

MISSION STATEMENTS

From Deep History to the Century of the Environment: The National Park Service as Environmental Leader

Edward O. Wilson

[*Ed. note: on September 12, 2000, the renowned biologist, Edward O. Wilson, addressed the National Park Service's Discovery 2000 conference in St. Louis. An audience of 1,500 listened as he explained the global importance of national parks and the biodiversity they protect, and challenged the National Park Service to assume a mantle of leadership along a broad front of environmental concerns. Later, in an on-stage colloquy with Peter Raven, Wilson recounted how, as a child growing up poor in Washington, D.C., the free access he enjoyed to Rock Creek Park, the National Zoo, and the Smithsonian museums marked him indelibly as a naturalist—and demonstrated “the great benevolent power of a well-administered and visionary federal presence in our lives.” Below, we offer an abridged version of his remarks as this issue's “Mission Statement.”*]



Director [Roger] Kennedy, Director [Robert] Stanton, other members of the national park community, colleagues, friends; I thank you all for the opportunity to speak to this potent audience in such a crucial time. For the National Park Service and for the environment generally, I take it as a great honor and opportunity to be here, and believe me, the benefit I see runs more strongly to my own inspiration and excitement for the future.

I don't need to tell you, I only need to stress it as an independent observer, that Americans love the national parks. They trust you. And you have enormous credibility, probably the greatest credibility of any part of the federal government. In 1983, the late poet-naturalist Wallace Stegner correctly said, “National parks are the best idea we ever had. Absolutely American, absolutely democratic, they reflect us at our best rather than our

worst.”

Much of the appeal that Stegner had in mind has to do with what is called “civic egalitarianism.” Some major art galleries, archives, museums, and state and national parks are so important and unique and expensive to establish that they must be created by public discretion, and then, in a democratic society, made available to everybody with free and equal access there to mingle without distinction—from the richest to the poorest.

Deep within us, those national parks set aside for nature, in distinction from the cultural parks, satisfy an innate craving for a sense of wildness, a part of the world that we can see and enjoy whenever we wish. One dear to our hearts, yet not part of us, but instead one that exists independently of humanity, that was here on Earth before the coming of humanity, and would stay much the same if we were

to disappear as a species. To know that it exists, to have the freedom to go there and see it at its best, that capacity is surely one of the marks of high civilization.

It's also a part of the American heritage celebrating a continuous stream of existence that dates back not to 1775, or 1619, or 1492, or even before the coming of the Indians 12,000 or more years ago, but farther back in geological time. You of the National park Service are the stewards of what can be called America's "deep history." There is a distinction in this Service between cultural and natural programs, but they are the same, in terms of long-term continuity.... The cultural deals with a few centuries or at most millennia; the natural goes back and back through history 200 million years.

Little wonder that many of our national parks are overcrowded, given their essential and irreplaceable nature. We need additional national parks, so I'll make a comment now that is strictly as a private citizen and not representing or reflecting any particular organization.

There is a great deal to be said for converting more and more land from the public domain, including state and national forest holdings, into national parks. That's what was done in the past to create Bryce, Glacier, Great Basin, Olympic, Yosemite, and others. If all the forests and other natural, terrestrial habitats managed [by other agencies] could be converted, it would more than quadruple the size of the [national] park system and it would also be consistent with the public needs and the current uses of these habitats as presently managed. Consider the national forest system's own estimate. For example, its contri-

bution to the gross domestic product in the year 1999, the last for which we have concrete figures, was \$35 billion, of which 78% was from recreation and only 14% from logging. At that, timber extraction is supported substantially by public subsidy.

Public lands, including the national forests, contribute only about 6% of the U.S. timber yield. The picture seems too clear, at least to me—despite [the Forest Service's] more enlightened newer policies, such as no additional roads (except for the Tongass)—for extraction to continue runs counter to the aims of the more important recreation policy. It is also economically counter-productive and contrary to the needs and desires of the American people as a whole who, let us not forget, own the land. America's timber needs can be met from the 94% of forests on private land, and from the burgeoning tree farms and the growing technology of woodland extension on already cleared lands. [These timber needs] should not be extracted from our national forests.

But there is another reason why the national parks, beyond what I have just stated, are destined to play an ever-larger role in this country, and as part of America's leadership role in the world. It has to do with a historical period we have now entered ... that I believe can be properly called the *century of the environment*. The facts are very simple. Let me briefly recite them because they produce a bottom line very different from that recognized and promulgated by most economists and public philosophers.

The world's population is now past 6 billion, and it's expected from United Nations projections to reach 8–10 billion before peaking and starting to descend in the second half of

this century. Natural researchers suggest that this many people can be accommodated, but just barely. Per capita fresh water and arable land are descending steadily ... to levels experts agree are risky. The great majority of people are very poor and about 1 billion live in absolute poverty, suffering malnutrition. In fact they exist on the edge of starvation. All are struggling to raise the quality of their lives by any means at their disposal, including, unfortunately, conversion of the surviving remnants of the natural environment. The great tropical forests where a majority of the world's plant and animal species live are half gone, and disappearing at the rate of about 1% of cover per year. In every way, with reference to the environment, *Homo sapiens* is moving very close to the edge. The planet is near the end of its human population explosion, fortunately, and is bracing now for what is likely to be the greater aftershock of the development.

Let me give you the bottom line now that matters. It's the ecological footprint, the average amount of productive land and shallow [oceans] appropriated from people by bits and pieces around the world for food, housing, water, energy, transportation, commerce, and waste management comprising a bit of Saudi Arabia for your oil, for example, a small piece in Costa Rica for your coffee, and so on. That ecological footprint is 2.5 acres per person in the developing world and 10 times that much—24 acres—in the United States. Here, then, is the bottom line that counts for the future. For every person in the world to reach present U.S. levels of consumption would require four more planet Earths. Let me repeat that. For every person in the world to reach present

U.S. levels of consumption, and I should add with existing technology, would require four more planet Earths. The 4 billion people of the developing nations may never wish to attain our level of profligacy, but in trying to achieve a decent standard of living they have joined the industrial world in destroying most of the last of the natural environment and driving to extinction a large part of the world's fauna and flora. If present trends continue unabated, the planet could easily lose a quarter of its plant and animal species within the next 30 years, and half by the end of the century.

Meanwhile, *Homo sapiens* has become a geophysical force. The first species in life to attain that dubious distinction, we have driven carbon dioxide to the highest levels in the last 200,000 years, unbalanced the nitrogen cycle, and contributed to a global warming that will ultimately be bad news everywhere, including incidentally, creating severe pressure on the national parks, probably within a matter of just several decades.

I've burdened you with these projections that are, I assure you, solidly based on the best data and consensus of environmental experts, in order to put into context what I and many other scientists see as the inevitable growing importance of the national parks in this country and other countries for scientific research and education vital to the future of society. Science and technology have led us into the present bottleneck of overconsumption and environmental deterioration, a bottleneck that we must pass through, and come out the other end as the population begins to subside, with as much dignity and as high a quality of life and with [as] much of the rest of life accompanying us as

possible.

Now science and technology, guided by a sound environmental ethic, must see us out. The national parks are our treasure houses of the remnant natural ecosystems. They protect much of the nation's biodiversity. They are the baselines of our relatively undisturbed environment, and they need to be thoroughly understood, not only for their beauty and their wildness and deep history, but also to realize their unique and vital contribution to science and education, particularly of the future.

In sum, I can only endorse the Natural Resource Challenge launched last year by the Director, Robert Stanton, to revitalize the scientific arm of the Service, a large step into the century of the environment. It meets the provision of the National Parks Omnibus Act of 1998, and addresses the "house divided" issue raised in Richard Sellars' history of the National Park Service. I am happy that Congress has appropriated funds this year for biodiversity censuses.

In so doing I speak for a growing number of scientists who look to the National Park Service as a major force in fundamental research on biodiversity, ecology, and conservation, in much the same way that medical scientists look to the National Institutes of Health and space scientists [do] to NASA. Many scientists will be glad to form partnerships with the National Park Service. They will welcome access to the parks, and collaboration with the staff. They will help you further the primary aims of the Service with support and solid information of the kind needed to solve the complex and accelerating problems you face in this century.

The National Park Service can fur-

ther the country's needs, even more than in the past, to promote science education, a high priority now as seen by more and more of our political leaders. There's no better classroom than our national parks, no more respected teachers than their guides and experts. Its educational potential alone, quite apart from the scientific potential, is a persuasive argument to Congress to provide badly needed support for the growth and the strengthening of this absurdly underfunded Service. The National Park Service can help this country provide an example to the rest of the world, which is desperately needed to protect and make full use of the natural environment. If we don't expand our national parks, if we don't make them centers of research, if we don't develop the scientific capability of fulfilling a global environmental ethic, who will? We can't expect Ghana or Paraguay to do it. You are, whether you planned it that way or not, natural leaders on a broadening front whose actions will have growing influence in the United States and elsewhere, especially in the developing countries and far beyond the traditional venue of the national parks.

Almost 50 years ago, in the summers of 1951 and 1952, as a young graduate student at Harvard, I first visited some of our parks—the Great Smoky Mountains, Glacier, Yosemite, and Yellowstone to conduct research on my favorite group, the ants. I collected specimens in violation of the law and I made confession directly to Director Stanton yesterday, and was provided provisional absolution.

The parks are magic still. They're a potential new source of strength in a rapidly changing and still dangerous world, a world that is becoming dan-

gerous in a new environmental way. of leadership and inspiration, added to
We're all looking to you for that kind the noble service you already give.



“Mission Statements” is an occasional column that presents compelling statements of values and ideals that are important to the people, places, and professions that the Society serves. We are looking for inspirational and insightful writings that touch on close-to-the-heart issues that motivate us to do what we do as park professionals. We invite readers to submit their own Mission Statements, or suggest previously published essays that we might reprint in this column. Contact GWS executive director Dave Harmon at dharmon@georgewright.org.