

# NATURAL RESOURCES MANAGEMENT--TREND OR FAD?

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**J**ohn Naisbett (1982) recently described ten "megatrends" of our American Society that are changing the way that we all do business. His book implies that if we are to be successful and prosper we should understand these generic trends and make use of this new perspective. Within this context, Naisbett differentiated between fads and trends. He wrote that fads are top-down events which usually have their origins in New York City or Washington, D.C.; they live a short life and fade. Trends, on the other hand, are bottom-up events that have their roots in local communities. They are long-lived and affect every one of us in some manner or another every day of our lives.

I interpret the recent emphasis on resources management within the National Park System as a trend and not as a fad. It is a grass-roots event that seem to be increasing in scope. It is an event that in my mind is crucial to the long-term perpetuation of park values. It is closely intertwined with the well-being of the land and Americans. It suggests a reawakening of true land stewardship. And it places the care of the land into the twenty-first century, so that resource managers become the trend-setters rather than the followers.

## **Background**

The National Park Ranger has long been responsible for the care afforded the park's resources. Caretaker duties range from protection of people and facilities to the intricate natural processes for which the national parks were established. During the first half of the 20th Century, law enforcement was rarely more than monitoring, and resources management usually was little more than policing the environmental *status quo* (Wauer, 1980). The Park Ranger was able to adequately budget his time to be an effective "jack-of-all-trades."

Societal influences began to change these activity patterns during the 1960s, and Park Rangers began to spend more and more of their time and energy dealing with acute law enforcement issues (Philly and McCool, 1981). The resources management portion of their duties became secondary in an overwhelming number of areas. Park Ranger recruitment standards were changed to attract individuals with more law enforcement background. And on January 1, 1978, Public Law 94-458 took effect, that required all Park Rangers with law enforcement duties to be commissioned. This required 200-hour police training initially, and annual 40-hour refresher courses for recertification. Many Park Service employees see this as a step toward the "derangerization" of the Service (Charles, 1982). It unquestionably favored law enforcement interests, and devalued interests and expertise in the natural resources.

These changes within the National Park System happened during a period of time when (1) park visitation more than tripled, (2) the Park Service experienced a significant decline in the total number of its employees, (3) many of the parks' natural buffers became seriously eroded by increasing adjacent land uses, and (4) environmental pollutants were increasing exponentially with each passing year.

Some of the more enlightened park managers hired scientists or resource specialists to help them address these concerns. However, the majority of the scientists

found themselves dealing with resources management issues rather than science, and the majority of the resource specialists found themselves overwhelmed with the technicalities and magnitude of the problems with which they were expected to deal. Most of the resource specialists did not possess a level of expertise to adequately understand the technological issues that existed. Most of these individuals were former Park Rangers or Park Interpreters with little state-of-the-art education or training. Although some possessed special skills, such as back-country, wildlife or cave management, few could relate to the more holistic problems such as air and water pollution.

Such were conditions within the National Park Service during the mid-1970's.

### **State of the Parks and Aftermath**

In the March and April 1979 issues of *National Parks and Conservation Magazine*, the National Parks and Conservation Association (NPCA) reported on information they had obtained in a 1978 survey of 203 parks, under the title of "NPCA Adjacent Land Survey: No Park is an Island." These articles revealed a multitude of both internal and external threats affecting park resources. In summary, the authors stated that, "Unless all levels of government mount a concerted effort to deal with adjacent land problems in a coordinated manner, the National Park Service mandate. . . will be completely undermined."

At the same time, in December 1979, The Conservation Foundation published an "Issue Report" entitled, "Federal Resource Lands and Their Neighbors" (Shands, 1979). This document summarized responses of questionnaires that they had sent to a variety of Federal land managers. It stated that adjacent land development was the principle threat to national parks and other protected lands.

These combined efforts in developing these reports did not go unnoticed by the Park Service and members of Congress. In fact, in July 1979, the Director of the National Park Service received a letter from Congressmen Phillip Burton and Keith G. Sebelius that asked the Service to prepare a "State of the Parks Report." The request stated, "What we have in mind is in the line of factors such as increasing air and water pollution, encroaching developments, troublesome visitor use pressures, legally on-going or rights to exercise incompatible use within the parks, and the like."

Since I was the Washington Office Chief of Natural Resources at the time, I assumed the responsibility for developing the Park Service response. Questionnaires were sent to all 333 park units. We asked, "In the light of the enabling Legislation, the Legislative History, and the Statement for Management, What Threats are Impacting the Park Resources and to What Extent?" And members of my staff began to research materials that could be utilized in writing the report.

On May 6, 1980, "State of the Parks - 1980, A Report to the Congress," was sent to the Congress by the Director (N.P.S., 1980). It represented the first time the Service had undertaken a complete evaluation of the conditions of its natural and cultural resources. The report stated that none of the parks was immune to the vast array of threats that were bombarding the resources from every conceivable direction. The report documented the magnitude of the threats from within and outside of the parks, and stated that the large natural areas, America's crown jewels, were most seriously threatened. The report focused attention on the resources as never before, and reminded the Service of its primary mandate to protect the significant resources within its area of responsibility. It provided the

very best "hook" available for the Park Service to obtain the support necessary to initiate the kind of sound natural resources management program essential to addressing the ever-increasing spiral of threats.

As a follow-up to the May 1980 report, the Service was requested by Congressmen Burton and Sebelius to prepare a second report that would outline a strategy for preventing and mitigating the myriad of internal and external threats that were identified in the first report.

This second report--"State of the Parks: A Report to the Congress on a Service-wide Strategy for Prevention and Mitigation of Natural and Cultural Resources Management Problems" (N.P.S., 1981) -- was sent to Congress in January 1981. It identified numerous prevention and mitigation activities underway and anticipated within the parks, and also listed a number of generic programs--from new guidelines to an expanded in-Service training program--planned for the Service. One of these was the development of a Servicewide Natural Resources Management Trainee Program.

This training initiative was implemented in the summer of 1982 as a multifaceted trainee development program for three dozen park units, to train a cadre of newly-hired resource specialists. It incorporated training plans specifically tailored for the individual trainee and benefitting park over a two-year period. This program has succeeded exceptionally well, and after the first two-year program is completed this summer, it will be repeated, with a few modifications, starting in the fall 1984.

What has been most important about this program is the visibility it has received both within and outside of the Park Service. It has created a greater recognition of the necessity for the type of specialists the program was designed to produce. Several additional park units have since hired natural resource management specialists or realigned their organization to give resources management functions the attention it so richly deserves.

### **Facts and Figures**

During 1979, a good deal of information on NPS personnel was accumulated in preparation of the 1980 State of the Parks Report; most was not utilized. That personnel database, however, provides an excellent point of reference on the status of various types of employees on duty with the Service on December 1979.

One hundred and fifty-four individuals were identified as natural resource specialists within the 333 park units. This total represented only 1.6% of the total NPS work force of 9,319 permanent employees. The 154 natural resource specialists were stationed within 62 of the park units; 271 units (81%) were without a natural resource specialist. The total of 154 is skewed, however, because 51 of these were stationed at only two areas, Everglades and Redwoods national parks; both parks were recipients of significant natural resource programs through special appropriations. It is obvious that a considerable shortage in natural resources management expertise existed within the Park Service in December 1979.

Three years later, in fall 1982, a second survey of all the parks was undertaken through the pertinent regional offices to assess the current natural resources management capability of the Service (Form 1). Information was requested on (1) the number of employees actually spending 51% or more of their time doing natural resources management, (2) their academic training, (3) the number of field employees that received in-Service training in natural resources-oriented

courses, (4) the park's organizational placement of natural resources management, and (5) the status of resources management planning efforts.

The new database revealed a considerable increase in natural resources management expertise in the field during the three years. Ninety-three additional employees had been added to the natural resources management roles. A total of 247 park employees were identified within 112 park units, increases of 38% and 45%, respectively. Thirty-four percent of all park units now possess at least one specialist on their staff, compared with only 19% in 1979.

Educational levels of the 247 natural resource specialists varied. Fifty-one percent (125 individuals) possessed a Bachelor's Degree, twenty-five percent (63 individuals) possessed a Master's Degree, twenty percent (49 individuals) had not completed a college degree, and four percent (10 individuals) possessed a Ph.D. Although the number of graduate degrees was higher than expected, so was the number of individuals without a college degree. It is imperative that only highly trained personnel be hired for these highly skilled positions. We can no longer adequately address our resources management responsibilities with "good old boys" and "hobbyists." We must approach every resource problem with the expectancy that every project coordinator is likely to stand in a court of law to defend his program before it is solved. Any other position is inadequate and unrealistic.

Since 1979, thirty-three 40 to 50-hour courses in natural resources have been provided through Servicewide or regional in-Service training programs. A total of 459 trainees participated in the 33 courses, that varied from general natural resource subjects such as "Management of Natural Resources for Superintendents and Mid-level" employees, or "Introduction to Natural Resources Management," and "Planning Natural Resources Management Programs," to more specific ones such as "Prescribed Fire Management," "Coastal Zone Management," and "Air Quality Monitoring."

Training has long been a highlight of NPS operations, and the increased emphasis on natural resources has helped to focus attention on the importance of professionalism in natural resources management like never before.

Of the 112 park units with at least one employee involved with natural resources management during the majority of the work time, thirty-six (32%) of these programs were aligned directly under the park's superintendent or assistant superintendent. Fifty-nine (53%) of the 112 programs were aligned directly under the park's chief ranger. Seventeen (15%) of the 112 natural resources management programs were aligned directly under one of the following park offices: interpretation and resources management, professional services, park operations, resources management and planning, resources management and visitor protection, or facility management.

In twenty cases (18%), Resources Management was considered a separate division within the park unit; in thirty-nine cases (35%) it had been given branch status, and in fifty-three cases (47%) it had been combined as only a function of a division and not given separate identity.

Resources Management Plans (RMP) are one part of the Service's General Management Planning Process, but usually are prepared independently by the park staff. The RMP's document all of the park's management, monitoring and research activities relating to the area's natural and cultural resources. These plans describe all of a park's resource problems and discuss a full range of resource-related activities underway and anticipated. RMP's are the park's single

most important document for the management of its natural and cultural resources.

Although RMP's have been a required part of a park's planning process since the 1960's, few parks complied. In fall 1979, only 94 park units possessed an approved plan. By winter 1982, a total of 222 (an increase of 128 plans) park units possessed an approved plan, and an additional 16 were in final draft stage.

## Conclusions

While natural resources management has come a long way in recent years, it is obvious that it still has a long way to go to receive the status it must have if it is to remain a viable and effective program for the long-term management of national park resources.

It is clear that threats to park values will not decline in the foreseeable future. It is unlikely that the abundant issues that require constant attention within the parks will decline; rather, they are likely to increase. It also is probable that the Park System will continue to be seriously pressed for funds and manpower to address the varied natural resource issues.

The most likely inroads into preventing and mitigating the abundant resource problems of the parks will come with increased quality of attention. That CAN be accomplished with recruitment of well-educated and enlightened personnel, a continued training program in natural resources, and the placement of the responsibilities for natural resources management within the parks where it will receive the attention and clout necessary to compete against the additional areas of concern within the parks. The care and attention afforded the natural and cultural resources of the parks will determine the long-term value of national parks as a symbol of American achievement and respect.

## Literature Cited

- Charles, Michael I. 1982. The Yellowstone Ranger: the social control and socialization of Federal law enforcement officers. *Human Organization*, 41, 3:216-226.
- Naisbitt, John. 1982. *Megatrends*. Warner Books, Inc., N.Y.
- National Park Service. 1980. *State of the Parks - 1980 A Report to the Congress*. U.S.D.I., Wash., D.C.
- National Park Service. 1981. *State of the Parks: A report to the Congress on a Servicewide strategy for prevention and mitigation of natural and cultural resources management problems*. (unpubl. report).
- National Parks and Conservation Association. 1979. NPCA Adjacent Land Survey: No Park Is An Island. *National Parks & Conservation Magazine*, March and April, 1979.
- Philly, M. Peter, and Stephen F. McCool. 1981. Law enforcement in the National Park System: Perceptions and Practices. *Leisure Sciences*, 4, 3:355-371.
- Shands, William E. 1979. *Federal Resource Lands and Their Neighbors*. The Conservation Foundation, Wash., D.C.
- Wauer, Roland H. 1980. *The role of the National Park Service natural resources manager*. N.P.S., Coop. Park Study Unit, Coll. Forest Resources, Univ. Wash., B-80-2
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