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# The National Park Service natural resources management trainee program: 20 years later—looking back to the future

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Introduction and background

Fundamental conflicts between visitor use and resource preservation have been at the core of the National Park Service (NPS) mission (Sellars 1997, 1-5). The public perception of park resources for utilitarian purposes, coupled with the struggle to secure adequate funding for resource preservation (Clarke and McCool 1985, 48-64), have been a paradox for sound, long-term management. As a result, understanding and managing the ecological systems within the National Park System has long proven a difficult task for the NPS. Despite at least a dozen reviews urging change in how these programs are managed, science in the support of ecosystem management has languished in NPS (National Research Council 1992). Until the status of natural resources within NPS was clearly articulated in the second State of the Parks Report (NPS 1981), having park staff dedicated to manage natural resources was more the exception than the rule. In most cases, the responsibility for natural resource management was assigned to park rangers who had a variety of duties; thus, natural resources management was often a collateral responsibility. In a sweeping attempt to rectify that situation, several initiatives were implemented by NPS in the early 1980s (NPS 1981), one of which was the natural resources management trained (NRMT) program. The program trained personnel in a variety of natural resource-related disciplines with the intent to produce a cadre of natural resource managers to work in individual park units. From a regional prototype in the late 1970s, the NRMT program evolved to a nationwide effort in 1982 (Supernaugh 1994). Twelve years and six classes later, the program had trained nearly 150 individuals dedicated to the management of natural resources throughout the National Park System.

The program's immediate goal was to provide a cadre of natural resource managers working within NPS units (Wauer 1980). At the outset, the long-term impact that these individuals might have on the system was uncertain. How graduates would advance and influence the overall management of park resources was unknown because a career ladder for natural resource managers was not available in NPS. In addition, programmatic initiatives are often short-lived due to a variety of factors, including changing politics, shrinking budgets, and agency

reorganizations. Finally, the culture of NPS revolves around the park ranger. The NRMT program was designed to produce professional natural resource managers, with the intention that they be classified in the biological science (i.e., 400) series according to U.S. Office of Personnel Management guidelines. Separation of responsibilities for natural resources from the park ranger series represented a fundamental change in how NPS would conduct natural resources management. How this change would be received was unknown. Until a retrospective evaluation could be undertaken, the fate of program participants and an assessment of their

accomplishments would remain a question mark.

Nearly 20 years have passed since the first NRMT program was implemented, and we attempted to evaluate the success of the program, albeit somewhat subjectively, by examining where program participants had moved to in their careers and what type of work they have been engaged in. Our objectives were to determine if these individuals had moved into senior-level positions and, if so, were they having a significant, positive impact on natural resources throughout the National Park

System.

#### Methods

We conducted telephone interviews in the spring of 2001 with individuals from all six NRMT program classes to determine their current occupational series and grade, and to develop some perspective about the success and shortcomings of the program. Individuals were also questioned about what they felt was their most significant contribution to the natural resource arena. We synthesized the administrative details of the program and briefly discuss how changes in the structure of the NPS affected the program.

If individuals had left NPS but were still in the federal service, we included their personnel information in our database. We compared federal grade and occupational series data with identical information collected nearly 10 years earlier (1992) after the

completion of the fifth class of the NRMT program.

Program synthesis and results

The first class of the NRMT program was 24 months long and included 37 trainees. Subsequent classes were shortened, ranging between 13 and 22 months with a class size of 20-25 individuals. For the first two classes, the positions were encumbered and new position announcements solicited potential candidates. The program later evolved into a format which selected participants based on a training announcement. Employees were then selected based on their qualifications, coupled with park needs with park needs.

We contacted 120 out of a possible 147 individuals that participated in the program. Ninety-four percent (n=112) of the individuals that were interviewed still work for NPS. Ninety-six percent work in the Department of the Interior. Eighty-six percent of the first class completed the training and graduated from the program. All 110 participants who entered the last five classes completed the program. Participants have proceeded to fill positions at all levels of management within NPS (Figure 61.1). Federal grade levels, as expected, have increased over time. One participant from the first class is now in the Senior Executive Service (SES) training program.

Individuals currently hold positions in eight different U.S. Office of Personnel Management occupational series (Figure 61.2). There has been a slight decrease in the number of park ranger positions in the 025 occupational series since the program started despite the fact that 12 individuals are now park superintendents. Since the program's inception, most individuals have been employed as biologists or natural resources specialists (series 401), but positions now reflect a greater number of categories within the biological science group (which includes all 400 series). Some individuals also have moved to positions within the administrative group (300 series), demonstrating a broad range of administrative and program management responsibilities.

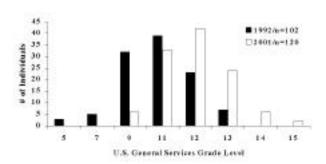


Figure 61.1. Federal grade levels for participants in the natural resources management training program in 1992 and in 2001. As of 1992, only five classes had been completed.

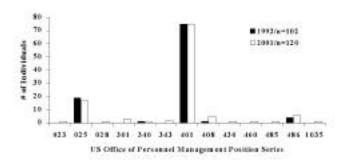


Figure 61.2. Occupational position series for participants in the natural resource management training program. As of 1992, only five classes had been completed. Position series are as follows: 023 - environmental specialist; 025 - park ranger; 028 - environmental protection specialist; 301 - administrative technician; 340 - program manager; 343 - manager; 401 - biologist; 408 - ecologist; 430 - botanist; 460 - forester; 485 - refuge manager; 486 - wildlife biologist; 1035 - public information specialist.

#### Discussion

Nearly 20 years have elapsed since the NRMT program began. Although the Nearly 20 years have elapsed since the NRM1 program began. Although the original goal of the program was to train individuals to manage a park's natural resources (Wauer 1980), there has been a widely held conviction that people graduating form this program would eventually become senior managers in NPS. Within NPS, one measure of success—and a route of entry into senior-level management—is to become a park superintendent. Representing slightly more than 8% of all program participants, superintendents now manage sites that range from the largest natural areas to small historical and urban NPS units. Program graduates also manage sites in the Bureau of Land Management and the U.S. Fish and Wildlife Service.

Because program participants chose to focus on a career in natural resources, it

Because program participants chose to focus on a career in natural resources, it seems reasonable that not all these individuals would aspire to become park superintendents. Many individuals from this program have continued to focus their careers in natural resources management and hold key NPS natural resource positions as program chiefs in individual parks, regions, and at the Washington level. A classic example of the influence by program participants is demonstrated by the fact that some NRMT graduates have been instrumental in establishing a career ladder for natural resources management in NPS.

Despite funding shifts and administrative reorganizations within the NPS Division of Natural Resources, the NRMT program managed to survive 12 years. As with any program, there were both positive and negative aspects (Table 61.1). Of those we interviewed that have left NPS to work for other federal agencies, particularly those in the Department of the Interior, there was a perspective that NPS was somewhat archaic in their approach to natural resources management. These individuals felt that natural resources were not considered a priority and on a level equivalent with other NPS operations. equivalent with other NPS operations.

#### Strengths

- Exposure to a diversity of issues and disciplines
- Network of contacts
- Understanding of agency culture and mission

### Weaknesses

- One training curriculum fits all participants
- Too much time and travel
- Training responsibilities versus position duties
- Lack of training in cultural resources

#### Table 61.1. Strengths and weaknesses of NRMT program as perceived by participants.

There is some sentiment in NPS that the NRMT program, despite its relatively long tenure, was stopped prematurely. Another perspective is that NPS must develop more of an institutional memory regarding the management of natural resources (M. Soukup, NPS associate director for natural resources, personal communication). These ideas are not mutually exclusive, however, and we believe that the NRMT program, by providing natural resource managers to areas without such historic expertise, does in fact provide an institutional memory, or at least the beginning of one. We also believe that the projects and issues (Table 61.2) that beginning of one. We also believe that the projects and issues (Table 61.2) that

NRMT program participants have managed or influenced is a clear testament demonstrating the significant positive impact of this program on NPS. Some of these projects are still in progress and will continue to have a long-term positive influence on natural resources management across NPS. It seems clear that the initial goal of the program to produce a cadre of natural resource managers in parks was met and perhaps has been exceeded with the entry of an ever-increasing number of program graduates into the ranks of NPS senior management.

- Designation of Dry Tortugas as a Natural Area Reserve
- Dam removal adjacent to Olympic National Park
- Carrying capacity model for Mount Rainier National Park
- Parkwide faunal and floral inventories: Great Smoky Mountains National Park, Valley Forge National Historical Park, Channel Islands National Park
- Resource stewardship curriculum for NPS protection rangers
- California Desert Protection Act
- Endangered species protection and population viability: grizzly bears, gray wolves, ruffed grouse, elk, sea turtles
- Exotic species removal: mountain goats, oryx, exotic plants
- Ecosystem restoration: reptile and amphibian populations, riparian habitat, wetlands
- National natural resource information database

#### Table 61.2. Natural resource projects and issues in which NRMT participants have been involved.

#### References

Clarke, Jeanne N., and Daniel McCool. 1985. Staking Out the Terrain: Power Differentials Among Natural Resource Management Agencies. New York: State University of New York Press.

National Park Service. 1981. State of the Parks: A Report to the Congress on a Servicewide Strategy for Preventing and Mitigation of Natural And Cultural Resources. Washington, D.C.: National Park Service.

Resources. Washington, D.C.: National Park Service.
National Research Council. 1992. Science and the National Parks. Washington, D.C.: National Academy Press.
Sellars, Richard W. 1997. Preserving Nature in National Parks: A History. New Haven, Conn.: Yale University Press.
Supernaugh, William, R., Jr. 1994. An assessment of progress made between 1980 and 1992 in responding to threats to the national park system. M.S. thesis. Slippery Rock University, Pennsylvania.
Wauer, Roland, H. 1980. The Role of the National Park Service Natural Resources Manager. Technical Report CPSU\UW B-80-2. Seattle: NPS Cooperative Park Studies Unit University of Washington

Studies Unit, University of Washington.