

**How Canadians Value Nature:  
A Strategic and Conceptual Review of Literature and Research**

**EXECUTIVE SUMMARY**



**Prepared for Environment Canada**

**By CSoP Research & Consulting**

Randolph Haluza-DeLay, Ph.D.

Nathan Kowalsky, Ph.D.

John Parkins, Ph.D.

June 2009

*Nature is important to Canadians.* Period.

*Nature is important because* it is part of Canadian self-identity and history.

*Nature is important because* it is the basis of our society's functioning, in terms of resource and energy needs but also for all of the services that natural ecosystems provide.

*Nature is important because* research shows a pervasive decline in regular contact and experience with nature, but understanding the importance of ecological functions requires knowledge and experience.

*Nature is important because* as a species, humans may have a biological need for a connection to nature that goes beyond economic or leisure needs.

*Nature is important* to Canadians for an amazing variety of spiritual, aesthetic, recreation, economic, artistic, business, tourism, quality of life, and other reasons.

These are among the ways that Canadians value nature. But these values are under pressure. Several serious factors - such as urbanization, environmental degradation, and technological intervention – threaten the availability of nature, the regular and widespread experiencing of nature, and the potential ecological security of Canadian lifestyle. A focus on the vital role that nature plays in human well-being is urgent.

*How Canadians Value Nature* widely surveys the existing research.<sup>1</sup> That nature has economic value is obvious. But the value of nature for Canadians extends far beyond that measurement. *How Canadians Value Nature* shows that nature is valued in many other ways also and that objective and subjective valuing are both important. Some of the most important values of nature are “hard-to-define values” which defy easy measurement. Many of these values are not reducible to a monetary metric or market value, which makes comparison of the values more difficult. Even recreation value is not simply a dollar figure, although it is often presented in that form. Most importantly, human sciences such as sociology and psychology show that value and valuing takes place in context so that understanding and assigning value requires understanding the social and ecological circumstances of the valuing processes.

Since values are diverse, many and complex in character, the most crucial recommendation in *How Canadians Value Nature* is that any assessment of the importance of nature should pay attention to how the values are produced, what values come to be held, and how they are acted upon. Research that shows differences in values between the Canadian population and people in other countries demonstrates that values are influenced by social context and are not merely technical measurements.

The clearest recommendation that follows from the review presented in *How Canadians Value Nature* is that more than one type of method be used to gain comprehensive answers about the importance Canadians attribute to nature. Both inductive and deductive research should be used. The variety of research tools could include such methodologies as economic calculation of

---

<sup>1</sup> The contents of this report reflect the views of its authors and their sources. It does not necessarily reflect the official views of Environment Canada or the Federal, Provincial, and Territorial governments participating in the Value of Nature to Canadians Study.

natural resource value, substitutability costs of the ecosystem services nature provides to human, surveying of the range of values individual Canadians hold, and ethnographic analysis of the procedures by which values are formed and how particular groups are enabled or disallowed to put their values into action. *How Canadians Value Nature* reviews some of the major methodologies for researching values, and this state of Canadian research on this topic.

*How Canadians Value Nature* begins with an overview of the concept of “nature” and the concept of “values.” While the words are common, their meanings vary widely. As the pictures on the report cover represent, nature could be a wild landscape, or a naturalized front yard, a garden, an urban park, or “just” a place for parent and child to chase insects together. *How Canadians Value Nature* shows that the idea of values also differs widely. The report describes how values are conceptualized in five domains of study – conservation science, economics, psychology, philosophy and socio-cultural sciences. Major ways that these five disciplines have tried to assess the values of nature are also reviewed.

An important point of difference among approaches is whether values exist outside of human assigning, that is, could any value be *intrinsic* to nature? Another observation is that when we talk about *values* we should usually talk about *valuing*. That is, values are not static, objective objects. Instead, they are dynamic processes, shaped by factors such as access to nature, the personal experiences of individuals, how nature is represented in mass media, differences between rural and urban dwelling, increasing levels of “video-philia” and “bio-phobia” as a result of changing social habits in the population, and well-publicized conflicts about resource management or nature protection. Canadian cultural diversity must also be recognized in any assessment of values and valuing.

Another observation of *How Canadians Value Nature* is that the value of something may be unrecognized. Wetlands, for example, have tremendous ecological value – such as water filtration, extreme weather buffering, flood control, and toxics remediation – but many people do not know or assign importance to the lands that often provide such services to human communities. Therefore, valuing of nature will be intimately associated with people’s concepts of nature. Important questions include:

- How do people perceive nature?
- How do people interact with what they see as Nature?
- How do people’s concepts and their experiences shape their values?

The research surveyed in *How Canadians Value Nature* shows *value pluralism* – that there are many values. At times, there is also *incommensurability* where the values cannot be measured in a way that allows comparison or tradeoffs to be made between them. For example, the marketable value of the timber in a forest cannot co-exist with aesthetic values of the forest, or the value of extant forest ecosystem and watershed, or an intrinsic value of the forest itself, nor the value of the forest for other species. These values cannot also be measured by the same measurement tool.

Specific methodologies that have been used to elicit people’s social values about nature are also assessed in *How Canadians Value Nature*. Subsections of the report describe some of the particular advantages and disadvantages of studies that have relied methods such as cost-

benefit analysis and contingent valuation, survey, narrative, ethnography, focus groups and spatial mapping techniques. Since each method has advantages unique to the type of data desired, mixed-method studies are recommended. This approach is particularly important since values are fundamentally contextual. People mobilize particular values relevant to a specific situation. Research that attempts to assess values must be attentive to the contexts in which the values have relevance. Therefore, narrative methods adapted to large sample sizes are recommended as a satisfactory way to assess without oversimplifying the cultural and social diversity of Canadian values of nature and the social processes in which values are formed and deployed. In other words, *How Canadians Value Nature* emphasizes that it is vitally important to measure the right things in the right ways.

The final section of *How Canadians Value Nature* analyzes specific sectors of life that may represent how people value or show value of nature. These sectors have been chosen to represent a spread of ways that nature may be valued. Particular focus is placed on “nearby nature” (and nature in urban settings), nature and health, and how nature is valued in recreation and tourism. The detailed discussions in these sections and the more limited discussions about other life sectors – nature-values and cultural diversity, ecosystem services, aesthetic values, nature-values in resource management, the way that social exclusion affects values of nature and access to nature, religious values of nature, and nature, schools and the cognitive development of children – show us that nature is highly valued by Canadians. Each subsection on these life-sectors contains boxes at the beginning with highlights derived from the review of research in this area. Each subsection concludes with suggestions of sample data to collect to understand how Canadians approach that particular value of nature.

*How Canadians Value Nature* shows some key gaps in Canadian research on nature, values and the environment. For example, extensive research shows that contact with nature helps determine values and attitudes about the importance of nature. Contact with nature also has physical health, psychological, cognitive and other benefits. However, in Canada we have extremely limited understandings of how contact with nature is related to Canadian population demographics, neighbourhood location, or other characteristics. For example, a very limited number of studies have begun to show that children in poorer families are deprived of contact with nature, and thus likely experience the deficits associated with such reduced contact. Another weakness demonstrated in the report is the limited Canadian knowledge of how social inequality – such as those dimensions known as the social determinants of health – are related to access to nature, nature values, and nature-related deficits. *How Canadians Value Nature* demonstrates a need for Canadian environmental ministries to pay increased attention to dimensions of social inequity and exclusion. This gap in knowledge indicates that Environment Canada, Natural Resource Canada, Parks Canada and other ministries responsible for nature conservation and environmental management should explicitly include consideration of *environmental justice* in their programmes and policies, as have countries such as the United States and United Kingdom.

*How Canadians Value Nature* concludes by placing Canadian nature-values and research in the broader, international research context. Values are part of the interpretive matrix that individuals use but they do not occur in isolation. The most contemporary knowledge from research programmes in the United States and European Union show that *value orientations*

(clusters of values or *worldviews*) matter most. Here again Canadian research shows a clear gap. At present, there is no reasonably comprehensive and systematic research on the ways that the Canadian population values nature. A national survey can help to construct this understanding and how these values differ across the country. In addition, because we do not know what values Canadians hold about nature, we cannot know how Canadian values about nature are changing. The concluding section of *How Canadians Value Nature* recommends some specific methods and theoretical frameworks that can guide research on the question of how Canadians value nature.

Values are a crucial component of human culture, along with norms, language, institutions and so on. Nature is a basis for human flourishing. Canadian society, like the rest of the world, is becoming more aware of environmental degradation which possibly threatens that flourishing understanding. Understanding the distribution of values held by Canadians about nature or the environment can be a significant basis for effectively engaging them on environmental and nature conservation efforts. As *How Canadians Value Nature* shows, such understanding needs to take account of the tremendous personal and cultural variations that are included in valuing nature. *How Canadians Value Nature* shows that nature is important to Canadians in many forms and many ways.