

# Exploiting the Human Need for Nature for Successful Protected Area Management

## Nature's Importance to People

**F**or the purposes of this study, "nature" is defined as wilderness, semi-wilderness, and non-built places, and the components of nature such as wildlife. Many researchers have provided evidence that people need nature (Driver et al. 1987; Driver, Nash, and Haas 1987; Ewert 1996b; Kaplan and Kaplan 1989; Kaplan and Talbot 1983; Leopold 1966; Maslow 1962; Manfredi, Vaske, and Sikorowski 1996; Mannell 1996; Montes 1996; Schroeder 1992; Schroeder 1996; Ulrich 1984; Wilson 1984). In addition, there are now many studies on the outcomes desired from recreational experiences in outdoor environments. According to Kaplan and Kaplan (1989, 141), the themes of stress mediation, competence building, and the search for environmental diversity dominate the literature. They also state: "Nature is a valued and appreciated part of life.... Nature seems ... important to people.... Human functioning is impacted by its evolutionary origins which speaks loudly for our strong connection to nature in our primitive role before technological advances" (Kaplan and Kaplan 1989, 1, 7).

Ulrich (1984, 420) demonstrated that nature content in a hospital patient's view contributes to faster recovery. Many studies provide further evidence for the importance of nature to people (Kaplan and Kaplan 1989, 2).

Kaplan and Talbot (1983, 178) declare that "the wilderness inspires feelings of awe and wonder, and one's intimate contact with this environment leads to thoughts about spiritual meanings and eternal processes." Individuals feel better acquainted with their own thoughts and feelings, and they feel "different in some way—calmer, at peace with themselves, more beautiful on the inside and unstifled" (Kaplan and Kaplan 1989, 141).

Maslow (1962, 40) details peak experiences as "moments of highest happiness and fulfillment" that are often achieved by a nature experience and other experiences such as creative movement and intellectual insight.

Craik (1970) suggests that human beings have deeply rooted definable and measurable psychological dispositions toward the physical environment—dispositions that help drive environmental attitudes, preferences, and behaviors. He also reported that the deepest and strongest attachments between people and natural environments may give birth to spiritual experiences in which people feel a sense of connection with a larger reality that gives meaning to their lives. Schroeder

(1992) added that in some cases, people report that natural areas provide them a sense of refuge and an escape from the pressures of urban environments and daily routines.

Dwyer, Schroeder, and Gobster (1991) stated that research on people's experiences of natural environments shows that strong emotional ties exist between people and elements of natural settings such as trees and forests. Montes (1996, 109) adds that some scientists have argued that natural environments are preferred by many people over indoor or highly urbanized settings because the former offer therapeutic advantages. Driver and co-authors (1987) felt that nature experience provided benefits while built environments had constraining or deleterious qualities. Others have argued that "the way in which humans are programmed by evolution causes people to experience and perceive natural environments in a way that promotes relaxation and restoration; to realize nature benefits is, in a sense, built-in" (Mannell 1996, 412; quoting Hartig and Evans 1993).

Some researchers have suggested that some aspects of connecting with nature, such as wildlife viewing and other forms of contact with wildlife, are essential to human well-being (Katcher and Beck 1983; Kellert and Wilson 1993; Leopold 1966; McVay 1993; Soulé 1991; Ulrich et al. 1991; Wilson 1993). McVay (1993, 3) has proposed that we have a "Siamese" connection to wildlife, but that we do not totally understand our human-animal interactions. Our capacity for survival is impressive so far, but our perceptions of who we are and how we

fit into the world ecosystem are still vague. According to Edward O. Wilson, the originator of the biophilia hypothesis, the more we know of other life forms, the more we respect ourselves: "Biophilia ... is the innately emotional affiliation of human beings to other organisms" (Wilson 1993, 31).

### **Biophilia: Is the Need for Nature in Our Genes?**

Kellert and Wilson (1993) have stated that there is an inherent human need for contact with a variety of life forms, which includes wildlife. Their biophilia hypothesis asserts the existence in humans of a biologically based, inherent need to affiliate with life and life-like processes. Accordingly, human identity and personal fulfillment depend on our relationship to nature. The human need for nature is linked to the influence of the natural world on our emotional, aesthetic, cognitive, and spiritual development; it is not restricted to our material exploitation of nature. Biophilia, then, is the natural emotional affiliation of human beings with other living organisms.

A core premise of biophilia is an intrinsic, genetic predisposition to react to biological phenomena. Evidence supporting such a premise would add weight to the argument that the wildlife component of nature is essential to human well-being and growth. An inborn need for wildlife and nature justifies conservation as both a biological and social imperative. The question is whether biophilic responses reside in our DNA and, therefore, our minds, and if they do, whether and to what degree such

primitive responses and behavior have been affected by a few millennia of agriculture and technology (Soulé 1991). More research is needed in this area.

### **Therapeutic Effects of Nature**

Katcher and Wilkins (1993) have stated that certain natural stimuli, including wildlife viewing, have strong therapeutic effects that are beneficial to individual health and to society. Even if this is plausible, conservationists are still concerned that electronic substitutes for nature (for example, virtual reality) will some day displace the need to experience real animals and real nature (Katcher and Wilkins 1993). More study is needed in this area as well.

Another important area lacking study is the question of whether natural or human-made sounds are more relaxing (Soulé 1991). The sound of a rose-breasted grosbeak singing during a wildlife viewing experience, for example, may provide a person with greater innate satisfaction than does the sighting of a bison through a car window. The interplay of a multitude of other variables that influence our choice of recreational preference suggests the extreme complexity of understanding the wildlife viewing phenomenon.

### **Conclusion: Biophilia and Protected Area Management**

To successfully manage protected areas, we must include human dimensions. Of the vast field of human dimensions, we can focus on the biophilia hypothesis, which asserts in humans a biologically based, inherent need to affiliate with life and life-like

processes (Wilson 1984). This will allow us to place preservation of the protected area first while incorporating the human need to affiliate with intact ecosystems. More and more studies point to the biophilia hypothesis as a major reason people visit protected areas. People seem to have a built-in need to connect with nature.

Protected area managers can incorporate this human need for nature into their planning documents and everyday management. They can do this starting at the protected area planning document level by incorporating the biophilia hypothesis into their park vision. They should start with the premise that a primary reason people visit protected areas is to have a biophilia connection. This means that all visitor services must be focused on this end. It may, for example, mean lowering the speed limit on a parkway to allow for a greater biophilia connection between visitor and wildlife. It may mean rethinking visitor services and dropping some, if necessary, in favor of more environmentally friendly and ecologically enhancing methods of recreation. For instance, power boating was banned from Elk Island National Park (Alberta, Canada) in 1979; as a result, red-necked grebes and many other species of waterfowl returned to the park in greater numbers.

A case study for inclusion of the biophilia hypothesis in the planning process has been completed at Elk Island. The park is a wildlife sanctuary formed in 1905. The new park management plan has been rethought to place emphasis on ecosystem preservation and rehabilitation, and includes

a strong biophilia hypothesis connection. Previous plans placed recreation at the same level as ecosystem protection, and the park tried to fulfill the role of being all things to all visitors, even allowing such ecologically non-conforming facilities as a dance hall. Now, wildlife viewers—those trying to have a biophilia connection—have been identified through extensive surveys as being a major user of the park. As well, traditional human-induced involvement in shaping the ecosystem has been identified, such the aboriginal use of fires. Other national parks in

Canada are pursuing the same path of placing ecological integrity first, as opposed to placing visitor opportunities at the same level as the ecosystem.

Despite the wealth of literature on biophilia, to many skeptics the biophilia hypothesis is just wishful thinking. The criticism is also sometimes made that biophilia is either unintelligible or self-evident to indigenous people. While initial contacts with aboriginals seem to indicate that they do have a biophilia connection, more work needs to be done in this area (Chapman 2002).

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