By Deborah J. Chavez, James A. Harding, and Joanne F. Tynon

Many trails across the United States are part of the 1968 National Trails System Act (NTSA; P.L. 90-543), which authorized the establishment of a system of trails. Under this legislation, two types of trails are congressionally authorized and well-known: National Scenic Trails (the Appalachian and Pacific Crest Trails were the first in 1968) and National Historic Trails (the first four designated in 1978 were the Iditarod, the Lewis and Clark, the Mormon Pioneer, and the Oregon National Historic Trails). National Scenic Trails are continuous protected corridors for outdoor recreation, whereas National Historic Trails generally consist of trail segments and remnant sites; for example, past routes of exploration, migration, trade, communication, and military action. Currently there are eight National Scenic Trails and 12 National Historic Trails.

Also included in the NTSA is a lesser-known but much larger category of trails, the National Recreation Trails (NRT). NRTs are existing trails recognized by the federal government as contributing to the National Trails System that do not meet the special scenic or historic status and thus do not require congressional authorization. Criteria for inclusion include readiness (trail must be ready for public use already), availability (reasonably accessible to urban areas), length (may vary but must be continuous), location (wherever possible the significant natural and cultural features of the surrounding area should be incorporated into the trail network), design commensurate with anticipated use, and certification (that the trail will be available for public use for at least 10 consecutive years, following which the trail may be recertified in perpetuity).

There are 822 National Recreation Trails across the United States adding more than 10,000 miles of trails to the system. NRTs include a wide variety of trail types, uses, lengths, topography, history, and physical challenges. They support a wide range of activities, including hiking, mountain biking, cross-country skiing, motorized recreation, and horseback riding. Two-thirds of NRTs are federally managed, and the remainder are managed by a variety of nonfederal public and private entities, such as state governments and private foundations.

NRTs differ in physical characteristics (length, elevation, surface type), social characteristics (allowable uses, trail amenities), and management concerns (level of maintenance, signage). Most of the trails (63 percent) were designated National Recreation Trails between 1978 and 1981. It is time for a reevaluation of this lesser-known system.

Methods

Some data on National Recreation Trails were available from the Register of National Recreation Trails (USDI-NPS 1993), including the name and...
number of each trail, its designation
date, seasons of use, and uses permit-
ted. Uses were categorized as foot, bi-
cycle, snowmobile, handicapped,
water, horse, ski, interpretive, under-
ground, and motorized. Trail surface
types were categorized as asphalt,
wood, natural or native material, or
concrete. Finally, the register listed trail
length, administering agency, and con-
tact address.

A mail-back questionnaire was de-
signed and administered to NRT man-
gagers using Dillman’s (1978) total de-
sign method. Variables included in the
instrument were types of uses, surface
types, challenges most often experi-
enced by NRT managers (Chase 1987;
Pettit and Pontes 1987; Jacoby 1990;
Tilmant 1991; Watson et al. 1991;
Chavez et al. 1993; Moore 1994;
Chavez 1996a) and management tech-
niques used (Chavez 1996b, 1997).
Also included were questions about the
managers such as gender, age, level and
type of education, and length of em-
ployment in recreation management
and in NRT management.

Of 822 NRT managers, 512 com-
pleted and returned questionnaires,
for a response rate of 62 percent.
Using the Register of National Recre-
ation Trails (USDI-NPS 1993) we
compared respondents to nonrespon-
dents on several variables and found
no significant differences.

Use of NRTs

The managers reported that hiking
and walking were by far the most pop-
ular activities on National Recreation
Trails (80 percent), and for some (14
percent) hiking and walking consti-
tuted all of their NRT use.

Twenty-five percent reported their
trails were used for interpretation or
nature walks. Slightly fewer reported
use by equestrians (22 percent) or
mountain bikers (21 percent). (Note
that these are not exclusive categories;
some trails are used for more than one
activity.)

A large majority of managers re-
ported no use in any of the following
activity categories: water-based activi-
ties (96 percent), in-line skating (93
percent), motorized use (93 percent),
and snowmobiling (92 percent).

Conflicts on Multiple-Use Trails

To understand how social conflicts
might occur on NRTs requires some
background on the allowable uses on
those trails. Half of the NRTs allowed
nonmotorized single use, and almost as
many (39 percent) allowed nonmotor-
ized diversified use (for example, they
allowed hikers and equestrians). Few
trails allowed a mixture of nonmotor-
ized and motorized use (8 percent) and
even fewer were designated for only
motorized single use or motorized di-
versified use (2 percent).

Regardless of trail type (single or
multiple use), there were few reports of
social conflicts (table 1, p. 42). When
looking at all trails, most social con-
licts were between pedestrians and
other groups; looking at only the trails
that allowed multiple use, most con-
licts were between bikers and other
groups. The relatively low number of
conflicts may result from two factors:
most trails had no portion of their trail
in urban areas (88 percent) and many
trails were single use (50 percent).

NRTs are prevalent in rural areas, de-
spite the NTSA criterion that trails be
“reasonably accessible to urban areas”
(NTSA; P.L. 90-543, Section 4).

There was a relationship between
surface type and social conflicts as sug-
gested by previous research (Gobster
1995). Trails that were asphalt or partly
asphalt had slightly higher levels of so-
cial conflict than nonasphalt trails (25
percent compared to 17 percent), pos-
sibly because most asphalt trails are lo-
cated in urban areas and get more use.

Issues of more significance to the
trail managers were related to safety
and resource damage. Although safety
This National Recreation Trail, formerly the Washington and Old Dominion (W&OD) railroad tracks, stretches for miles into rural Virginia. The section shown here runs through suburban Vienna, Virginia, posing a distinctly urban challenge to users—dodging traffic.

was considered the most important management issue (80 percent ranked it first or second in a list that included safety, accidents, user conflicts, and resource damage), the most frequently cited problem was resource damage (using the same list, 25 percent reported that it occurred frequently or often). This latter problem was not tied to the number of times trails received maintenance, although nearly one-quarter (21 percent) reported no maintenance of their trails and 28 percent reported maintenance occurred only once a year.

Knowledge and Awareness

Most NRT managers were men (72 percent) in their forties (mean age = 42.8) with fewer than 10 years managing the NRTs (mean = 8). Most managers held a BA or BS degree (44 percent), several had a master's degree (14 percent), and a few had earned a doctorate (2 percent). By far the greatest percentage of survey respondents (43 percent) worked for the USDA Forest Service, followed by municipal parks and recreation departments (12 percent), state governments (9 percent), the National Park System (6 percent), US Army Corps of Engineers (6 percent), and USDI Bureau of Land Management (3 percent), as well as private companies, universities, and foundations.

One rationale for NRT designation offered in the 1968 Act was that it would convey some prestige to the trails, which would result in favorable publicity, community benefits, and added protection. However, the present study shows that most of the managers have little knowledge about NRTs, and many were not even aware that a trail they managed carried the NRT designation. A few typical comments were: "We haven't been able to locate this trail." "We've talked to a lot of people, and they didn't know anything about the trail." "No one has heard of this trail." "There are very few people around anymore who know anything about it."

The latter statement may help explain the lack of awareness by managers. About 80 percent of the trails were designated before 1982, whereas most of the NRT managers started in their positions after 1988. Apparently there is little institutional memory about these trails, as most managers learned about them in the course of this study. Only one manager mentioned that he had used the NRT designation, to form partnerships to assist with trail upkeep.

Another potentially critical issue was the closure of NRTs. From two managers we heard the following: "The trails at this park are no longer available to the general public" and "Plans are to remove these trails in the near future."

In all, we found that 6 NRTs were closed, though their names still appeared in the Register of National Recreation Trails (USDI-NPS 1993). Another 15 were "no longer managed as National Recreation Trails" despite the fact that there are no management guidelines to follow once a trail has been designated an NRT.

Conclusions

NRT managers reported few social conflicts but had concerns about safety and resource damage. Although many NRTs offered myriad recreational opportunities, some had been closed to use by the general public and others may be closed in the near future. Many of those that remain are open to single or multiple nonmotorized use. Few managers were aware that they managed a trail designated as an NRT or had used the designation to their advantage.

Awareness of NRTs can be easily remedied; indeed, awareness was raised simply by our survey instrument. Only one manager mentioned...
how he used the NRT designation to his advantage, by forming partnerships. Although partnerships are not panaceas, there are characteristics of partnerships (Selin and Chavez 1993, 1994) that could be used successfully by all NRT managers.

The time is right for a formal review of the NRTs by the agencies overseeing them, particularly to address awareness and issues of concern to managers. Such a review was recently initiated by the National Recreation Trails Revitalization Roundtable, a group composed of representatives from American Trails, American Hiking Society, Rails-to-Trails Conservancy, and others, as well as federal land management agencies such as the National Park Service. At this time no additional trails are being designated as NRTs although this is expected to change in the near future. In fact, the review is likely to produce a streamlined application process. In addition, efforts are under way to develop a website for NRT information which should result in more knowledgeable managers and users. Together, these efforts may help revitalize National Recreation Trails.

**Literature Cited**


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