

New Perspectives in Science

By William E. Brown

*Editor's Note: The following essay appeared first in **Proceedings** of the Second Glacier Bay Science Symposium, Sept. 19-22, 1988 and is here reprinted with permission of the author and of Jim Wood, **Proceedings** co-editor. Brown is currently SWR Coordinator of the Columbus Quincentenary, stationed in the Santa Fe SWRO. He plans to retire in April 1991 and devote himself to the activities of the Glacier Bay NP Science Advisory Board and the Friends of Glacier Bay ... all from the rocking chair on the front porch of his home at Gustavus, AK.*

In the beginning, the national parks were anthropocentric. When Phineas T. Barnum visited Yosemite in 1870, he conveyed the sense of the age with this comment:

"Unsurpassed and unsurpassable. Look around with pleasure and upward with gratitude."

A century later, the founding anthropocentric purpose still informed the creed of lifetime ranger Lon Garrison – with the added insights of a century:

"Parks are for the understanding of nature and ourselves; they are for the inspiration that comes from lonely commune with nature and the forces that shape our environment; they are for solace for those troubled by the turbulence of modern civilization."

From this modern turbulence, with its specter of human species run amok, emerged a biocentric reaction; that nature – particularly in those last untrammelled vestiges of it, the national parks – was intrinsically valuable, independent of conventional measures of human utility. In its most profound statement this philosophy maintained that plants, animals, and mountains had rights and souls of their own. This was a Deep Ecology version of the pantheism and spiritual union with nature that once moved us all. It called back to Eden, to the garden before its violation, to the human innocence and integration that preceded the violation.

The founding ideal of the National Park Service can be viewed as a three-part esthetic: The Wonders of Nature, in both its emotive and intellectual beauties; the health and virility gained from wildlands experience, the Rooseveltian perpetuation of the frontier mythos; and the pure esthetics of artistic and literary expression. Somehow, in the crush of the late 20th Century, that ideal had become inadequate. The environmental ethic had crept in.

While public thought and perception evolved, the people of the Park Service doggedly pursued the management of their congressionally mandated dilemma: preservation and use ... without impairment. But they began to see that parks were more than the pleasuring grounds and mythic landscapes of the founders' vision. For the environmental ethic was contagious. They began to view parks as laboratories and models whence that ethic could be broadcast to the larger society. They began to see that parks could not long endure as refuges from troublous times and encroaching despoliation, lacking public conversion to the environmental ethic.

On another front, as early as the late 1920s, with the advent of George Wright's influence, the Park Service began to glimpse the need for science-based management if these marvelous areas were to be preserved. But the Depression, Wright's untimely death, wars, then postwar expansion of the Park System and the deluge of visitors to it, and the Park Service's response

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to that deluge, combined to shrivel the enlightened beginning. Then came criticism of the hiatus in park science, followed by a series of studies beginning with the Leopold and Robbins reports of the early 1960s, all calling for order-of-magnitude expansions of scientific research in the parks, and for the sake of their own preservation.

Social studies began to make the tie between environmental conditions and human health – physical, mental, social. An earth mortgaged by the parents faced the children yet to come.

Today the expanding horizons of thought have met each other coming around. Now the ecosystem affecting and affected by human beings is clearly seen to be the entire biosphere.

And still, here is the Park Service preserving the natural and cultural environments of the past. In the long view of history, what can be attributed only to an accident of cultural altruism – this setting aside of parklands for the benefit of the people – has become a pragmatic treasure of the utmost current significance. The adventure in cultural edification first embodied in the early parks has held in trust relatively unaltered ecosystems or parts thereof in which, belatedly, we can attempt to discover the workings of this world ... in which we can measure environmental and cultural changes that threaten the environmental solvency and sanity of the world.

From such studies in the parks can come the communications – scientific reports, lectures, campfire and school programs, films – that can inform and move the public at large to those reforms of social and individual behavior that may yet save us, and the parks that give us inspiration.

This traditionalistic institution, which has always fought within itself whether to go along with public demand or to take on the duty of edifying and guiding that demand, has, through its prescient congressional mandate, unwittingly positioned itself and the landscapes it manages for transcendent contribution to this society and the world at large. Its very conservatism, its being a kind of model of cultural lag, finding solace in the past, has fortuitously been its greatest strength. For despite the Service's human foibles, the System stands today relatively intact for the great social purpose of the coming decades. It would seem that social experiments as well as scientific ones can produce unforeseen benefits.

Now opportunity beckons. Through scientific studies using the vast assemblage of natural laboratories preserved by the terms of an earlier vision, the restrictively managed parklands of this Nation – and from that inspiration, of the world – stand ready to synthesize the anthropocentric and biocentric visions so that man can return to the fold as a functioning rather than destructive part of the biosphere. Man in nature, beholden to it for nurture – and reciprocating that care – is no longer an ecofreak.

In this expansion of the meaning and purpose of the National Park System, with its evolving bureaucracy trying to catch up with the evolving world ecosystem, the older mission cannot be lost. Nor indeed should we presume to change the words of the Organic Act that in 1916 launched the Service and cohered the System. In its wisdom, the Congress gave us a broad charter, which, like the Constitution, responds elastically to the needs of an evolving society:

"The Service thus established shall promote and regulate the use of the Federal areas known as national parks, national monuments, and reservations ... by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Immanent in this charge is the authority to meet the necessities of a changing world, to marshal the resources and ideas necessary to save the parks, to build upon the founders' philosophy – as a tree grows and extends its branches in its maturity. We must intelligently explicate the evolving mission and purpose, and seek congressional sanction for the tools and wherewithal to carry them out. But this added nourishment should flow through the roots that have sustained us all these years. This is no new planting. It is the growth of the original institution.

From the beginning the parks have been a mosaic of values and functions. These parks, these cultural creations, can and should – through enlightened zoning and land-use dedication – combine traditional public access to beautiful and instructive parklands with scientific utility for social understanding and survival. Environmental standards and aspirations gained from parkland experiences – along with the scientific knowledge derived from parkland study zones – can help guide the larger decisions and reforms that our society must make in the coming decades.

Thus, the founding concept of public use and enjoyment need only be adaptively expanded to accommodate modern socio-scientific imperatives. To the extent that America's parklands contribute to that larger reform, they can save themselves from encroachment and further justify their value to the public. In a world ever more straitened for resources, the park ideal and the parklands themselves will escape exploitative predation only because of their more profound social utility as parklands.