

THE GEORGE WRIGHT

FORUM

A JOURNAL OF CULTURAL AND NATURAL PARKS AND RESERVES

Volume 13

❖ 1996 ❖

Number 2



THE JOURNAL OF THE GEORGE WRIGHT SOCIETY

Dedicated to the Protection, Preservation and Management
of Cultural and Natural Parks and Reserves
Through Research and Education

The George Wright Society

Board of Directors

STEPHANIE TOOTHMAN ■ President
Seattle, Washington

JONATHAN B. JARVIS ■ Vice President
Copper Center, Alaska

STEPHEN D. VEIRS, JR. ■ Treasurer
Davis, California

ELIZABETH BERTILLION SMART ■ Secretary
Sacramento, California

RUSSELL E. DICKENSON ■ *Bellevue, Washington*

JOHN DONAHUE ■ *Washington's Birthplace, Virginia*

GEORGE J. MINNUCCI, JR. ■ *Lansdale, Pennsylvania*

NEIL W. P. MUNRO ■ *Halifax, Nova Scotia*

RICHARD WEST SELLARS ■ *Santa Fe, New Mexico*

THE GEORGE WRIGHT FORUM

JEAN MATTHEWS, Contributing Editor ■ *Vancouver, Washington*

WILLIAM E. BROWN, Contributing Editor ■ *Gustavus, Alaska*

Executive Office

Hancock, Michigan

Robert M. Linn ■ Executive Director

David Harmon ■ Deputy Executive Director

The George Wright Society is a member of
US/ICOMOS (International Council on Monuments and Sites—U.S. Committee),
IUCN—The World Conservation Union, and
The Natural Resources Council of America

© 1996 The George Wright Society, Inc. All rights reserved.
(No copyright is claimed for previously published material reprinted herein.)
ISSN 0732-4715

Editorial guidelines may be found on the inside back cover.

Text paper is made of 50% recycled fibers.

Printing is by Weber & Sons, Park Falls, Wisconsin.

THE GEORGE WRIGHT FORUM

Volume 13



1996



Number 2

Society News, Notes & Mail	2
Letter from Gustavus: <i>The Will to Live in a Livable Future</i>	4
<i>William E. Brown</i>	

Values, Ethics, and Public Lands • Guest Editor: Robert E. Manning

Introduction	8
<i>Robert E. Manning</i>	
Shifting and Expanding Forest Values: The Case of the U.S. National Forests	10
<i>David N. Bengston and Zhi Xu</i>	
Environmental Values and Ethics: An Empirical Study of the Philosophical Foundations for Park Policy	20
<i>Robert E. Manning, William A. Valliere, and Ben A. Minter</i>	
Should Wilderness Areas Become Biodiversity Reserves?	32
<i>J. Baird Callicott</i>	
Beyond Preservationism	39
<i>Max Oelschlaeger</i>	
Rethinking Place, Reinventing Nature: An Environmental Justice Perspective on Managing the Public Lands	45
<i>Robert Gottlieb and Louis Blumberg</i>	
Encouraging Environmental Care: A Code of Ethics for Short Hills Provincial Park	52
<i>Ingrid Leman Stefanovic</i>	
A Wilderness Ethic for the Age of Cyberspace	69
<i>Roderick Frazier Nash</i>	

GWS Membership Form	72
---------------------	----

On the Cover:

What's it worth? —Some thoughts about that in this issue.

Shown: Siskiwit River & Falls in the Wilderness of Isle Royale National Park.

Announcing

The George Wright Society's Home Page on the Internet

<http://www.portup.com/~gws/home.html>

Links To:

General Information About GWS

Internet Resources for Park Professionals

The 1997 Conference in Albuquerque

A Forum Sampler

GWS Publications List & Order Form

Membership Information & Form



Center for Field Research Invites Proposals

The Center for Field Research invites proposals for 1997 field grants awarded by its affiliate Earthwatch. Earthwatch is an international, non-profit organization dedicated to sponsoring research and promoting public education in the sciences and humanities. Information about Earthwatch field grants is available on The Center's World Wide Web site (<http://gaia.earthwatch.org/www/cfr.html>) or you can contact: Dr. Andy Hudson, Director, The Center for Field Research, 680 Mt. Auburn Street, Watertown, MA 02172, USA. Telephone: (617) 926-8200 • FAX: (617) 926-8532 • e-mail: ahudson@earthwatch.org or Sean Doolan, Science Officer, Earthwatch Europe, Belsyre Court, 57 Woodstock Road, Oxford OX2 6HU, United Kingdom. Telephone: (865) 311-600 • FAX: (865) 311-383 • e-mail: ewoxford@vax.oxford.ac.uk

Call for Papers & Posters

9th Conference on Research and Resource Management
in Parks and on Public Lands

Making Protection Work

—Parks & Reserves in a Crowded, Changing World
Albuquerque, New Mexico • March 17–21, 1997

A Call for Papers brochure will be received by all Forum recipients during June or early July for this Conference scheduled for March 17–21, 1997, in Albuquerque. The theme title for this 9th conference reflects the tension between the rapidity of change and the difficulty of protecting cultural and natural attributes in parks over the long term. The bedrock assumption underlying the creation of parks and reserves is that they will be protected in perpetuity—but today's world is characterized by the dizzying pace of technological change, rapid human population growth, large-scale alteration of ecosystems, the disintegration of shared cultural views of history, declining government budgets, and an increasingly fragmented and volatile political climate. Consequently, the notion of what it means "to protect" is being re-evaluated, and even being attacked by some. Yet we believe that protection can still be made to work—although innovative and flexible thinking will be required.

The GWS conference is a unique chance to meet people from other organizations and from outside your field. Past conferences have been sanctioned by U.S. federal agencies as official training and career-development opportunities. Watch for the brochure and/or tune in to our web page.

Letter from Gustavus

The Will to Live in a Livable Future

March 19, 1996

I have recently been involved with a broad-scope stakeholder group that is trying to resolve the dilemmas created by commercial fishing in Glacier Bay National Park, Alaska. The incongruity of commercial fishing in park waters jolts park people and environmental groups accustomed to Lower-49 National Park standards.

The contradiction stems from a history of commercial fishing in marine waters that later were incorporated into Glacier Bay National Monument (redesignated "National Park" in 1980), and subsequent special regulations for the continuance of such fishing. Several related matters compound the issue: the Redwood National Park Act amendment of 1978, which prohibits extractive commercial activities in National Parks unless specifically allowed by statute; ambiguities in the Alaska National Interest Lands Conservation Act of 1980 regarding this old-line, Lower-49-type park; and ongoing marine-waters and fisheries-management jurisdictional disputes between the state of Alaska and the federal government.

This stew of local history and evolving National Interest Lands policy simmers in a political context militantly antipathetic to government in general and to preserved public lands specifically. Especially this is so in Alaska, which contains two-thirds of the total acreage of the U.S. National Park System (and a similarly large proportion of the National Wildlife Refuge System).

This Glacier Bay controversy (and many similar ones) gets little calming assistance from Alaska's exploitation- and development-oriented congressional delegation, which, in the present Congress, wields immense and inimical power over the nation's preserved public lands.

In such an ambiance it is not surprising that the values of strictly preserved lands, of sanctuaries and refugia, are not common coin amongst Glacier Bay's interested stakeholders. I want to be very clear that the fisherfolk in these conversations are good people—several of them my neighbors. They naturally start from their own economic interests and historical dependence (as a class) on Glacier Bay waters. And remember, for many years commercial fishing in park waters was sanctioned (and still is, conditionally) by National Park Service regulation and pronouncement. I believe it fair to say that, from my associa-

tion, the local fisherfolk have as great a love of this land- and seascape as I do—though we approach it somewhat differently.

Rather, the divide between park-and-preservation people and commercial-fishing-use people is the concept of pure preservation. The notion that in some chosen places Nature—untrammelled by consumptive human use—should have its way, its rhythms and seasons and cycles undisturbed by humans:

For the places' own sake. Because Nature, in all its manifestations, was here long before we came along.

Or, progressing to a different sort of utilitarian perspective, such chosen places reserved as biological benchmarks to help us monitor and measure the global changes wrought by pervasive human pressures across the biosphere.

Of course at Glacier Bay, as is the case in most national parks in the United States and elsewhere, visitor use does have a trammeling effect—cruise ships, tour boats, chartered sport fishing, backcountry camping at limited or wildlife-concentration sites, flight-seeing, etc., all intrude on Nature's pure regime. To further attenuate the Platonic preservation ideal of Nature insulated from the human factor, consuming humans have been featured at Glacier Bay over several thousand years, and descendants of the Earliest Americans are still around and still view this place as theirs (as, with variations of nomenclature, is the case in national parks around the world).



Thus, we in the preserved-lands business have a tough time in the best of times convincing anyone—especially one with an economic stake—that preservation of Nature can be pure, in this time or in any pragmatically relevant time in the past. People as we know them, or their hominid ancestors, have been whacking away at Nature, as a part of it, for about 4 million years.



The idea of preserved lands (i.e., those saved from human exploitation) is very recent. It arose in the 19th century in direct response to what even then was seen as the human juggernaut powered by coal and industrialization. The world was being tamed in the far places by heroic explorations. Nearer home, Henry Adams' symbolic dynamo was chewing up the local glades and streams, the green grottoes once filled with dreams. At the heart of this idea was a view

of Nature redolent of the Romantic movement of that pivotal century: the sense that in an evermore complex and mechanical and dreary world there must be places where the higher aspirations of the human soul could flourish. It was in this soulful soil that the first national parks germinated.

Right here, in the United States. A blessed place that, compared with the rest of the world, was land-rich. Its social surplus was most readily expressed in its continental expanse, with vast sectors of the trans-Mississippi West practically uninhabited compared with the eastern shores—and unimaginably vacant for the teeming masses of Europe, Asia, and Africa. They had their tombs, cathedrals, and monuments—crowded round by fetid cities. We had God's works in remote places, trod only yesterday by an ancient nobility clad in deerskin robe, shod in moccasin.

How impractical this all was, even then (except for railroads needing passengers to and through the empty regions). How doubly impractical now—now that our social surplus has been expended.

Yet, if we think more deeply, the idea of preserved vignettes of primitive America still expresses much of the spirit of this nation. The idea has the practical aspect of providing solace for overstressed people (Adams' dynamo now screams and threatens to pull its anchor bolts right out of their sockets). These same increasingly urbanized folks can also stand a bit of education into the wonders and ultimate controls of Nature, and of our historical relationships to it—most of them destructive.

And still, these places, inherited from people who left them after thousands of years of use in a condition that we would later call "wilderness," can serve as biological benchmarks. For they are the least disturbed of all landscapes in this world, excepting only Antarctica.

And what of the idea that there are some places of such exquisite aesthetic and spiritual significance, of such physical or biological specialness, that we as a species can defer to a higher order of value than the simple exploitative? Would we condone the slashing of great paintings, the breaking of statues and ceramics and buildings from another age? The burning of a library such as that of Alexandria? Of course not. Then why cannot we attribute non-utilitarian value—for its own sake—to such things as Nature? (Not to mention the utilitarian value of the Alexandrian library that, say, biodiversity represents.)

And even if we cannot see such values in the press of our own time-bound circumstances, why cannot we be conservative, in the most inclusive sense of that term—of rain forests, places of natural beauty, habitats, species? Both for practical and for intangible-values purposes. As a favor to our children and their children. As a statement of our faith in them to find values in things and places that we, in our primitive and confused time, cannot properly evaluate. This is the calling of the social contract, which, if it means anything, is inter-generational.

Would any of us want to come into a world so used up that there were no fresh and pretty places left? No places to discover? Of course not. Yet we are on our way to leaving such a world to those who—unless we alter course—will curse us to eternity for our unforgivable sin of ignorance and self-indulgence.



We are truly at a turning point. The human condition—despite futuristic blather—is regressing by way of its increasing numbers and impact on a fragile and finite world. All objective signals support this assertion. Yet, just as we have arrived at that dismal juncture, we have arrived also at levels of understanding about our sustaining world, and modes of instant worldwide communication, that would allow us as a species to put the brakes on and change course for a productive, sustainable future.

It is my belief that right now, in this present moment of emergency and potential choice, the national parks of the world can help guide that choice. By, among other things, making us make decisions. If we decide to hold on to these special places (including all equivalent preserves) we will be stating our faith in a future worth being born to. If we use them up, we will have decided that there is no future worthy of our concern, even if our children do have to live in it.

In our plaintive preservation literature we have often used the metaphor of the canary in the mine—the parks as signal of the world's health. Usually, this figure has related to the physical health of the world. Now it relates to our will to live. That's what the canary in the mine was all about.



Well, that's what a few days' meetings on commercial fishing in Glacier Bay National Park have generated in one person. It makes me wonder what thoughts would flow if all the visitors and protectors of the world's national parks could state the values of their park experiences in one great big petition to save the places they treasure. And, of course, be used as standards for a livable world. That is their greatest value.

Imagine a world that lacked these standards.



Values, Ethics, and Public Lands

Introduction

Last year I presented a paper at the biennial George Wright Society meeting. The paper addressed environmental values and ethics and their implications for public land management. I was aware of George Wright's legacy: he was a powerful advocate for science in the management of parks and other public lands. Consequently, I was a little unsure about how my paper—exploring so seemingly soft a subject as values and ethics—would be received.

In the end, I was relieved. In fact, the meeting room was nearly full, and I enjoyed spirited conversation with several Society members until well after the session. Follow-up correspondence led to the idea of a special issue of THE GEORGE WRIGHT FORUM devoted to the subject of environmental values and ethics. We solicited papers from leading writers in the field. The only incentive offered was that their papers would be read by researchers, managers, and policy-makers in the best position to guide and influence public land management. Nearly all responded with both substance and timeliness.

The seven papers in this collection are broadly representative of the growing literature in this area. The papers might be grouped into three broad categories. The first includes two papers which explore a range of potential values found in nature as well as a diversity of environmental ethics. Both papers are empirically based. Bengston and Xu explore shifting and expanding values resident in the national forests. Their premise is that management of national forests must evolve in concert with evolving social values. Using content analysis, they found that the public is placing increasing importance on life support and moral-spiritual values of forests. However, economic-utilitarian values retain their traditional importance in society. The authors conclude, among other things, that new, integrated paradigms, such as ecosystem management, may be especially timely as a means to resolve inevitable conflicts among forest values. Manning, Valliere, and Minter report on several surveys of park and wilderness visitors. Initial conceptual development identifies and classifies a range of environmental values and ethics. Empirical measures are developed and respondents are asked the extent to which they subscribe to these values and ethics. Findings suggest that parks hold multiple values in society and are clearly more than recreation places. Environmental ethics are also multi-

faceted, ranging across the anthropocentric–biocentric continuum. As with the previous paper, increasing conflict over public lands is a likely implication arising out of those findings. However, protection of ecological integrity may be a common denominator in realizing this diverse set of environmental values and ethics.

The second set of papers is more philosophical. All three argue for changing conceptions of public lands. Callicott is critical of the traditional rationale for wilderness preservation which he finds too anthropocentric and ecologically uninformed. He suggests zoos as an appropriate analogy. In recent years, zoos have evolved into “biological parks” in recognition of their enlightened ecological role. In a similar manner, wilderness areas should evolve into “biodiversity reserves.” These areas would be expanded in size, new areas created where habitat requirements demand, and economic and other human uses allowed where compatible with conserving biodiversity. Oelschlaeger also criticizes the conceptual foundations of parks and wilderness as too limited and rooted in the assumptions of modernism. As isolated reserves, parks and wilderness can be viewed as mere playgrounds, farms, or even prisons, detached from humanity. If parks and wilderness were more integrated into society—if we could move beyond preservationism—then they might serve as models of a more harmonious relationship between humans and nature. Gottlieb and Blumberg take a different tack, encouraging us to expand the public interest in public lands. Reflecting on the broad social agenda associated with environmentalism—ideas that can be traced back to Robert Marshall, Catherine Bauer, and Benton MacKaye—the authors outline ten ideas designed to achieve social and environmental justice. They conclude that a broader base of environmentalism will be good for both society and our public lands.

The final set of papers focuses directly on human behavior. Both papers address the behaviors of visitors to parks and wilderness. Stefanovic notes that there are not yet well-developed norms of behavior among recreationists. One solution to this problem may be codes of ethics for park visitors. The author describes development of such a code for Short Hills Provincial Park, Ontario. Nash is concerned more specifically with new communications technology and its implications for the quality of the wilderness experience. Instant, two-way communication between wilderness visitors and the “outside” world may diminish the very idea of wilderness. Following a tradition of human restraint to protect wilderness, Nash suggests we need a new wilderness ethic in the age of cyberspace.

I would like to thank the authors of these papers for their thoughtful and provocative ideas. I also appreciate the encouragement and assistance of Dave Harmon in developing this special issue of THE GEORGE WRIGHT FORUM. I hope readers find it useful.

Shifting and Expanding Forest Values

The Case of the U.S. National Forests

The idea that public forest values have changed significantly in recent decades has become widespread. According to this view, forest values—conceptions of what is good or desirable about forests—have changed in two important ways. First, it is often claimed that forest values have shifted, i.e., the relative importance of different values has changed. Social scientists refer to this type of change as a shift in a value system. Second, some have argued that the number of forest values has expanded, i.e., that there are new concepts of what is good or desirable about forests (new values), or new forest attributes that people care about (new objects of value).

Shifting forest values—the first type of value change—have been discussed for many years. In 1970, for example, the University of Montana's influential report on the clearcutting and terracing controversy on the Bitterroot National Forest stated that there has been "considerable change in our value system—a rising public concern with environmental quality" (U.S. Congress 1970:14). In recent years, many prominent leaders in the forestry community have observed that forest values have shifted, including deans of forestry schools, chiefs of the USDA Forest Service, leaders of the Society of American Foresters, organizers of the Seventh American Forestry Congress, as well as a host of social scientists. The report of the Forest Ecosystem Management and Assessment Team—a major study following up on President Clinton's 1993 Forest Conference in Portland,

Oregon—stated: "The paradox is that those social values for which our ability to define and measure is poorest, are the very ones that appear to be of increasing importance in our society" (FEMAT 1993:VII-33).

Expanding forest values have also been discussed in recent years. Environmental historian Samuel Hays has written: "New values have emerged about what the forest in America is and what role it ought to play in modern society" (Hays 1988:550). Others have stated that management of the national forests in ways that are responsive to new public values is the core challenge faced by the Forest Service (Shands 1991). The broadening and deepening of forest values in the United States is reflected in the major laws affecting the Forest Service. Between 1960 and 1980, Congress enacted at least 30 laws whose main thrust was the conserva-

tion of resources, wilderness, recreation, or environmental quality on national forest land (Shands 1994).

The view that forest values have changed significantly is important because, if true, it implies that forestry must also change. Few would deny that the management of public forests must be responsive to the ways in which the public values those forests. In a democratic society, public lands are managed with the tacit consent of the citizenry. Therefore, if public forest values have changed, the forestry profession and forest management agencies must respond. Changed social values imply the need for new goals, policies, and management programs.

Private forest lands are not immune to the effects of changing forest values. In a market-based economy, firms and private forest land managers must also be responsive to changing public values, especially values expressed through consumer demands. There is some evidence, such as the growing number of "green forestry" certification programs (Fox 1995) and the American Forest and Paper Association's Sustainable Forestry Initiative (Wallinger 1995), that the forest products industry perceives and is responding to changing forest values.

This paper examines the nature of changing forest values in the United States, with an emphasis on the national forests. The following sections summarize the findings of two studies by the authors on change in national forest values in recent years, one fo-

cusing on shifts in the relative importance of values and the other focusing on expansion of the objects of value (forest attributes, outputs, and functions) associated with the national forests. Implications for forest policy and management are presented in a concluding section.

Shifting National Forest Values

The authors used content analysis to test the hypothesis that forest values—specifically, values associated with the national forests—have shifted over time (Bengston and Xu 1995). For the purposes of this study, we distinguished four broad categories of forest values: economic-utilitarian, life-support, aesthetic, and moral-spiritual (Figure 1). These categories represent four distinct ways in which people value forests. They are fundamental motivations for caring about the environment, and many more specific values are subsumed under each of the four categories.

The first two categories of forest values—economic-utilitarian and life-support—are "instrumental values." Instrumental value is one concept of the good in which the good is equated with what is useful as a means to some desirable human end. The instrumental value of the environment arises from the fact that "nature benefits us. Nature is useful: it serves a purpose, satisfies a preference, or meets a need" (Sagoff 1991:32). Economic-utilitarian value is a type of instrumental value, and stems from a forest's usefulness for

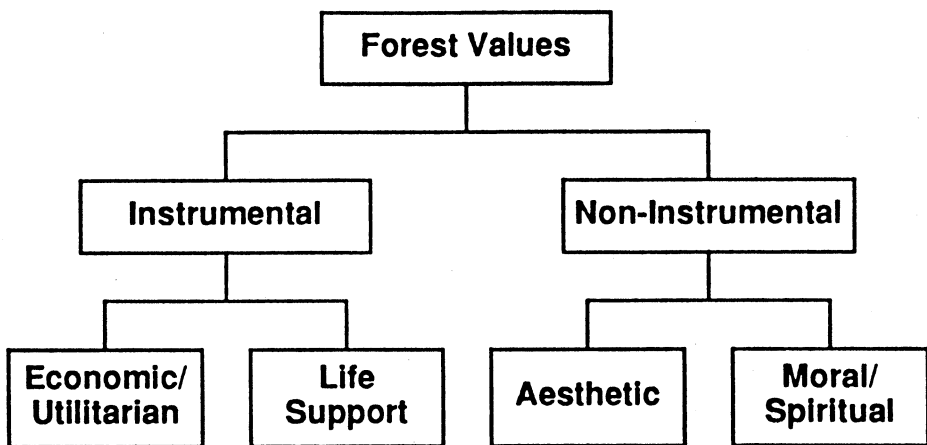


Figure 1. A classification of forest values.

achieving human ends, where the ultimate end or goal is maximizing preference satisfaction. Life-support (or ecological) value is another broad concept of what is instrumentally good about forests. For people who hold this value, life-supporting environmental functions and services are good because human well-being depends on these functions and services.

Aesthetic and moral-spiritual value are both non-instrumental values. We value an object non-instrumentally when we care about it as an end in itself, rather than as a means to an end. Aesthetic value is a type of non-instrumental value in which beauty is the concept of what is good or desirable. Aesthetic value has historically had and continues to have profound impacts on public land policy and management (Callicott 1992). Finally, we value something morally or spiritually when we regard it with love, affection, reverence, and

respect. This is what Aldo Leopold had in mind when he wrote: "It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value. By value, I of course mean something far broader than mere economic value" (Leopold 1966:261).

We developed a computer-coded content analysis procedure to analyze change in these four broad categories of forest values. Content analysis is a research technique for making valid inferences from text by systematically identifying and analyzing specified characteristics within text. It has been used by social scientists for many purposes, ranging from determining the psychological state of individuals to analyzing cultural patterns over time (Weber 1990). An important premise of content analysis for our study is that the language used in social discourse is not mere words—it is an expression of our values. Histo-

rian Paul Hirt (1994:17) notes that "language is a very important indicator of values and ideology. Industrial foresters use a common set of terms that both reflect and shape the perceptions and assumptions of those sharing that vocabulary." Hays (1992:11) has identified forest terminology as a vital indicator of forest values: "Through such terms a profession tells what it values, what it believes, what role it wishes to play in the larger scheme of things." Changes in this language therefore reflect changes in our systems of beliefs and values, which have a powerful influence on the way we think and behave.

To measure forest values and track them over time, we developed four "value dictionaries"—lists of words and phrases that are indicators of the expression of each of the four values. The dictionaries enable us to indirectly observe and quantify expressions of forest values. The validity of the words and phrases contained in the dictionaries as indicators of forest values was tested by repeated examination of computer-generated keyword-in-context lists. In this way, we were able to determine which of the words and phrases were accurate indicators of the expression of the four values. Words and phrases that were found to be used ambiguously or incorrectly—i.e., that did not accurately capture expressions of forest values—were dropped from the dictionaries.

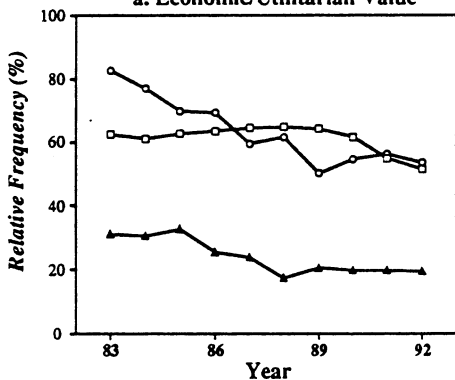
The final value dictionaries were applied to computer databases of text

on the national forests covering the period 1982 through 1993 for three populations of interest: (1) forestry professionals, represented by text on the national forests from the *Journal of Forestry* and the Society of American Foresters national convention proceedings; (2) mainstream environmentalists, represented by text on the national forests from *Sierra*, *National Wildlife*, and *Wilderness*; and (3) the news media, represented by text on the national forests from the NEXIS electronic database of newspapers and news services.

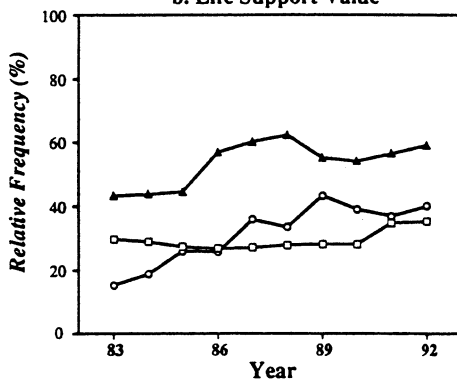
Figures 2a-d summarize the forest value time trends revealed by our content analysis. These figures show changes over time in the relative frequency of expression of forest values, i.e., the vertical axis is the share of a particular value as a percentage of total expressions of all four values.¹ As shown in Figure 2a, the relative frequency of expression of economic/utilitarian value declined significantly for both environmentalists and forestry professionals. The decline is particularly pronounced for forestry professionals, with expressions of economic/utilitarian value dropping from more than 80 percent of total value expressions in the early 1980s to about 55 percent in the early 1990s. The trend for the news media is basically flat throughout most of the 1980s, and then be

¹ Statistical tests were carried out to determine the significance of the trends. See Bengston and Xu (1995) for detail on the tests and results.

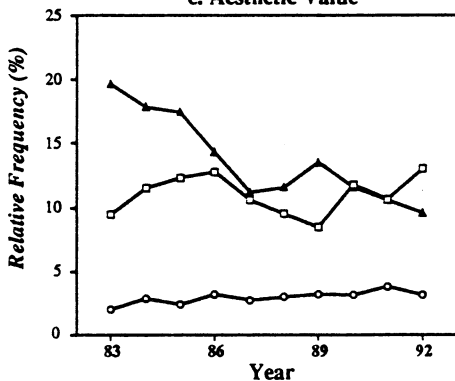
a. Economic/Utilitarian Value



b. Life Support Value



c. Aesthetic Value



d. Moral/Spiritual Value

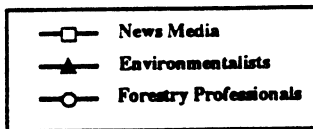


Figure 2. National forest value time trends.

gan to decline significantly during the late 1980s and early 1990s.

Figure 2b shows the trends in relative frequency of expression of the life-support value of national forests. Trends for environmentalists and forestry professionals are upward and highly significant. For the news media, there is evidence of an upward trend in the expression of life

support value for the second half of the 12-year period.

Trends in the expression of aesthetic value for the national forests are shown in Figure 2c. Note that the scale on the vertical axis has changed for Figures 2c and 2d, reflecting the fact that aesthetic and moral-spiritual values are expressed less frequently than economic-utilitarian and life-

support values in the text we analyzed. We found no clear trend for aesthetic value for the public or forestry professionals. Surprisingly, however, we found evidence of a downward trend in the expression of this value for environmentalists. This may be due to a change in the nature of environmental aesthetics. Callicott (1992), Gobster (1995), and others have described an ecological aesthetic—a concept of the beauty of nature informed by ecological knowledge—that seems to be gaining ground. If an ecologically informed aesthetic is beginning to replace the more traditional “scenic” aesthetic, then our aesthetic value dictionary may be limited by its inability to identify these ecologically oriented expressions of aesthetic value.

Finally, Figure 2d shows the trend in the relative frequency of expression of moral–spiritual value. Results of statistical tests provide evidence of a significant increase in expression of this value over time by forestry professionals and environmentalists, but no trend for the news media.

Expanding National Forest Values

We surveyed USDA Forest Service land managers to explore the hypothesis that forest values have expanded and to identify key objects of value associated with the national forests. The mail survey included the following two-part question: “We would like to find out your views, as a manager of public land, of what the public is most interested in or concerned about in your district or for-

est.... The following is an incomplete list of forest ecosystem attributes, outputs, and functions. Please look over this list and: (1) add any additional items that *the public* is interested in or concerned about in your district or forest, and (2) check the 10 most important forest attributes, outputs, and functions to *the public* in your district or forest.” This questionnaire was sent to all Forest Service district rangers and forest supervisors—more than 700 forest managers—and the response rate was almost 54 percent.²

Figure 3 shows the ranking of national forest “objects of value” based on responses to our survey. This figure ranks objects of value by their relative importance, which is defined as the frequency of a given object divided by the frequency of the object with the *highest* frequency (in this case, wildlife and fish habitats). The six objects of value most often identified by managers is a rather traditional list of forest outputs and attributes. Wildlife habitat was identified by nearly all respondents, followed closely by consumptive recreation (e.g., game hunting, fishing), nonconsumptive recreation

² The results of this questionnaire should not be interpreted as the public’s preferences and values, but rather as managers’ perceptions of the public. Vining and Ebreo (1991) have shown that forest managers’ perceptions of the preferences and values of the public may differ from the actual preferences and values of the public. We are planning a follow-up survey of the public that will enable us to compare managers’ perceptions with actual values.

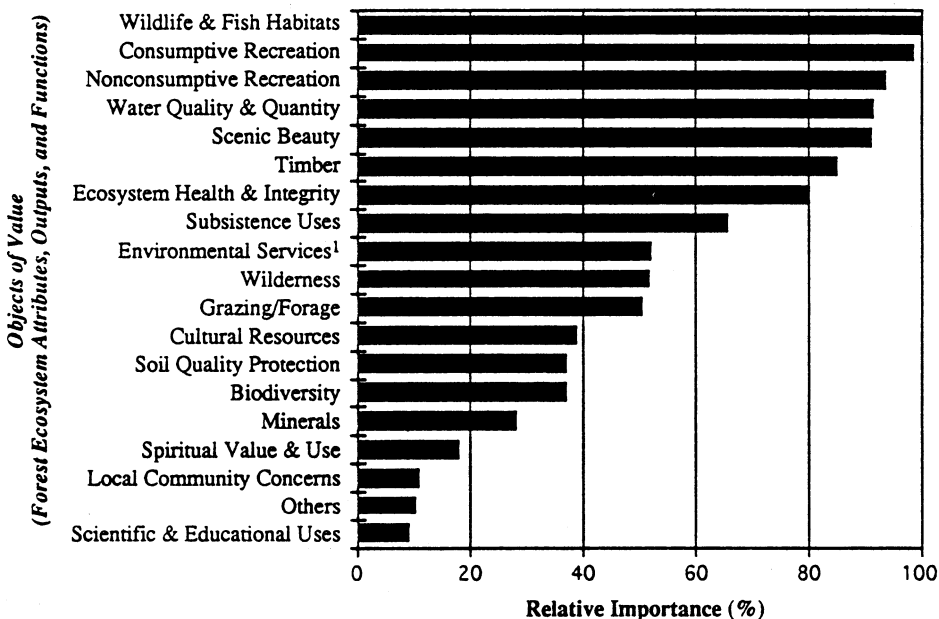


Figure 3. Relative importance of forest ecosystem attributers, outputs, and functions (all regions). Relative importance (%) is the frequency of a given attribute divided by the frequency of the attribute with highest frequency (Wildlife & Fish Habitats). ¹Environmental services include air quality, absorption of wastes, climate regulation, erosion control and watershed protection, and forests as carbon sink.

(e.g., camping, bird-watching, hiking), water quality and quantity, scenic beauty, and timber.

But our survey also revealed that a variety of other, nontraditional forest attributes, outputs, and functions are perceived to be important to the public. An interesting finding in Figure 3 is that, for the United States as a whole, ecosystem health and integrity was identified by managers almost as frequently as timber as an important object of forest value. In ecoregions that are not major timber producers, ecosystem health and integrity was rated higher than timber. It is also

noteworthy that forest attributes and functions such as the environmental services provided by forests, biodiversity, and ecosystem health and integrity were identified as frequently as is shown in Figure 3. It is highly unlikely that environmental attributes and functions such as these would have even appeared on the “radar screen” of public concern a few decades ago.

Conclusions and Policy Implications

Our studies of shifting and expanding national forest values point

to a central dilemma for forest policy, planning, and management. On the one hand, we found an increase in the relative importance of forest values that have often been neglected or ignored in the past—specifically, life-support and moral-spiritual values. We also found that objects of value related to life-support value (eco-system health and integrity, environmental services, biodiversity) were ranked surprisingly high in Figure 3. On the other hand, we found that traditional economic values and related objects of value are still important. Figure 2 reveals that, although declining, economic-utilitarian values are still frequently expressed, and Figure 3 shows that various forest outputs and attributes that are valued primarily for economic reasons are perceived by managers to be among the most important to the public.

The increasing importance of life-support values and continuing importance of economic-utilitarian values have several significant implications for forest policy and management. First, the tension between emerging and traditional forest values implies the need for change in the way forest managers think about and deal with conflict. Value change has been the underlying source of increased conflict over public forest management in recent decades. Bitter clashes between forest stakeholders with divergent values have characterized forest management debates, and they will likely intensify unless forest managers

learn how to deal with conflict more positively, proactively, and effectively. Part of the change in thinking that is needed is recognition of the fact that some level of conflict is a natural and inevitable part of how we manage natural resources in a democratic society. Recognizing the positive role of conflict will help managers develop and implement conflict management approaches that will more effectively bridge the gap between those holding emerging forest values and those holding traditional values.

Second, the tension between emerging and traditional forest values implies the need for planning and decision making processes that are better able to incorporate diverse values. There is a greater need than ever before for meaningful stakeholder participation in forest planning and decision making. Participatory planning and decision making is a key to getting diverse values on the table and working them out. It is through discourse and deliberation that people discover and express social values, which can then be incorporated into management. Natural resource management agencies have often used limited forms of stakeholder involvement in the past, but generally have not implemented meaningful public participation and shared leadership.

A third implication of the forest values dilemma is that ecosystem management—an emerging natural resource management paradigm—may be an appropriate and timely

policy response to the current social milieu. Most definitions of ecosystem management emphasize that its goal is to sustain ecological health and integrity while simultaneously meeting socioeconomic needs, including the need for commodities produced by forests. For example, the Ecosystem Management Charter of the Forest Service defines ecosystem management as follows: "Ecosystem management means using an ecological approach to achieve the multiple-use management of national forests and grasslands by blending the needs of people and environmental values in such a way that national forests and grasslands represent diverse, healthy, productive, and sustainable ecosystems" (USDA Forest Service 1992). Thus, ecosystem management can be interpreted as an attempt to manage simultaneously for the "new" ecolog-

ical forest values and the traditional economic-utilitarian forest values. This is an ambitious goal, and it remains to be seen whether or not ecosystem management will be able to deliver on its promises.

Shifting and expanding forest values have made the jobs of forest planners and managers much more challenging and complex. The traditional five resources that the USDA Forest Service focused on in the era of multiple-use forest management—timber, recreation, water, wildlife, and forage—are still important, but this is clearly an inadequate list of concerns for today. National forest management must continue to shift from a focus on the production of a narrow set of commodities and uses to a much broader set of forest values (Thomas 1992).

References

- Bengston, David N., and Zhi Xu. 1995. Changing national forest values: A content analysis. Research Paper NC-323. St. Paul, MN: USDA Forest Service, North Central Forest Experiment Station. 29 pp.
- Callicott, J.B. 1992. The land aesthetic. *Renewable Resources Journal* 10(4):12-17.
- FEMAT. 1993. Forest Ecosystem Management: An Ecological, Economic, and Social Assessment. Report of the Forest Ecosystem Management Assessment Team, July 1993. Washington, DC: U.S. Government Printing Office.
- Fox, Richard W. 1995. Certification: Pinpointing good wood. *American Forests* 101(5/6):16-17, 55-56.
- Gobster, P.H. 1995. Aldo Leopold's ecological esthetic: Integrating esthetic and biodiversity values. *Journal of Forestry* 93(2):6-10.
- Hays, Samuel P. 1988. The new environmental forest. *University of Colorado Law Review* 59:517-550.
- . 1992. A challenge to the profession of forestry. Pp. 36-51 in: James C. Finley and Stephen B. Jones, eds., *Practicing Stewardship and Living A Land Ethic*, Proceedings of the 1991 Penn State Forest Resources Issues Conference, Harrisburg, PA, March 26-27, 1991. State College, PA: Penn State University. 87 pp.
- Hirt, Paul W. 1994. *A Conspiracy of Optimism: Management of the National Forests Since World War Two*. Lincoln, NE: University of Nebraska Press. 416 pp.

- Leopold, A. 1966. *A Sand County Almanac*. New York: Ballantine Books. (Originally published 1949). 295 pp.
- Sagoff, Mark. 1991. Zuckerman's dilemma: A plea for environmental ethics. *Hastings Center Report* 21(5):32-40.
- Shands, William E. 1991. Beyond multiple use: Managing national forests for distinctive values. *American Forests* 94(3/4):14-15, 56-57.
- . 1994. National forests and the human legacy: Some history. Pages 3-11 in: *Silviculture: From the Cradle of Forestry to Ecosystem Management*, Louise H. Foley (compiler). Proceedings of the National Silviculture Workshop, November 1-4, 1993, Hendersonville, NC. Gen. Tech. Rep. SE-88. Asheville, NC: USDA Forest Service, Southeastern Forest Experiment Station. 258 pp.
- Thomas, Jack Ward. 1992. Forest management approaches on the public's lands: turmoil and transition. The Horace M. Albright Lectureship in Conservation, April 14, 1992. Department of Forestry & Resource Management, College of Natural Resources, University of California, Berkeley. 28 pp.
- U.S. Congress. 1970. A University View of the Forest Service. Report of the Select Committee of the University of Montana on the Bitterroot National Forest. Document No. 91-115, Senate Committee on Interior and Insular Affairs, 91st Congress, 2nd session. Washington, DC: U.S. Government Printing Office. 33 pp.
- USDA Forest Service. 1992. Ecosystem Management Charter. July 28. Washington, DC: USDA Forest Service.
- Vining, Joanne, and A. Ebreo. 1991. Are you thinking what I think you are? A study of actual and estimated goal priorities and decision preferences of resource managers, environmentalists, and the public. *Society and Natural Resources* 4(2):177-196.
- Wallinger, Scott. 1995. A commitment to the future: The sustainable forest initiative. *Journal of Forestry* 93(1):16-19.
- Weber, Robert P. 1990. *Basic Content Analysis*. 2nd ed. Sage University Papers 49. Newbury Park, CA: Sage Publications. 96 pp.



David N. Bengston, USDA Forest Service, North Central Forest Experiment Station, 1992 Folwell Avenue, St. Paul, Minnesota 55108

Zhi Xu, Office of Policy Analysis and Research, Washington Department of Natural Resources, P.O. Box 47014, Olympia, Washington 98504

Environmental Values and Ethics

An Empirical Study of the Philosophical Foundations for Park Policy

Parks occupy a special place in our society. From urban greens to back-country wilderness, the nation's parks provide a rich diversity of opportunities for public use and enjoyment. This diversity is augmented by the multitude of other values that parks might hold for the public. While outdoor recreation is the provision most often associated with parks, other values, ranging from the scientific to the spiritual, may be significant as well. Indeed, it would be difficult to deny the potential ability of parks to provide numerous, and often very different, values to society.

The values the public finds in parks are underpinned by deeper and perhaps more intimate beliefs and feelings about the appropriate relationship between people and the environment. Commonly referred to as "environmental ethics," these beliefs create and express an individual's fundamental worldview of human-nature relationships. They also play a significant yet complex role in the formation of an individual's attitudes and behavior toward the environment.

Taken together, values and environmental values and ethics are revealing social constructs that become highly significant in the discussion of natural resource management issues. For parks, the relevance is especially strong, owing largely to the traditional public character of park resources. The identification of the

public's environmental values and ethics, therefore, becomes an important and enlightening contribution to responsive and effective park policy.

The research described in this paper has three primary objectives. The first is to identify and classify an array of environmental values and ethics which may apply to parks and equivalent reserves. The second is to measure the extent to which park visitors subscribe to those values and ethics. The third objective is to explore the implications of these findings in an effort to begin building an empirically based philosophical foundation for park policy.

Environmental Values and Ethics

Environmental values and ethics were identified and classified through literature review. There is a rich literature base in history, philosophy,

and a variety of environmentally related fields regarding the potential values of parks and related areas and environmental ethics. Much of this literature is reviewed in contemporary texts, including Bailes (1985), Brennan (1988), Callicott (1995), Des Jardins (1993), Elliot and Gare (1983), Glacken (1956), Hargrove (1989), Merchant (1993), Nash (1983; 1989), Petulla (1988), Rolston (1986; 1988), Simmons (1993), Stone (1987), Taylor (1986), Van DeVeer and Pierce (1994), Worster (1977; 1993), and Zimmerman (1993). Based on this literature, park values were classified along two dimensions. The first dimension concerns the potential direct and indirect uses of parks. Eleven potential park values were identified as shown in Table 1. The second dimension concerns when these values accrue over time. Four temporal values were identified and are also shown in Table 1.

Sixteen environmental ethics were identified as shown in Table 2. The 16 environmental ethics were further classified into five broad categories to provide some additional order. We do not necessarily suggest that these broad categories of ethics are ideas that are clustered together within segments of society. These categories merely represent groups of ideas which appear to have some conceptual commonality.

Measuring Values and Ethics

Measuring the extent to which park visitors subscribe to these values

and ethics involved two principal tasks: developing measurement scales and conducting visitor surveys. Four batteries of questions were developed to measure values for parks and related areas. The first simply asked respondents the degree of importance they attached to parks and related areas as a place to achieve each of the eleven potential use values noted above. These statements are shown in Table 1. A six-point response scale was used, ranging from "not-at-all" to "extremely" important. The second battery of questions asked respondents the extent to which they agreed with four statements concerning the importance of the four potential temporal values of parks. These statements are also shown in Table 1. A four-point response scale was used, ranging from "strongly agree" to "strongly disagree." The third battery of questions asked respondents to allocate on a percentage basis their total willingness to pay for parks and related lands among the potential use values of state parks. The fourth battery of questions asked the same type of question for the four potential temporal values of state parks.

For environmental ethics, a battery of statements was developed which attempted to capture alternative dimensions of each of the 16 environmental ethics. An eleven-point response scale was used which was anchored at "strongly agree" and "strongly disagree." An initial battery of 104 statements was pre-tested on a group of 150 undergraduate students who were asked to comment on any

Table 1. Park Values.

Value	Statement ¹
Use Values	
Aesthetic	Parks are places to enjoy the beauty of nature.
Education	Parks are places to learn how things are connected ecologically.
Recreation	Parks are places to enjoy outdoor recreation activities.
Therapeutic	Parks are places to regain and/or maintain one's health and mental well-being.
Ecological	Parks are places to protect the environment in order to ensure our own survival.
Scientific	Parks are places to conduct scientific studies on the natural environment.
Intellectual	Parks are places to go to think because civilization cannot interrupt.
Historical/Cultural	Parks are places that is important to the history of this country.
Moral/Ethical	Parks are places to express our moral or ethical obligation to protect other living things
Spiritual	Parks are places to get closer to God.
Economic	Parks are places to get raw materials for society to grow in the future.
Temporal Values	
Use	Parks are important because I use them for recreation and/or other purposes.
Option	Parks are important because they provide me with an option to use them in the future.
Existence	Parks are important because I simply like knowing they exist.
Bequest	Parks are important because they will be valuable to future generations.

¹ Statements are worded slightly differently in each study in accordance with the type of study area.

Table 2. Environmental Ethics.

Category	Environmental Ethics	
	Ethic	Representative Statement
Anti-environment	Threat to survival Spiritual evil	Nature is a threat to human survival. Nature is evil.
Benign indifference	Storehouse of raw materials Religious dualism	Nature is a valuable storehouse of raw materials. Humans and nature are fundamentally different.
Utilitarian conservation	Anthropocentric humanism Efficiency Quality of life Ecological survival	Human cruelty toward animals is wrong because it could lead to cruelty toward other humans. Humans should manage nature as efficiently as possible. Nature is important because it adds to the quality of our lives. Protecting ecological processes is important to human survival.
Stewardship	Religious duty Future generations Reverence for life—God's creatures Reverence for life—mysticism	It is our religious/spiritual duty to take care of nature. Nature should be protected for future generations of humans. Humans should protect nature because it is God's creation. All living things have a spirit.
Radical environmentalism	Humanitarianism Animism/organicism/ pantheism Liberalism/natural rights— evolutionary Liberalism/natural rights— ecological processes	Humans should not cause needless pain and suffering to animals. Nature should be protected because it is sacred. As products of evolution, humans have a responsibility to care for the rest of nature. As part of nature, humans have a responsibility to care for the rest of nature.

problems, ambiguities, or other difficulties in interpreting and responding to the statements. Based on this pretest, 62 statements were retained. Each of the 16 environmental ethics was measured with between two and five statements. Representative statements are shown in Table 2.

Three visitor surveys were conducted using some or all of the above batteries of questions. Procedures for survey research recommended by Dillman (1978) were followed. The first study was conducted in the Breadloaf Wilderness in Vermont. A representative sample of 251 visitors in the summer and fall of 1992 was given a mail-back questionnaire. Using three mailings, a response rate of 78 percent was attained, yielding 196 completed questionnaires. The second study was conducted at Marsh-Billings National Historical Park in Vermont. This is a relatively new unit of the national park system. A representative sample of 500 park visitors in the summer and fall of 1993 was given a mail-back questionnaire. Using three mailings, a response rate of 78 percent was attained, yielding 388 completed questionnaires. The third study was conducted throughout the Vermont state park system. A representative sample of 3,100 visitors to 45 state parks during the summer of 1993 was given a mail-back questionnaire. The questionnaire was distributed on-site and two follow-up mailings were used. A response rate of 61 percent was attained, yielding 2,158 completed questionnaires.

Study Findings

Park Values. Values of parks and related lands were measured in all three studies, though temporal values were measured in only two of the these studies, and the willingness-to-pay approach to values was used in only one study. Study findings are summarized in Tables 3 and 4. From Table 3, it is clear visitors feel that parks and related lands are important for a considerable variety of use values. In fact, most of the potential values are rated by the sample as a whole as at least "somewhat" important. There is also a clear hierarchy of values. Direct use-related values—values that accrue more directly to individuals—tend to be rated as especially important. These include aesthetic appreciation, education, outdoor recreation, and therapeutic values. This is probably to be expected, given that the sample comprises direct visitors to these parks and related areas. Less direct values—values that accrue less directly to individuals but more to society as a whole—constitute a second tier of importance and include the value of ecological integrity to human survival, parks as a scientific resource, and parks as a historical-cultural resource. More abstract values, including parks as an expression of moral-ethical obligation to nature and the spiritual value of parks represent a third tier of importance. The economic value of parks as a source of raw materials and as a tourism-related economic development strategy is clearly rated as relatively low in importance, though

Table 3. Importance of Park Values.

Value	<u>Breadloaf Wilderness</u>		<u>Vermont State Parks</u>		<u>Marsh-Billings National Historical Park</u>	
	Average Score	Rank	Average Score	Rank	Average Score	Rank
Use Values¹						
Aesthetic	1.45	1	1.45	1	1.69	1
Education	1.85	2	2.13	3	2.17	4.5
Recreation	1.93	3.5	1.49	2	3.05	8
Therapeutic	1.93	3.5	2.43	6	2.97	7
Ecological	2.45	5	2.21	4	1.87	2
Scientific	2.56	6	3.23	9	—	—
Intellectual	2.66	7	2.86	7	2.71	6
Historical/Cultural	2.69	8	2.91	8	2.17	4.5
Moral/Ethical	3.16	9	2.32	5	1.88	3
Spiritual	3.46	10	3.75	10	3.47	10
Economic	4.64	11	5.20	11	3.17	9
Temporal Values²						
Use	—	—	1.36	2	1.54	3
Option	—	—	1.45	3	1.83	2
Existence	—	—	1.95	4	1.34	4
Bequest	—	—	1.26	1	1.93	1

1 1="extremely important" 6="not at all important"

2 Vermont state parks: 1="strongly agree" 4="strongly disagree"

Marsh-Billings National Historical Park: 3="strongly agree" -3="strongly disagree"

Table 4. Allocation of Park Values—Vermont State Parks.

Value	Average Percentage of Willingness to Pay
Use Values	
Recreation	28.2
Aesthetic	13.3
Ecological	12.3
Therapeutic	9.2
Moral/ethical	7.5
Educational/scientific	7.1
Economic	7.0
Historical/cultural	5.9
Intellectual	4.9
Spiritual	4.4
Temporal Values	
Use	36.4
Bequest	26.5
Option	25.6
Existence	11.6

its average rating of between “slightly” and “somewhat” important may be surprising.

There are, of course, some exceptions to this general pattern of findings. In particular, visitors to Marsh-Billings National Historical Park rated ecological, moral-ethical and historical-cultural values as considerably more important than did visitors to the other two study areas. This is probably related to the fact that this area was established to celebrate conservation history and environmentally related ideas of George Perkins Marsh and Frederick Billings.

Findings in Table 3 suggest visitors feel that a variety of temporal values are also served by parks and related lands. On average, respondents “agreed” or “strongly agreed” that parks were important for all four

temporal values addressed. However, future-oriented bequest value was consistently rated as more important than the present-oriented use and existence values.

Table 4 presents findings on how visitors to the Vermont state parks allocated their total willingness to pay for state parks among ten use values and four temporal values. The relative ranking of park values derived from this approach is generally consistent with the general importance ratings shown in Table 3. Moreover, all potential values continued to receive some allocation of total value. However, this measurement approach revealed greater variation among values. Recreation value, for example, represented an average of 28.2 percent of total willingness to pay, more than twice as much as any

other value. Similarly, in the temporal dimension, use value represented a substantial plurality of total willingness to pay.

Environmental Ethics. Environmental ethics were measured in two studies, the Breadloaf Wilderness and Vermont state parks. Findings were quite similar in both studies. For this reason, only the Breadloaf Wilderness study findings will be reported.

Study findings for environmental ethics of Breadloaf Wilderness visitors are shown in Figure 1. Data from the 62 environmental ethics statements were subjected to factor analysis as a data reduction technique and to test the validity of the statements as measures of the 16 environmental ethics originally conceptualized. The factor analysis resulted in 17 factors which were quite similar to those outlined in Table 2. However, in the benign indifference category, "religious dualism" was divided into two environmental ethics, "intellectual dualism" (humans are different from the rest of nature due to their rationality) and "human rights" (humans have religiously based rights to use nature). In the stewardship category, "religious duty" and "reverence for life—God's creatures" were combined into a general "religious stewardship" ethic, and "reverence for life—mysticism" was divided into two ethics, "nature as spirit" (nature should be protected because living things have a spirit) and "importance of nature" (nature should be protected because it is important).

Finally, in the radical environmentalism category, "liberalism/natural rights-evolution" and "liberalism/natural rights-ecological processes" were combined into one ethic, "natural rights," and also produced another ethic, "humans in nature" (humans are a part of nature).

Responses to the statements comprising each environmental ethic factor were added to form an index score. Because factors contained unequal numbers of statements, these raw scores were standardized, transforming them to back into the original eleven-point scale. These standardized index scores are the values graphed in Figure 1.

As with park-related values, it is clear that wilderness visitors subscribe to a diversity of environmental ethics. Stewardship-based environmental ethics, particularly as they relate to duties of future generations, along with the general importance of nature, enjoy especially strong support. Strong support for utilitarian conservation ethics—quality of life, ecological survival, and efficiency—is also pervasive across the sample. Radical environmental ethics—ideas that tend to challenge the traditionally anthropocentric Western worldview regarding nature—also tend to be strongly embraced. Environmental ethics comprising benign indifference and anti-environment categories are generally not supported, with the exception of some support for the view of nature as a storehouse of raw materials.

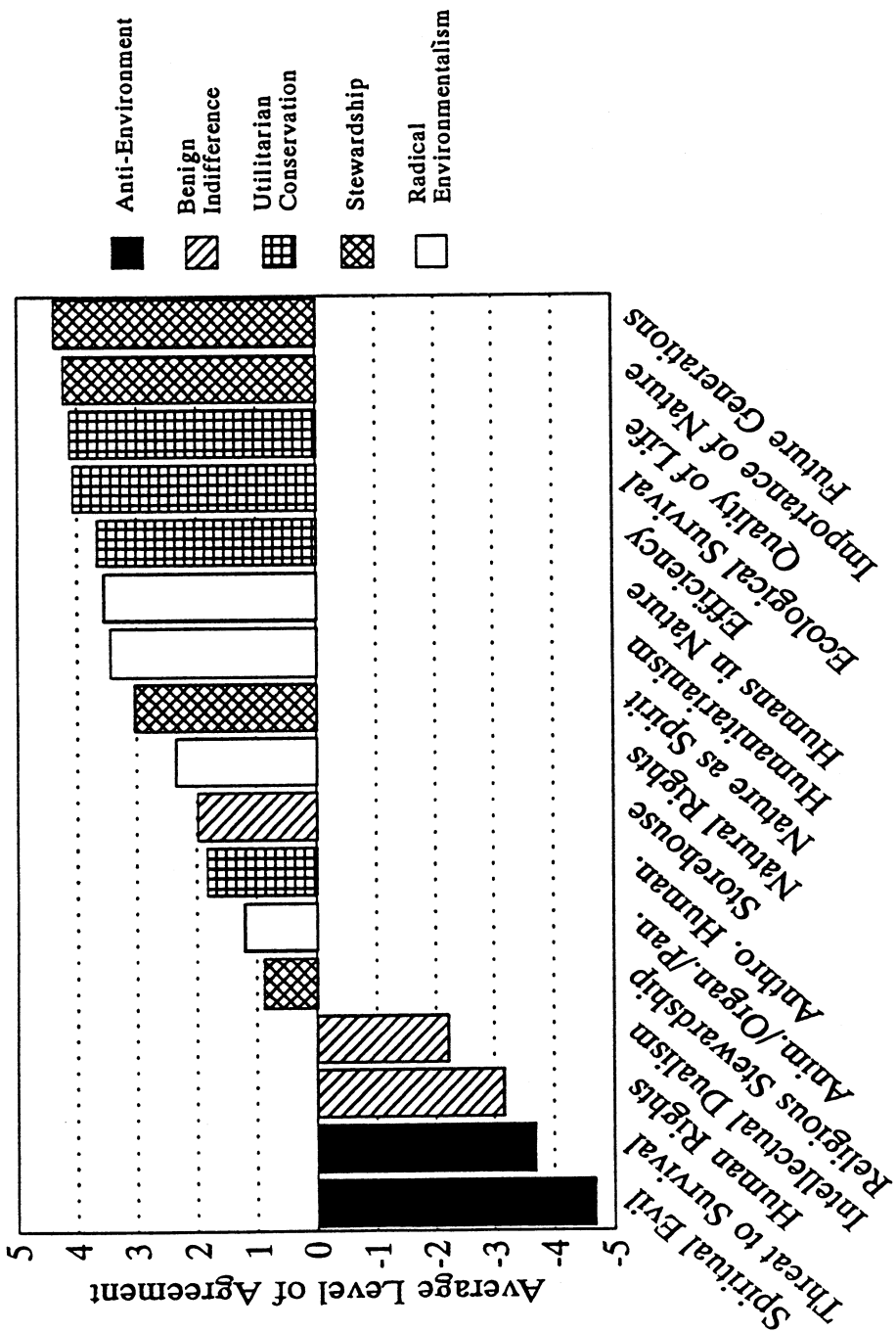


Figure 1. Environmental Ethics Factors.

Conclusions and Implications

Several conclusions and implications are apparent from these study findings. First, it is apparent that environmental values and ethics can be isolated and measured. Traditionally, such environmentally related values and ethics are treated primarily at a conceptual level. However, these intellectual notions can be defined more explicitly, classified, and measured through scale development and associated survey and statistical techniques. While the values and ethics-related classification systems and measurement scales are certainly subject to continued refinement, they suggest that an empirical approach to these issues can be potentially productive and useful.

Second, it is clear that visitors value parks and related areas for many reasons. Direct or individually related values such as recreation and aesthetic appreciation tend to be rated as most important. However, less direct or more socially related values, as well as more abstract values such as ecological protection and expression of a moral-ethical obligation to nature, are also rated as important, and in fact may make up a majority of total park value. Findings regarding value in the temporal dimension follow a similar pattern. Current use value is rated as most important, but future-oriented values, including bequest and option values, are also rated as important and may, in fact, compose the majority of total park value.

Third, it is also clear that park visitors subscribe to an array of environmental ethics. These ethics can be described as both anthropocentric (including stewardship and utilitarian notions) and biocentric (including notions of radical environmentalism).

Fourth, a common theme across the findings is the future-oriented thinking of respondents with regard to parks. Future-oriented values—option and bequest—are consistently rated as important and may even compose the majority of temporal park values. Moreover, stewardship of nature for the sake of future generations was consistently the most strongly supported environmental ethic.

Several park management implications arise from these findings. First, conflict over park management may become increasingly intense. The diversity of park values and environmental ethics found in these studies suggests that parks and related areas are subject to multiple demands and that some of them may inherently conflict. Use of parks for recreation, for example, causes some ecological impact. This may, in turn, be antithetical to the value of parks as an expression of moral-ethical obligation to preserve nature or to the value of parks as a scientific resource. Similarly, the mix of anthropocentric and biocentric environmental ethics may present competing and potentially conflicting demands on park management.

Second, the above ideas may suggest a more comprehensive and systematic approach to park policy. Some parks, because of their characteristics or the demands made upon them, may be more appropriately managed to emphasize selected values or to reflect selected values and environmental ethics. The types of data developed in these studies may begin to provide an empirical basis for formulation of such systematic park policy.

Third, it may be wise for park managers to be increasingly cautious about ecological impacts to park resources. Many of the values of parks identified in this study are heavily dependent upon maintaining the ecological integrity of parks. Moreover, many of the environmental ethics identified are biocentric and future-oriented. These ethics are also highly dependent upon maintaining ecological integrity. By so doing, parks can best meet the multiple demands placed upon them by contemporary society.

Finally, it should be noted that these studies focus on park visitors only. Parks are societal resources, and their management should reflect the broad spectrum of the population. Through institutions such as the National Park System and the National Wilderness Preservation System, it is clear that the American public at large generally supports parks and related reserves. But what values and ethics underlie such support? It might be hypothesized that this segment of the population would support less direct, more biocentric, and more future-oriented values and ethics even more strongly than park visitors. After all, this segment of the population does not partake in the more direct, more anthropocentric, and more current-use values such as recreation. If this is the case, then even more management emphasis should be placed on protecting the ecological integrity of parks and related areas.

This research was supported in part by the McIntire-Stennis Forestry Research Program, the National Park Service, the Vermont Department of Forests and Parks, and the North Central Forest Experiment Station.

Literature Cited

- Bailes, K.E. (ed.). 1985. *Environmental history: Critical issues in comparative perspective*. Lanham, Massachusetts: University Press of America.
- Brennan, A. 1988. *Thinking about nature: An investigation of nature, value, and ecology*. Athens: University of Georgia Press.
- Callicott, J.B. 1995. *Earth's insights: A survey of ecological ethics from the Mediterranean Basin to the Australian Outback*. Berkeley: University of California Press.

- Des Jardins, J. 1993. *Environmental ethics: An introduction to environmental philosophy*. Belmont, California: Wadsworth.
- Dillman, D. 1978. *Mail and telephone surveys: The total design method*. New York: John Wiley & Sons.
- Elliot, R., and A. Gare (eds.). 1983. *Environmental philosophy*. University Park: Pennsylvania State University Press.
- Glacken, C.J. 1956. *Traces on the Rhodian shore*. Berkeley: University of California Press.
- Hargrove, E.C. 1989. *Foundations of environmental ethics*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Merchant, C. (ed.). 1993. *Major problems in American environmental history*. Lexington, Massachusetts: D.C. Heath.
- Nash, R. 1983. *Wilderness and the American mind*. New Haven, Connecticut: Yale University Press.
- . 1989. *The rights of nature*. Madison: University of Wisconsin Press.
- Petulla, J. 1988. *American environmental history*. Columbus, Ohio: Merrill.
- Rolston, H. 1986. *Philosophy gone wild: Essays on environmental ethics*. Buffalo, New York: Prometheus Books.
- . 1988. *Environmental ethics*. Philadelphia, Pennsylvania: Temple University Press.
- Simmons, I.G. 1993. *Environmental history: A concise introduction*. Cambridge, Massachusetts: Blackwell.
- Stone, C. 1987. *Earth and other ethics: The case for moral pluralism*. New York: Harper & Row.
- Taylor, P. 1986. *Respect for nature: A theory of environmental ethics*. Princeton, New Jersey: Princeton University Press.
- Van DeVeer, D., and C. Pierce. 1994. *The environmental ethics and policy book*. Belmont, California: Wadsworth.
- Worster, D. 1977. *Nature's economy: A history of ecological ideas*. Cambridge, Massachusetts: Cambridge University Press.
- . 1993. *The wealth of nature: Environmental history and the ecological imagination*. New York: Oxford University Press.
- Zimmerman, M. (ed.). 1993. *Environmental philosophy: From animal rights to radical ecology*. Englewood Cliffs, New Jersey: Prentice Hall.



Robert E. Manning, William A. Valliere & Ben A. Minteer, School of Natural Resources, University of Vermont, Burlington, Vermont 05405

Should Wilderness Areas

Become Biodiversity Reserves?

The twenty-first century is just around the corner. That calls for reflection and reassessment of the conservation philosophy that has governed the management of public lands in the United States since the late nineteenth century. As jurisdictions, the national forests, range lands, and parks didn't just happen. They were deliberately created. For a reason. But, over a century, new thinking can emerge that challenges the *raison d'être* of old institutions. I reviewed the thinking of the giants of twentieth-century conservation philosophy—John Muir, Gifford Pinchot, and Aldo Leopold—in an earlier issue of *THE GEORGE WRIGHT FORUM* (Callicott 1993). Here I would like to supplement that discussion with a sharper focus on the *raison d'être* of wilderness areas in the public domain.

During the 1980s the “crisis discipline” called conservation biology emerged. The crisis that it aims to address is the precipitous and accelerating loss of species, or, more generally and abstractly, the loss of biological diversity at every level of organization—of genetic diversity within populations, of diverse populations within species, of various species, of diverse assemblages of species populations (biotic communities), landscape-scale diversity, and diverse biomes. Conservation biology has quietly transformed the agenda of conservation *from* either conserving natural resources (“wise use,” etc.) or conserving pristine Nature (“wilderness preservation”) *to* conserving biological diversity (or “biodiversity” for short).

The utilitarian Pinchot philosophy of conservation—summed up in the maxim, “the greatest good for the

greatest number for the longest time,” and in the general policy of “maximum sustained yield” of “natural resources”—is easy to criticize, but hard to kill. Though anthropocentric, reductive, and based on a pre-ecological scientific paradigm, extractive resourceism is still very much alive in the USDA Forest Service and most other federal and state land management agencies. After I also criticized the once sacrosanct (in environmentalist circles) Muir philosophy of conservation—wilderness preservation—here and elsewhere, the floodgates have opened and a torrent of criticism has washed over the wilderness idea, finally cresting in a recent *New York Times Sunday Magazine* article, “The Trouble with Wilderness,” by environmental historian Bill Cronon (1995).

And just what is wrong with the wilderness idea? In the fourth num-

ber of the tenth volume of the FORUM I wrote:

Muir's philosophy of wilderness preservation is equally obsolete. First, no less than Pinchot's, it perpetuates the pre-evolutionary strict separation of "man" from "nature." [Pinchot had infamously declared, "There are two things on this material earth, people and natural resources."] It [preservationism] simply puts an opposite spin on the value question, defending bits of innocent, pristine, virgin nature against the depredations of greedy and destructive "man." Second, it ignores the presence and considerable impact of indigenous peoples in their native ecosystems. North and South America had been fully inhabited and radically affected by *Homo sapiens* for 10,000 or more years before European discovery (Denevan 1992). And third, it assumes that, if preserved, an ecosystem will remain in a stable steady-state, while current thinking in ecology stresses the importance of constant, but patchy, perturbation and the inevitability of change (Botkin 1990).

We have to be very careful, here, however, not to throw the baby out with the bath water. The *idea* of wilderness that we have inherited from Muir and his successors—Sigurd Olson, Robert Marshall, David Brower, et al.—may be ill conceived, but there's nothing whatever wrong with the *places* that we call wilderness, except that they are too small, too few and far between, and, as I

shall directly explain, mostly mislocated. Those who have long campaigned for wilderness preservation (Noss 1994, Foreman 1994) are concerned lest honest, friendly critics of the wilderness *idea*, such as Cronon and I, give unwitting aid and comfort to the real enemies—the likes of Rush Limbaugh, Ron Arnold and the "Wise Use Movement," the congressional delegation from Alaska, and the rest of the shock troops in the Newt Gingrich-led Republican Revolution—of designated wilderness *areas*. It is incumbent, therefore, on well-intentioned critics of the received wilderness idea to offer something positive with which to replace it.

And what might that be? In my earlier FORUM article I emphasized one half of a whole answer to that question. Following the lead of the twentieth century's third towering figure in conservation philosophy, Aldo Leopold, I stressed our need to find ways to inhabit and use nature that are at the same time ecologically benign. Examples abound of past human cultures that lived in harmony with their non-human neighbors (Gomez-Pompa and Kaus 1988). On the other hand, some species—most obviously large predators—do not coexist well with *Homo sapiens*. If members of such species are to have a place to live, then sustainable inhabitation and use of *most* places must be complemented by setting aside *some* places in which human inhabitation and use are either prohibited or severely restricted.

Such places are designated wilderness *areas*. In addition, however, to the above-noted conceptual problems with the received wilderness *idea*, the system of wilderness areas that we have inherited from our forebears only accidentally serves the vital habitat needs of endangered species—because wilderness areas were created with purposes other than biological conservation in mind. A review of the preservationist literature from the mid-nineteenth to the mid-twentieth century indicates that most traditional preservationists were not concerned primarily with providing habitat for members of those species that do not coexist well with people, but with such things as the recreational, scenic, and spiritual values of the human *experience* of wilderness. And just such values informed wilderness preservation policy. Hence, designated wilderness areas were selected, not because they were particularly rich or diverse in species, but for their recreational, scenic, and spiritual potential.

One institution, the zoological garden, that we have inherited from our forebears has been quick to adapt to the changed agenda of conservation—as redefined by conservation biology. Capturing and displaying wild animals appears to be as old as civilization itself; “the first known large collections were assembled in Egypt around 2,500 B.C.E.” (Dunlap and Kellert, 1995:184) Modern zoos that display exotic animals from far-away places to a curious public became an urban commonplace in the

nineteenth century A.D. Gawking at animals, imprisoned like criminals behind bars, was what, until very recently, zoos were all about. When wildlife cinematography began routinely appearing on television, people could see moving images of animals in the wild. By comparison, the incarcerated zoo animals, in their cramped and barren cages, appeared lethargic, forlorn, unhealthy, and incomplete. Simultaneously, animal welfare and environmental ethics came on the scene. Rather suddenly, the very existence of zoos has become morally problematic (Fox 1990). To survive, zoos had to change.

One response was to simulate the natural habitats of the inmates, displaying mixed-species groups of animals in open, landscaped compounds, secured by moats, rather than bars. But conservation biology was the real godsend for the public relations problems of zoos. Zoos contribute to conservation biology in several ways (Luoma 1987). They provide subjects and facilities for biological research. For some highly endangered species whose natural habitats are engulfed by the deluge of human overpopulation, zoos are arks, havens of last resort. More generally, a consortium of American and European zoos participate in a program of Species Survival Plans that features not only maintaining viable populations of threatened species, but also maintaining genetic variability in captive species populations through scientifically sophisticated captive breeding. The ultimate goal

of this program is to reintroduce zoo-bred animals into the wild—if and when enough of their habitat can be reclaimed and restored. Finally, taking advantage of the fact that people still flock to zoos in great numbers for family entertainment, zoos are attempting subtly to educate their patrons about the biodiversity crisis and the dire necessity for biological conservation.

Zoos play an important role in what conservation biologists call “*ex situ*” (off-site) conservation. (Other *ex situ* conservation institutions, such as the International Crane Foundation, also exist—originally created not to exhibit but to help conserve threatened species.) What conservation biologists call “*in situ*” (on-site) conservation is by far the preferred approach, *ex situ* conservation being to an endangered species somewhat as intensive hospital care is to a gravely ill organism. Life in a hospital with no hope of going home is a living death. Similarly, a species’ existence solely in zoos, with no hope of a return to the wild, is a living extinction. Here’s another analogy. Designated wilderness areas are, I suggest, to *in situ* biodiversity conservation, what zoos are to *ex situ* conservation. But just as zoos had to remake themselves to function as *ex situ* conservation institutions, so wilderness areas also need a make-over to function as *in situ* conservation institutions.

How then does conservation biology change wilderness policy? We can get a start on answering that question by reviewing how zoos have

been changed by conservation biology.

The first order of business is a name change. The old Bronx Zoo in New York City has been renamed. It is now the “Wildlife Conservation Park.” The director of the National Zoo in Washington D.C., Michael Robinson (1989), has proposed “biological park” as a new generic name for the institutions formerly called zoos. What’s in a name?, Shakespeare asked. Rather a lot. Names are fraught with all sorts of associations. Baggage. (That’s why some women don’t like to be called “ladies.”) The name “zoo” conjures images of animals in cages—there to be stared at, fed Crackerjacks and other snacks, teased, and such. “Biological conservation park” puts patrons on notice that the place they are visiting has a higher calling than some site for public amusement on the same scurrilous level as a circus tent or dog track. I suggest we rename wilderness areas “biodiversity reserves.” That would put patrons on notice that the back country in the national parks and forests doesn’t exist primarily for the enjoyment of trekkers, climbers, canoers, campers, and solitude seekers—as wilderness advocates argued from the mid-nineteenth to the mid-twentieth century—but for the nonhuman inhabitants of such places.

On the other hand, zoos have not closed their gates to the public. Far from it. People still patronize erstwhile zoos—in record numbers—most of them completely oblivious to

the fact that they are visiting not zoos but biological conservation parks. Any thoughtful and tasteful visitor to a remodeled biological conservation park will immediately notice that exhibits have become more spacious, natural-looking, and ecologically informed. But the conservation agenda of biological conservation parks takes priority over the public entertainment agenda, despite the fact that the vast majority of the public is there to do some good old-fashioned gawking at charismatic megafauna, not to be educated about the biodiversity crisis and such things as the genetic niceties of captive breeding. The silverback mountain gorilla that patrons may have come especially to admire just may be on loan to another facility in hopes that he will romance a female of his species located there. Or, at that other facility, the courting couple may not be on display to the public so as to allow them the privacy they require to consummate their union. If so, too bad. Patrons will be informed of the reason for their disappointment and will have to be content with just knowing that their favorite exhibit is temporarily serving a higher purpose. Similarly, in the Yellowstone or Glacier biodiversity reserves (or, as they are now still called, wilderness areas), backpackers might just have to be excluded from grizzly bear or gray wolf habitat altogether if their recreational activities prove to be in conflict with the conservation of these beleaguered species. More controversially—though personally I do not see why it should be—if the needs of

bears and wolves in national forest biodiversity reserves (a.k.a. wilderness areas) are in conflict with nearby livestock grazing, biological conservation should take precedence, in my opinion.

It would be hard to argue that the old zoos were not located in the right places. If properly designed and managed, London is as good a place as New York for a biological conservation park, and San Diego is as good as Chicago. Unfortunately, designated wilderness areas are not always located in the best places to perform their newfound and overriding conservation function. In the blunt characterization of one unregenerate wilderness advocate, much of the wilderness system in the United States, for all its stupendous glory, is rock and ice (Foreman, 1991). But it's a start. The Yellowstone Biodiversity Reserve (as it might be renamed) should be expanded to become coextensive with the Greater Yellowstone Ecosystem and connected up with the Selway-Bitterroot, Frank Church River of No Return, and other proximate wild lands. Politically impossible, you may be thinking. That's part of what's wrong with the wilderness label. It pits the politically anemic historic rationale of wilderness preservation (recreation and aesthetics for an elite few) against the politically more robust claims of jobs and profits. Preserving biodiversity is a more universal and higher-minded conservation aim than the provision of outdoor recreation and monumental scen-

ery—which can be made to look like a government-subsidized luxury for social misfits by a congressional demagogue, with a little help from his or her spin doctors. And, unlike traditional wilderness areas—which are partly defined in terms of the absence of “man” and “his works”—all human economic activity need not be ruled out, by definition, in biodiversity reserves. Under certain circumstances, selective logging, regulated hunting, and careful mineral extraction might be made compatible with *in situ* Species Survival Plans.

The next step is to establish biodiversity reserves in the places that are biologically rich but scenically poor, and that thus got overlooked by the historic wilderness preservation movement. Three general categories of places appropriate for biodiversity reserve designation come to mind. First, representative biomes with their characteristic species. The biome most neglected by the waning twentieth century’s North American wilderness preservation movement is surely the Great Plains. No monumental scenery, no wilderness designation. The plains are sufficiently vast, sparsely populated, and climatically diverse to warrant the establishment of a whole network of biodiversity reserves from Alberta to Chihuahua. Second, what conservation biologists call “hot spots”—areas of particularly rich biodiversity (which often occur at the intersection of biomes)—are obvious candidates for designation as biodiversity reserves (Lydeard and Mayden 1995). Third,

unique ecosystems, such as the Florida Everglades—the most threatened ecosystem in the United States, according to a recent Defenders of Wildlife assessment.

A pipe dream? Maybe; maybe not. The Republican Revolution in Congress may fizzle between the writing and publication of this article. You can’t fool all the people all the time. The populism of the anti-environment far right is a sham. Who gets represented and who gets their legislative agenda enacted is who contributes big bucks to the campaign coffers. The cynical bet is that those who merely vote can be manipulated. But tax breaks and government subsidies for the rich and ripoffs for everyone else can’t play for too long in Peoria or anywhere else in a healthy democracy. A militant minority—big ranching, big mining, big drilling, big logging, big real estate development—are the instigators and beneficiaries of the current effort in Congress to sell out the environment and literally sell off our public domain. I don’t think it will fly much longer. In the meantime, hopefully, the current public and academic debate about the fate of endangered species, the wilderness idea, and the environment in general will mix some new and creative thinking with the venerable American traditions of nature conservation and preservation. And, hopefully, the twenty-first century will be characterized by a more serious and coherent conservation agenda than its predecessors.

References

- Botkin, D. B. 1990. *Discordant Harmonies: A New Ecology for the Twenty-first Century*. New York: Oxford University Press.
- Callicott, J. B. 1993. Sustainability in historical-philosophical context. *The George Wright FORUM* 10 (4): 26-33.
- Cronon, W. 1995. The trouble with wilderness. *New York Times Sunday Magazine*, August 13: 42-43.
- Denevan, W. M. 1992. The pristine myth: the landscape of the Americas in 1492. *Annals of the Association of American Geographers* 82: 369-385.
- Dunlap, J., and S. R. Kellert. 1995. Zoos and zoological parks. In: W. R. Reich, ed., *Encyclopedia of Bioethics*, Vol. 1: 184-186.
- Foreman, D. 1991. Dreaming big wilderness. *Wild Earth* 1 (spring): 10-13.
- . 1994. Wilderness areas are vital: A response to Callicott. *Wild Earth* 4 (winter): 64-68.
- Fox, M. W. 1990. *Inhumane Society: The American Way of Exploiting Animals*. New York: St. Martin's Press.
- Gomez-Pompa, A., and A. Kaus. 1988. Conservation by traditional cultures in the tropics. In: V. Martin, ed. *For the Conservation of the Earth*. Golden, Colo.: Fulcrum.
- Lydeard, C., and R. L. Mayden. 1995. A diverse and endangered aquatic ecosystem of the southeast United States. *Conservation Biology* 9:800-805.
- Luoma, J. R. 1987. *A Crowded Ark: The Role of Zoos in Wildlife Conservation*. Boston: Houghton Mifflin.
- Noss, R. F. 1994. Wilderness—now more than ever: A response to Callicott. *Wild Earth* 4 (winter): 60-63.
- Robinson, J. G. 1993. The limits to caring: sustainable living and the loss of biodiversity. *Conservation Biology* 7:20-28.
- Robinson, M. 1989. Zoos today and tomorrow. *Anthrozoos* 2:10-14.



J. Baird Callicott, Department of Philosophy and Religion Studies, University of North Texas, Denton, Texas 76203

Beyond Preservationism

Without defending the point, it is fair to claim that America's national parks have been legitimated by and managed within the framework of preservationist philosophy (cf. e.g., Sax 1980). Whatever the merits of preservationism, I wonder if this philosophy is adequate today? Does it enable a bridge from where we are now, living in a world (including the national parks) that is being swallowed by a tidal wave of human beings, to a world where "carrying capacity" has become an operational principle? Does it exhaust the cultural potential of the national parks, which on the preservationist account are little more than islands of exotic flora and fauna set in unhumanized terrain, psychic refuges for citizens seeking respite from the "quiet desperation" of ordinary life, and ecological anachronisms in a world headed for total domestication? Does the preservationist philosophy also create an illusion that a few set-asides are enough to protect wilderness values and check the process of humanization? Is preservationism, generally, too limited a philosophy for these difficult times?

Perhaps preservationism is no longer entirely adequate, because the relative scale of culture and nature has changed. Nature once seemed limitless, infinitely resilient to human insult. No longer. Popular writers declaim the end of nature. And scientists have coined a new term, "the anthropogenic biosphere." No longer is the human species merely one among many, loosely coupled with the flora and fauna. We are closely coupled: the sheer mass of humanity, some conservation biologists contend, is an ecological aberration. We perch on the precipice of an anthropogenic mass extinction (Wilson 1992). And we are replacing natural ecosystems evolved over thousands, even millions of years with artificial schemes. In a phrase,

time is out of joint. This reality calls the adequacy of the preservationist philosophy into question, and all the more so as a guide to the management of the parks.

If time is out of joint, then what functions might the national parks play in restoring synchronicity? Is it enough simply to have set-asides open to all Americans to pursue recreational ends? To simply claim that the national parks are crucially important to America's sense of itself seems ingenuous: no other nation has so many. Yet no other nation contributes more to the malaise of the earth. Further, is there any reason to think that the national parks themselves escape the insufficiencies of the modern world? And how is it that I can justify my belief that the men and

women who manage the national parks are in a position to resist, to overcome those insufficiencies, and through their leadership help the parks become part of the means by which culture heals itself?

Time is Out of Joint

I begin with some criticisms of the national parks. No doubt the readers of THE GEORGE WRIGHT FORUM are aware of the ecological shortsightedness of yesterday's management policies, the hordes of visitors that overrun even the largest parks, the commercial interests outside park boundaries whose activities adversely affect habitat inside, and the budgetary shortfalls created by a Congress that further squeezes a park system already in dire financial straits. So I will be brief. The dominant strain of criticism goes roughly like this: whatever the illusion of naturalness and wildness created for visitors to the national parks, and whatever the veneer of legitimacy created by preservationism, the stark reality is that they have become little more than playgrounds, farms, and prisons. Thus national parks represent simply an extension of the idea that nature is nothing more than a stockpile of resources for exploitation by Man.

As *farms*, our national parks are placed under the control of an agricultural elite, trained in the ways of resource management, including wildlife and forestry. The ideas that our national parks might yet be self-sustaining enterprises, that their pro-

cesses are not inherently linear and predictable, and that nature knows best are concealed behind the managerial impulse. As *playgrounds*, parks become a resource for a multi-billion dollar industry that first creates and then satisfies the demand for "wilderness experience." Again, these lands must be placed under the control of an elite trained in tourism and recreation. These individuals must devise operating plans so that the national parks deliver wilderness experiences, including scenery, to the consumerist masses who come *incognito* as tourists. As *prisons*, the national parks are constrained within the ideological walls of Man. Just as walls of concrete and cells of steel hold human miscreants not fitting within the domestic domain, so park preserves fence in the not-yet-totally-domesticated, the rough lands and wild animals outside civilization.

Viewed as farms, playgrounds, or prisons the national parks represent a kind of bad faith at the ideological heart of modern culture—a discourse of power hidden within preservationist ideology. So framed, the national parks are hyper-realities that deceive us into thinking that we are conserving the land and wild creatures when in fact they conceal the gesture of continued domination. Such simulacra displace the possibility of truly wild, chthonian beings and wild ecosystems not subject to human constraint. As farms, playgrounds, or prisons the national parks conceal the awesome reality of life, a nature subject to its own imperatives, rather

than an object, subject only to human control.

These criticisms do not imply that the national parks are intrinsically flawed so much as suggest that they have not escaped modernity. Gadamer (1976) argues that modern society "clings with bewildered obedience to scientific expertise, and the ideal of conscious planning and smoothly functioning administration dominates every sphere of life even down to the level of molding public opinion." By contextualizing the national parks as farms, playgrounds, and prisons, critics raise questions about the legitimacy of managerial authority. The manager's stock in trade, of course, is conjuring the illusion that "I am in control." Ed Abbey (1988) observes that we are "coming so close to the end [of the process of humanization] that we can easily foresee an American state, inhabited by our children, in which swamp and forest, desert, seashore, and mountain are nothing but recreational parks for organized tourism." Managed farms that guarantee a continuing supply of animals and plants that constitute scenery; managed recreational areas that entertain, amuse, and otherwise provide a spectacle for consumers; managed prisons that constrain unruly animal Others who, if not totally domesticated, are rendered into harmless simulacra, mere resemblances of wild animals.

Beyond Preservationism

Almost 90 years ago, when the American national parks were still

feeling the pangs of birth, John Muir wrote that

like everything else worth while, however sacred and precious and well-guarded, they [the national parks] have always been subject to attack, mostly by despoiling gain-seekers—mischievous-makers of every degree from Satan to supervisors, lumbermen, cattlemen, farmers, eagerly trying to make everything dollarable, often thinly disguised in smiling philanthropy, calling pocket-filling plunder "Utilization of beneficent natural resources, that man and beast may be fed and the dear Nation grow great."

Is it possible that today's criticisms are merely refinements of the criticism that Muir made of strong anthropocentrism? Lord Man, as Muir named strong anthropocentrists, through a combination of religiously inspired arrogance, economic greed, and sheer ignorance, was grandly indifferent to the web of life. Strong anthropocentrism, to make a complicated story too simple, draws a metaphysical dividing line between Culture and Nature, between the province of Human Meaning and Goodness and Reason and all the rest of Creation, which exists only to serve Man. This characteristic attitude was and remains among the strongest of our cultural narratives.

Insofar as this thesis is plausible, then there is little reason to think that park managers should escape strong anthropocentrism, for they are first and foremost members of Western

culture. The wonder and terror of the human predicament, as sages remind us, is that we are almost inextricably caught in the grip of Mother Culture. Can there be any surprise, then, that the national parks have too often become farms, playgrounds, and prisons? For Lord Man controls all. Or does he? Does the stark reality that time is out of joint, that our very cultural success now threatens to destroy the biogeophysical processes with which our existence is fundamentally entwined, call into question such a notion of control?

For Muir, "control" was an illusion dispelled by biocentrism, a perspective rooted partly in science and partly in wilderness experience. Biocentrism challenges strong anthropocentrism: when Muir (1901) writes that "going to the woods is going home; for I suppose we came from the woods originally," he is affirming that whatever humankind might be, our essential human beingness remains tied to the rest of creation (see Oelschlaeger 1991). Such a biocentric orientation erases metaphysical boundaries between Nature and Culture. It also challenges us to reconceptualize the cultural significance of the national parks. From this radical perspective, the notion of national parks as set-asides—to be managed on the basis of preservationist philosophy—is tenuous. For Muir, the flowing whole is the ultimate reality: life and death and all other human conceptualizations are ultimately and only comprehensible in the larger context part of everything

else.

Even while recognizing Muir's challenge to strong anthropocentrism, we must bear in mind that we human beings can never be other than what we are. We can only have a human perspective—the recognition of which is "weak anthropocentrism." But weak anthropocentrism denies any metaphysical dividing lines between a wild Nature or ecology that is "out there," apart from Culture, and a civilization that humans are "inside," apart from the "out there." Golley (1993) catches the point precisely.

It is not clear to me where ecology ends and the study of the ethics of nature begins, nor is it clear to me where biological ecology ends and human ecology begins. These divisions become less and less useful. Clearly, the ecosystem, for some at least, has provided a basis for moving beyond strictly scientific questions to deeper questions of how humans should live with each other and the environment.

Which is to say, then, that Muir's biocentrism (and other ecophilosophies, such as land ethics) remain human points of view; there is no alternative. But such a philosophy challenges any *human-centered viewpoint*. And it also provides the beginnings of an answer to the critics who have charged that the national parks are nothing more than farms, playgrounds, and prisons. The nub of the criticism of the management of the national parks is that whatever our intentions, we have remained

enframed within the dominant world view of strong anthropocentrism, a human-centered way of thinking which inevitably succumbs to hubris.

Conclusion

In this age of ecosocial crisis where time is out of joint, park managers are not accorded the luxury of doing nothing while contemplating their navels in hopes of achieving a mystical union with all of nature. Manage we must, but from the deeply grounded realization that we humans in all our cultural guises remain attached to and embedded within ongoing biogeophysical processes. But it is an illusion to think that we are in control, as if by setting aside and managing some of nature we have met our responsibilities. Or acted intelligently.

Muir points us in a new direction, where we can cease acting as if the national parks were farms, playgrounds, and prisons. Biocentrism reminds us that our human schemes are not the only schemes of significance on this planet. True, the national parks conform with lines drawn by human beings. In this sense the parks find their definition within and only within a culturally conceived space. But in claiming that we have reduced the parks to farms, playgrounds, and prisons the critics are not objecting to the bounding of the land and creatures within a human scheme of things per se. Rather, it is the attitude that in establishing metes and bounds we have set the land in order, tamed, and put to good

purpose what would have otherwise remained wild, unmanaged, chaotic.

We have thought of the parks in the preservationist frame, as if they were something "out there," apart from our kind and purposes. No doubt, much good was accomplished through preservationism. Yet it remains a part of the modernist frame and the socially prevailing idea of wilderness, construed as unhumanized ecosystems and species, something that is other than civilization. Our national parks should remind us of the artifice of civilization, for the boundaries we establish within the human scheme are too small to contain the magnificence of the biogeophysical processes that created the land and all the creatures over thousands, tens of thousands, and millions of years. More than anything else the critics remind us that the human species does not exist apart from the land and the floral and faunal domains: we are of and about earth.

I have asserted that time is out of joint. But the parks can offer the visitor the opportunity for a wilderness experience that begins to heal the wounds, to close our sense of national history and purpose with the longer and deeper resonances of biogeophysical process, and to heal the rupture between nature and culture, spirit and matter, psyche and soma. No where else is there better opportunity for Americans to cross over the facile boundary between wilderness and civilization, to step outside the frame of ordinary life, to reveal the illusion that we are somehow sepa-

rate from and above the rest of nature. In this perilous time, as industrial civilization verges on a mass extinction of life, a doubling of human population within one hundred years, and global climate change, such an affirmative vision of the role the national parks might play is crucially important. Thus, beyond any role in conservation and preservation, which I might term their ecolog-

ical function, our national parks must serve an educational, even philosophical, function. As Roger Kennedy (1994) recently remarked, "Wilderness is that which lies beyond our anxious self-assertion as humans. It is the present, proximate metaphor for that wider universe which, when we pray, we acknowledge to be beyond even our understanding."

References

- Abbey, Edward. 1988. "Introduction," in Mary Austin, *The Land of Little Rain*. New York: Penguin.
- Gadamer, Hans-Georg. 1976. *Philosophical Hermeneutics*, trans. and ed. David E. Linge. Berkeley: University of California Press.
- Golley, Frank Benjamin. 1993. *A History of the Ecosystem Concept in Ecology*. New Haven, Connecticut: Yale University Press.
- Kennedy, Roger. 1994. Remarks before the 6th national wilderness conference. *6th National Wilderness Conference Handbook*.
- Muir, John. 1901. *Our National Parks*. Boston: Houghton Mifflin.
- . 1988. *John Muir in His Own Words: A Book of Quotations*, ed. Peter Browning. Lafayette, California: Great West Books.
- Oelschlaeger, Max. 1991. *The Idea of Wilderness: From Prehistory to the Present*. New Haven, Connecticut: Yale University Press.
- Sax, Joseph L. 1980. *Mountains without Handrails: Reflections on the National Parks*. Ann Arbor: University of Michigan Press.
- Wilson, Edward O. 1992. *The Diversity of Life*. Cambridge, Massachusetts: Harvard University Press.



Max Oelschlaeger, University of North Texas, Denton, Texas 76203

Rethinking Place, Reinventing Nature

An Environmental Justice Perspective on Managing the Public Lands

What constitutes an environmental perspective on managing the public lands, given the shifting and sometimes contentious discussion of what constitutes environmentalism itself? Environmentalism, we have argued elsewhere, is a complex movement with diverse roots (Gottlieb 1995). Such a perspective extends beyond the traditionalist view of a movement for preservation and/or the management of the natural environment, and seeks to include “where we live, where we work, and where we play,” as environmental justice advocates like to say (Gottlieb 1993). In this view, environmentalism becomes a *place*-centered movement, where the natural environment is no longer separated from the urban and industrial forces that have so influenced changing habitats, changing uses of the land, and changing social environments. A more integrated perspective about human and natural environments—what various analysts have characterized as a “co-evolutionary” (Prugh 1995) or “reinventing Nature” approach (Cronon 1995; Humanities Research Institute 1993)—provides a new departure point for rethinking the question of the public lands as well. Along those lines, this essay seeks to broaden the environmental perspective on the public lands, beginning with a revisionist view of certain key historical figures and movements.

Bob Marshall: The People's Domain

Wilderness Society founder Bob Marshall, although later canonized within mainstream environmentalism as a great outdoorsman and wilderness advocate, was also forceful about the need to make nature a direct part of people's lives. This radical forester proposed a common thread for a movement split between managers and protectors of the natural environment and those defining their environmentalism on the basis of daily life experiences.

During the 1920s, when he worked in various capacities for the Forest Service, Marshall began to view the forests as a necessary retreat “from the encompassing clutch of a mechanistic civilization,” a place where people would be able to “enjoy the most worthwhile and perhaps the only worthwhile part of life.” Marshall quickly became a strong critic of development by private logging companies whose activities had led to a decline in productivity, an in-

crease in soil erosion, and a "ruination of the forest beauty" (Glover 1986).

Marshall's social philosophy, combined with his overarching desire to be in touch with wilderness, eventually led him to criticize the two most prominent public lands agencies at the time, the National Park Service and the Forest Service. He focused on the Forest Service's pro-development positions as well as the Park Service's recreation-oriented policies which sometimes promoted a elite-oriented notion of public access and appreciation of natural environments. The criticism of the Forest Service, spelled out in Marshall's best known work, *The People's Forests*, was tied to his overall critique of *private* forestry and its role in injuring the work force, the community, and the land itself. In this book, Marshall advocated public ownership of forest lands in order that "social welfare" be "substituted for private gain as the major objective for management." To Marshall, that meant a new labor and rural economic development strategy and careful land-use planning, more research and science, and safeguarding recreational values from "commercial exploitation" (Marshall 1933).

Marshall's integrated social justice and environmentalist vision included subsidizing transportation to the public forests; operating camps at nominal cost for low-income people; changing Forest Service practices that discriminated against blacks, Jews, and other minorities; and acquiring

more recreational forest land near urban centers. Ultimately, his linking of the idea of an urban relationship to the natural environment with valuing wilderness as a special place provided a broader, distinctive vision of how to manage the public lands.

The Regional Planning Movement: Place-Based Perspectives

In 1937, Catherine Bauer, then a leader in the regional planning movement, wrote to her good friend Bob Marshall about how wilderness appreciation had become "snobbish," even though the majority of people could enjoy and respect wilderness, given a chance to experience it. Bauer suggested that "factory workers, who experience our machine civilization in its rawest and most extreme form," could most benefit from wilderness and thereby broaden wilderness's political base (Glover 1986).

Bauer's notion of linking urban and industrial constituencies to wilderness advocacy reflected in part the long-standing interest of the regional planning movement in the 1920s and 1930s to overcome the division between urban and rural, as well as human and natural, environments. Led by such figures as Bauer, Lewis Mumford, and Benton MacKaye, the regional planning movement promoted concepts about the reorganization of urban life and its link to natural environments.

Central to this view of an urban-rural, nature-human integration was MacKaye's idea of the Appalachian Trail, incorporating a series of con-

nected cooperative settlements, recreational and educational activities, and wild reservations and parks linked by feeder trails. This vision was essentially based on the idea of regionalism, or region as "place," an integration of city and countryside necessary to make the earth more habitable for those who inhabited it. In the process, MacKaye and the others distinguished between what they called the "overcity," with its cycles of ecological imbalance (reaching farther and farther for water, fuel, food, building materials, and locating distant areas for waste and sewage disposal), in contrast with what MacKaye called the "cosmopolitan city of scale," where jobs and housing would be in greater balance, where roadless highways would complement the recreation trails and wild reservations, and where the potential for community living and cooperative food raising would also suggest a reintegration of urban and natural environments (MacKaye 1962, 1928; Sussman 1976). Though the regional planners never fully succeeded in translating this vision into either permanent policy innovations or in helping specific social movements rethink their agendas, they left an important legacy in the planning domain itself about what constituted a "region."

The Urban Environment Conference: Equity Perspectives

The late 1960s and 1970s witnessed a resurgence of new perspectives on the reintegration of urban life

and the natural environment. Urban greening became both symbol (e.g., Berkeley's People's Park) as well as an arena for action concerning what were called, at the time, "quality of life" issues. Within this arena, equity and justice considerations figured prominently. Regarding public lands issues, groups like the Urban Environment Conference argued forcefully that parks and greening strategies required an urban framework extending beyond the dominant rural and suburban-oriented open-space approaches pursued by mainstream environmental and resource agency organizations. One focal point of such equity-oriented advocacy was the Interior Department's Land and Water Conservation Fund. The Fund's annual matching grant disbursements to the states for recreational and open-space purposes significantly neglected urban and inner-city needs. State governments each year spent only a fraction of their funds for urban parks and other inner-city recreational facilities and open-space acquisitions. The environmental equity advocates insisted that such a redistribution needed to be seen as part of a larger restructuring of the movement in order to "advance an environmentalism that serves both the human condition and the natural systems upon which life depends," as UEC director and former Conservation Foundation head Sydney Howe put it (Center for Growth Alternatives 1975; Burdick 1975). Though the Urban Environment Conference failed to bridge ur-

ban concerns with mainstream environmental and resource management perspectives, they became an important forerunner of the contemporary environmental justice movement, which today actively seeks to broaden the environmental discourse.

An Environmental Justice Approach to the Public Lands: Ten Theses

Each of these historical perspectives resonate when elaborating an equity or environmental justice-based approach to the public lands. Such an approach, we are arguing, requires a different set of assumptions about how to define "the public lands." As part of such an exercise, we are presenting "ten environmental justice theses on the public lands," indicating the paths that can be taken.

1. *Public lands agencies such as the U.S. Forest Service and the National Park Service need active urban programs.* There are a handful of urban-oriented programs, such as the U.S. Forest Service's "Urban Forestry" initiative and USDA's "Urban Resources Partnership," that need to be expanded significantly.
2. *Open-space acquisitions must have an urban component.* There are numerous urban spaces that can be protected as public lands for habitat, greening, or recreational purposes. Efforts should be made to inventory such possible spaces, and strategies should be elaborated, such as through the Land and Water Conserva-

tion Fund, to protect and develop them as "green retreats," to use Bob Marshall's phrase, in the urban environment. At the same time, the recent sharp declines in Land and Water Conservation Fund appropriations need to be vigorously challenged.

3. *Access to open spaces should be a priority.* People with the least access to open spaces and public lands are those without cars, many of whom live in communities woefully deficient in open spaces and green areas. Transit programs for special needs, as provided in federal and state legislation, should include resources and planning strategies for access to green spaces.
4. *Community gardens and edible landscapes are an important component of the public lands.* Community gardens, as urban "green" spaces, provide a wide range of benefits for local residents. They also help redefine what constitutes an urban aesthetic, parallel to the rural aesthetic associated with scenic resource protection.
5. *Urban forestry, such as tree plantings in urban core neighborhoods, needs to be expanded.* Despite widespread recognition that urban trees have significant aesthetic as well as environmental (e.g., air quality) benefits, urban forestry remains a stepchild of local, regional, state, and federal government planning efforts.

Both expanded resources and new policy approaches (e.g., tree plantings as a resale requirement) need to be developed.

6. *Urban waterways, including rivers and wetlands, need to be seen as "green resources" for urban communities.* Too often, many of the pitched battles over the channelizing and cementing of urban rivers or destroying wetlands for new urban development have failed to explore the importance of such rivers or wetland systems as green resources in an urban environment. Programs to manage and reorient such systems as urban green resources need to be developed before their emergence as contested terrain in development battles.

7. *Urban agriculture, including farming in urban fringe areas, needs to be nourished and protected.* The ability to directly access fresh produce in urban areas, including the development and expansion of direct-marketing grower-to-consumer relationships (e.g., farmers' markets) should be a crucial component of an urban public lands approach.

8. *We need to think regionally as well as ecologically about land systems.* Crucial environmental management strategies, such as watershed protection, have often ignored the regional nature of the issues associated with such systems or have superimposed re-

gional management structures that are ill-equipped to address either the ecological or regional issues involved. Watershed management approaches that seek to link protection of resources with urban "downstream" concerns provide a politically strategic entry point for regional management.

9. *Environmental education about open spaces and the public lands also needs a strong urban component.* Understanding "natural" systems, ecological interactions, and other concepts often associated with appreciation of open spaces needs to have an urban dimension, including directly exploring the ecology of urban environments.

10. *The integrity of the public lands concept must be maintained. The frontal assault on the public lands by the Republican-controlled 104th Congress parallels the anti-urban and anti-poor people approaches of those same majorities.* Both need to be vigorously opposed by coalitions recognizing the need to connect urban and environmental constituencies. An environmental justice approach to the public lands provides one type of connection.

One other note on the 104th Congress. The approaches towards the public lands that have emerged during the two past years also contravene certain crucial democratic tra-

ditions that can be traced back to the English concept of the "commons"; that is, publicly shared lands. Uses of the public lands had remained open-ended in terms of this tradition, *as long as such use did not degrade the lands to diminish other uses as well.*

In the context of the development of the American West and elsewhere, uses of the public lands were often differentiated from activities on private lands. Self-interest partially motivated such policies; e.g. private timber owners early in the 20th century supported restrictions on the public lands in order to keep potential competition away from a cheap supply source and thus allowed high prices to be maintained. However, public interest (e.g., resource protections) also framed the public lands-private lands distinction. It was this approach that Bob Marshall so passionately sought to reinvigorate in 1930 with his plea for public ownership and public responsibilities for forest lands.

By the post-World War II period, however, the situation had evolved considerably, with resource depletion combined with globalization trends creating new pressures on public lands management in the push for commercial exploitation. Through the 1950s and 1960s, the extractive industries dominated policy, resulting in far greater numbers of clearcut forests, mining wastes, destroyed grasslands, and polluted water. Environmental policies in the 1970s and 1980s sought to slow

down the pace of development and create tradeoffs in the name of multiple use. New concepts, such as ecosystem management and watershed protection emerged, but often without clear definition and policy direction.

Then came the onslaught after November 1994, with the counterattack launched in the name of takings, deregulation, and private property. Proposals abound in Congress that would dismantle our system of public lands. The traditional distinction between private and public—the notion of the commons—is now being challenged on the basis that any public interest, such as recreational access, is superseded by the so-called private property rights of traditional, extractive users of the public domain. This has involved not simply a "sale to the highest bidder" philosophy but an elimination of all public rights and public responsibilities as well. Yet this frontal attack is occurring at a moment when claims are *increasing* rather than decreasing for public access and public rights regarding the public lands, including claims made in urban settings. In such a context, environmental justice can provide a stronger, broader-based defense of managing the public lands in the public interest. Increasing public access, enhancing urban environments, protecting resources, and valuing the land as an "ecological resource," can indeed become compatible approaches.

References

- Burdick, John M. 1975. *Recreation in the Cities: Who Gains From Federal Aid?* Washington D.C.: Center for Growth Alternatives, August 1975.
- Center for Growth Alternatives. 1975. "Federal Recreation Aid Slight Cities," press release, August 24.
- Cronon, William. 1995. "The Trouble With Wilderness." *New York Times Magazine*, August 13, 42-43.
- Glover, James M. 1986. *A Wilderness Original: The Life of Bob Marshall*. Seattle: The Mountaineers.
- Gottlieb, Robert. 1993. *Forcing the Spring: The Transformation of the American Environmental Movement*. Washington: Island Press.
- . 1995. "Beyond NEPA and Earth Day: Reconstructing the Past and Envisioning a Future for Environmentalism," *Environmental History Review* 19:4 (Winter), 1-14.
- Humanities Research Institute. 1993. "Reinventing Nature," Humanities Research Institute, University of California.
- MacKaye, Benton. 1928. "Regional Planning." *The Sociological Review* 20:1 (January), 18-33.
- . 1962. *The New Exploration: A Philosophy of Regional Planning*. Urbana: University of Illinois Press.
- Marshall, Robert. 1933. *The People's Forests*. New York: Harrison Smith and Robert Hass.
- Prugh, Thomas. 1995. *Natural Capital and Human Economic Survival*. Solomons, Maryland: International Society for Ecological Economics.
- Sussman, Carl. 1976. *Planning the Fourth Migration: The Neglected Vision of the Regional Planning Association of America*. Cambridge, Massachusetts: MIT Press.



Robert Gottlieb, Department of Urban Planning, School of Public Policy and Social Research, University of California at Los Angeles, Los Angeles, California 90095

Louis Blumberg, California-Nevada Regional Office, The Wilderness Society, 116 New Montgomery, Suite 526, San Francisco, California 94105.

Encouraging Environmental Care

A Code of Ethics for Short Hills Park

In 1991, following a lengthy process of broad public consultation, the Ontario Ministry of Natural Resources (OMNR) published a Management Plan for Short Hills Provincial Park, a 688-hectare park located on the southwest edge of St. Catharines in the Regional Municipality of Niagara. The Ministry recognized on the one hand, that there was clear public support for preserving this park as a “wild, natural area, with only very basic facilities to support trail use.”¹ On the other hand, it was equally clear that a wide variety of recreational uses of the park—ranging from hiking, horseback riding, sport fishing, cross-country skiing, mountain biking, nature and heritage appreciation, as well as outdoor education—were to continue.²

The common ethical dilemma of how to reconcile ecocentric and anthropocentric needs surfaced in the Ministry’s recommendations. The Plan concluded that there was a need to explore ways of satisfying both environmental and human needs. On the one hand, the park’s significant natural features unique to the Niagara escarpment deserved to be protected. On the other hand, a variety of “high quality, day-use recreational and interpretive experiences” were also to be accommodated.³ Due to the variety of uses of the park and because some conflict over trails had already been evident, the Ministry’s goal was to seek ways to “minimize conflict between trail users” themselves.⁴

Traditional ways of minimizing social conflict and environmental disruption often amount to policing procedures, and to use of essentially

negative reinforcement techniques and punishment of behavior. So, for example, fines may be administered for littering, or for overnight camping within Short Hills; or, as with the new Management Plan, specific user groups (snowmobilers and motorcyclists in this case) may now be excluded from the park by law.

Planner Oscar Newman reminds us, however, that the root of the word “policing” is “polis,” meaning community.⁵ Certainly, assigning a Park Warden to control behavior within Short Hills Provincial Park may be necessary, but it is not in itself a sufficient condition of ensuring acceptable behavior within the park. Studies have shown that for many (perhaps the majority) of park users, prompts, cues, information dissemination, and better education about behavior expectations, naturally regulated by

members of the community, also encourage constructive activities and help to restrict potential friction between park visitors.⁶

It is in this spirit of pursuing such methods of *positive reinforcement* of responsible behavior, that a Code of Ethics was drafted for visitors to Short Hills Provincial Park.⁷ It has evolved in consultation with hikers, equestrians, bikers, and lovers of the park. At one of the workshops convened during the course of the study, a Friends of Short Hills group has been struck; they are currently investigating means of implementation and communication and dissemination of the code to park visitors.

To our knowledge, such park-centered codes of ethics are rare to the point of being nonexistent in Ontario, and even in Canada. (Some moral imperatives may find their way into general introductory visitor brochures, but not in a self-contained, unified format.) It is true, as David Johnson notes, that "unlike most other aspects of human existence, [enjoyment of outdoor activities] does not have a long-established, tight code of laws regulating it. Rules are still few and loose."⁸ It is precisely on account of this degree of freedom, however, that there may be a need for a level of ethics "considerably higher" than in more naturally restrictive settings, and with more heavily socially or politically monitored activities. Perhaps the time is right to seek to encourage responsible behavior and environmental care in our parks, with the guidance of codes of ethics. In-

deed, this is the argument of the present paper.

What is a Code of Ethics —And Why Do We Need One?

In very general terms, a code of ethics is a written articulation of moral guidelines, designed to lead to minimally acceptable standards of human conduct. A survey of the current literature on ethical codes suggests that, as an expression of general agreement on shared beliefs, a code should:

- Serve to provide a *common vocabulary* about what is right and what is wrong;
- Offer a thoughtful *framework for conflict resolution* and policy development;
- *Clarify ethical issues* and help to resolve disagreement about moral dilemmas, thereby seeking to decrease, if not eliminate, unethical practices;
- *Impose some constraints* on individual behavior;
- *Reduce uncertainty* as to ethical and unethical courses of action;
- *Suggest some course of action* to follow up on charges of unethical conduct;
- *Facilitate improved cooperation* among interested parties, by enhancing mutual ethical understanding of norms of action; and
- *Promote environmental awareness*, by sensitizing the public to shared social and environmental values.⁹

There is some disagreement among academics, policy makers and practitioners, about the usefulness of codes of ethics. Some of the common complaints made about ethical codes include the following:

- They are little more than “*window-dressing*” and “*public relations gimmicks*” which are designed to impress outsiders but are not taken seriously by practitioners.
- They are *too abstract*—too broad, and difficult to apply in specific situations.
- If they manage to express consensus, then they end up being *too vague* and too weak in their provisions; as a result, they provide little practical guidance.
- They may be *counterproductive*, if they formalize the very status quo which they are only apparently attempting to change.
- They are *difficult to enforce*, because they are often not covered by law.
- They are *unnecessarily restrictive* on individual rights and freedom of choice.
- They *unnecessarily complicate matters of management*, by introducing new rules and standards to be enforced.
- They are *ineffective* in handling systematic corruption.¹⁰

It is important to acknowledge that any code of ethics may be potentially subject to the above criticisms. Indeed, in this vein, even the most energetic defenders of codes of ethics rec-

ognize that codes are not a cure-all for every sort of unethical behavior. Nevertheless, particularly in conjunction with other forms of environmental education, written standards can and do help to clarify and resolve ethical dilemmas. Many of the above dangers and complaints directed towards codes of ethics can be avoided through careful formulation and competent administration of codes. In this respect, the goal must not be to avoid formulating ethical codes, but on the contrary, to do so conscientiously, prudently, while remaining mindful of the potential pitfalls.

In the case of Short Hills Provincial Park, we recognized that one way of avoiding the risk of constructing an abstract and ultimately irrelevant code was to maintain open lines of communication with the community. The initial stages of the study consisted of a dialogue with community members regarding the very issue of the feasibility of a moral code for encouraging ethical social and environmental interactions. A mail-out questionnaire to approximately 90 individuals collected information on whether organized groups already relied upon their own code of ethics, and whether they could identify sources of conflict in the park. In-depth, one- to two-hour interviews were scheduled with a select group of individuals, representing a cross-section of organized visitor groups identified in the park. A workshop was held in June 1993 at Brock University to bring these groups together

to discuss the potential of a common code of ethics to help resolve issues relating to social and environmental conflicts within the park.

Individual codes of ethics were obtained from hiking, equestrian, cyclist, motorcyclist, ski-doo, and naturalist associations. At the same time, there was overwhelming consensus in support of the need of a *common* code of ethics, directed specifically to integrating diverse activities, and regulating overall conduct within the park. Respondents agreed that such a common code would be helpful in addressing the *relations between* individual visitor groups, as well as special environmental considerations *of the park itself*.

While there was clear support for such a code, all groups did recognize the need of other means of regulating members' conduct, in addition to a code of ethics. Such means ranged from self-enforcement, to group monitoring, to pledges, education sessions, meetings, and information manuals. This indicated to us that, according to those surveyed, a code of ethics should not be expected to operate in isolation from other means of regulating behavior.

One question asked in our survey was whether there were "any identifiable groups with whom your own group might be expected to come into conflict within Short Hills Provincial Park." Hikers and naturalists did suggest that mountain bikers, motorized vehicles, and equestrians could present potential sources of

conflict with respect to their own objectives within the park. Representatives of a nature club suggested that they have found "trails crowded and eroded by passing horses, such that one member suffered significant leg injury after a fall."

Altogether, there was acknowledgment of the need to address the issue of *how best* to resolve actual and potential conflicts in the park. Dramatic headlines in a local newspaper at this time, read "Equestrians vs. Pedestrians," and "Short Hills battle a sign to planners of disaster ahead."¹¹ On the other hand, contrary to such headlines, emerging from our research was a clear overall indication of goodwill by respondents towards one another, and a genuinely conciliatory spirit towards resolving potential social conflicts.

On the issue of environmental preservation, there was some disagreement regarding the degree to which the park should be developed to support recreational and educational activities. One respondent wrote that the "Board of Education is most anxious to add Short Hills to their list of resources. However, in order to facilitate *school use*, we need access to the park, parking for a bus, and washrooms." While the Board representative was appreciative of the need to preserve the natural environment of the park, he was equally concerned that pupils from elementary grades would be unable to access educational trails, because of large distances required for walking from parking lots, and because public fa-

cilities were insufficiently available.

Others (like the Niagara Falls Nature Club) appeared to welcome the wildness of the park. They wrote: "The people of the Niagara Falls Nature Club value and appreciate the opportunities in Short Hills Park to observe and study the birds, trees and wildflowers in a significantly sized natural habitat." What emerged from such comments was a lack of consensus among various sectors of the public as to what extent Short Hills—originally deemed to be a natural-environment-class park—could nevertheless be developed to accommodate human (e.g., including children's) use. In short, it was unresolved as to how to balance anthropocentric (human-centered) and ecocentric (wilderness-centered) visions of what the park should be.

The problem of how to reconcile these conflicting anthropocentric and ecocentric demands has riddled environmental ethics. On the one hand, philosophers such as Tom Regan have suggested that "the development of what can properly be called an environmental ethic requires that we postulate inherent value in nature."¹² Otherwise, he argues, we must resort to a "management ethic" for the "use of the environment," instead of a proper ethic of the environment itself.¹³ Critics of the anthropocentric world-view contend that when we value humans above all else, inevitably, the natural environment is seen to be less important and, consequently, we feel justified in degrading nature if it is to society's advantage.

These critics maintain that it is such a human-centered world-view that is to blame for the environmental crisis in the first place. Instead of an anthropocentric ethic, what we need instead, they argue, is an ecocentric ethic to protect the earth as valuable in and of itself.¹⁴

On the other hand, critics of the opposite extreme—of ecocentric morality—have pointed out that to assume that the environment possesses value in and of itself is still to justify such value *on human grounds*.¹⁵ To be sure, reconciling anthropocentric and ecocentric demands presents ongoing ethical challenges which continue to be addressed in the philosophical literature to this day.¹⁶ Not surprisingly, although these general issues of how best to balance human and environmental needs were considered within the extensive public consultation process prior to development of the management plan, our study showed that the concerns had been incompletely resolved. That a code of ethics would need to address some of the difficulties in balancing these anthropocentric and ecocentric interests was clear from the initial stages of our study.

Toward a Code of Ethics for Short Hills Provincial Park

Before we discuss the code itself, a number of key philosophical assumptions which grounded our approach may warrant some discussion here. Presumably, a variety of methods might be employed to evolve a code of ethics, building on either an-

thropocentric or ecocentric theoretical foundations. We chose to rely, however, on the phenomenological method, inasmuch as phenomenology seeks to ally itself with neither a subjectivistic nor objectivist extreme but, instead, aims to uncover the essential belonging and interplay of the two. For the phenomenologist, neither nature in and of itself, nor humans, are central.¹⁷ Rather, firmly grounded in a description of human being-in-the-world, phenomenology will maintain that "the relation is more fundamental than what is related."¹⁸

Originally defined as the study of "phenomena," or of "that which appears" to human understanding, phenomenologists aim to describe things, events and processes as they show themselves, in and of themselves, rather than in terms of any preconceived theoretical filters.¹⁹ Instead of imposing generalized, abstract hypotheses upon the lived world, the intention is to "lay bare" essential patterns of meaning through a careful seeing and listening. The synergism and complexity of phenomena is thereby to be preserved, rather than manipulated into neat, static categories, ultimately disengaged from the phenomenon under study.²⁰

Translating this approach to our research meant that instead of imposing a top-down, preconceived system of theoretical principles to instruct a code of ethics, we proceeded to evolve the code bottom-up, so to speak, through a careful listening to

what community members had to tell us about their needs and perceptions. Questionnaires were designed, not in order to facilitate a quick quantitative compilation and survey of views; on the contrary, leading questions encouraged respondents to share their stories in a narrative format. (This meant, in some cases, that some participants went to their computers, reprinted the questions, and literally went on for pages, sharing their ideas.) Interviews were structured in such a way as to encourage community members to share their thoughts with minimal interruption by the interviewers, allowing for a stream of dialogue to emerge as spontaneously as possible.²¹

Our aim in all cases was to be attentive to essential messages which emerged throughout the course of our data-gathering stages. Even the final questionnaire which elicited views on the contents of a code of ethics, initially gathered information from respondents not on what "ought" and "ought not" to happen in the park, but rather, on what aspects of the park they found to be valuable in and of themselves, inasmuch as they provided for a genuine *sense of place* in Short Hills.²²

Edward Casey reminds us of the fundamental significance of place, as the condition of meaningful description of our way of being in the world. He writes that "to be is to be in place.... [P]lace, by virtue of its unencompassability by anything other than itself, is at once the limit and the condition of all that exists."²³ A

holistic sense of place provides the context for that which is meaningful within a specific locale. What I find to be valuable about an environment is colored by the interest which I take in it, which itself is elicited by a holistic perception of the environment's sense of place.

Such an understanding of the foundations of human values as grounded in a sense of place guided our research project in Short Hills Park. The research method aimed to elicit essential community values about the sense of place of the park as a whole, and to reflect those values in the code, rather than to impose any preconceived, abstract theoretical model of ethical rules of conduct upon park visitors. Such a phenomenological approach, it seemed to us, was warranted if the code was indeed to bring to light ethical precepts which could be seen as ultimately relevant by the very members of the community who cared for Short Hills Park.

To enlarge further upon these views, some words might be helpful about a second set of related philosophical assumptions about the need for an *ontological* grounding of an ethical code.²⁴ We should emphasize two points in this regard. First, phenomenological ontologists argue that a distinction has arisen between abstract value systems and concrete facts. This has resulted in ethical theories of free-floating ideals that seem to be detached from and irrelevant to the lived world of decision-making. Such a separation between facts and

values, moreover, is seen to be possible only on the basis of a more primordial ontological rift that has developed between subject and object. Let us spend a moment to examine these two propositions and how they affected the development of a code of ethics for Short Hills Park.

In the modern epoch, we may be inclined to describe values as subjective, and facts as objective.²⁵ Values are apparently fuzzy opinions; facts reflect reality. Philosophy supposedly describes subjective value systems; science studies objective facts. Yet, as Don Marietta observes, gradually we have come to understand that the "notion of brute, theory-free facts is an obsolete concept, no longer useful in science or the philosophy of science."²⁶ Conrad Brunk and his colleagues provide a fascinating illustration in their book entitled *Value Assumptions in Risk Assessment*, of how the same set of scientific facts are differently interpreted by distinct individuals, because of hidden value systems affecting the interpretation of those facts.²⁷ In other words, facts are rarely if ever value-free, because they are interpreted always within the context of taken-for-granted assumptions and beliefs. At the same time, values cannot afford to be divorced from facts; otherwise, they become irrelevant and lack a proper "fit" with the lived world of our everyday existence.²⁸

In assigning significance to a specific environment like Short Hills Park, I think that it is fair to say that, normally, we would not seek to as-

seem a cumulative list of discrete, objective "facts" about it—that it provides specific natural science features or a particular terrain of trees and trails—and only then proceed to "value" the park. On the contrary, the process of moral awareness is more complex, and fundamentally other than one of linear, technical process.²⁹

Joseph Kockelmans explains that "it is of the greatest importance to realize that a human being is not born a moral agent, but that he grows up and is educated to become a moral agent. The importance of this remark becomes clear when one realizes that the experiences in which ethical discourse must take its point of departure, have already occurred in the life of an individual long before they received an explicit ethical meaning in the limited sense of this term.... Thus it seems to me that reflections on the foundations of morality should begin at a level where the distinction between ontology, anthropology and ethics is not yet relevant."³⁰

The point here is that ethical beliefs are not just arbitrary, subjective opinions, nor are they abstract, technical constructions. To be meaningful, they arise within the existential concreteness of lived experience. In this respect, the phenomenological task of evolving a code of ethics becomes more than a philosophical construction of abstract moral rules for the community to follow. Once again, the task becomes one of illuminating taken-for-granted community values that sustain that community in

their everyday experiences of the park prior to the evolution of the code.

To turn to our second, related point, we have suggested that the tendency to separate human values from the world of "facts" rests on a more fundamental dualism that has developed in modern metaphysics between subjects and objects themselves. The rift, briefly described above, between anthropocentric and ecocentric foundations—one that has played a prominent role in environmental ethics—is merely a reflection of a more fundamental ontological dualism that has evolved between subjectivity and objectivity.³¹

To bridge this chasm, phenomenologists describe the ontological belonging of humans to their lived worlds, and they emphasize this belonging in the hyphenated description of human being-in-the-world.³² Rather than grounding their thought either within a subjective idealism, or the alternative of an objective realism, phenomenologists seek to describe the ontological *relation between* humans and the environments within which they find themselves.³³

How did such an ontological presupposition affect our work at Short Hills? First of all, it made us wary of subjectivistic, human-centered assumptions which would immediately assign ontological priority to humans over the natural environment. There has been much criticism in the field of environmental ethics of this sort of anthropocentrism. From Deep Ecology to Leopold's Land Ethic, the arguments against assuming that hu-

mans come first—and that the environment is nothing more than a resource for the use of human beings—have been presented in many different forms.³⁴

More specifically, consider, by way of example, the definitions coming out of the United States of “outdoor ethics”—a term signifying precisely the domain of our Short Hills project. At a conference in 1987, the director of National Park Service in Washington stated that “outdoor ethics are a code of man’s creation which governs his conduct in the use of the outdoors.”³⁵ Similarly, the Assistant Deputy Minister for Parks and Wildlife in Manitoba defines outdoor ethics again as a “system of code morals which applies to man’s use of the out-of-doors.”³⁶

Putting aside the gender critique of sexist language here (women use outdoors too!), both these definitions clearly stipulate *the use of* the outdoors. Indeed, a commonly accepted term in the Short Hills Management Plan which we found somewhat problematic was that of *user groups*. In all of these cases, the claim that the environment is there *for human use* may lead one to the conclusion that the world is there exclusively for human purposes. It is precisely such a view of nature in terms of its purely instrumental value to humans which, according to many theorists, has provided the justification for the domination, manipulation, and exploitation of the environment and the current unsustainable state of society.

Paul Eagles reminds us that even

such a phrase as “natural resource management is value laden”—as is indeed the very concept of management.³⁷ “To manage is to guide or control,” he explains. “Typically, management involves setting goals, marshaling resources and taking action to fulfill those goals. It is inherently manipulative. Some managers feel that they must interfere, must change the environment, or they are not properly fulfilling their management role.”³⁸ Yet, as we all know, sometimes the best environmental policy may turn out to be non-interference with natural cycles.³⁹

As much as phenomenologists avoid committing themselves to a subjectivistic ontological foundation, they similarly avoid an objectivist, ecocentric perspective which itself becomes ultimately naive. Douglas Torgerson explains that the paradox of the ecocentric move is that

it de-centers the human and, at the same time, places humanity at the center of things. As soon as humanity is expelled from its privileged position, it is readmitted, so to speak, by the back door. Human reason is divested of its pretensions, but placed in judgment of all being. It could not be otherwise, for environmental ethics depends, after all, on ethical discourse. Discourse presupposes rational participants, and the only natural beings we know to be potentially qualified participants happen to be human beings.⁴⁰

Arguments for the "intrinsic value" of nature in and of itself, existing independently from human consciousness, assume the human understanding of that very statement of value—and to this extent, it becomes impossible to completely abandon the human standpoint.⁴¹ Those who see the dangers of an *ego-centric* perspective may wish to opt instead for an *eco-centric* view, but Torgerson reminds us that in such a move, we cannot, in fact, avoid employing human parameters for the very purpose of assigning value to the environment itself. We cannot escape *being* human in the projection of value onto non-human entities.

How do the above considerations impact upon Short Hills Park? They serve to remind us of the recurring dialogue among those who wished to preserve the park's natural, wild features for their own sake, and those who sought to accommodate human needs and wants which inevitably impact upon the wildlife of the park. Inasmuch as phenomenology will opt for neither a pure subjectivism nor a pristine objectivism to ground an ethic, we sought ways to avoid grounding the ethical discussion on either a purely anthropocentric, or, on the other hand, a purely ecocentric foundation. What then, was the alternative?

Recall our discussion above that, from the phenomenological perspective, one seeks to shed light on the *human-environment relation*. In this light, the challenge was not to evolve a code to exclusively support the hu-

man "use" of the environment, but neither was it to argue for the intrinsic value of the environment *separate from* human concerns. Instead, the aim was to remain sensitive to the reciprocal relation between humans and the environments within which they find their place. The phenomenological task was to see that Short Hills Park is not there merely for human utilization, yet that it may also benefit from human stewardship and care.⁴² Such care, though, if it is to be genuine, should be park-directed, for the good of the environment as a whole.⁴³

In addition to these phenomenological assumptions of our study, there were some practical guidelines to which we adhered in the formulation of a code of ethics for Short Hills Park. Having contacted superintendents from every major national park in the United States, we were particularly moved by a code of ethics which is provided to visitors of Grand Canyon National Park as a bookmark. (See Appendix A).⁴⁴ This code begins with some fundamental "understandings," on the basis of which an environmental "pledge" is then articulated. The code is concise, and powerful in its simplicity. It captures the essence of a caring attitude towards the park, as the foundation of responsible conduct. We decided to follow the example of including a general understanding of commonly accepted precepts, as the context for a pledge of a personal, moral commitment to protect the environment.

Indeed, in our overview of other

ethical codes in general, we saw the practical advantages of including both global guidelines as well as more specific codes of conduct in the park.⁴⁵ One of these advantages was the maximum flexibility in levels of communication of a code which could be conveyed either in a brief, immediate fashion, or in other arenas, with a more detailed explanation. For instance, a short, to-the-point review of basic moral tenets could be posted in such strategic meeting points as feed stores for horses, or in sports stores for hikers and bikers. Another suggestion was that one-line prompts and cues, based on some of the more general precepts of the code of ethics, could be posted on wooden signs, carefully placed in appropriate areas of the park. A more detailed code of conduct could be useful to Boards of Education, who might seek some more specific and pragmatic direction of a code, to be communicated within a program of environmental education. The same could be said for organized visitor groups, keen on encouraging environmental awareness among their own group members.⁴⁶

In the end, a draft Short Hills Park Code of Ethics (including a code of conduct) was presented to community members at a workshop at Brock University in September 1994. Small working groups deliberated over details of the draft proposal, and their valuable suggestions were incorporated into some modifications of a final code, found in Appendix B to this paper. The Friends of Short Hills

Group, who held their first organizational meeting shortly after this workshop, began the process of investigating appropriate ways and means of communicating the code to park visitors.⁴⁷ Board of Education members will be similarly considering ways in which the code might be integrated into current environmental education programs for children in Niagara.⁴⁸

Some Policy Recommendations

On the basis of this two-year study, we propose the following policy recommendations:

1. That the Ontario Ministry of Natural Resources, together with other Ministries and Departments with responsibility for human-environment relations, recognize the potential for *positive reinforcement* of responsible human behavior within their programs. Concurrently, we encourage government support of community-centered initiatives, such as is found in the recently formed Friends of Short Hills Park.
2. That these same Ministries recognize the positive role that can be played by a carefully formulated code of ethics, within the broader framework of a program of enhancing environmental awareness among the public. Such "recognition" could range from explicit encouragement of the formulation of codes of ethics within management plans, to education of public service employees of the impact of philosophical and

ethical assumptions upon behavior.

Clearly, formulating a code of ethics is not the sole route to encouraging environmental care, nor do we advocate blind obedience to any rigid set of codified rules. (Chandler reminds us of Aristotle's warning that it is quite possible to obey laws and regulations, while remaining unethical.)⁴⁹ It may be true that ultimately, it is one's own conscience which is the genuine source of environmentally responsible behavior.⁵⁰

At the same time, however, it is in the sharing of common paradigms that communities are formed.⁵¹ If shared paradigms, reflected in a code of ethics, may help to increase environmental awareness and resolve

some conflicts among community members, if a code may broaden one's environmental vision so that one's conscience is better informed, then perhaps such a philosophical articulation of ethical guidelines does indeed have some significant role to play in guiding the future of our parks.

This paper is forthcoming in Canadian Issues in Applied Environmental Ethics, edited by Alex Wellington, Allan Greenbaum, and Wesley Cragg (Peterborough, Ont.: Broadview Press). For ordering information, call 705-743-8990 or write to Broadview Press, 71 Princess Street, P.O. Box 1243, Peterborough, Ontario K9J 7H5, Canada. Used by permission.

Endnotes

¹ Ontario Ministry of Natural Resources, *Short Hills Provincial Park Management Plan* (Fonthill, Ontario: OMNR, 1991), p. 2.

² *Ibid.*, p. 7.

³ *Ibid.*, p. 4.

⁴ *Ibid.*, p. 21. Examples of conflicts between trail users included complaints by hikers of damage to trails by equestrians, mountain bikers startling horses and similar instances relating to the sharing of multi-use trails in particular.

⁵ Oscar Newman, *Defensible Space: Crime Prevention through Urban Design* (New York: Macmillan, 1972), p. 3.

⁶ For instance, studies by psychologists have shown that there was a significant reduction in the rate of destructive lawn-walking in areas of a new "mini-park," simply by erecting signs reading "University Mini-Park: Please Don't Trample the Grass." (Cf. S. C. Hayes and J. D. Cone, "Decelerating environmentally destructive lawn-walking behavior," in *Environment and Behavior* 9, 91-101). Certainly, such prompts may not achieve such success under some conditions (for example, when the cost of obeying the cue is too high), but nevertheless, researchers have learned much about the power of positive prompts. Reich and Robertson have shown that the chances of success of written cues are much enhanced when they are positively worded: thus for example, people are less likely to obey an overly forceful sign, such as "You *must* not litter," and may even react in direct opposition to such an order; more effective would be a sign which read "Thank-you for not littering." (Cf. J. W. Reich and J. L. Robertson, "Reactance and normal appeal in antilittering messages," in *Journal of Applied Social Psychology* 9, 91-101, 1979). Similarly, a prompt in the form of an acceptable alternative may prevent environmentally unfriendly acts: for instance, psychologists suggest a nearby sidewalk might serve as a prompt not to walk on newly planted grass, or a nearby garbage bin may offer a cue not to litter. (Cf. Paul A. Bell, Andrew Baum, J. D. Fisher, and Thomas E. Greene, *Environmental Psychology* (Fort

Worth: Holt, Rinehart and Winston, Inc., 1990), 480; and A. W. Magill, "Methods to Control Negative Impacts of Recreation Use," *River Recreation Management and Research Symposium*, Jan. 24-27 1977, 402-4.

⁷ Research Assistants on this project were Marie Poirier, Institute of Environmental Policy, Brock University; David Szttybel, Department of Philosophy, University of Toronto; and Lynn Topp, Department of Recreation and Leisure, Brock University. The researchers gratefully acknowledge the financial support for this project, provided through a Social Sciences and Humanities Research Council (SSHRC) General Research Grant; and a Grant-in-Aid, through the Department of Philosophy, University of Toronto. Thanks are also extended to Brock University's Institute of Environmental Policy, which hosted both workshops on the project.

⁸ David N. Johnson, "Outdoor Ethics and Public Education in Africa," p. 22 in *Proceedings of the International Conference on Outdoor Ethics*, November 8-11, 1987, Lake Ozark, Missouri.

⁹ Cf. for example Kenneth Kernaghan, "Managing Ethics: Complementary approaches," *Canadian Public Administration* 34:1, 132-145; Reg Lang and Susan Hendler, "Ethics and Professional Planners," in D. MacNiven, *Moral Expertise* (London, 1988); J. S. Beazley, "What is this Thing called Ethics and Sometimes, The Code of Ethics?," *Photogrammetric Engineering and Remote Sensing* 57:5 (May 1991), 497-499; James Schaefer, "Toward an ethic for the Great Lakes Basin ecosystem," discussion paper prepared for the Societal Committee of the Great Lakes Science Advisory Board, Windsor, Ontario, November, 1989; and Ralph Clark Chandler, "The Problem of Moral Reasoning in American Public Administration: The Case for a Code of Ethics," in *Public Administration Review* 43 (January-February 1983), 32-39.

¹⁰ Cf. Kernaghan, 135; Lang and Hendler, 61; and Chandler, *Ibid*.

¹¹ Stories by Doug Draper in the St. Catharines [Ontario] *Standard*, June 26, 1993.

¹² Tom Regan, "The Nature and Possibility of an Environmental Ethic," *Environmental Ethics* 3 (1981), p. 34.

¹³ *Ibid*.

¹⁴ See, for example, David Ehrenfeld, *The Arrogance of Humanism* (New York: Oxford University Press, 1978).

¹⁵ Douglas Torgerson, "The Paradox of Environmental Ethics," in *Alternatives* 12:2 (Winter 1985), 26-36.

¹⁶ See, for example, Leslie Paul Thiele, "Nature and Freedom: A Heideggerian Critique of Biocentric and Sociocentric Environmentalism," *Environmental Ethics* 17:2 (1995), 171-190.

¹⁷ *Ibid*.

¹⁸ Joan Stambaugh, "Introduction," Martin Heidegger, *On Time and Being* (New York: Harper & Row, 1972), x.

¹⁹ Cf. Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*, translated by F. Kersten (The Hague: Martinus Nijhoff, 1983); and Martin Heidegger, *Being and Time*, translated by John Macquarrie and Edward Robinson (New York: Harper and Row, 1962). For a layman's introduction to phenomenology, see I. L. Stefanovic, "What is Phenomenology?," in *Brock Review* 3:1 (1994), 58-77.

²⁰ The term "synergism" builds on the notion that, on the strength of the interaction between discrete entities, the total effect is greater than the sum of the individual effects.

²¹ A paper describing the phenomenological method as it impacts upon the interview process is in preparation. Some preliminary remarks are available in a paper describing a similar process of interviews on another project—the interdisciplinary "Ecowise" research study funded by the Tri-Council program of awards, and investigating the sustainability of the Hamilton Harbour Ecosystem. See Ingrid Leman Stefanovic, "Interdisciplinarity and Wholeness: Lessons from Eco-research," *Environments: A Journal of Interdisciplinary Studies* 23:3, 1996.

²² Some clues for this approach were provided to us by a particularly instructive article by Jim Cheney, "Postmodern Environmental Ethics: Ethics as Bioregional Narrative," in *Environmental Ethics: Convergence and Divergence* (New York: McGraw-Hill, 1993).

²³ Edward Casey, *Getting Back into Place: Toward a Renewed Understanding of the Place-World* (Bloomington and Indianapolis: Indiana University Press, 1993), 14-15.

²⁴ Ontology is the study of the meaning of Being itself. Instead of focusing merely on essents (things), ontology seeks to illumine the condition of the possibility of the appearance of things in the world. See Heidegger, *Being and Time*.

²⁵ For a fascinating discussion of the belonging and overlapping of facts and values, see Don E. Marietta, Jr., "Knowledge and Obligation in Environmental Ethics: A Phenomenological Analysis" in *Environmental Ethics* 4:2 (1982), 153-162; also J. Baird Callicott, "Hume's Is/Ought Dichotomy and the Relation of Ecology to Leopold's Land Ethic," *Environmental Ethics* 4:2 (1982), 163-174.

²⁶ Cited in Marietta, *Ibid.*, 267-8.

²⁷ Conrad G. Brunk, Lawrence Haworth, and Brenda Lee, *Value Assumptions in Risk Assessment: A Case Study of the Alachlor Controversy* (Waterloo, Ontario: Wilfrid Laurier University Press, 1991.) For a recent work on similar issues of how hidden value assumptions affect interpretations of risk, see William Leiss and Christina Chociolko, *Risk and Responsibility* (Montreal: McGill-Queen's University Press, 1996.)

²⁸ On the notion of sustainable "fittingness," see Maurice Mandelbaum, *The Phenomenology of Moral Experience* (Baltimore and London: Johns Hopkins Press, 1969), especially 61 ff.

²⁹ Cf., in this connection, Hans-Georg Gadamer, *Truth and Method* (New York: Seabury Press, 1975), 284. He seeks to distinguish between the *techne* of the craftsman and the *phronesis* (practical knowledge) of the judge who seeks to interpret, in a morally justifiable sense, a specific law.

³⁰ Joseph J. Kockelmans, "The Foundations of Morality and the Human Sciences," in *Foundations of Morality, Human Rights and the Human Sciences*, edited by Anna-Teresa Tymieniecka and Calvin O. Shrag (Dordrecht, Holland: D. Reidel, 1983), 381-382.

³¹ On this point regarding the subjectivism and objectivism of the modern age, see Martin Heidegger, "The Age of the World Picture" in *The Question Concerning Technology and Other Essays*, translated with an introduction by William Lovitt (New York: Harper & Row, 1977).

³² Cf. Heidegger, *Being and Time*, *op. cit.*

³³ A paper entitled "The Contribution of Phenomenology to Environmental Ethics" describes more fully the significance of the ontological ground of ethics, and is in preparation by the author.

³⁴ See for example, Walter O'Brian's "Man, Nature and the History of Philosophy," in William T. Blackstone (ed.), *Philosophy and Environmental Crisis* (Athens: University of Georgia Press, 1974); Aldo Leopold, *A Sand County Almanac with Essays on Conservation from Round River* (New York: Oxford University Press, 1949); David Ehrenfeld, *The Arrogance of Humanism* (New York: Oxford University Press, 1978); and Arne Naess, *Ecology, Community and Lifestyle* (Cambridge, England: Cambridge University Press, 1989).

³⁵ William Penn Mott, Jr., "A National Park Service Perspective on Ethics," p. 39 in *Proceedings of the International Conference on Outdoor Ethics*, November 8-11, 1987, Lake Ozark, Missouri.

³⁶ Richard Goulden, "Meeting the Outdoor Ethics Challenge in Canada," *Ibid.*, 80.

³⁷ "Is the squirrel that lives in the tree a natural resource? Not usually, unless someone wants to hunt it or eat it, or look at it. The concept of a natural resource, then, is inherently anthropocentric." Cf. Paul F. J. Eagles, "Environmental Management in Parks," p. 154 in Philip Dearden and Rick Rollins (eds.), *Parks and Protected Areas in Canada: Planning and Management* (Toronto: Oxford University Press, 1993).

³⁸ Eagles, *Ibid.*, 155.

³⁹ Planner Michael Hough advocates the design principle of "doing as little as possible." "The greatest diversity and identity in a place, whether a regenerating field or urban wetland, or a cohesive neighbourhood community, often comes with minimum, not maximum, interference." For elaboration on this perspective, see his *Out of Place: Restoring Identity to the Regional Landscape* (New Haven and London: Yale University Press, 1990), 190-191.

⁴⁰ Douglas Torgerson, "The Paradox of Environmental Ethics," *op. cit.*, 27.

⁴¹ Cf. J. Baird Callicott, *op. cit.*, who clearly shows the fallacy of seeking philosophical justification for the "intrinsic value" of nature, apart from human understanding.

⁴² Leslie Paul Thiele shows how a Heideggerian phenomenological understanding of nature and freedom provides a significant impetus for fostering a new ethic of ecological stewardship and "care," distinct from both ecocentric identification with nature as well as from egocentric manipulations. See "Nature and

Freedom: A Heideggerian Critique of Biocentric and Sociocentric Environmentalism," *Environmental Ethics* 17:2 (1995), 171-190.

⁴³ Interestingly, in their deliberations on the meaning of crimes against the environment, the Law Reform Commission of Canada has come to a similar conclusion. In reflecting upon "homocentric" and "ecocentric" ethics, they explain that "there remain some serious conceptual and practical obstacles to the provision of legal protection to the natural environment *for its own sake*, apart from considerations of human benefits, wishes, uses and health risks. It would amount to granting rights to nonhuman entities. From a practical standpoint, it is inconceivable that natural resources could ever be totally insulated from economic and political considerations. Nor is it evident that we cannot provide adequate protection for the natural environment itself by continuing to permit a homocentric ethic to underlie our environmental regulations and laws, but one which now gives more scope to the *quality* of human life, and to our responsibility of *stewardship* or trusteeship over the natural environment." (See "Crimes Against the Environment," Law Reform Commission of Canada, pp. 217-218 in Eldon Soifer (ed.), *Ethical Issues: Perspectives for Canadians* (Peterborough, Ontario: Broadview Press, 1992).

⁴⁴ We acknowledge with gratitude, the detailed and extremely informative responses which we received from virtually every park superintendent contacted in the U.S.A.

⁴⁵ It was useful to compare, for example, the codes presented in *Codes of Ethics: Ethics Codes, Standards and Guidelines for Professionals Working in a Health Care Setting in Canada*, compiled by Françoise Baylis and Jocelyn Downie (Toronto: Department of Bioethics, The Hospital for Sick Children, 1992).

⁴⁶ Sometimes these more detailed codes of conduct could include actual *examples* of ethical dilemmas, and routes for resolving such dilemmas. While we saw the advantages to this, at the same time, we were concerned to keep the code of ethics, in its complete form, to a single typed page. We felt that anything longer might be seen to be vexatious and tedious to some.

⁴⁷ Further information about the Friends of Short Hills Group is available from Marie Poirier, at the Institute of Environmental Policy, Brock University, St. Catharines, Ontario.

⁴⁸ Contact, for example, Bert Murphy, Consultant in Environmental Education for the St. Johns Outdoor Studies Centre, Fonthill, Ontario.

⁴⁹ Chandler, *op. cit.*, 34.

⁵⁰ For a discussion of stages of moral development, see Daniel L. Dustin, "To Feed or Not Feed the Bears: the Moral Choices we Make," *Parks and Recreation*, October 1985, pp. 54-57, 72.

⁵¹ Cf. Chandler, *op. cit.*, for some further discussion of this notion.



APPENDIX A. A model code of ethics from Grand Canyon National Park

CODE OF ETHICS

As a member of the world community, I understand that:

- All life on earth—human, plant and animal—is joined in one world community. This is our natural heritage.
- Every person has a right to a safe and healthy environment in which to live. Plants and animals share that right.
- Our air, water, and atmosphere are replenished and maintained by the diverse natural communities of the world. I share responsibility for protecting these communities.

As a member of the world community, I pledge:

- To show respect for the world's natural heritage by taking care not to harm or degrade it through ignorance, carelessness or misuse.
- To continue to increase my understanding about the diversity of life and to share that knowledge with others.
- To express my opinion on issues of concern that affect our natural heritage, and to actively support its protection.

Enjoy your visit to Grand Canyon National Park.



APPENDIX B. A code of ethics for Short Hills Provincial Park

As a friend of Short Hills Park, I understand that:

- The park is a unique, natural environment to be preserved for its own sake, as well as for future generations.
- My responsibility is that of a care-taker, to actively seek to promote the ecological health and diversity of the park.

I pledge to:

- *Show respect; tread lightly.*
- *Pack out* at least what is packed in.
- *Keep wildlife wild*, by observing from a safe and non-interfering distance.
- *Observe, not disturb* natural features in the park. Memories outlast specimens.
- *Preserve the peace* in the park. Be considerate of others.
- *Protect the park from disruptive activities*, such as fires or vandalism.
- *Become better informed* about the needs of Short Hills Park, and share my knowledge with others.

SOME GUIDELINES FOR CONDUCT

1. Show Respect; Tread Lightly.

1.1 *Remain on established trails.*

1.2 *Respect the rules of multi-use trails.* Meet and pass with respect. Use caution and speak quietly in approaching, to pacify the horses. Cyclists will remain in single file to the right of trails, announcing themselves in advance of bends, and yielding to others.

1.3 *Avoid using trails when wet*, especially when cycling or horseback riding.

1.4 *Avoid trespassing* on private property.

2. Pack out at least what is packed in.

2.1 *Avoid all littering.*

2.2 *If possible, leave the park cleaner than you found it.*

3. Keep wildlife wild, by observing from a safe and non-interfering distance.

3.1 *Avoid feeding wildlife*, as it upsets the natural food chain.

3.2 *Control all pets* brought into the park.

- 4. **Observe, but do not disturb natural features in the park.**
 - 4.1 *Preserve plants and flowers.*
 - 4.2 *Natural systems, as well as cultural artifacts, will remain duly undisturbed in the park.*
 - 4.3 *Refrain from polluting the environment in any way.*
- 5. **Preserve the peace in the park. Be considerate of others.**
 - 5.1 *Be courteous in sharing trails.*
 - 5.2 *Use common sense in announcing yourself, particularly on narrow trails with limited visibility.*
 - 5.3 *Curtail rowdiness.*
- 6. **Protect the park from disruptive activities.**
 - 6.1 *Fires are prohibited in the park.*
 - 6.2 *Report to the Park Superintendent, at the telephone number below, any vandalism encountered within the park.*
- 7. **Become better informed and share your knowledge about Short Hills.**
 - 7.1 *Be aware of and sensitive to the needs of the park. Be open to new knowledge about the park.*
 - 7.2 *Support environmental education about Short Hills Park.*



Ingrid Leman Stefanovic, Department of Philosophy, University of Toronto,
215 Huron Street, 9th Floor, Toronto, Ontario M5S 1A1 Canada

A Wilderness Ethic for the Age of Cyberspace

The concept of restraint is essential to wilderness preservation. The history of American protection of wild country began in the 1920s and 1930s with a determination by some U.S. Forest Service personnel to keep roads out of designated environments. These so-called "roadless areas" later formed the core of the 1964 National Wilderness Preservation System. The point is that roads could have been built, but society opted instead to restrain itself in the interest of protecting wilderness and the wilderness experience.

In the 1960s, it became increasingly apparent to land managers that restraint would have to be exercised, as well, with regard to wilderness visitors. The concept of "carrying capacity" gained importance as managers realized that wilderness could be loved to death. The new management tool was visitation quotas (and the associated wilderness permits) which were first applied to Mt. Whitney in the California Sierra and to the Grand Canyon, both in 1972. Filling out forms and going through lotteries or long waiting lists, we learned another dimension of restraint with regard to wilderness.

Minimum-impact camping procedures—part of a rising wilderness "ethic"—also indicated a willingness to accept restraint. Thoughtful wild-land users now refrain from building wood fires, trenching tents, and trampling multiple trails into wet meadows. The reason for these ethical codes—and, sometimes, land-use

rules—was, again, respect for wilderness and the wilderness experience.

What is important to think about today, at the dawn of the millennium, is the impact of the communications revolution on wilderness. It began, in one sense, with map-making. Classic wilderness was *terra incognita*—the blank space on the map. For much of the 20th century, there were wild holes in the U.S. Geological Survey's ambitious effort to map the entire nation on a scale of at least 1 to 62,500. I can recall the excitement of planning a trip that was literally off the charts. Sometimes I suggested that students leave the maps at home and just go out there and see what lay around the bend or over the next ridge. The compensation for the occasional navigation mistake was a heightened sense of wilderness. After all, risk, uncertainty, and lack of control, coupled with self-reliance, lies at the heart of the wilderness experience.

About 1980, the last of the topographic maps were released. You could lay out the entire continent, edge to edge, if you had a big enough floor! It was a great technological achievement, but something of the old wild continent died when the mapmakers filled in the last blanks. And now we have satellite imagery that, as every reader of Tom Clancy novels knows, can show a cigarette pack from outer space. You can purchase satellite photos of every inch of the planet, and they are updated every few hours. Moreover, the satellite-based Geographical Positioning System means that, with a pocket-sized receiver costing about \$500, you can determine your latitude and longitude within a few yards. And Emergency Position Indicating Radio Beacons, prized by pilots and mariners, allow you to transmit your location, again via satellite, to search and rescue teams. Columbus or Lewis and Clark would have been amazed and maybe a little saddened. The world is a lot smaller now, the human being somewhat diminished despite his technological prowess.

Telephone communication technology is exploding in sophistication. A few years ago, a reasonable measurement of wilderness was the distance to the nearest telephone. But now, with cellular telephones, it is possible to place and receive calls from the heart of many wildernesses. Even in the Grand Canyon with its mile-high walls, cellular contact is almost total. And where the cellular service stops, the Internet begins.

Using the World Wide Web, adventure travel companies like Mountain Travel-Sobek are actively marketing cyberspace "chats" between, say, an expedition in Antarctica and armchair explorers of virtual reality. The computer screen will also keep the home audience updated on prevailing weather conditions and present digital images of the landscape. Next stop on the Internet, promises Mountain Travel-Sobek, "Virtual Galápagos." You won't have to go to the wilderness to go to the wilderness!

So, is it fair to ask, what? You still can't get pizza delivery out there. The person on the other end might listen to you become a pizza for a hungry bear, but they can't do much about it except call for the helicopters. And don't people bring communication technology into the wilderness all the time in the form of books and audio tapes? Yes, of course, but such things do not have an interactive, two-way capability for providing instant, updated contact with the "outside." *This* technology really dilutes the wilderness experience; for many it destroys the wilderness just as thoroughly as clearcutting.

It is well to remember in this connection that wilderness is a state of mind. It has more to do with perception of place than with the place itself. Consequently, it is fragile, vulnerable to the disruptive influences of civilization, even if they arrive electronically.

The upshot of this is that the potential of communication technology

to impact adversely on wilderness once again requires the exercise of restraint. Maybe language could be added to the 1964 Wilderness Act mandating that not only non-mechanized travel but also non-mechanized communication be banned from protected wildland. More feasibly, outdoor educators, guides, and land managers should take a stand on this issue. We do at Grand Canyon Dories, a wilderness-oriented outfit-

ting company specializing in Grand Canyon river trips. Leave the laptop and the cellular phone home, we tell our guests. Or, conversely, if you want things to be just the way they are at home, stay at home. For two weeks of your life, let the old rhythms and the vast silences be your guide; let the river be your information highway. Without this kind of self-restraint, we risk preserving wilderness that is no longer wild.



Roderick Frazier Nash, University of California-Santa Barbara, Santa Barbara, California 93106

The George Wright Society

Application for Membership

Name: _____

Affiliation: _____

Address: _____

ZIP/Postal Code: _____

Workplace phone: _____

Fax: _____

E-mail: _____

Please ☒ the type of membership you desire:

- ☐ Patron \$500/year
- ☐ Life Member \$350/life
- ☐ Supporting Member \$100/year
- ☐ Regular Member \$35/year
- ☐ Student Member \$25/year
- ☐ Institutional Member \$35/year
- ☐ Here's an additional contribution of \$_____.

Dues and contributions are tax-deductible in the USA.

\$10.00 of your membership goes to a subscription to THE GEORGE WRIGHT FORUM.

Note: Except for Life Memberships, all dues are good for the calendar year in which they are paid. New members who join between 1 October and 31 December will be enrolled for the balance of the year and the entire year following. *Special Note to Canadian Applicants:* If paying dues in Canadian funds, please add 25% to cover our bank fees.

Optional: Please name your profession or occupation and any specialty, expertise, or area of professional interest:

Mail payment to: The George Wright Society, P.O. Box 65, Hancock, MI 49930-0065 USA. Would you rather be billed? Just fax this form to 906-487-9405 or e-mail us at gws@mail.portup.com and we'll invoice you. Thank you!

Submitting Materials to THE GEORGE WRIGHT FORUM

The editorial board welcomes articles that bear importantly on the objectives of the Society—promoting the application of knowledge, understanding, and wisdom to policy making, planning, management, and interpretation of the resources of protected areas and public lands around the world. The FORUM is now distributed internationally; submissions should minimize provincialism, avoid academic or agency jargon and acronyms, and aim to broaden international aspects and applications. We actively seek manuscripts which represent a variety of protected-area perspectives, and welcome submissions from authors working outside of the U.S.A.

Length and Language of Submission Manuscripts should run no more than 2,500 words unless prior arrangements with the editors have been made. Current readership is primarily English-speaking, but submissions in other languages will be considered; in such cases an English summary should be prepared.

Form of Submission We no longer accept unsolicited articles that are not also accompanied by a 3.5-inch computer disk. Almost any such disk can be read in its original format (please indicate whether your disk is formatted for IBM or Macintosh, and note the version of the software). We will also accept e-mailed submissions. A double-spaced manuscript must accompany all submissions in case there are compatibility problems.

Citations Citations should be given using the author-date method (preferably following the format laid out in *The Chicago Manual of Style*). In exceptional instances we will accept other conventions for citations and reference lists; call the GWS office for details.

Editorial Matters; Permissions Generally, manuscripts are edited only for clarity, grammar, and so on. We contact authors before publishing if major revisions to content are needed. The FORUM is copyrighted by the Society; written permission for additional publication is required but freely given as long as the article is attributed as having been first published here. We do consider certain previously published articles for republication in the FORUM. Authors proposing such articles should ensure all needed copyright permissions are in place *before* submitting the article for consideration.

Illustrations Submit line drawings, charts, and graphs as nearly “camera-ready” as possible. If submitted in a size that exceeds the FORUM’S page dimensions, please make sure the reduction will still be legible. The preferable form for photographs is black-and-white (matte or glossy) prints. Medium contrast makes for better reproduction. Color prints and slides may not reproduce as well, but are acceptable. Half-tones from newspapers and magazines are not acceptable. We particularly welcome good vertical photos for use on the cover, either in black-and-white or color. Please provide captions and secure copyright permissions as needed.

Correspondence Send all correspondence and submissions to:

The George Wright Society
P.O. Box 65
Hancock, MI 49930-0065 • USA
☎ (906) 487-9722. Fax: (906) 487-9405.
E-mail: gws@mail.portup.com