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Wilderness, Value of

Michael P. Nelson and John A. Vucetich

Why should we preserve areas known as wilderness? What good is wilderness preservation? What is wilderness preservation for? An answer to each of these questions will presuppose that those places we call wilderness have a certain value or set of values. For over a century people have been putting forth various arguments for why we should value and preserve wilderness. Over time, the assumed values of wilderness have changed. In the early part of the twentieth century these arguments appealed to the broad range of recreational values wilderness provides. More recently, wilderness arguments have been premised upon scientific values associated with wilderness preservation. Upon examination, however, these arguments are not all equally persuasive. Here we review these arguments and offer a general examination or critique of the values upon which these arguments are premised.

A perennially difficult issue in assessing the value of wilderness is coming to grips with what wilderness means. Etymologically, “wilderness” is a “place of wild animals.” According to the US Wilderness Act of 1964, wilderness is an area “in contrast with those areas where man and his own works dominate the landscape, ... where the earth and community of life are untrammelled by man, where man himself is a visitor who does not remain.” These physical areas of wilderness are reflections of an idea of wilderness, a place significantly set apart from humans and human influence (*see* NATURE AND THE NATURAL).

The variety of reasons offered for why we should value such places represent at least 31 distinct arguments (Nelson 1998; Jenkins 2008), which can be further categorized into six sets of related arguments. We would note that while these groupings do not have hard and fast boundaries, they do illustrate that different arguments, premised upon different values, possess different strengths and weaknesses.

The first set of arguments appeals to a wide range of utilitarian (*see* UTILITARIANISM) and anthropocentric (*see* ANTHROPOCENTRISM) values. That is, these arguments are focused on the use of wilderness for the goods that use provides, and humans are the focus or sole beneficiary of those goods. These arguments and the key value (or premise) that distinguishes each argument are:

- 1 *The Natural Resources Argument*: Wilderness areas are repositories for vast amounts of natural resources (timber, clean water, etc.).
- 2 *The Hunting Argument*: Wilderness areas are great places to hunt, containing both wilderness-dependent species and a context that facilitates a certain kind of

hunting experience. Many of Theodore Roosevelt's writings represented this argument (*see* HUNTING).

- 3 *The Pharmacopoeia Argument*: Wilderness areas, as the harbinger of so much of the world's plant life, are the source of known and yet-to-be discovered medicines. Donella Meadows referred to this as the "Madagascar Periwinkle Argument," after the plant that produces the drugs vincristine and vinblastine, used to treat leukemia.

Some might view the above arguments as paradoxical, in the sense that the essence of wilderness is a place from which people do not exploit or extract resources.

The second set of arguments is also anthropocentric and utilitarian, but does not obviously suffer from the shortcoming of the first set of arguments, inasmuch as this next set of arguments does not explicitly involve the removal of physical resources:

- 4 *The Physical Therapy Argument*: Wilderness areas serve as a place to enhance and remedy our physical health. Wilderness here provides the source or measure of physical health.
- 5 *The Arena Argument*: Wilderness areas provide us with superb, perhaps incomparable, locales for athletic and recreational activities such as mountain climbing and deep-powder skiing.
- 6 *The Mental Therapy Argument*: Wilderness experience is psychologically therapeutic for humans and therefore salves our mental health: a means by which "thousands of tired, nerve-shaken, over-civilized people ... [are] get[ting] rid of rust and disease," as John Muir (1991: 1) once put it.
- 7 *The Classroom Argument*: There are valuable lessons (e.g., tree identification, the functioning of an ecosystem, a sense of humility and priority) to be learned by visiting wilderness areas.
- 8 *The Mythopoetic Argument*: Wilderness areas are the optimum locale to observe and to maintain the tradition of myth making. Even the very idea of wilderness, according to Max Oelschlaeger (1991: 231), reflects an important "search for meaning – for a new creation story or mythology."
- 9 *The Defense of Democracy Argument*: Good and strong democracies provide for the needs of the minority (like wilderness backpackers).
- 10 *The Social Bonding Argument*: Wilderness areas are great places for people to learn how to cooperate and function in a group.
- 11 *The National Character Argument*: Wilderness areas serve as monuments to our national character, especially in the United States. Historian Roderick Nash (2001: 176) summarizes this argument when he refers to wilderness as the "crucible of American character."
- 12 *The Inspiration Argument*: There is great, even unparalleled, artistic and intellectual inspiration found in wilderness areas.
- 13 *The Future Generations Argument*: Destroying wilderness areas violates the rights of future generations who will value and depend upon wilderness areas.

- 14 *The Salvation of Freedom Argument*: Wilderness areas serve as places to escape a tyrannical government. This argument was famously promoted by Edward Abbey (1968: 148–51), who wrote: “We may need it someday ... as a refuge from authoritarian government, from political oppression ... [wilderness areas] may be required to function as bases for guerilla warfare against tyranny.”
- 15 *The Self-Realization Argument*: Wilderness areas force us to realize we are part and parcel of nature, and reliant upon nature for our well-being and continued existence.
- 16 *The Ontogeny Argument*: Wilderness areas are the context in which our species evolved, hence wilderness areas memorialize our evolutionary past and preserve our continued development.
- 17 *The Necessity Argument*: We cannot have or understand civilization without wilderness, its opposite.

These arguments, individually and as a set, assume the well-being of humans, now and in the future, is significantly harmed by the failure to preserve areas of wilderness and facilitate human interaction with wilderness areas.

The third set of arguments is much like the second set in that the values of wilderness are utilitarian (though satisfaction of these values does not explicitly require exploitation or even visitation of wilderness areas), except that there is ambiguity about whether the value of wilderness is solely anthropocentric (see BIOCENTRISM). These arguments are:

- 18 *The Service Argument*: Wilderness areas provide invaluable services (e.g., carbon dioxide removal, protection of river headwaters and hence clean water, etc.).
- 19 *The Life-Support Argument*: To use Anne and Paul Ehrlich’s classic image, natural areas, such as wilderness areas, are like the rivets holding spaceship earth together; the continued existence and health of living things is therefore entwined with the preservation of wilderness.
- 20 *The Disease Sequestration Argument*: Wilderness areas keep many diseases away from living things by protecting the species that serve as a disease’s natural host (see SPECIES, THE VALUE OF).
- 21 *The Unknown and Indirect Benefits Argument*: Wilderness areas most likely possess many unknown and indirect benefits to living things.

These arguments suggest that if we value living beings (including nonhumans), then we should value areas of wilderness that provide, indirectly, for the well-being of those living beings.

The fourth set of arguments is notable for the ambiguity it possesses with regard to anthropocentric and utilitarian values. In some ways these arguments could be narrowly construed as utilitarian and anthropocentric, but there is a sense in which they are neither. These arguments are:

- 22 *The Art Gallery Argument*: Wilderness areas are places to have aesthetic experiences, maybe even the measure of the beautiful and the sublime. The

essence of this argument is captured most clearly in John Muir's (1991: 4) assertion that "none of Nature's landscapes are ugly so long as they are wild."

- 23 *The Cathedral Argument*: Wilderness areas serve as a site for spiritual, mystical, and religious encounters; they are akin to a giant house of worship or even the very source of the sacred.
- 24 *The Standard of Land Health Argument*: Areas of wilderness provide us with a control sample or base datum to measure our effects on land, or, in other words, a standard for land health.
- 25 *The Storage Silo Argument*: Wilderness areas are essential for protecting and defending biodiversity. Aldo Leopold (1966: 190), who wrote about the value of wilderness for more than 30 years, famously summarized this argument by pointing out that "to keep every cog and wheel is the first precaution of intelligent tinkering."
- 26 *The Cultural Diversity Argument*: The worlds' various cultures are also derived from certain contexts, which include wilderness areas.

If beautiful and sacred places, healthy and biodiverse land, and the origins of cultural diversity are valuable because they serve humanity, then these arguments are premised upon utilitarian and anthropocentric values. If, however, beauty, sacredness, land health, biodiversity, and the origins of cultural diversity are, in and of themselves, valuable, then these are neither anthropocentric nor utilitarian.

For many of the above wilderness arguments, the value of wilderness is replaceable (e.g., you can recreate in places other than wilderness; see Argument 5 above) or contingent (e.g., they are dependent upon the end they serve being of value; see Argument 8 above). The fifth set of arguments relies on premises asserting that the value of wilderness is neither replaceable nor contingent:

- 27 *The Psychotherapy at a Distance Argument*: It is importantly psychologically therapeutic just knowing areas of wilderness exist, whether we visit them or not. As Mark Jenkins (2008: 175) puts it, "the very idea of wilderness acts as a balm on the psychic scrapes and bruises that inevitably come with navigating this modern world."
- 28 *The Laboratory Argument*: Wilderness areas provide scientists with an irreplaceable venue to conduct various types of scientific inquiry.

The strength of these arguments hinges greatly on the ability to demonstrate that these values are important and irreplaceable, which may be more difficult than is immediately apparent if said values can be satisfied by means other than preserving areas of wilderness.

The sixth, and final, set of arguments is explicitly nonanthropocentric:

- 29 *The Animal Welfare Argument*: Wilderness areas provide for the survival of many wild animals that possess intrinsic value, deserve direct moral standing, and require areas of wilderness to survive. Leopold (1966: 276–8), for example,

claimed that “saving the grizzly requires a series of large areas from which roads and livestock are excluded.”

- 30 *The Gaia Hypothesis Argument*: If earth is a living organism (or like one), and if all living organisms deserve moral respect, then destroying wilderness areas violates this respect.
- 31 *The Intrinsic Value Argument*: Wilderness areas possess direct moral standing and should be protected for reasons quite apart from how they serve some other end (see INTRINSIC VALUE).

These arguments appeal to the idea that wilderness areas possess value quite apart from, or in addition to, serving some human end. To expand upon just one of these arguments, contemporary wilderness advocates sometimes forward what we have called the Intrinsic Value Argument. E. O. Wilson (1992: 303), for example, once wrote, “wilderness has virtue unto itself and needs no extraneous justification.” Since we believe certain things (such as our friends, family heirlooms, and children) possess a value unto themselves, one might argue wilderness possesses the same sort of value. This argument avoids a certain amount of contingency since wilderness is seen no longer as a means to some other end, but as an end in and of itself, worthy of preservation in its own right. The task of proving the intrinsic value of the nonhuman world, and thus of wilderness areas, has been the task of those on the front lines of ecocentric environmental ethics (see ENVIRONMENTAL ETHICS) since the late 1970s.

Assessing Wilderness Values

Arguments for or against things, from gun control to the legalization of marijuana to wilderness preservation, often attempt to be persuasive by maintaining that they serve as a means to some other desirable end. Thus, proponents may argue that more restrictive laws for the legal possession of firearms would reduce rates of violent crime, that legalizing marijuana might increase tax revenue and eliminate a certain seedy and undesirable element of society, or that areas of designated wilderness are a means to a variety of beneficial and desirable ends. If there is a more efficient, less expensive, less time-consuming or generally better way to attain the end we desire, our original assertion is weakened. Another way to put it is that the persuasiveness of an argument is directly linked not only to the desirability of certain ends and to the fact that our means will secure those ends, but also to the discovery that ours is the best or only means to that end.

In every argument in Groups 1–3 (and in some interpretations of Group 4), wilderness is put forth as valuable as a means to some other end. That is, wilderness areas are said to be valuable and worth protection because they provide a pharmacopoeia of potential medicinal cures; they provide tremendous services to humanity, such as water purification or disease isolation; they are wonderful places to salve our mental and physical well-being; they are locales for intellectual, artistic, and spiritual inspiration; and a wide variety of other ends that we generally deem worthy.

Although this is not the place for a complete analysis of each wilderness preservation argument, it is worthwhile examining a few arguments as illustrations. For example, claiming we ought to preserve areas of wilderness because they provide us with places for artistic and intellectual stimulation makes preservation contingent on our ability to discover alternative sources of inspiration of equal or greater value, and on the value of intellectual stimulation itself. Therefore, if we can find alternative sources of intellectual stimulation or if the value of intellectual stimulation is not or cannot be persuasively articulated, then there is no longer a need for wilderness preservation on this basis, and the argument is dealt a serious blow. Or consider backpacking. While we can grant the value of the end of backpacking simply on the basis that so many people like to do it, the force of the argument that wilderness areas ought to be preserved because they provide great places to go backpacking is going to rest upon wilderness preservation as a means to backpacking. Since we can go backpacking elsewhere, this argument might fail to provide a strong reason to preserve wilderness areas. Certainly, we could strengthen this argument if we asserted (and *proved*) that wilderness areas provided us with incomparable or qualitatively superior locations for backpacking.

The solidity of any argument, however, depends on its ability to stand fast against the gales of dissent. So we need to examine these arguments critically; we need to consider how critics of wilderness preservation have and might dismiss wilderness preservation arguments.

The Conflation of Physical Wilderness and Experiential Wilderness Values

Wilderness – what we think the concept means and our attitude toward that concept – is a powerful reflection of our overall relationship with nature. Much scholarship about wilderness has focused on whether the development of wilderness, as a concept capable of providing some kind of global insight for conservation, is intractable because the meaning of wilderness depends too greatly on one's cultural perspective and because wilderness seems to depend so greatly on another seemingly intractable and troubling concern, i.e., human–nature dualism (Callicott 2008). These issues fuel long-standing debate about whether wilderness, as a concept, is more destructive than not. However, these apparent shortcomings are likely rooted in a failure to recognize that wilderness is often the conflation of two distinct concepts, physical wilderness and experiential wilderness.

A physical wilderness is a large landscape (or seascape) where ecological processes are thought to operate largely in the absence of direct human influence. A wilderness experience, by contrast, might be crudely defined as a psychological experience deprived in some significant and general way of human culture. Expressed less negatively, and more formally, a wilderness experience is a psychological experience associated with perceiving the nonhuman elements in one's environment.

This idea of experiential wilderness entails the salient features associated with traditional uses of the term (e.g., European colonists in the forests of the New World;

early twentieth-century practitioners of woodcraft; and modern-day, gadget-laden backpackers). Experiential wilderness is also broad enough to accommodate coarse variation in culture (e.g., the vision quest of an indigenous person) and fine variation among individuals of the same culture. For example, a New York City resident and a life-long Alaskan bush pilot may both share the same physical environment (a picnic on a wilderness lake arrived at by seaplane), but the nature of their wilderness experience at that moment may differ greatly.

Physical wilderness is critical for understanding our physical relationship with nature. Experiential wilderness is critical for understanding our dispositions and attitudes toward nature.

A wilderness experience may usefully be considered as a constellation of psychological phenomena that involves a physical stimulus, perception of that stimulus (which may be positive or negative), and reaction to that perception (i.e., the effect the perception has on one's more general relationship with nature and the nonhuman world). The great value of experiential wilderness as a concept is to describe, analyze, and explain various kinds of wilderness experience, with the purpose of understanding which kinds of wilderness experience promote a flourishing relationship with nature and which do not.

Neither physical wilderness nor experiential wilderness depends on a metaphysically real distinction between humans and nature. The concept of physical wilderness depends on the human–nature dualism only to the extent that it is a necessary and sensible way of relating things. For example, thinking that humans can cause environmental alteration (destruction) requires a dualistic framework.

Experiential wilderness does not depend on a human–nature dualism; rather, it treats the perception of that dualism. That is, some wilderness experiences reinforce the perception and others dissolve it. If wilderness experience is a deprivation of human culture, and if that deprivation is viewed negatively, then human–nature dualism may be reinforced. However, a wilderness experience may be better characterized as perceiving the nonhuman elements in one's environment, and that experience may result in empathy for denizens of wilderness or the landscape itself (in the sense that Leopold shows us how to empathize with ecological collectives in "Thinking Like a Mountain," in Leopold 1966). Inasmuch as empathy is a vivid, knowledge-based imagination about another's circumstances, situation, or perspective, this kind of wilderness experience is liable to dissolve the perception of a human–nature dualism (Rifkin 2009; Vucetich and Nelson 2013). Empathy tends to be associated with the dissolution of dualism between the empathizer and the object of one's empathy. The challenge of experiential wilderness is to understand why some cultures and individuals respond to some environments positively and others negatively (for a detailed discussion of this topic, see Vucetich and Nelson 2008).

Physical wilderness and experiential wilderness do not perfectly coincide with the distinction between subjective and objective elements of wilderness. Experiential wilderness, though importantly subjective, entails an important objective element – the

physical environment that triggers the wilderness experience. And while physical wilderness is importantly objective (in the sense that a landscape exists independently of you and me), the concept of physical wilderness is importantly subjective. One must prescribe the conditions that represent physical wilderness (e.g., is an ecosystem large enough or sufficiently unaffected by humans to be considered physical wilderness?).

Conclusion: Contemporary Wilderness Values

Wilderness proponents have appealed to a variety of wilderness values and have focused their defense of wilderness on different sets of arguments over the past century. Early in the twentieth century those arguments clearly and almost solely appealed to utilitarian and anthropocentric values, and arguments tended to focus on human recreation and mental therapy. More recent wilderness arguments have a different focus. Many contemporary conservation biologists argue wilderness areas ought to be preserved because they serve as a base-datum for normally functioning ecosystems and land health. Their reasoning for preferring this argument is their belief that the burden of this argument seems easy to satisfy. Given the emerging realization that human health is entwined with the health of the biotic community, and that the health of the biotic community might be measured best, if not only, in comparison to the health of various areas of wilderness, only the self-destructive dissenter would object to wilderness designation. Moreover, such an argument is thought to provide both a necessary and sufficient condition to preserve wilderness areas given the belief that we cannot measure land health or provide for a base-datum in any other fashion. In addition, this argument suggests that a wide variety of different types and sizes of wilderness areas should be set aside, since there are a wide variety of land types, all of which require a standard of land health.

See also: ANTHROPOCENTRISM; BIOCENTRISM; ENVIRONMENTAL ETHICS; HUNTING; INTRINSIC VALUE; NATURE AND THE NATURAL; SPECIES, THE VALUE OF; UTILITARIANISM

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