

Contemporary Criticisms of the Received Wilderness Idea

J. Baird Callicott

Abstract—Names are important. The *name* “wilderness” is fraught with historical baggage obfuscating the most important role of wilderness *areas* for contemporary conservation. The received wilderness idea has been and remains a tool of androcentrism, racism, colonialism, and genocide. It privileges virile and primitive recreation, because the main reason wild lands were originally preserved is for such utilitarian purposes. The wilderness idea is associated with outmoded equilibrium ecology and ignores the ecological impact of at least eleven thousand years of human inhabitation of the Americas and Australia. Finally, the wilderness idea perpetuates a pre-Darwinian separation of “man” from nature. The alternative concept of “biodiversity reserve” more clearly expresses the most important role of so-called wilderness areas for contemporary conservation: habitat for nonhuman species that do not coexist well with *Homo sapiens*.

In one of the most ancient and venerable sources of Chinese philosophy, the *Analects*, his disciple asks Confucius what he would do first were he to become the prime minister of the State of Wei. Without question, Confucius replies, first I would rectify names (Hall and Ames 1987). His disciple was puzzled by this saying; and for a long time so was I. No more, for here my project is precisely to rectify one domain of names—the wild domain.

The answer to Juliet’s question, “What’s in a name?” in Shakespeare’s play, is “Really, quite a lot.” Consider, by way of analogy, a different domain of names: various names for women—chicks, babes, broads, ladies. The feminist movement has made us keenly aware that what we call someone or something—what we name him, her or it—is important. A name frames, colors and makes someone or something available for certain kinds of uses...or abuses. The feminist project in the domain of names for women also makes us keenly aware that someone who criticizes a name is not necessarily critical of what the name refers to. Indeed, often quite the contrary. Women themselves have, of course, taken the lead in purging polite and respectful discourse of such names as “chicks,” “babes” and “broads.” Even the name “lady” is freighted with so much baggage that it is not worn comfortably by many women.

Just as the women who criticize some of the names they are called do not intend to criticize themselves or other women, I want to note here at the outset, in the most direct and emphatic way I can, that I am not here criticizing the

places we call “wilderness.” Quite the contrary. Rather, I criticize a *name*, a concept, the *received* wilderness idea. I am as passionately solicitous of the places called wilderness as any of the defenders of the classic wilderness idea. However, in my opinion, the name “wilderness” improperly colors them, frames them and makes them available for inappropriate uses and abuses.

As Michael Nelson and I brashly write in the introduction to our recently published anthology, *The Great New Wilderness Debate*, the wilderness idea is “alleged to be ethnocentric, androcentric, phallogocentric, unscientific, unphilosophic, impolitic, outmoded, even genocidal” (Callicott and Nelson 1998). I hasten to say that *we* are not necessarily the ones who allege that the received wilderness idea is *all* these bad things, just that such things have been alleged—some of them by him or me, some by other writers included in the book. Here, I take up each of these indictments, try to explain why they have been filed and expose the evidence on which they are based.

But first, what is meant by the “received” or “classic” or “traditional” wilderness idea? The idea of wilderness we have inherited—received—from its framers, going back now at least several centuries, but shaped most fully during the first half of the 20th century. The *received* wilderness idea is eloquently conveyed in the definition of “wilderness” in the oft-quoted Wilderness Act of 1964: “A wilderness, in contrast to those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain” (Public Law 88-577).

First, the received wilderness idea is ethnocentric. My friend and fellow environmental philosopher, Holmes Rolston, III—a staunch defender of the classic wilderness idea—told me awhile back that when he was lecturing in Japan, his translators could come up with no Japanese word for the English word “wilderness.” Recently, I asked another friend, Roger T. Ames, who translates and interprets Chinese philosophy, if there is a word for wilderness in Chinese. There is for wild man, he said, and wild woods, but no word for wilderness. Even for most Europeans, wilderness is a foreign concept. The notable exceptions are the Norwegians and other Scandinavians, who, significantly, have an arctic frontier inhabited by indigenous peoples, formerly called Laps and now Sami.

The wilderness idea is most familiar in American and Australian discourse. The United States and Australia have colonial histories, both beginning as English colonies. As opposed to the French, Spanish and Portuguese, who seem to have been more interested in extracting and appropriating resources and leaving behind their genes, the English colonial enterprise was focused on land to live on and to make over into a landscape like the one they left behind. The

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J. Baird Callicott is Professor of Philosophy and Religion Studies, University of North Texas, Denton TX 76203 U.S.A., e-mail: callicott@unt.edu

English colonists called the new lands of North America and Australia “wilderness,” an idea originally taken from the English translation of the Bible—about which more below. This designation enabled them to see the American and Australian continents as essentially empty of human beings, and thus available for immediate occupancy. The Australian bureaucratic term for wilderness, *terra nullius*, a Latin phrase meaning “empty land,” says it all quite explicitly (Bayet 1998). So does the U.S. Wilderness Act of 1964, “an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation” (Public Law 88-577, emphasis added).

The Australian and American continents were not, however, empty lands when “discovered” by Europeans and settled by English colonists. Until recently, the voices of American Indians and Australian Aborigines were either ignored or silenced (Plumwood 1998). In the third edition of *Wilderness and the American Mind*, Roderick Nash (1982) belatedly noted that American Indians disputed the idea that European colonists found North America in a “wilderness condition,” and quoted Luther Standing Bear to that effect. Nelson and I could find no earlier American Indian protest against the wilderness idea, so we republished the chapter of Standing Bear’s 1933 book, *Land of the Spotted Eagle*, in which it occurs. As many readers of Nash’s preface to the third edition will recall, Standing Bear (1998: 201) said,

We did not think of the great open plains, the beautiful rolling hills, and winding streams with tangled growth, as “wild.” Only to the white man was nature a “wilderness” and only to him was the land “infested” with “wild” animals and “savage” people. To us it was tame. Earth was bountiful and we were surrounded with the blessings of the Great Mystery. Not until the hairy man from the east came and with brutal frenzy heaped injustices upon us and the families we loved was it “wild” for us. When the very animals of the forest began fleeing from his approach, then it was that for us the “Wild West” began.

This is as clear a piece of evidence as one could want to show that the wilderness idea is ethnocentric; it was an idea not entertained by a representative member of and spokesperson for a non-European ethnic group. Shakespeare’s Juliet goes on to say “a rose by any other name is still a rose.” Yes. And in almost every language, there are different but mutually translatable names for common plants, such as roses, and animals, such as rabbits, and all the other general features—rivers, mountains, valleys—of the landscape. But not every language has a name for wilderness—not Lakota, not Japanese, not Chinese, not Dutch, probably not most. Unlike the names “mountain” or “river,” which are just the English labels for actual topological features of the landscape, the name wilderness *socially constructs*, as we now say, the landscape, in a way not shared by all social groups. It is therefore an ethnocentric idea.

Note that I am here making a more limited claim than that recently ridiculed by Gary Snyder (1996)—“the idea of Nature as being a ‘social construction.’” Because “liberal critical theorists,” according to Snyder “. . . are still under the illusion that it isn’t seriously *there*, they indulge themselves in this moral and political shallowness.” While other philosophers, East and West, past and present, have doubted the

robust reality of the whole of *nature*—mountains and rivers, plants and animals, sun and moon, stars and planets—I do not. In my opinion, nature and all its components and processes are incontestably real, “there” as Snyder would have it. But to call certain areas of the natural world “wilderness”—just as to call certain aspects of nature “natural resources”—is to put a spin on them; it is to socially construct them, not as objective, autonomous nature, but nature in relationship to us human beings. The name “natural resources” socially constructs nature as a self-renewing larder existing for our consumption; “wilderness” socially constructs it in a variety of ways, many of which are the subject of this discussion. Most feminists believe that women too are seriously *there*, but to call them “babes” or “ladies” is to put a spin on them, it is to socially construct them in relationship to men, not neutrally as autonomous female persons. The name “babes” socially constructs women as sexual objects; “ladies” socially constructs women as paragons of virtue standing on a pedestal.

The quote from Standing Bear provides a transition to the ugliest allegation against the wilderness idea—that it is genocidal. More precisely, it was and is a *tool* of genocide. Suppose you come to a place already inhabited by people and declare it to be a wilderness, that is, “an area...where man...is a visitor who does not remain,” an area that is devoid of “human habitation,” to quote once more the essential characteristic of wilderness in the Wilderness Act of 1964. Then you have “erased,” as Australian environmental philosopher Val Plumwood (1998) puts it, the indigenous inhabitants from the landscape as you and your group socially construct it. If you don’t acknowledge their existence in the first place, it makes it easier to dispossess and delete them.

There is another way of defining wilderness, which is not in contrast to man and his works, but in contrast to a certain kind of man and certain kinds of his works—to civilized man and to the works of civilization (Duerr 1985). By that definition, a wilderness may be inhabited by wild people without invalidating its wilderness condition. Which means, in effect, that the noncivilized *Homo sapiens* living in the wilderness are just another form of wildlife. So it is of as little moral consequence to hunt them as it is to hunt other kinds of wildlife. We know that in North America, indigenous peoples were often regarded as “vermin” to be shot on sight, man, woman or child—as indicated in the infamous frontier phrase, “the only good Indian is a dead Indian”—while in Australia, Aborigines were actually hunted for sport (Berkhofer 1978; Whitelock 1985).

But that was then, and this is now. In Central America—Guatemala most notoriously—genocidal campaigns against indigenous peoples have been conducted right into the 1990s, although not under cover of the wilderness idea (Broder 1999). In Africa and India, however, wilderness areas have been created, quite recently, by clearing out inconvenient human inhabitants. A quarter century ago, Colin Turnbull (1972) shocked the world with an account of an African tribe called the Ik who seemed to have lost their humanity, living sullenly in their huts, with only minimum human contact and turning their children out at three years of age to fend for themselves. What had happened to these people to turn them into a travesty of humanity? They were victims of the wilderness idea. They had the misfortune to live in the

Kidepo Valley, where, a decade earlier, the dictator of Uganda, Milton “Apollo” Abote, decided to establish an American-style national park in which “man himself is a visitor who does not remain” (Harmon 1998) Thus, he couldn’t have the Ik remaining there, where they had happily, successfully, sustainably and humanly lived as gatherer-hunters from time immemorial. The Ik seem literally to have abandoned their humanity, in their abject despair over having been evicted from their homeland and forced to live in sedentary villages. A similar fate, though with less dramatic human consequences, befell the Juwasi San, among the famous Kalahri bushmen, when Etosha National Park was created in Namibia (Thomas 1990). These are not isolated cases. They only loom large because they were publicized in popular media, such as trade books, magazines, and film. All over Africa, according to Raymond Bonner (1993), similar cases abound.

The most bitter critique of the wilderness idea in our anthology was written by Ramachandra Guha, who documents several Indian examples of ethnic cleansing in recently declared “wilderness areas.” Here is his characterization of one case.

The Nagarhole National Park in Southern Karnataka has an estimated forty tigers . . . [and] is also home to about 6,000 tribals, who have been in the area longer than anyone can remember, perhaps as long as the tigers themselves. The state forest department wants the tribals out, claiming they destroy the forest and kill wild game. The tribals answer that their demands are modest, consisting in the main of fuel wood, fruit, honey, and the odd quail or partridge. They do not own guns, although coffee planters on the edge of the forest do. . . . [T]hey ask the officials, if the forest is only for tigers, why have you invited India’s biggest hotel chain to build a hotel inside it while you plan to throw us out? . . . [T]he Nagarhole case is not atypical. All over India, the management of parks has sharply pitted the interests of poor tribals who have traditionally lived in them [so far, apparently, without destroying them] against wilderness lovers and urban pleasure seekers who wish to keep parks “free of human interference”—that is, free of *other* humans. These conflicts are being played out in the Rajaji sanctuary in Uttar Pradesh, in Simlipal, in Orissa, in Kanha in Madhya Pradesh, and in Melghat in Maharashtra (Guha 1998).

I now take up the allegation that the wilderness idea is politically suspect. As mention of these African and Indian cases demonstrates—along with a thousand other things, from Coca Cola, Kentucky Fried Chicken, and Marlboro, to Bay Watch, blue jeans, and Michael Jordan—the influence of American culture is global. The politics of wilderness preservation in the rest of the world, however, is not what it is in the United States. In the U.S., a beleaguered minority of mostly liberal and progressive people heroically battle the industry-funded Wise Use Movement, congressional delegations of Alaska, Idaho, and Utah, and a variety of ideologically driven right-wing, private-property zealots on behalf of some roadless fragments of backcountry with a precious modicum of remaining ecological integrity. In many other parts of the world, the politics of wilderness preservation are not so unambiguously respectable. There, preservationists often find themselves bed-fellowed with wealthy urban elites, state-sponsored paramilitary terrorists and undemocratic regimes against remnant populations of Fourth World peoples—tribals as Guha calls them—living by traditional

modes of subsistence in scattered pockets of Third World nation states.

Take the androcentric and phallogocentric charges against the received wilderness idea next. “Androcentric” means male-centered. I’m not sure what “phallogocentric” means. Evidently, it is a feminist neologism combining *phallus* with *logos* and adding the suffix “centric.” The bottom line here is that the wilderness idea is macho.

I am not sure if it still is, but it certainly once was. One hundred years ago, Theodore Roosevelt was advocating wilderness preservation for reasons based on historian Frederick Jackson Turner’s then new and convincing “frontier thesis.” After generations of contact with the wild frontier, the transplanted Northwestern European had become a new kind of human being on the face of the earth, an American. Or so it was thought. However, by the end of the 19th century—with the construction of the transcontinental railroad, the slaughter of the bison, and the final solution of the wild Indian problem—the frontier closed. To conserve the American character, Roosevelt advocated conserving simulacra of the frontier, to which future Americans could repair for rugged, character-shaping adventure. One might call this the “American-character” rationale for wilderness preservation.

By the way, we forgot to mention in the introduction to the anthology that, ancillary to the American-character rationale, the wilderness idea is liable to the allegation of racism, not to be confused with ethnocentrism. Aldo Leopold (1998, emphasis added), early in his career a warm supporter of the American-character rationale for wilderness preservation, expresses the racist undercurrent in this argument with his characteristic flair for elegant succinctness: “For three centuries [wilderness] has determined the character of our development; it may in fact be said that coupled with the character of our *racial* stocks, it is the very stuff America is made of. Shall we now exterminate this thing that made us Americans?” Leopold (1998) defined the distinctive American character as follows: “a certain vigorous individualism combined with the ability to organize, a certain intellectual curiosity bent to practical ends, a lack of subservience to stiff social forms, and an intolerance of drones.” Leopold (1991), incidentally, was fully aware that designated wilderness areas provide only illusions—simulacra—of the bygone frontier:

[T]he loss of adventure into the unknown . . . causes the hundreds of thousands to sally forth each year upon little expeditions, afoot, by pack train, or by canoe, into the odd bits of wilderness which commerce and “development” have regretfully and temporarily left us here and there. Modest adventurers to be sure, compared with Hanno, or Lewis and Clark. But so is the sportsman with his setter dog in pursuit of partridges, a modest adventurer compared with his neolithic ancestor in single combat with the Auroch bull. The point is that along with the necessity for expression of racial instincts there happily goes that capacity for illusion which enables little boys to fish happily in washtubs. That capacity is a precious thing, if not overworked.

But, getting back to androcentrism, according to Roosevelt, the distinctive American character was decidedly machismo: “wilderness promoted ‘that vigorous manliness for the lack of which in a nation as in an individual, the possession of no other qualities can atone,’” while its absence risked a future

breed of American “who has lost the great fighting masterful virtues” (Nash 1982).

The androcentrist aspect of the wilderness idea is also prominent in the work of two wilderness-movement giants in the first half of the 20th century, Robert Marshall and Sigurd Olson. First, according to Marshall (1998),

Some men become so choked by the monotony of their lives that they are readily amenable to the suggestion of lurid diversion. Especially in battle, they imagine, will be found the glorious romance of futile dreams. William James has said that “militarism is the great preserver of ideals of hardihood, and human life with no use for hardihood would be contemptible.” The problem, as he points out, is to find a “moral equivalent of war.”...This equivalent may be realized if we make available to every one the harmless excitement of the wilderness.

The androcentric brassiness of Olson’s prose, like Marshall’s written in the 1930s, is a little shocking in the 1990s. His essay, “Why Wilderness?” opens with the following sentence: “In some men, the need of unbroken country, primitive conditions and intimate contact with the earth is a deeply rooted cancer gnawing forever at the illusion of contentment with things as they are” (Olson 1998). And it continues through to the end in the same vein:

I have seen them come to the “jumping off places” of the North, these men whereof I speak. I have seen the hunger in their eyes, the torturing hunger for action, distance and solitude, and a chance to live as they will. I know these men and the craving that is theirs; I know also that in the world today there are only two types of experience which can put their minds at peace, the way of wilderness and the way of war...The idea of wilderness enjoyment is not new. Through our literature we find abundant reference to it, but seldom of the virile, masculine type of experience men need today (Olson 1998).

In the first third of the 20th century, the dominant argument for wilderness preservation was recreation of a primitive and unconfined sort. Now, ironically, wilderness recreation has become one of the most gadget-laden and rule-bound forms of sport available—what with the freeze-dried food, Swiss Army knives, nylon tents, permits, designated camp sites, open-flame restrictions, packing-out-your-garbage-and-feces requirements and all. But back then, wilderness recreation was imagined to be the crudest and freest form available, suitable for the men about whom Olson waxes poetic. They take off their clothes, “laugh as they haven’t laughed in years and bellow old songs in the teeth of a gale. . . . I can honestly say, that I have heard more laughter in a week out there than in any month in town. Men laugh and sing as naturally as breathing once the strain is gone” (Olson 1998).

After Roosevelt, so entangled with the notion of an unconstrained, virile, masculine type of recreation was the wilderness idea that in the 1920s Leopold routinely characterized the minimum size of an area to qualify for wilderness designation in terms of such recreation—“big enough to absorb a two weeks pack trip.” And by “pack trip,” he didn’t mean back pack; he referred to a donkey train.

Next, the wilderness idea is unscientific. One scientific problem with the wilderness idea has already been indicated in connection with the ethnocentric allegation. The fact is, there were people here in the Americas before Columbus’s

landfall in the late 15th century and in Australia before the European discovery of that continent by James Cook in the mid-18th century. That not only renders the received wilderness idea ethically and politically problematic, it also creates an ecological conundrum for “wilderness science” based on that idea. When the existence of such peoples was acknowledged at all by the framers of the wilderness idea, their ecological impact was minimized. Read Marshall (1998) on the matter:

When Columbus effected his immortal debarkation, he touched upon a wilderness which embraced virtually a hemisphere. The philosophy that progress is proportional to the amount of alteration imposed upon nature never seemed to have occurred to the Indians. Even such tribes as the Incas, the Aztecs, and Pueblos made few changes in the environment in which they were born. “The land and all that it bore they treated with consideration; not attempting to improve it, they never desecrated it.” Consequently, over billions of acres the aboriginal wanderers still spun out their peripatetic careers, the wild animals still browsed unmolested in the meadows and the forests still grew and moldered and grew again precisely as they had done for undeterminable centuries. It was not until the settlement of Jamestown in 1607 that there appeared the germ for that unabated disruption of natural conditions which has characterized all subsequent American history.

But the ecological impact of American Indians, over the 13,000 years or more since America was originally discovered, and of Australian Aborigines, over the 40,000 years or more since Australia was originally discovered has probably far exceeded the ecological impact of the rediscovery and resettlement of those continents by European peoples (Denevan 1998; Pyne 1997). For starters, there is a disturbing coincidence, and very probably a causal connection, between the extinction of some 30 genera of megafauna in the Americas and the arrival of Siberian big game hunters, the infamous clovis spearmen (Martin 1973). Paul S. Martin (1984) traces the same coincidence of a spreading wave of *Homo sapiens* out of Africa and a wave of megafaunal extinctions all over the planet.

After the ecological spasm that followed initial invasion of the Western Hemisphere, *Homo sapiens* became naturalized in the Nearctic and Neotropics. The species became an ecological keystone, structuring biotic communities by horticulture, irrigation, cultural fire and unremitting predation on grazers and browsers (Doolittle 1992; Kay 1994; Kretch 1999; Pyne 1987). Therefore, the classic wilderness idea as defined by the Wilderness Act of 1964, serves only to befuddle the science of wilderness management. The goal of wilderness management in the United States—to preserve “the condition that prevailed when the area was first visited by the white man”—was set by the enormously influential Leopold Report in 1963 (Leopold and others 1998). But that condition was heavily influenced by the Native Americans; it was not a condition “affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable” as specified in the Wilderness Act of 1964. Knowing what we now know about the ecological impact of indigenous peoples in the Americas, preserving these “vignettes of primitive America” requires a continuous trammeling of the kind historically imposed by their original human inhabitants on areas designated as wilderness, “where the earth and its community of life are untrammelled by man, where

man himself is a visitor who does not remain.” You see how confusing this is.

Adding to the confusion and paradox is the post-contact demographic history of the Western Hemisphere. Today’s demographers estimate the 15th-century New World human population to be ten times greater than demographers estimated it to be in Marshall’s day, the 1930s (Denevan 1998). Earlier estimates did not take account of Old World diseases that reduced the pre-Columbian population of the Western Hemisphere by up to ninety percent. In 1750—the halfway point between Columbus’s “immortal debarkation” and the present—subtracting all the Indians that died, and adding all the Europeans and Africans that immigrated and multiplied, the human population of the Western Hemisphere was thirty percent *less* than in it was 1492, according to William Denevan (1998). Old World diseases stalked the New World, transmitted from Indian to Indian, well in advance of the leading edge of European conquest and settlement. Thus, the condition that prevailed in areas of the North American west—where most designated wilderness is located—when first visited by the white man was one of rapid ecological transition. Denevan (1998) refers to it tentatively as in a process of “recovery.” In any case, between 1492 and 1750, the keystone species that had for centuries, if not millennia, structured the biotic communities of the New World was reduced by epidemic disease and warfare with the white (and black) invaders from the Old World. Thus, whatever we call it, the biotic communities in the Western Hemisphere were headed toward new ecological domains of attraction. So here’s a nice scientific mind bender. The upshot of Denevan’s thesis is this: When the white man first visited the interior of North America, he did, after all, find a wilderness condition as defined by the Wilderness Act of 1964—“an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain”—but it was an *artificial* wilderness condition, an anthropogenic ecological effect, created by the depopulation of the country following the devastating demographic consequences of contact.

As the quotation from Marshall shows, the received wilderness idea is entangled with another unscientific assumption, the now discredited balance-of-nature paradigm in ecology. Stripped of its fancy language, this is the picture Marshall paints: The Western Hemisphere was virgin territory when discovered and then raped by the white man. Well, maybe there were some Indians here, but there were not very many of them, and they were so technologically backward and environmentally ethical that they either couldn’t or wouldn’t change the Nature of which they were a part. Thus—and here’s the new point—for centuries, if not millennia, Nature remained in a dynamic equilibrium. In his own words, again, Marshall believed that “the wild animals still browsed unmolested in the meadows and the forests still grew and moldered and grew again precisely as they had done for undeterminable centuries.” In the absence of a robust human presence in the Western Hemisphere, Nature remained in a steady state.

By now, however, we have all read and absorbed the work of Margaret Davis (1969) and other palynologists who paint a very different picture of the constantly shifting ecological mosaic of North America over time. By now, we have all

read and absorbed the work of Pickett and White (1985) and other landscape ecologists who emphasize the normalcy, not the abnormalcy, of ecological disturbance, whether anthropogenic or nonanthropogenic. Daniel Botkin (1991) has popularized the new “shifting paradigm” in ecology in his well-read book, *Discordant Harmonies*.

Now, next to last, I discuss the allegation that the received wilderness idea is unphilosophic. As Nash (1982) points out in his classic *Wilderness and the American Mind*, the word “wilderness” hails from Old English and was used in English translations of the Bible. In its biblical context, it stood opposed not only to civilization, but to the Garden of Eden, and often referred, more especially, to arid, desert regions such as the Sinai. And as Nash (1982) also points out, it was applied to North America by the Puritans especially, for whom at first it had a wholly negative connotation. North America in the perfervid Puritan imagination was the stronghold of Satan, and the indigenous population—what was left of it anyway—was composed of the devil’s minions. In the words of historian Perry Miller (1964), the Puritans believed themselves sent by God on an “errand into the wilderness,” to convert the continent to Calvinism and replace the wilderness with fair English-style, small-hold farms and shining European-style cities on hills.

After several generations had succeeded well in this enterprise, later Puritan fervor found sin in those very cities. The country having been ethnically cleansed and pacified, Nature began to appear to be God’s pristine, undefiled creation. A central doctrine of Puritan theology was original sin and human depravity. Our anthology opens with selections from Jonathan Edwards, who finds “images or shadows of divine things” not in his fellow men or in human works, but in Nature. To make a long story short, the received wilderness idea is ultimately a legacy of Puritan theology. At the heart of that theology is a dualism of man and nature. To the first generations of Puritans in America, man was created in the image of God and, if not good, at least the Elect among men were put in the service of a good God to enlighten a benighted, dismal and howling wilderness continent. To later generations of Puritans, the positive and negative poles of the dualism were reversed. The Fall and man’s consequent evil were stressed. In the minds of some influential Puritan thinkers like Edwards, Nature became a foil for man’s sin and depravity. It was transformed into the embodiment of goodness. After all, Nature was created by God and declared to be good, as you may read for yourself in the first pages of Genesis. And as Muir (1916) astutely observed in the mid-19th century, Nature and its nonhuman denizens remain, in sharp contrast to man, “unfallen” and “undepraved.”

In many of the most passionate framers of the received wilderness idea, strains of what might be called neo-Puritan Nature theology run strong. Man and his works are sinful, Nature is pure and divine. It is there in Thoreau, there most vividly in Muir, there in Marshall, there in Rolston (1998)—an ordained Presbyterian minister, I might add—and there in Dave Foreman (1998a), who likes to boast about his pugnacious Scotch-Irish temperament. I don’t see it in Leopold, and, curiously, the Scandinavian Olson complains that this meme in the memetic makeup of the received wilderness idea gets in the way of the expression of the macho meme: According to Olson (1998),

Typical of this tone of interpretation is Thoreau with his “tonic of wildness,” but to the men I have come to know his was an understanding that does not begin to cover what they feel. To him the wild meant the pastoral meadows of Concord and Walden Pond, and the joy he had, though unmistakably genuine, did not approach the fierce unquenchable desire of my men of today. For them the out-of-doors is not enough; nor are the delights of meditation.

Olson’s men had to be out there yukking it up in the real wilderness, not silently sniffing the ladyslippers and communing with the Oversoul in a rural wetland. Muir, on the other hand, being the most orthodox neo-Puritan framer of the received wilderness idea, opposed the macho meme in it for which Roosevelt is most responsible. According to Nash (1982), Muir took Roosevelt on a hike and sleep-over in Yosemite and there said to him, “Mr. President, when are you going to get beyond the boyishness of killing things...are you not getting far enough along to leave that off?”

Finally, I come to the outmoded allegation. Recreation may be an important purpose served by designated wilderness areas, but the most adamant apologists for the wilderness idea and I agree that wilderness areas have a higher calling in these desperate days. According to Snyder (1996), “we are not into saving relatively uninhabited wild landscapes for the purpose of recreation or spirituality even, but to preserve home space for nonhuman beings.” Historically, according to Foreman (1998b), “The most common argument for designating wilderness areas . . . touted their recreational values.” But now, “core wilderness areas [should] be managed to protect and, where necessary, to restore native biological diversity and natural processes. Traditional wilderness recreation is entirely compatible, so long as ecological considerations come first.” The most important *raison d’être* of designated wilderness areas is habitat for species that do not coexist well in close proximity with *Homo sapiens*—for whatever reasons; brown bears, wolves, and mountain lions are the most frequently cited examples (Grumbine 1992, 1998). They do not coexist well with people because of direct or indirect conflict of interest. Usually people, out of fear or ignorance, attack them; or, more rarely, they attack people or pets or livestock. But many species of birds, with which people have no direct conflict, need interior forest habitat that is increasingly fragmented, and thus ruined for them, by suburban and exurban real estate development (Robinson and others 1995).

What to do now? We’re talking about a name, an idea, a concept. We could redefine it. We could purge it of its macho baggage, its neo-Puritan theological freight, its connotation of a resource for either virile or meditative recreation, its penumbra of Arcadian ecology, its undercurrents of ethnocentrism and racism, and sanitize or disavow its colonial origins and functions. Or we could start with a fresh concept for the purposes of wilderness science. I recommend the latter alternative; except in that case, of course, we wouldn’t call it “wilderness science.”

If we call the habitat of wolves, bears, lions, lynx and warblers “wilderness areas,” inevitably our minds are flooded with all the hogwash the wilderness idea is steeped in. Visions well up in our imaginations of virile, unconfined recreation, or of reverential pilgrimages in holy sanctuaries unsullied by the presence of profane people and preserved forever just as they always existed, in splendid harmony and

balance from time immemorial. We get confused by the wilderness name and think that these places should remain “natural” and not be actively managed by, say, prescribed burns or therapeutic hunts to make them fit habitat for threatened species, or that they mainly exist for us to recreate in, just as the Wilderness Act of 1964 says. But that should not be their primary purpose. They should exist, primarily, for the animals, whose homes they are, and for us to manage with their needs exclusively in view or, in some cases, to stay out of altogether. Imagine insisting on calling a Battered Women’s Shelter, the House of Babes or the Home for Uppity Ladies. It might attract the wrong kind of attention.

Well, how do I propose we rename the places misnamed wilderness areas? The scientific community seems to be settling on “biological reserve” or “biodiversity reserve” as the most straightforward name (Scott 1999). That idea, however, is not new (Grumbine 1998, Scott 1999). A similar concept was proposed in the first quarter of the 20th century, just as the wilderness movement was gathering steam, most notably by Victor Shelford (1921, 1933), Francis Sumner (1920, 1921), G. A. Pearsons (1922), and George Wright and others (1933). It was reasserted again at mid-century by S. C. Kendeigh and others (1950) and Ray Dasmann (1972). But the proposal for a representative biological reserve system for the United States, as opposed to a system of “wilderness playgrounds” (Leopold 1991), was eclipsed by the human-experience-oriented wilderness idea and, until now revived, was consigned to the dust bin of American conservation history (Grumbine 1998; Scott 1999). The names of Shelford, Sumner, Pearsons and Wright became but footnote fodder in the scholarly tracts of conservation historians, while the names of Thoreau, Muir, Roosevelt, Leopold, Marshall and Olson live on in wilderness legend.

We are in the midst of a global conservation crisis. The present generation is witness to and the cause of only the sixth abrupt mass extinction event in the 3.5 billion-year biography of the Earth. To address this gargantuan problem a new transdisciplinary science called conservation biology has taken shape. Its summum bonum—or “greatest good”—is biodiversity. As one of its architects, Michael Soulé (1985), put it in a field-defining paper, “Diversity of organisms is good.” Period. The only way to save species populations from extinction is to provide them with habitat. *Ex situ* conservation without the hope of reintroduction into fit habitat is a kind of living extinction for species, just as confinement in a hospital with no hope of going home is a kind of living death for sick people. Human activities, such as agriculture and suburban and exurban development, provide some organisms—such as raccoons and white-tailed deer—with excellent habitat. But the habitats of many other organisms are severely degraded by the cultural modifications of landscapes that characterize contemporary industrial civilization. These organisms need places that are otherwise suitable for them where modifications of that kind are prohibited. Such places are biodiversity reserves, and a major focus of the science of conservation biology is reserve selection, design and management (Meffe and Carroll 1997).

Designated wilderness areas now serve as biodiversity reserves, but only as an afterthought. As Dave Foreman (1998b) points out, they were selected for purposes other than providing threatened and endangered species with

habitat. They were selected, rather, because of their potential for a virile and unconfined type of recreation, or because they contained spiritually uplifting “monumental” scenery, or often because they simply had no other foreseeable utility (Foreman 1998b). They may not be the best places for biodiversity reserves, but they are a start.

However, to continue to call these places and future reserves “wilderness areas” not only confuses the public about what their most important function is, it also confuses their scientific management. What are the goals of wilderness science? To preserve vignettes of primitive America? To preserve pristine Nature in perfect balance? To provide opportunities for meditative solitude, or for travel by canoe and pack animal? To monitor what happens to a biotic community when its keystone species has been prohibited from remaining and can only visit as a tourist or scientist? To provide habitat for threatened and endangered species? Some of these? All of these? Or only one of these? If we had already decided to take my suggestion and rename wilderness areas “biodiversity reserves,” then “wilderness science” would be more narrowly focused, as I believe it ought to be, on the science of reserve selection, design and management.

With a clearer focus on goals, we can achieve not only a clearer focus on the scientific task, but also a better criterion for determining what is and what is not an acceptable human presence in biodiversity reserves. In some places in the Amazon, for example, traditional extractive activities, such as rubber tapping and nut gathering, may be consistent with many if not all the biodiversity conservation goals in those areas (Peters and others 1989). In which case conservation may not be at odds with the economic activities of indigenous peoples. Such peoples and conservationists may then form political alliances against capital-intensive development schemes hatched in distant capitals that would destroy the economies of both tribal peoples living by traditional means and the habitat of the species with which they have traditionally coexisted. On the other hand, in the First World, bourgeois recreational use of wilderness areas may come in conflict with species recovery plans. If renamed biodiversity reserves, the priority question—the species recovery plan or the bourgeois recreational use—is not even up for debate. We allow recreational and other human uses of biodiversity reserves, certainly, but only up the point that the maintenance of threatened species populations is not compromised.

As Grumbine (1998) notes, “the concept of ‘biodiversity’ has become a central rallying cry for a growing portion of the US environmental movement.” It may not be, however, so central on the radar screens of most laypersons. While the term “biodiversity reserve” may serve to better focus the energies of the scientific subset of the environmental movement, it may be a nonstarter politically. But “wilderness” too, as already noted, is a politically loaded term. For purposes of public relations, other more or less equivalent names might be employed. We might resurrect, for example, the term employed by Kendeigh and others (1950) at mid-century, “nature sanctuaries.” Or if “nature” is too vague and inclusive a term, we might call them “wildlife sanctuaries.” A task for future social science research might be to discover the most appealing name for what future erstwhile wilderness scientists will refer to as “biodiversity reserves,” if my advice is heeded.

In conclusion, I have criticized a name, “wilderness,” not the places—wilderness areas—that bear the name. I might add that I am not criticizing the framers of the received wilderness idea either: Edwards, Emerson, Thoreau, Muir, Roosevelt, Aldo Leopold, Marshall, Olson—well maybe Olson—Starker Leopold and Howard Zahnizer, the ghost-writer of the Wilderness Act of 1964. Their times were different from ours today. Now we are in the midst of a global biodiversity crisis that, with one exception, they knew nothing about. That exception was Aldo Leopold (1998b) who, although he continued until the end to call them wilderness areas, recast his arguments for their preservation in the same terms as I am here, namely habitat for “threatened species,” as had Shelford and a few other of his now all-but-forgotten contemporaries. The baggage that freights the received wilderness idea, in my opinion, makes it an unsuitable conceptual tool to meet the challenge of the biodiversity crisis. We need a new name that will better focus our contemporary conservation goals and, therefore, our conservation policy and science. I suggest that new name, at least within the scientific sector of the conservation community, should be “biodiversity reserves.”

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