These words by the preeminent field biologist and wilderness proponent Olaus Murie reflect a theme that resonates through American wilderness writing: Beyond utilitarian and commodity needs, our natural landscapes serve needs that lie at the core of the human psyche (figure 1). Yet the spiritual realm is usually relegated to the background of wilderness stewardship, often alluded to, but seldom incorporated in planning, management, and educational programs. One searches the policies of the four wilderness managing agencies in vain for any specific notion as to how spiritual values will be accommodated. Why is spirituality left as a closet value?

In part, managers’ reluctance to recognize spirituality is due to its association with religion or religious doctrine—a barrier resulting from a possible misinterpretation of the First Amendment’s mandate for separation of church and state. Although the Constitution prohibits the government from establishing, promoting, affiliating with, or discriminating against any religious doctrine or organization, it does not prohibit an agency from recognizing or enhancing opportunities for the nondoctrinaire aspects of spirituality (Friesen 1996).

Perhaps the main reason managers are squeamish about this dimension has to do with its association with something...mystical. But wilderness stewards can come to understand the spiritual orientation toward wilderness, and protect the conditions conducive it, without reference to anything supernatural or paranormal. Insights from six fields of research are particularly helpful in enabling us to understand spirituality as a secular, psychological phenomenon, as an inherited and beneficial component of our humanity with biological roots in our evolutionary past.

History

The association between wilderness and spirituality reaches back thousands of years. In Western traditions, leaders and prophets such as Jesus, Moses, Elijah, and Muhammad left their society to find their vision and inspiration in the wilds. The Buddha’s remote sojourn provided spiritual insights that were influential in the East and in the formation of Thoreau’s transcendentalist ideas—a foundation of the American wilderness movement. For Thoreau, wilderness was a medium for transcending the effects of socialization and conformity (figure 2), and coming to the humbling recognition that we are “an inhabitant, or part and parcel of nature” (Thoreau 1906).

A generation later, John Muir drew upon the emerging ecological and evolutionary thinking, and especially the
implications of the common origin of all life, to preach that wilderness is particularly conducive to enabling people to see themselves as “a small part of the one great union of creation” (Muir 1918). Aldo Leopold (1987) further incorporated the spiritual implications of ecological and evolutionary thinking into the emerging wilderness ethic. The wilderness movement, he wrote, was “one of the focal points of a new attitude—an intelligent humility towards man’s place in nature.” Even the gung-ho Bob Marshall, late in his life, came to the realization that the dominant value of wilderness was “being part of an immensity so great that the human being that looks upon it vanishes into utter insignificance” (as cited in Zahniser 1957). This diminishment of the self, the ego, and the sense of connection with something timeless and universal was the central motivation, the spiritual motivation, of Wilderness Act author Howard Zahniser, who was compelled by the belief that “we deeply need the humility to know ourselves as the dependent members of a great community of life” (Zahniser 1957).

Psychology of Religion and Comparative Religion
The unitive experience these wilderness movement leaders spoke of has a great deal in common with religious systems of thought and belief; so much can be learned from these fields. But we must keep in mind that, as research disciplines, their concern is not the object of spirituality. Rather, they are concerned with the common characteristics, benefits, and factors contributing to the spiritual experience. Whether religions are based on a God, animistic spirits, an Eastern philosophy of harmony and unity, or belief in one’s embeddedness in the natural world, they share a core function: They replace the self as the “ultimate,” with a sense that the self is part of a larger, more enduring reality.

In the words of psychologist Mihaly Csikszentmihalyi, they all provide a sense “that one belongs to something greater and more permanent than oneself” (1997). Historically, this has been expressed as a core wilderness precept. Its psychological universality suggests an innate underpinning—that there is likely an evolutionary human predisposition for this impulse for connection to some larger, greater, encompassing ultimacy.

Clinical and Health Psychology
Although not specific to wilderness, these fields provide empirical support for what the founders of the wilderness movement knew intuitively—that the kind of spiritual orientation many find in wilderness can be healthy. They offer functional definitions of spirituality, provide psychometric scales to measure it, and document the positive effects spirituality can have on one’s physical and psychological well-being. Robert Emmons (1999) summarized research documenting that a spiritual orientation can lead to a lesser incidence of negative states, such as anxiety, stress, and depression, and can contribute to the positive states of satisfaction, optimism, and meaning and purpose of one’s life.

Piedmont (2001) documented the positive correlation between such benefits and individuals whose orientation fits within this summary definition of spiritual:

The capacity of individuals to stand outside of their immediate sense of time and place and to view life from a larger, more objective perspective.

This transcendent perspective is one in which a person sees a fundamental unity.

Transcendence—rising above the narrow confines and concerns of the self—is the initial state one must pass through to find this enlarging capacity. And across research disciplines, across cultures, and throughout the foundational wilderness writings, this is what’s common to the definitions and descriptions of spiritual experience.

Outdoor and Wilderness Recreation Experience
These fields provide a plethora of studies wilderness stewards can draw upon to better understand the nature of this state and the benefits of attaining it. Employing interviews, journal analysis, and a variety of survey instruments, they provide qualitative descriptions of how, for many visitors, wilderness experience contributes to personal growth, and enhanced self-identity, self-efficacy, and self-esteem. Yet although meaningful and beneficial, these self-constructs are not, in themselves, spiritual as many psychologists

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define spirituality. The work of Marilyn Riley and John Hendee (2001) suggests that these “self” aspects comprise an initial, or prerequisite stage through which one must pass in the process toward transcendence—described by psychologists Steven Kaplan and Janet Talbot (1987) as their subjects’ emergent feeling of “a sense of union with something that is lasting, that is of enormous importance, and they perceive as larger than they are” (p. 195).

In examining the “wilderness effect,” psychologist Robert Greenway (1995) found that for many of his subjects, a primary value of their trip was the “perceptual shift” they experienced. He found an expansion of the self, and a lessening of the ego and culturally reinforced individualistic thinking patterns. His term perceptual shift is worthy of attention because it lends insight into the actual nature, onset, intensity, and duration of transcendent experiences in wilderness. They are seldom sudden, intense, ecstatic, or comparable to reported religious conversion experiences. In fact, the word experience may be misleading if taken to mean a discrete event or episode. As Barbra McDonald et al. (1989) have noted, the term spiritual growth better describes the gradual change in awareness more characteristic of the phenomenon.

Csikszentmihalyi’s (1990) conceptualization of the “flow” state integrates findings from recreation, religion, and mental health research to enhance understanding of how the diminishment of self-consciousness contributes to this change. The concept was so named because his subjects reported that immersion in their experience was analogous to being on a river, “carried on by the flow” (Csikszentmihalyi 1991). Immersed in the trip, they were better able to forget, or hold in abeyance, awareness of status concerns and pressure to conform to socially defined roles and norms. In short, their perception of and relationship to the surrounding environment became less affected by the filter of their self-image.

Solitude

The popular literature describes solitude as a prerequisite condition for spiritual experience in wilderness, and many studies provide useful insights into its nature and role (figure 3). Although the term solitude usually refers to some degree of aloneness, privacy, or isolation, it is more appropriately defined as a state of mind, or way of being, that isolation, among other factors, is conducive to.

William Hammitt’s “The Psychology and Function of Wilderness Solitude” (1994) is among the psychometric studies that identify components of the experience and correlate them with the major causative factors. Characteristics of the environment his subjects reported to be particularly important were the naturalness and peacefulness of the setting and its being free of human-made intrusions. This is one example of the kind of study offering much-needed research-based rationale for protecting such conditions, and especially the last one—which begs the question…intrusions upon what? Intrusions upon what” in psychological parlance is termed cognitive freedom. Its characteristics include the freedom to limit your attention to whatever you choose, to control your thoughts, and to be free of the expectations of others. Significantly, a characteristic of all spiritual traditions is the premise that concern with your self-image, status, and approval of others are barriers to transcendence.

Although the physical characteristics of wilderness, and the physical and temporal separation it provides, are especially conducive to attaining both solitude and spiritual experience, they are only contributing factors. The findings of Hollenhorst et al. (1994) on the most effective predictors of solitude achievement are as applicable to the more encompassing spiritual experience. It was not primarily the physical characteristics of the setting they conclude, “but rather predispositional factors that the visitor brings to the wilderness experience.” Wilderness is also a symbolic environment, a socially constructed behavioral setting. Like a church, cathedral, or monument to which it is so often compared, wilderness has become invested with meanings that make it prone to support spiritual interpretation and experience.

Evolutionary Psychology and Neurophysiology

A convergence of evidence from these fields is providing a growing body of support for the idea that there are deeper predispositional factors at play than the learned beliefs, values, and expectations for spiritual experience that the visitor bring to the wilderness. They support the theme that resonates through the wilderness literary tradition, represented by Muriel’s reference to “attributes which we have inherited and developed through the ages…in response to an
inner urge that we still have and still do not fully understand" (1973, p.184).

For example, Newberg and D’Aquili’s (2001) research on the neurological structures and processes that generate the spiritual experience provides compelling evidence that the spiritual urge is encoded in a genome that developed in synergistic evolution with the natural world. It’s part of our wiring as Homo sapiens. Their findings are based on brain imaging studies of subjects in the midst of transcendent experience, described as “the absorption of the self into something larger.” To grossly simplify, within the limbic system they identified specialized bundles of neurons that cause perceptions to reach one’s awareness through neural pathways less affected by the filter of self-interest. Changes in the brain’s left parietal lobe were observed as subjects passed through stages of quiescence and came to a state that would help “free the mind’s awareness from the limiting grip of the ego.” As they summarized:

We saw evidence of a neurological process that has evolved to allow us humans to transcend material existence and acknowledge and connect with a deeper, more spiritual part of ourselves perceived of as an absolute, universal reality that connects us to all that is. (2001, p. 60)

What triggers this innate potential in some but not others? In brief summary, it’s the set of beliefs and expectations one brings to a setting that, because of its physical characteristics and associated meanings, is conducive to a perceptual shift.

Conclusion
Where did this predisposition come from, and why does it persist? What “mental and spiritual needs,” as Murie (1960) described, did it evolve to meet? We can only speculate as to how, through our biocultural evolution, it enhanced the fitness of our ancestors and the likelihood of their passing genes on to the future. Perhaps, as some evolutionary psychologists theorize, it emerged with the development of the brain’s neocortex, serving to relieve the psychic stress associated with the existential concerns that arose with the development of conscious thought. Perhaps in enabling our ancestors to sense their brief lives as part of a larger, more enduring reality, they were better able to deal with the new realization that they, as individuals, would die.

But as wilderness stewards, we need not concern ourselves with the question of whether or to what degree the spiritual impulse originates in evolutionary process, social construction, or perhaps, divine intervention. We need only recognize that the longing to connect to an ultimate value larger than the self is ancient and has always been central to the idea of wilderness.

Recent insights into the human mind’s workings enable understanding of and provision for the spiritual dimension of wilderness in psychological (secular) terms, thus making it a legitimate concern of science-based natural resource agencies. They provide empirical understanding for what those who initiated the wilderness movement knew intuitively—the great importance of mediums such as wilderness for opening people to something within themselves that seeks relatedness to a greater meaning beyond themselves. This is the spiritual function—of wilderness, or a church, monument, memorial, shrine—of any consecrated place. An adaptive mechanism, the spiritual dimension of wilderness has evolved, is evolving, and will continue to evolve in response to changes in ourselves and our relationship to the natural world. The manifestation of spirituality in the wilderness concept both reflects the unmet needs of our urban, utilitarian, commodity-driven culture, and reveals some archetypal part of us that this culture obscures.

Wilderness is both a place and a system of belief and feeling about our role in the larger scheme of things. Geographically, wilderness is a remnant of our world that is still natural, wild, and free. Spiritually, it is a refuge for that part of ourselves that seeks connection, belonging, and rootedness within that world.

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