.

Dave - I'm concerned with definitions of 'effectiveness'. Are we looking at it in terms of public perception, meeting Council-approved policy, ecological effectiveness, or providing opportunities to the public? In terms of acquisition, what was originally called the environmentally sensitive areas study defined a good definition for acquiring a natural area such that eventually it becomes a natural environment park. Preserving natural areas is important to sustaining health and we are now trying to integrate natural environments into our lifestyle.

Doug Mt - We are faced with the problem of how the general public defines 'natural', based on knowledge of issues, personal perspective, and experience. Although we have done a relatively good job providing urban natural areas on a broad scale, one of the difficulties is identifying and protecting environmentally sensitive lands which are not yet public. Preservation of natural lands always comes out as the lowest cost alternative, but we rarely consider the question of lost opportunity cost. Most societies, when under pressure, opt for the economics of the situation

rather than preservation. We need to educate more about the value of what we are trying to preserve, and the reasons why we need to preserve it.

Nancy - Basically the two perspectives to consider are that of the public/park user and that of the planner/administrator. The public has their own set of expectations and perceptions, whereas the planners are involved in the implementation issues and the realities facing natural area acquisition. To determine our effectiveness, we need to bring the two sides together to make clear definitions, to give the public a framework for their input. Calgary Parks & Recreation really needs a policy to pull all of the different parks structures together, with political support.

Doug Mc - I looked at effectiveness from three perspectives: the planning, the mechanism for acquiring natural areas, and development and working with developers on those areas. In terms of **planning**, we are inconsistent in our terminology and approach. We need a group to review and coordinate documents such as ASPs, ARPs, the Municipal Development Plan, etc., for consistency and continuity. We generally have an extreme philosophy to protect every bit of natural area. **Acquisition** is covered under the Planning Act. To improve it, we need a system of principles and definitions for aesthetic areas. With respect to **development**, what do we do with the lands once we acquire them? We need more negotiations between the City and the development industry to find a middle ground between pristine natural area and developed land.

Rosemary - On a positive side, Council decisions support a philosophy of protecting natural areas. There seems to be a public perception of natural areas as large regional park land, such as Nose Hill and Fish Creek which receive a lot of publicity. Our means of acquiring natural area is still too haphazard, rather than systematic. Thus we miss out on opportunities. As well, we need to be careful of what we're defining as natural area to the public: natural areas don't necessarily have to be 'unusable'. It may make the public think to have to lose local parks in exchange for more natural areas.

Cathy - Urban natural areas can cover a range of form and function : public perception may not line up with our definition of natural area, for instance because we are in an urban setting, some might perceive that a nearby park is a natural area. Calgary has been fortunate to have river valleys and ravines: areas that have been protected through planning mechanisms. It is not realistic to prohibit all human use in an urban setting, we need to accommodate a range of activities. We are now moving towards more of a system which looks at long term viability early in the process, rather than adding to our system as an afterthought.

**Question #2: What are the implications of polarization in public opinion on the amount and appropriate use of urban natural areas (as exhibited in the *Pulse on Parks and Nature in the City* surveys) on the way we (in Calgary) currently plan, design and manage our parks?**

Cathy - We are trying to cover many interests, functions and needs within one park, rather than designating a specific park for a specific function. We need to be adaptable: public interest is prone to change over time. We can't necessarily address everyone's views (especially polar opposites), but we will cover/satisfy 'middle ground'.

Rosemary - We should provide a **range** of things, rather than considering polar opposites. We need to get more uses out of an area; it evolves with time. We should also consider whether the public is polarized over **definition** or **value** of natural areas.

Nancy - We need to be careful: don't ask for an opinion if you're (a) not interested or (b) won't use it. Most issues can be resolved through 'consensus building': a process that people buy into and design themselves. Not all sites can meet all needs . . . balance should be in the entire system.

Doug Mt- There has to be a **will** to **build** a consensus!



Doug Mt - We need to clarify for the public what we do and why to it , and in layman's terms. There is a cost: if we are to serve the public, we must be sure it is the public, and not extremist groups, who we are serving.

Dave - Treat people like they're not polarized. There's a spectrum of different views on different items . . . and a lot of 'grey area'. We can 'use' that middle ground rather than put factions at opposite ends with no choice but to fight, regardless of their true opinions.

Kathy - Provincial parks are designed to ensure **the future** of those areas. Vision statements can guide us in some situations such as: who I work for, what I work for, and what I'm working toward. That's both for parks and parks systems.

Will - We're big enough to manage/develop a balanced system of open space/recreation facilities. Zonation is one means of addressing polarity on a range of opportunities as well as diversity in management strategies. The most difficult situation is dealing with a single resource.

Bir- We need to create a flexible plan which meets the needs of different people at different times.

Dave - We need to first determine what **is** the bottom line. We may not necessarily get two diametrically opposed answers. The public can be 'ignorant'. For example, they will complain about truck tracks that **bend** grasses, but the truck was used to spray thistle which **destroys** grasses. We are managing a resource.

Doug Mc - Did not participate in the second half of the forum, due to previous commitments.

**The following are summary point from the ensuing general discussion:**

Management should be of natural areas/environment parks **regardless of ownership**. Mechanisms should be in place for protecting environmentally significant areas on both private and public land.

For private management, the City can't always regulate, but it should be clear whose guidelines are being or should be used.

Definitions are needed for natural areas; there is a difference in the ecological perspective and the public view. In the public, one often wonders what other agendas are coming into play.

The value of natural areas is human value, by excluding people or general access, they lose their value. People who don't /can't use an area don't value it the way people who do/can use it.

Some areas are valued simply for their existence, not just access or use.

Exclusionary measures eliminate opportunity for experiences.

It is not possible to plan 100% or make a decision based JUST on a survey or plebiscite - otherwise end product isn't for the general public.... more research is required. (Disagreement - a random sampling is reality, it is the lobbyists, fringe groups, etc. who may receive disproportionate representation at public hearings at so on.

## **APPENDIX VIII**

### **Pulse on Parks (POP) Survey Overview**

#### **Introduction**

Amid changing economic trends, changing recreational needs, and an increased demand for natural area management during the 1970's the Alberta Government recognized the need to expand outdoor opportunities to all Albertans by supporting the provision of parks in Alberta's municipalities. The Urban Parks Program, funded through the Alberta Heritage Savings Trust Fund, was created to provide assistance to towns and cities across the province for the development of urban parks.

Urban parks are defined as "areas of open space and natural environments made accessible to urban populations".<sup>1</sup> They have been developed throughout the province. The first Urban Park in Alberta was Fish Creek Park in Calgary. In 1989 the Government of Alberta announced the second phase of the program. The City of Calgary is eligible for up to \$15 million in grants for the development of an Urban Park system. Calgary's City Council chose the river valley system as the focus for the next phase of Calgary's Urban Parks Program. Council proposed these funds be used to provide linkages and park nodes along the river pathway system and/or establishing additional links to outlying community and park areas.

Following Council's approval of the concept plan "Heart of the Valley, Calgary's Riverine Urban Parks Project", the **1991 Pulse on Parks, Urban Parks Survey** was undertaken by Calgary Parks & Recreation in order to establish an objective baseline of information related to the parks and open space needs, preferences, and priorities of Calgarians. In addition, the survey was to provide an opportunity to educate Calgarians about the project as well as provide an opportunity for public participation directly in the identification of issues related to the overall master planning process. The survey was completed by Calgary Parks & Recreation during the months of November and December 1991. One questionnaire was distributed to each household in the city.

#### **Study Goal**

The goal of the 1991 Pulse on Parks, Urban Parks Survey was:  
to provide an opportunity for Calgarians to participate in the identification of issues related to the Urban Parks Project.

#### **Study Objectives**

Underlying the overall goal of the survey were a number of specific objectives. They were:

1. To enhance the level of awareness of Calgarians with regards to the Heart of the Valley-Urban Parks Project.
2. To provide an opportunity for public input into the master planning process.
3. To select and implement a survey design that will provide a level of confidence of 95% (+/-5%) for the analysis of results on a community by community basis.
4. To measure the current usage patterns of Calgarians relative to parks and open spaces.
5. To provide an opportunity for Calgarians to identify their parks and open space preferences.
6. To oversee the design of the survey and ensure that the content is understandable, easily completed and will facilitate a minimum return rate of 3-5%.

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<sup>1</sup> A Concept Plan: Heart of the Valley, Calgary's Riverine Urban Parks Project. 1991 Calgary Parks & Recreation. P.4.

### **Study Area**

The study area used for this survey included all areas located within the boundaries of Calgary as of 1991 November 15. The sample frame used in this regard was provided by the Canada Post Corporation. The frame represents the means by which respondents of the survey were selected. It included a listing of all residential dwellings as of 1991 November 15. This represented 267,779 residences [households].

### **Census Sample**

In order to meet the objectives of the survey a census strategy to the data collection procedure was used. The survey objectives of: (1) educating the public to the Urban Parks Project, (2) generating a statistically reliable sample size at the community level, and (3) maximizing public participation in the survey, required the implementation of a census approach to the data collection procedure. In addition other issues related to cost, potential sampling errors, and the anticipated response rate, necessitated this approach rather than a random sampling procedure.

The implementation of a standard random sampling procedure, that would provide a statistically reliable stratified sample at the community level, would require an approximate sample size of 60,000 units. Given the costs associated with standard follow up procedures (eg. sending out a second survey if not returned and then following up with a telephone call) and an anticipated (historic) response rate of 10 to 20% the use of a stratified random sample for this survey was not the most appropriate or economically feasible data collection procedure.

Implementing a census instead of a specific sampling procedure is consistent with standard survey procedures used by such groups as Statistics Canada, when the survey objectives require a sample size greater than 80% of the population, there is a requirement for detailed information, or the information will serve as bench mark data. In cases where these elements are apparent the use of a census rather than a sample is typical. In the case of the 1991 Pulse on Parks, Urban Parks Survey in particular, these conditions combined with the study objectives and logistical constraints necessitated the use of a census as a cost effective survey method.

Using the census approach for data collection, in addition to maximizing public participation, does eliminate one of the two main types of errors found in surveys. Sampling errors (differences between the sample and the actual population) were eliminated because no sampling procedure was used. It is important to note that there is a potential, because of the self selection process in this survey (deciding whether or not to fill out the survey and return it), for a respondent bias. These will however be described and detailed in subsequent volumes.

The other main category of error is systematic error (errors in processing, coding etc.). These types of errors are more easily controlled in smaller sample sets. That is the smaller the sample size the lower the probability of some error to occur in the processing of the data. In order to minimize these types of errors strict data processing, coding, data entry, and verification procedures (as detailed in Section 8) were employed.

### **Survey Promotion and Advertising**

During the month of October an insert was placed in each utility bill issued by the City of Calgary. It informed Calgarians about the upcoming survey. Prior to the distribution of the survey, during the week of 1991 November 18, paid advertisements were placed in Calgary's two main newspapers (the Calgary Sun and the Calgary Herald) (Attachment 1). These advertisements informed Calgarians of the upcoming survey and encouraged them to participate. In addition, advertisements were placed in 46 community association newsletters through Prism Publications and the Riverview Printing Publication. Public service announcements were also prepared by Calgary Parks & Recreation and distributed to various media organizations through existing distribution channels.

During the data collection period, 1991 November 18 to 1991 December 10, an additional advertising campaign was initiated by Calgary Parks & Recreation in order to remind Calgarians about the survey and encourage their response. It provided the latest return rate and listed a telephone number to call if there were any questions about the intent of the questionnaire or the master planning process for the Urban Parks Project in general.

### **Data Collection**

The data collection procedures for this survey were as follows:

1. Admail lists were prepared by the Canada Post Corporation for each postal route (520) within the defined boundaries of Calgary. This represented 267,779 residential dwellings as of 1991 November 15.
2. All surveys were delivered, to each dwelling identified on the list, during the week of 1991 November 18 via Canada Post's Admail delivery service.
3. Each dwelling received one survey package. The package included a cover envelope, a single questionnaire, and a self-addressed postage paid return envelope.
4. One adult member of each dwelling was requested to complete the questionnaire and return it by 1991 December 10.
5. In cases where individuals called the Parks & Recreation office to say that they had not received a questionnaire, the address was recorded and passed on to Canada Post. Canada Post in turn investigated each and every case and where non-delivery could be confirmed a second questionnaire was issued. This represented 40 cases. No other secondary questionnaires were issued.
6. Only official questionnaires, returned in official envelopes were included in the data analysis.
7. Due to the time delay in processing the large number of questionnaires returned, questionnaires received up to 1992 January 11 were included in the data analysis.

### **Data Processing**

All returned questionnaires were initially received by the City of Calgary, Distribution Control Centre (Mail Room). They were counted and sent internally to the Pulse on Parks Survey Centre, 7th Floor Calgary Public Building, for processing.

Once received by the survey staff at Calgary Parks & Recreation, all returned questionnaires were again counted, marked with the six (6) digit identification number, recorded, and categorized as internal or external mail. All mail bearing postage or metered (business reply) stamps were classified as external mail. All materials submitted via the City's internal mail service were classified as internal mail. All questionnaires received were processed. This represented 47,633 items, 46,384 questionnaires were deemed valid. Invalid items included blank questionnaires, cheques for other City services and other extraneous items (eg. Christmas Cards). All extraneous items and information pertaining to other City departments were returned to the Distribution Controller for appropriate distribution.

Due to the large number of returned questionnaires, it was necessary to employ several temporary staff to assist with the data processing program. Trained staff members counted all returned questionnaires, packaged the questionnaires in bundles of 50 units, and placed them in record boxes of 500 units (10 bundles) in preparation for further data processing. Specific instructions are detailed in Attachment 2. Each record box was labelled with the number and series (eg.

Questionnaire #00001 to #001500) of questionnaires contained inside, the date received, and the date stored (Attachment 3). All record boxes were stored at the Pulse on Parks Survey Centre.

### **Data Coding**

Coding each returned survey was conducted from 8:00 a.m. to 8:00 p.m. Monday to Friday, and Saturday from 8:00 a.m. to noon, from 1991 December 5, to 1992 January 15. A team of temporary employees and contracted personnel were orientated, trained, and supervised by Calgary Parks & Recreation Staff. Strict procedures were introduced and all staff were trained in their application (Attachment 4). Shifts were limited to 6 hours in order to maximize efficiency and limit errors due to fatigue.

Computer coding sheets were prepared for each returned questionnaire (Attachment 5). Each questionnaire was coded in sequence and placed in storage binders holding 1500 questionnaires. Each binder was in turn recorded, sequenced and stored pending data entry. All comments received in the last section of the questionnaire were photocopied, sequenced and placed in storage for review in the future.

All responses given on returned questionnaires were coded numerically. That is a numeric value was assigned to each response given (eg. 1='Yes', 2='No'). This is a standard technique used to expedite the analysis of data. Open ended responses indicated in the 'other' category to each question were entered into a Watplus program for data storage using a specified protocol. (Attachment 6). A record of each comment received is available at the Planning Section of Calgary Parks & Recreation.

Errors in logic, such as responding to a question with more than one response or answering a question that one was supposed to skip, were given the code 'invalid'. A 'no response' to a question was also assigned. A verification program of confirming every 10th coded questionnaire was also conducted.

### **Data Entry**

All completed coding sheets were transferred to the Operation Support Section of the City of Calgary's Data Processing Services Department (D.P.S.D.). Data entry was conducted by a contracted data entry firm. Responses, as coded, were entered into a standard data entry file structure and returned by computer tape to the Operations Support Section. Here data was configured and placed on to a CMS-Xedit computer file for data storage.

### **Data Verification and Editing**

The data file stored on the D.P.S.D. account was divided electronically into units of 1500 records (representing questionnaires) according to the sequenced binders originally prepared during the data coding process (Attachment 7). A test file of 1500 units was run using a customized Statistical Analysis System program. Anticipating a keying error of 0.3% (which is an industry guideline) each record was checked for keying errors, missing data etc. When an error was found, the Survey Coordinator verified the record with the original computerized coding sheet or the original questionnaire (if required) and made the appropriate change (Attachment 8). Once verified the test file of 1500 records was sent back to the D.P.S.D. computer account for safe keeping. This process was repeated until all 46,384 valid questionnaires were checked. Only two (2) missing cases are now found in the entire data file.

Once all returned surveys were verified and entered, a complete data file was merged and configured by D.P.S.D. This file was transferred electronically to the Planning Section of Calgary Parks & Recreation for data analysis. Data analysis is being conducted through the application of a customized Statistical Analysis System program.

## **Survey Instrument**

The instrument used in this survey was a self-administered questionnaire. The questionnaire was prepared in a booklet form and distributed via the distribution method earlier described.

A Terms of Reference was prepared for the survey. It identified the survey's goal and objectives. Based upon these, topic areas were outlined for the survey. Each topic area referred to a potential issue that may be required to be reviewed in the master planning process for the Heart of the Valley-Urban Parks Project. In addition topic areas related to the strategic planning program (Policies & Priorities Plan) of Calgary Parks & Recreation were also integrated where possible.

Based upon each topic area a series of draft questions were prepared by the study team. The study team was made up of Calgary Parks & Recreation staff members. Draft questions were reviewed and refined by the study team. Primarily using close ended and Lickert scale formats a draft of the questionnaire was prepared. The graphics and configuration of the instrument were completed by the Graphics Section of Calgary Parks & Recreation.

A final draft was prepared and a pre-test was conducted. The pre-test was conducted with 20 volunteer staff members from different sections of Calgary Parks & Recreation. Test subjects were not given any prior notice of the test nor were they familiar with the project itself.

Following a review of the results of the pre-test, changes were made to the questionnaire. A final draft version was then sent out for review to the Mayor's Office, Commissioner's Office, Aldermanic Offices, Director of Calgary Parks & Recreation, Director of Planning & Building, and Director of Engineering and Environmental Services. In addition, draft copies were sent to other City staff who possess expertise in survey design. Their comments were solicited. This included members of the Transportation Department and the Corporate Resources Department. The final version of the questionnaire incorporated comments received from all of the above, where technically appropriate and feasible.

## **Questionnaire Format**

### **a) Introduction**

This section was placed on the front cover of the questionnaire. It provided the respondent with specific information related to the Heart of the Valley-Urban Parks Project. It outlined the goals and scope of the project and encouraged their participation. It was signed by the Director of Calgary Parks & Recreation.

### **b) Instructions**

A map of the area under review in the Heart of the Valley-Urban Parks Project and instructions for completing the questionnaire were contained on page two (2) of the booklet. A telephone number for more information and instructions relating to the returning procedure was also included.

### **c) General Park Use**

This section of the questionnaire was designed to measure the current level of park use and identify reasons for use or non-use. In addition respondents were asked to identify the level of importance that they place on parks and open spaces.

### **d) Heart of the Valley-Urban Parks Project**

In this section of the questionnaire respondents were asked to review a number of issues related to the river valley system. Respondents were asked to identify the issues that they felt should be addressed in the master planning process for the Heart of the Valley-Urban Parks Project. These issues were categorized into four main areas: pathways, protection and care of open space, river valley facilities, and interpretive facilities.

### **e) Park Functions**

Within this section of the questionnaire, respondents were asked to indicate their use of different

park and open space amenities. This included both local (community) and regional (city wide) open space features. Respondents were asked to identify their use according to a scale presented. The scale did have a minor technical error in that the scale went from '2 to 10 times per month', to 'more than 11 times per month', therefore if someone visited exactly 11 times per month the scale could be seen as inaccurate. Due to the minor nature of this technical flaw it is not considered to have had a negative impact on the results.

In addition this section provided respondents with an opportunity to rate the quality of the parks and opens spaces that they have experienced both locally (in and around their community) and regionally (on a city wide basis). As well one final question provided an opportunity to identify a priority for open space funding.

#### f) Information About You

In this section the respondent was asked to provide some basic demographic information about themselves and their household. Requesting this information is standard. It is asked in order to identify specific trends relative to differing demographic characteristics.

#### g) Comments

In this section respondents were provided an open ended opportunity to write down any additional comments that they might have concerning the Heart of the Valley-Urban Parks Project.

#### h) Summary

Respondents were thanked for their participation. A reminder as to the returning procedure was also given.

### **Response rate**

Of the 267,779 questionnaires sent out, 46,384 valid questionnaires were returned as of 1992 January 11. This represents an overall response rate of 17.3%. This return rate more than meets the stated objectives of the survey and falls within the historic response rate achieved in similar surveys.

As mentioned previously in Section 3.0 an objective of the survey, and in fact one of the main reasons for using such an all encompassing distribution method, was to generate response levels that would allow for statistically reliable generalizations to the population, at the community level. As a result of the overwhelming response this objective was met in approximately 64% of Calgary's community areas.<sup>2</sup> It is important to note that many community areas have a very small number of household units. In cases where the total number of household units is 500 or less, standard sample size would require a response rate of 45% or more. There are however means by which statistically reliable sample sizes can be generated. This could include combining community areas that are contiguous.

This statistical level of confidence can be further applied to much larger units of analysis. These include an analysis of results on a city wide, quadrant, and ward by ward basis. In addition

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<sup>2</sup> Those communities where the response rate is below the level required to statistically provide a level of confidence of 95% ( $P < 0.05$ ) include the following :

Abbeyle, Alberta Park/Raddison Heights, Applewood, Bonavista Downs, Banff Trail, Bankview  
Bridgeland/Riverside, Britannia, Cambrian Heights, CFB-Harvey, Currie, Lincoln Park, Cliff Bungalow, Coach Hill/Patterson Heights, Connaught, Deer Ridge, Eagle Ridge, Eau Claire, Elbow Park, Erin Woods, Erlton, Elboya, Fairview, Forest Heights, Forest Lawn, Greenwood, Highwood, Highland Park, Hounsfieid Heights, Inglewood, Maple Ridge, Manchester, Martindale/Taradale, Meadowlark Park, Mission, Monteray Park, North Glenmore, Parkhill, Penbrooke, Pineridge, Point McKay, Ramsay Rideau/Roxboro, Rosscarrock, Rosemont, Rutland Park, Saddleridge, Shaganappi, Shawnee Slopes, Southview, Spruce Cliff, Strathcona, Sunalta, University Heights, Victoria Park, Vista Heights, Windsor Park, Winston Heights.

analysis based upon other natural occurring groupings, (eg. those aged 20-24) is available given the size of the data base.

In all cases, the statistical level of confidence required for the individual strata (eg. quadrant, ward or community area) is 95% (P.<0.05). This means that 19 times out of 20, the results would be the same, assuming the application of similar survey procedures, plus or minus 5%. In the cases where larger data sets are available, such as on a city wide, quadrant or ward basis a higher level of confidence is available, although the standard statistical measure of confidence of 95% (P.<0.05) is used. In the vast majority of social science research 95% (P.<0.05) is the generally accepted standard.

Although all occupied residential dwellings were to receive a survey package, Calgary Parks & Recreation along with Canada Post received approximately 60 telephone calls or letters from individuals who said that they had not received a questionnaire. According to Canada Post, the anticipated error rate of delivery is 0.25%. This rate is confirmed by Canada Post's Admail Supervisors who verify the delivery rate on each postal route (520 total routes) by randomly selecting six (6) residences and either visually or by talking to a resident confirm delivery.

Certainly there may be a number of cases where individuals were unaware of the survey and therefore threw it away, assuming it was advertising mail. Others may have thrown it away unknowingly, not seen it in the package of mail delivery that day or another member of the household may have disposed of it, therefore they would not be aware of the survey. These occurrences are however unavoidable.

The reason for not sending out a substitute questionnaire relates to not allowing for any opportunity for a household to respond more than once. This is a critical and standard data control measure. Not allowing for any opportunity to respond more than once is applied in almost every survey. In the case of the Pulse on Parks, Urban Parks Survey, the census approach provided enough responses to allow for a detailed analysis of results.

### **Respondent Profile**

Of those who responded to the Pulse on Parks, Urban Parks Survey, a majority reside in the Northwest (29.5%) and the Southwest (29.0%) quadrants of the city. A comparison, based upon quadrant, of the residential location of respondents to the actual quadrant distribution is presented in Figure 2. Within the margin of error of 5% there is a minor under representation of those respondents residing in the Southwest, although it should be noted that there were a number of respondents (1.7%) who indicate that they lived 'downtown', the majority of which is in the Southwest quadrant.

For the Northeast however, there is a clear under representation. According to the 1991 City of Calgary Census 18.0% of all residential dwellings are located in the Northeast. Only 10.3 % of those who responded to this survey indicate they reside in this quadrant.

A further comparison of the demographic characteristics of those who responded to the population at large reveals that there is an under representation of males. That is 54.1% of respondents were female and 42.8% were male. According to the latest census information (1991), 50.1% of Calgary's population are female and 49.9% are male.

Relative to age, it is important to note that the segment of the population aged fourteen (14) and under were not targeted in the data collection program. This segment was not accounted for because the survey was directed to 'one adult' member of the household. An adult member of the household was requested to respond on behalf of the entire household. For the purposes of this survey an adult member was considered any member of the household aged fifteen (15) and over. As a result, the percentage of the population typically found in the age group 0-14 (21.6%) is



absorbed by all of the other age groups. Given the margin of error earlier described (+/-5%) the age groups of 20-24, 55-64, and 65+ are all congruent with actual population (Figure 4). However, exceptions relate to the age group 25-44, 45-54 and 15-19. As for the 25-44 age group this age group represents a majority of those who responded (56.6%). In the population this group accounts for 39.8%. There is also an over representation in the age group 45-54. They make up 15.6% of the respondent group compared to 9.9% in the population at large.

The 15-19 age group, on the other hand, are under represented. In the population this age group accounts for 6.1%. Relative to those who responded, this age group makes up 0.8%. This phenomenon is consistent with other surveys of this nature, when it is anticipated that the majority of adult members of any household tend to be aged 20 or older.

In terms of describing the living arrangement with others in the residence, 38.2% of respondents described themselves as 'a couple with children at home' and 30.9% described themselves as a 'couple'.

A final question asked respondents to describe their current activity level. More than 34.6% described themselves as being active (ie. daily walker, jogger, exerciser, etc.) and 38.2% described themselves as semi active (ie. weekly walker, jogger, exerciser, etc.).

### **Summary of Results**

The following section provides an outline of the frequency of response recorded for each question in the questionnaire. The response is provided in terms of a relative percentage of the total sample of 46,384 units. Overall, more than 87% of respondents rated the importance of Calgary's parks as either 'very important' or 'important'. Indeed 63.6% of respondents overall, indicate that parks are 'very important'. Detailed cross tabulations by age, gender and other socio-demographic comparisons will be available in later reports.

#### **a) General Park Use**

Overall respondents indicate that they use parks in Calgary often. In fact, 47.4% indicate that they use the park system '2 to 10 times/month' and 18.3% would consider themselves regular users as they indicate that they use the park system 'more than 11 times/month'.

Respondents also indicate that the main reason for visiting a park is to 'enjoy nature' (26.3%). A significant number of other respondents provide differing reasons such as 'to exercise' (17.4%), 'to participate in recreation, sport or leisure' (16.6%) or 'to relax' (14.1%). There was no significant difference among respondents from either gender nor was there a difference based upon the description of the household (eg. Single Parent versus Couple). However respondents aged 20-24 and 25-44 indicate higher levels of sport and exercise use.

Respondents also indicate that the most common reason for not using the parks system is 'poor weather' (18.9%). Other reasons for non-use include; 'too far away' (17.6%), 'too busy' (16.6%), and 'too crowded' (12.7%), 8.8% of female respondents indicated that personal security was the main reason for their non-use. This compares to 4.0% of male respondents.

Overall, more than 87% of respondents rated the importance of Calgary's parks as either 'very important' or 'important' and of these 63.6% of respondents overall, indicate that parks are 'very important'. Although there was no significant difference based upon household description there is a noted reduction in the level of importance among those indicating lower activity levels.

#### **b) Heart of the Valley-Urban Parks Project**

In this section respondents were asked to review a series of issues related to the river valley

system. They were asked to identify those issues which they felt needed to be addressed in the Heart of the Valley-Urban Parks Project. Issues were outlined and described in four (4) main categories: pathways, protection and care of open space, river valley facilities, and interpretive facilities. Space was provided to allow a response not noted in the prescribed categories.

### c) Pathway Issues

Respondents were asked to provide an indication as to how important they felt a series of pathways issues were to the master planning process. [Responses were as follows:]

Issue	Percentage (%) Strongly Agree + Agree	Percentage (%) Strongly Disagree + Disagree
Pathway safety	85.2%	5.5%
Amenities (eg. Benches)	78.6%	10.0%
Pathway surfaces	76.0%	10.6%
Connections to adjacent communities	76.0%	8.3%
Pathway access for the disabled	75.6%	7.1%
Bridge crossings	74.5%	8.6%
Pathway signs	72.5%	12.4%
Connections to outlying communities	59.3%	17.1%

Overall, 85.2% of respondents indicate that they 'strongly agree' or 'agree' that pathway safety is an issue that needs to be addressed. Female respondents, more so than male respondents, support this notion. Approximately 87.9% of females indicate that they either 'strongly agree' or 'agree' with its inclusion. This compares to 83.2% of male respondents. In addition female respondents agreed more than male respondents that a review of pathway signs and access for the disabled is necessary.

Respondents aged 20-24 and 25-44 agreed more strongly than other age groups, that connections to outlying communities is an issue to be addressed. Furthermore, the respondent group aged 65 and over indicate relatively lower support for a review of pathways signs, pathway surfaces, and bridges.

Support for connections to adjacent communities was strongest among those respondents with children, as 31.2% of respondents describing their household as a couple with children and 31.2% of single parent households strongly support this notion. This compares to 23.3% of those living alone, 24.4% of couples, 26.4% of those living with roommates and 27.4% of those living with extended families.

In addition to these responses there were 9.2% of respondents who indicate that there were 'other' pathways issues that they felt should be addressed.

### d) The Protection and Care of Open Space

In this section respondents identified the level of appropriateness that they place on particular strategies for the care and protection of open space. Overall respondents feel that a review of acquiring lands identified as environmentally sensitive and acquiring lands in order to complete the river valley system is most appropriate. Interestingly, male respondents more so than female respondents indicate greater support for the acquisition of lands to complete the river valley system. Approximately 39.9% of males indicated that this is 'very appropriate'. This compares to 31.0% of female respondents. It should also be noted that there is more support among younger respondents (20-24 and 25-44) for the review of land acquisition for environmentally sensitive areas and land acquisition in order to complete the river valley system. This age group was also more supportive of the notion of preserving open space and prohibiting human use, as well as preserving open space for wildlife use.

In addition, female respondents indicate greater support for preserving open space for wildlife use and increased public education programs, 38.1% of these respondents indicate that preserving open space for wildlife use is 'very appropriate'. This compares to 29.6% of their male counterparts. Relative to the notion of increasing public education programs, 34.3% of female respondents indicate that this is 'very appropriate'. Only 25.6% of male respondents agreed.

#### e) River Valley Facilities

In this section respondents were asked to identify the necessity of a series of potential river valley facilities. Overall respondents to the Pulse on Parks, Urban Parks Survey identified nature trails as a facility related issue that is most necessary to include in the planning process for the Heart of the Valley-Urban Parks Project. Responses provided by female respondents (indicating that it is 'very necessary') show that they are most likely to support nature trails (45.8%), rest areas (36.6%) and picnic areas (27.8%). Male respondents, on the other hand, indicate lower support (as identified by those indicating that it is 'very necessary'), with 38.0%, 27.0% and 21.8% respectively.

Respondents from the age groups 20-24 and 25-44 were more supportive of nature trails than their older counterparts (aged 45 and over). While the age groups 45-54, 55-64, and 65+ were more supportive of rest stops.

#### f) Interpretive Facilities

As part of this section's review of the potential elements for the river valley system, respondents were asked to indicate whether or not they felt that an interpretive theme should be included in the Heart of the Valley-Urban Parks Project. Overall 71.2% indicated 'yes' and of these 44.2%

#### g) Park Functions

Given the current variety of opportunities available within Calgary's existing park system, this section provided respondents with the opportunity to identify their current level of park use and rate the quality of these features. In order to provide a consistent point of reference, the Pulse on Parks, Urban Parks Survey classified the current open space system into two basic categories: (1) local open space and (2) regional open space. This is consistent with existing park planning and park classification procedures used by Calgary Parks & Recreation.

Local open space refers to those parks and open spaces that are found in and around one's local community. Examples of this type of open space would be a local tot lot, local walkway system, or the play fields found at an elementary school. Regional open space, on the other hand, refers to that open space, in and around the city, which is designed on a much larger scale. These sites can incorporate much larger scale recreation and leisure opportunities. Regional elements are often designed to service a particular region or the entire city. Examples of this type of open space provision would be Nose Hill Park, Prince's Island, Edworthy Park, Bowness Park or Prairie Winds Park.

#### g) i. Local Parks and Open Space

The first point that respondents were asked to consider was their local open space. They were asked to identify their use of this open space and they were asked to rate the quality of the parks and open space system in their local community. A reference to six (6) use categories of open space provision was used. These represent typical uses or activities associated with community based open space. These include: structured sports (eg. League Softball), unstructured sports (eg. Frisbee), informal play (ie. Tot lot Use), walking/jogging etc., relaxation, and getting around/commuting. These categories were designed to elicit responses based upon the major functions provided by local open space. Additional uses could be identified by the respondent by using the space provided to write in a response under the 'other' category. Only 4.0% of those who responded took this opportunity. Overall the community use most often noted was walking. Approximately 68.3% of those who responded indicate that they use the open space found in and around their community for this purpose '2 or more times per month'.

In terms of an assessment of the quality of these local park amenities, respondents overall indicate that those uses associated with walking and relaxation rate the highest. This may suggest, that on an city wide basis, respondents are pleased with the ability of their community based open space to provide for their most frequent use. Of all these categories there seems to be a minor level of concern relate to commuting, relaxation opportunities, and walking/jogging. That is 9.2%, 7.2%, and 6.0% of respondents rated their local open space relative to these uses as 'poor'.

#### **g) ii Regional parks and Open Space**

In order to provide a context for the types of activities that primarily take place in parks and open space that are regional in scope, different use categories for regional parks and open space were presented . Respondents were asked to identify their current level of use and rate the quality of regional parks relative to eight typical use categories. These categories include the following: structured athletic events (eg. Baseball Tournaments), special events (eg. Fun Run), picnicking and family outings, cultural or festival events (eg. Canada Day), walking/jogging etc., nature appreciation, getting around/commuting, and outdoor education. Again any additional uses, not described in the questionnaire could be identified by the respondent by using the space provided to write in a response under the 'other' category. Only 2.3% of respondents did indicate a use other than those presented.

On a city wide basis respondents utilize regional open space most frequently for walking/jogging etc. More than 59.6% of those who responded to the Pulse on Parks, Urban Parks Survey indicate that they regularly (11+ times/month) or often (2-10 times/month) utilize city wide parks for this purpose. Approximately 50.0% indicate the same usage level for nature appreciation.

As it relates to the quality of these regional facilities, respondents indicate that regional parks best service walking and picnicking/family outings . It is however important to point out that a large percentage of respondents (approximately 30% ) indicate that they were 'not sure' about

#### **h) Priorities for Open Space Funding**

Given limited resources respondents overall indicate that the priority for open space funding should be 'parks for walks, picnics & general use' and 'pathway and trail systems'. Of those who responded, 28.5% indicate support for general use parks (parks for walks, picnics, etc.) and 27.7% support the pathway system as the priority for open space funding given limited resources.

### **Future Reports**

To optimize the return on investment, and to manage the substantial return and subsequent information available, the preparation of a series of reports will be required. Each report will analyze a particular facet of the responses received. Trends will be examined, biases will be identified, and a detailed analysis of the relationships and correlations that exist will be described.

In Section II of this Volume (Volume I) an overview of the results will be presented on a ward by ward basis. Section III will describe, in detail, the level of support relative to the issues that are felt to be appropriate for review in the master planning process for the Heart of the Valley-Urban Parks Project. Specific support levels will be described and the particular biases that may be apparent in the population will be identified.

Following the completion of this report Volume II will provide a detailed analysis of the results relative to the major uses of open space described by respondents. This review will look at the level of support for particular open space allocations, features, and amenities as well as describe the interrelationships that exist in the population.

Section V of Volume II in particular will provide an opportunity to evaluate the current provision of open space relative to the current usage levels, importance, and existing types of open space

allocations. This analysis will provide detailed support and background information for the Policies and Priorities Plan of Calgary Parks & Recreation. Particular open space allocations that require additional attention or those where potential efficiencies are available will be described. [The outline of reports in Volume II is as follows:]

**Volume II**

- Section I:** Detailed Report & Analysis of Results- Structured & Unstructured Sports
- Section II:** Detailed Report & Analysis of Results- Informal Play, Walking & Jogging
- Section III:** Detailed Report & Analysis of Results-Festivals, Cultural and Special Events
- Section IV:** Detailed Report & Analysis of Results- Relaxation and Nature Appreciation
- Section V:** Detailed Report & Analysis of Results-Importance versus Performance Evaluation of Parks & Open Space Allocation

**Conclusion**

Following City Council's 1991 July 04 approval of the Heart of the Valley, Calgary's Riverine Urban Parks Project Concept Plan, Calgary Parks & Recreation undertook the completion of a public opinion survey. As one of the public participation strategies outlined in the Concept Plan, the 1991 Pulse on Parks, Urban Parks Survey was designed to provide Calgarians with an opportunity to participate in the identification of issues related to the planning process envisioned for the Heart of the Valley - Urban Parks Project. The 1991 Pulse on Parks, Urban Parks Survey has increased the level of community awareness with regards to the Urban Parks Project.

Moreover, the availability of the 1991 Pulse on Parks, Urban Parks Survey to provide an objective baseline of information, at the community level, as it relates to the open space uses, preferences, and priorities of Calgarians is apparent. Additional applications of the information available from this survey is anticipated. These include the preparation of Calgary Parks & Recreation's Policies & Priorities Plan, and inclusion in the ongoing discussions between the City, School Boards, and the development industry over open space allocation.

Given these applications and the significant response rate achieved, the 1991 Pulse on Parks, Urban Parks Survey will serve as an objective description of public opinion relative to park and open space, preferences, and priorities.

**(Excerpt from Technical Report and Summary of Responses)**

## APPENDIX IX

### 1991 Pulse on Parks (POP) Summary of Frequency Responses (N=46,384) (excerpt from Pulse on Parks 1991 Urban Parks Survey Summary Report)

#### I) General Park Use

The riverways and pathways of Calgary are an important feature of our existing parks system. The Heart of the Valley Urban Parks Project can improve this system. In order to set the stage for the overall project we would like to ask you some basic questions about your park use in general.

#### 1. How often do you use parks in Calgary? Would you say that you...

- 18.3% Regularly use the parks (more than 11+ times/month)
- 47.4% Often use the parks (2-10 times/month)
- 28.0% Rarely use the parks (less than 2 times/month)
- 3.7% Never use the parks (0 times/month)
- 2.3% No response
- 0.3% Invalid

#### 2. When you visit a park or open space, within Calgary, what is usually the main reason for your visit?

- 14.1% To relax
- 3.0% To visit/socialize
- 16.6% To participate in recreation/sport/leisure activities
- 17.4% To exercise
- 26.3% To enjoy nature
- 7.2% To walk my dog
- 2.5% I don't visit parks
- 3.0% Other
- 2.0% No response
- 7.9% Invalid

#### 3. There are a number of reasons why people do not use parks. Please indicate the most common reason why you would not use the parks system.

- 17.6% Too far away
- 3.9% Nothing to do there
- 16.6% Too busy
- 1.4% Too expensive
- 12.7% Too crowded
- 18.9% Poor weather
- 6.7% Lack of personal security
- 2.0% Personal health
- 0.6% Don't like the parks
- 6.9% Other
- 9.6% No response
- 3.0% Invalid

#### 4. Overall, how important are Calgary's parks and open spaces to you?

- 63.6% Very important
- 24.2% Important
- 8.3% Somewhat important
- 1.6% Not important
- 0.7% No opinion
- 1.6% No response
- 0.1% Invalid

## II) Heart of the Valley, Urban Parks Project

The following section deals with a number of issues related directly to the Heart of the Valley Urban Parks Project. We would like to get your opinions on Pathways, Open Space, River Valley Facilities and Interpretive Facilities.

### A. Pathways

Pathways are one of the features under review in the Heart of the Valley Urban Parks Project. You have the opportunity to help us identify issues related to pathways. Please read each statement listed below and indicate whether you agree, or not, that it is an issue that needs to be addressed.

	Invalid	Strongly Agree	Agree	Disagree	Strongly Disagree	No Opinion	No Response
1. Connections to adjacent communities	0.1%	27.5%	48.5%	6.9%	1.4%	9.8%	5.9%
2. Connections to outlying communities	0.1%	16.2%	43.1%	14.3%	2.8%	16.1%	7.5%
3. Amenities (eg. Benches, viewpoints)	0.1%	30.2%	48.4%	8.3%	1.7%	5.7%	5.6%
4. Bridge crossings	0.1%	24.5%	50.0%	7.4%	1.2%	9.0%	7.7%
5. Pathway surfaces	0.1%	29.3%	46.7%	9.0%	1.6%	6.2%	7.0%
6. Pathway signs	0.1%	24.8%	47.7%	10.5%	1.9%	7.3%	7.7%
7. Pathway safety	0.2%	47.9%	37.3%	4.5%	1.0%	3.3%	5.8%
8. Pathway access for the disabled	0.1%	30.9%	44.7%	5.6%	1.5%	10.5%	6.7%
9. Other	0.9%	7.7%	1.5%	0.1%	0.2%	3.1%	86.6%

### B. Open Space

The protection and care of open space, including environmentally sensitive areas, is also under review in the Heart of the Valley Urban Parks Project. Calgary Parks & Recreation plays an active role in this area. We would like to get your opinion on what the main focus should be. **How appropriate are the following to you?**

	0-Invalid	1-Very Appropriate	2-Appropriate	3-Somewhat Appropriate	4-Not Appropriate	5-No Opinion	6-No Response
	0INV	1VAP	2APP	3SAP	4NAP	5NOP	6NOR
1. Acquire lands identified as environmentally sensitive.	0.0%	41.8%	30.3%	11.8%	5.7%	3.9%	6.5%
2. Acquire lands to complete the river valley system.	0.0%	34.7%	37.7%	13.4%	3.9%	4.4%	5.8%
3. Develop open space and allow controlled human use.	0.1%	23.9%	41.0%	18.2%	8.6%	2.6%	5.7%
4. Preserve open space and prohibit human use.	0.1%	9.6%	12.9%	23.5%	41.9%	4.5%	7.6%
5. Preserve open space for wildlife use.	0.0%	34.2%	29.1%	21.3%	7.4%	2.4%	5.5%
6. Increase public education programs.	0.0%	30.3%	33.1%	18.6%	6.6%	5.3%	6.1%*
7. Other	0.6%	2.2%	0.4%	0.1%	0.1%	2.7%	93.8%*

\* Denotes one missing case

### C. River Valley Facilities

A variety of facilities are potentially available in the river valley system. Please provide an indication of how necessary you think the following are.

	Invalid	Very Necessary	Necessary	Somewhat Necessary	Not Necessary	No Opinion	No Response
1. Play areas	0.1%	29.5%	34.5%	20.6%	8.8%	1.5%	4.9%
2. Rest stops	0.1%	32.3%	44.5%	15.6%	2.8%	0.8%	3.9%
3. Picnic areas	0.1%	25.1%	42.2%	22.8%	4.7%	0.7%	4.4%
4. Nature trails	0.1%	42.1%	38.3%	12.5%	2.3%	0.8%	3.9%
5. View points	0.2%	24.8%	36.4%	25.4%	6.7%	1.2%	5.4%
6. Beaches	0.1%	14.4%	18.7%	28.1%	29.4%	3.4%	5.7%
7. Boat launches	0.1%	4.3%	9.4%	27.7%	45.1%	7.4%	6.1%
8. Other	0.6%	2.7%	0.8%	0.3%	0.3%	2.8%	92.6%

## D. Interpretive Facilities

Calgary's waterways have a rich and varied history which may provide interesting educational and interpretive opportunities. Do you think that interpretive themes should be developed for the different areas of the river and pathway system?

- 71.2% Yes\*
- 14.3% No
- 11.7% No opinion
- 2.7% No response

\* If yes, which of the following options do you prefer?

- 32.7% A self-guided interpretive program.
- 25.0% A sign system illustrating park theme(s).
- 3.9% A single interpretive facility.
- 7.7% A series of interpretive facilities.
- 0.6% Other
- 1.8% Invalid
- 2.4% No response
- 25.9% No answer required

## III) Park Functions

Calgary's parks and open space system offers a wide variety of recreation, sport and leisure opportunities. Some of these opportunities are provided to meet needs on a local community basis while others meet city wide open space needs. Community based needs are typically serviced by the parks and open spaces located in and around your community. City wide needs, on the other hand, are typically provided for by larger scale parks and open spaces that can allow greater numbers of people and activities.

In order to set the priorities for the Heart of the Valley Urban Parks Project, we would like to get an idea on how often you use existing parks and open spaces for different types of activities. In addition we would like your opinion on the overall quality of our parks and your preferences for future park developments.

### A. In And Around Your Community

(i) In and around your community you will find a number of parks and open spaces. Please tell us how often you use these areas in terms of the following types of activities.

Times per month	Invalid	Regularly 11+	Often 2-10	Rarely <2	Never 0	No Response
1. Structured sports (eg. League softball)	0.1%	3.7%	11.9%	21.5%	52.2%	10.6%
2. Unstructured sports (eg. Frisbee)	0.0%	4.1%	21.1%	39.0%	24.9%	10.9%
3. Informal play (ie. Totlots)	0.1%	8.7%	19.1%	23.1%	37.1%	12.0%
4. Walking, jogging etc.	0.1%	27.9%	40.4%	19.9%	5.3%	6.4%
5. Relaxation	0.1%	17.3%	38.2%	26.9%	8.3%	9.3%
6. Getting around/commuting	0.0%	8.2%	14.5%	26.8%	37.1%	13.3%
7. Other	0.5%	1.9%	1.5%	0.6%	2.7%	92.9%

ii) Based upon your experience, how would you rate the overall quality of your local parks and open spaces in terms of the following types of activities?

	Invalid	Excellent	Good	Adequate	Poor	Not Sure	No Response
1. Structured sports (eg. League softball)	0.1%	11.2%	28.5%	16.9%	5.1%	28.5%	9.8%
2. Unstructured sports (eg. Frisbee)	0.0%	13.0%	35.7%	23.7%	3.7%	14.0%	9.8%
3. Informal play (ie. Totlots)	0.1%	11.3%	31.1%	22.1%	5.7%	19.6%	10.1%
4. Walking, jogging etc.	0.1%	26.9%	39.8%	17.3%	6.0%	3.3%	6.6%
5. Relaxation	0.1%	22.7%	37.7%	19.8%	7.2%	4.3%	8.2%
6. Getting around/commuting	0.1%	9.6%	24.0%	20.5%	9.2%	25.0%	11.7%
7. Other	0.5%	0.7%	0.6%	0.4%	1.2%	2.7%	93.8%



## B. In And Around The City

(i) In addition to the parks and open space available in and around your community, there are a number of larger parks, natural areas and regional pathways located throughout our city. Calgarians from many communities use these areas. Other than golf courses, please indicate how often you use city wide parks for the following types of activities

Times per month	Invalid	Regularly 11+	Often 2-10	Rarely <2	Never 0	No Response
1. Structured athletic events (eg. Tournaments)	0.0%	2.4%	9.1%	25.1%	54.3%	9.0%
2. Special events (ie. Fun Run)	0.1%	1.1%	6.5%	37.4%	45.2%	9.7%
3. Picnicking or family outings	0.1%	3.6%	25.8%	47.6%	14.7%	8.3%
4. Cultural or festival events (eg. Canada Day)	0.1%	2.2%	13.1%	50.3%	24.9%	9.4%
5. Walking, jogging, etc.	0.1%	20.1%	39.5%	26.4%	7.8%	6.1%
6. Nature appreciation	0.1%	13.9%	36.1%	32.4%	9.5%	7.9%
7. Getting around/commuting	0.0%	6.2%	13.7%	28.2%	41.0%	10.9%
8. Outdoor education	0.0%	2.4%	9.8%	33.6%	43.4%	10.8%
9. Other	0.4%	0.9%	0.9%	0.5%	3.1%	94.1%

(ii) Based upon your experience, how would you rate the overall quality of these city wide parks in terms of the following types of activities.

	Invalid	Excellent	Good	Adequate	Poor	Not Sure	No Response
1. Structured athletic events	0.0%	9.9%	28.9%	15.6%	1.8%	34.0%	9.8%
2. Special events (ie. Fun Run)	0.1%	8.3%	30.4%	19.4%	1.3%	30.2%	10.3%
3. Picnicking or family outings	0.1%	13.7%	40.2%	24.8%	3.9%	8.7%	8.6%
4. Cultural or festival events	0.1%	12.4%	35.4%	21.7%	2.3%	18.2%	10.0%
5. Walking, jogging, etc.	0.1%	25.1%	43.1%	17.5%	2.2%	5.1%	7.0%
6. Nature appreciation	0.1%	16.7%	37.5%	22.8%	6.0%	8.4%	8.5%
7. Getting around/commuting	0.1%	7.3%	24.4%	21.0%	6.2%	29.7%	11.2%
8. Outdoor education	0.0%	5.1%	20.1%	22.6%	9.0%	31.5%	11.7%
9. Other	0.5%	0.4%	0.6%	0.4%	0.6%	2.8%	94.7%

## C. Parks and Open Space Priorities

Given limited resources, what do you think open space funding priorities should be?

- 4.4% Invalid
- 1.5% Formal athletic fields for structured sports
- 1.6% Informal play fields for unstructured activities
- 4.8% Local playgrounds and totlots
- 27.7% Pathways and trail systems
- 5.6% Local parks for relaxation
- 14.7% Natural areas
- 4.6% Long and narrow walkways winding through your community
- 28.5% Parks for walks, picnics & general use
- 1.3% Other
- 5.2% No response

## IV) Information About You

1. Which community do you live in? (See Technical Report for community districts listed.)

2. Please indicate your age group...

- 0.8% 15-19
- 4.2% 20-24
- 56.6% 25-44
- 15.6% 45-54
- 11.2% 55-64
- 10.2% 65+
- 0.4% Invalid
- 1.0% No Response

- 3. Please indicate your gender...**  
 42.8% Male  
 54.1% Female  
 1.4% Invalid  
 1.7% No response
- 4. How would you describe your present household situation?**  
 16.1% Living alone  
 4.8% Living with roommate(s)  
 30.9% Couple  
 38.2% Couple with children at home  
 4.1% Single parent  
 2.7% Living with extended family  
 1.4% Other  
 0.3% Invalid  
 1.4% No response
- 5. How would you rate your present physical activity level?**  
 34.6% Active - (ie. Daily walker, jogger, exerciser, cyclist etc.)  
 38.2% Semiactive - (ie. Weekly walker, jogger, exerciser, cyclist etc.)  
 18.3% Occasional - (ie. Monthly walker, jogger, exerciser, cyclist etc.)  
 4.0% No physical activity - (ie. Physically able but do not engage in activity)  
 2.2% Mobility restricted - (ie. Physical impairment due to health)  
 0.9% Other  
 0.6% Invalid  
 1.3% No response

**V) Comments**

**1. Do you have any additional comments that you would like to make about the priorities for the Heart of the Valley Urban Parks Project?**

- 41.3% Comments given (N=19,000+)  
 58.7% No comment

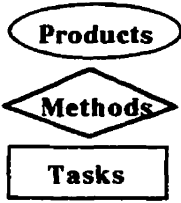
(Excerpted [and modified] from Appendix 1 - Summary of Results, Pulse on Parks 1991 Urban Parks Survey Summary Report [Calgary Parks & Recreation, 1993:18-24]).

Due to the high number of comments entered, the comments were examined to ensure that the responses of the survey participants were accurately represented. After the sample of these comments had been selected [N=393], eleven (11) categories for the responses were established. The categories and the number of responses is as follows: (Excerpted [and modified] from Summary, page 8)

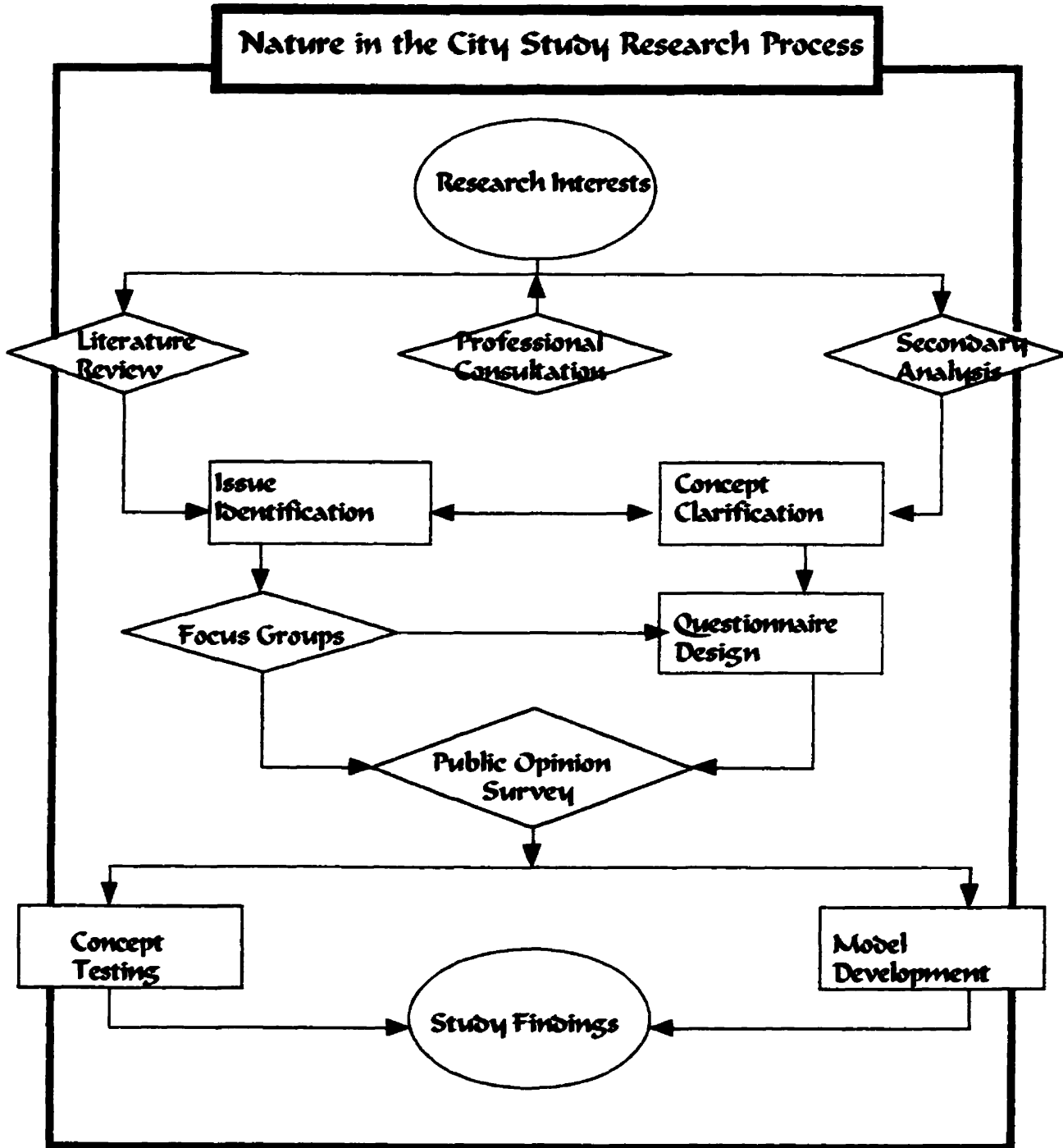
<b>Categories</b>	<b>Responses #/%</b>
1. Walking, Jogging, & Cycling	104/26.5%
2. Natural Areas & Limited Development	49/12.4%
3. Complimentary	49/12.4%
4. Better Access & Connections, More Paths	34/8.7%
5. More Amenities	33/8.5%
6. Dog Related Issues	24/7.0%
7. More Parks & Park Development	21/5.3%
8. Park Maintenance	19/4.8%
9. Negative Comments	18/4.6%
10. Security & Enforcement	11/2.8%
11. Other	31/7.9%

# APPENDIX X

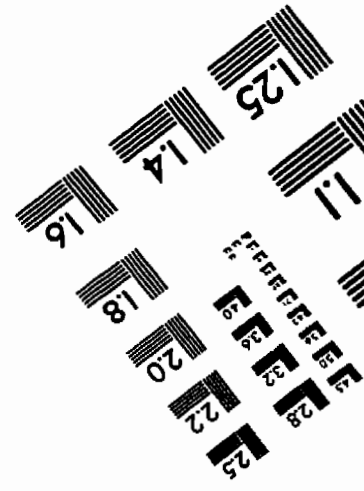
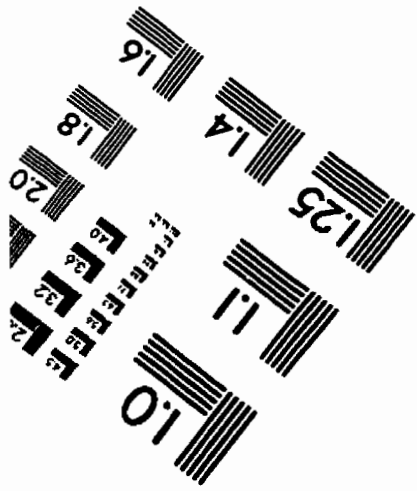
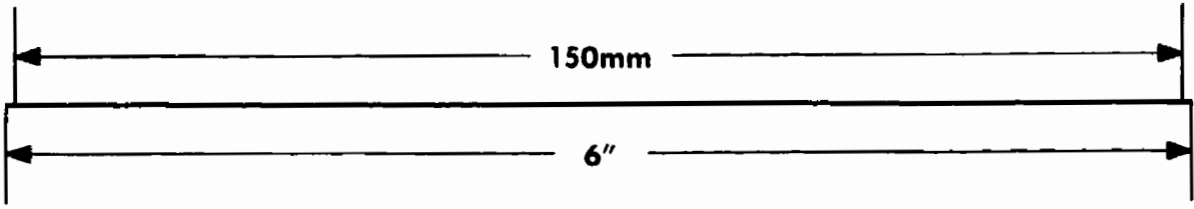
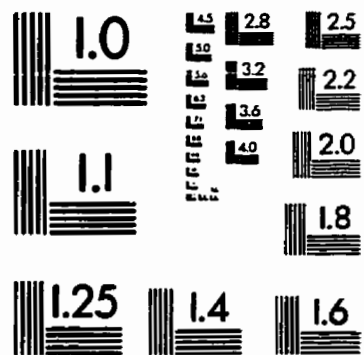
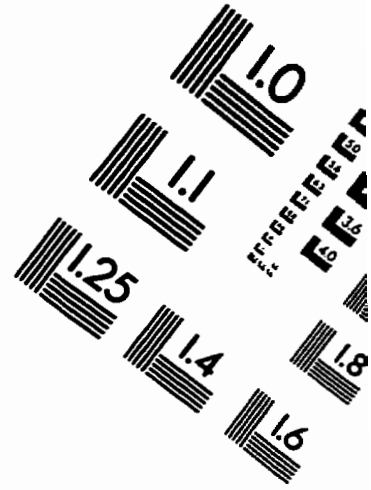
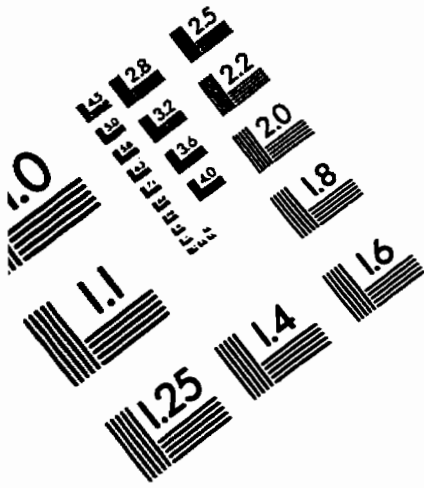
## Overview of Study Research Process



The following flow chart illustrates how the various components of the research process for this study relate to each other and to the final results.



# IMAGE EVALUATION TEST TARGET (QA-3)



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