

Chapter 2

RECREATION OPPORTUNITY SPECTRUM: A VEHICLE TO TRAIL LAYOUT AND CONSTRUCTION

BACKGROUND

The great outdoors offers a tremendous diversity of recreational opportunities. Equally diverse are the public's recreational interests and needs. From city parks to pristine wilderness, people look to the outdoors to satisfy their desires, challenge their abilities, and meet their expectations in a particular activity and setting. Recreation researchers have long recognized the importance of the relationship between expectations and settings. Many have suggested that managers should provide a range of opportunities to best serve the diversity of public expectations (Clark and Stankey 1979).

To serve as a framework for inventorying, planning, and managing recreation resources the USDA-Forest Service developed the **Recreation Opportunity Spectrum (ROS)**, in accordance with the Forest and Rangeland Renewable Resources Planning Act of 1974 (PL 93-378), amended by the National Forest Management Act of 1976 (PL 94-588). ROS allows accurate stratification and definition for classes of outdoor recreation environments. It can be applied to all lands, regardless of ownership or jurisdiction (USDA-Forest Service 1982).

Since the time of its development, ROS's use has become widespread among different agencies and groups. The following federal legislation, which requires consideration for accessibility by people with handicaps, documents acceptance for a system such as ROS: Architectural Barriers Act of 1968, Rehabilitation Act of 1973, and Americans With Disabilities Act of 1990 (ADA). The current task force working to respond to ADA requirements is basing their recommendations on the ROS. A logical step for the North Country NST's Handbook for Trail Design, Construction, and Maintenance is to follow ROS. Doing so demonstrates responsiveness to accessibility guidelines depending on the trail setting and provides a common ground for determining degree of trail development.

ROS EXPLAINED

The current ROS of the USDA-Forest Service divides recreation settings into six broad categories which, at times, overlap—urban, rural, roaded natural, semi-primitive motorized, semi-primitive non-motorized, and primitive. In the interest of simplicity and considering the nature of the North Country NST, these are combined into four categories. The recreation settings used throughout the remainder of this handbook are: urban, rural/roaded natural, semi-primitive, and primitive.

Many people associated with the North Country NST tend to think of and manage the trail as if it were semi-primitive throughout when, in fact, the surrounding degree of land development is inconsistent with this more restrictive level of management. At times it is difficult for volunteers and local trail managers to determine the class of an area so that the appropriate trail standards can be applied.

- **Urban** settings are characterized by substantially urbanized and modified natural

environments. Although sites may still appear natural, vegetation is often manicured. Renewable resources (timber, grass, etc.) are modified and utilization practices are designed to enhance specific recreation activities. Sights and sounds of humans on-site are predominant. Large numbers of visitors can be expected, both on-site and in adjoining areas. Facilities for highly intensive motor vehicle use, parking, and mass transit are often available.

Recreation sites and opportunities are convenient and the probability of experiencing contact with individuals and groups is high. Experiencing natural environments, having challenges and risks associated with the natural environment, and using outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive use of highly human-influenced parks and open spaces are common.

The areas along the North Country NST that offer a fully developed *urban* environment are limited. However, there are places where the trail passes through quaint little towns or medium to large-sized cities. The trail may follow a sidewalk or other highly developed linear parkway trail such as those portions through Lisbon (OH), Mackinaw City (MI), and Valley City (ND), or where it follows developed urban trails such as Battle Creek Linear Parkway (MI) and Petoskey Riverwalk (MI).

- **Rural/Roaded Natural** settings are characterized by a more natural appearing environment with moderate evidence of human activity. Interaction between users is low to moderate. Resource modification and utilization practices are evident but harmonious with the natural environment. Conventional motor vehicle use is common on paved, graveled, and unsurfaced roads.

An approximately equal chance of experiencing contact with other user groups and experiencing isolation from the sights and sounds of humans exists—though the chance for isolation will be much greater in roaded natural areas. Opportunities for a high degree of interaction with the natural environment are common. The challenge and risk associated with more primitive types of recreation are not very important. Practice and testing of outdoor skills are important.

Most of the North Country NST passes through this combined ROS setting. The rural setting has been combined with the roaded natural setting for simplicity because the standards for trail construction are the same in these two settings. However, there are distinct differences between the two landscapes. Generally, the typical flat, rolling, and even hilly farmland and pastoral settings are *rural*. More evidence of human activity (e.g., hay bales, plowed fields, farmhouses, and more frequent road crossings) is present. A degree of isolation is experienced when the trail passes through the isolated woodlots generally interspersed throughout the landscape. Examples of rural ROS are farmlands of southern

New York, western Ohio, southern Michigan, western Minnesota, and vast open areas of North Dakota.

In contrast, *roaded natural* settings are more typical of the predominantly forested areas. Most of the national forests such as Allegheny (PA), Wayne (OH), Manistee (MI), and expansive state, county, and private forests in northern Michigan, Wisconsin, and Minnesota, fall within this setting.

- **Semi-Primitive** settings are predominantly natural environments of moderate to large size. Interaction between visitors is low but there is often evidence of other humans. The area is managed in such a way that the minimum on-site controls and restrictions present are subtle. Motor vehicle use may be prohibited in some semi-primitive areas. Timber harvesting is often present but harvest intensity and schedules are modified. Size of cut areas are smaller, timber harvest may be restricted to once per 20-25 years rather than the normal ten years, access roads are less developed and farther apart, etc.

Moderate to high probability exists for isolation from the sights and sounds of humans. Opportunities are present for independence, tranquility, closeness to nature, and self-reliance through the application of outdoor skills in a setting that offers a high degree of interaction with the natural environment.

Along the North Country NST, there are a few areas that have been formally designated by the agencies as semi-primitive, such as Red Bridge Semi-Primitive Area on the Manistee National Forest (MI). Within the national parks, the term "backcountry" essentially equates to semi-primitive. Some of the trail route through Pictured Rocks National Lakeshore (MI) is backcountry (semi-primitive). Outside of the federal lands, there may be other areas where management is less intense and more semi-primitive. Less developed portions of some state parks, such as the western portion of Itasca State Park (MN) may fall into this setting.

Generally, the semi-primitive ROS class pertains to an area or block of land that is larger than the strip of 1000-foot wide trail corridor. However, a corridor that averages 1000 feet wide and spans a significant distance along the trail could be designated as semi-primitive, particularly on federal lands. Areas of this nature exist along the Appalachian NST, and may be the best long term solution for trail protection.

Whether or not an area is semi-primitive is often a judgement call based on factors such as acreage of undeveloped area, road density, degree of timber management, the intensity of sounds and sighting of traffic, or development observed from the trail.

The following criteria may help determine if the lands in question are

managed as formally designated areas and distinguish them from the more typical forested (roaded natural) areas.

- The area has a definable boundary (roads, streams, etc.).
 - The area has at least 2,500 contiguous acres.
 - Road densities are low—averaging one mile per square mile.
 - The area is generally under one ownership or, if multi-owners, there is management commitment that the area will be managed as a unit.
 - Timber management is of low intensity and frequency. Evidence of management activities is relatively low, consisting of scattered, small, recently regenerated stands.
 - Low standard roads—often gated at the periphery of the area.
 - There is low interaction between users in a predominantly natural or natural appearing environment.
 - Boat and canoe access is generally over trails of varying lengths. Normally, boats and canoes are carried in from the periphery of the area. Some interior lakes may not have developed access.
 - Recreation is low key, light-on-the-land in nature and generally dispersed. Low impact activities such as hiking, hunting, crosscountry skiing, etc. are emphasized. Campsites are dispersed and primitive in nature. Highly developed bicycle or ORV trails are not allowed, but some areas may allow for occasional motorized use.
 - There is owner/manager commitment for this type of management.
- **Primitive** settings are characterized by an unmodified natural environment of fairly large size. Interaction between users is low and evidence of others is minimal. The area is managed to be essentially free of man-made "improvements" and facilities. Motor vehicles and other motorized equipment are not permitted.

Experiencing isolation from sights and sounds of humans is probable. Opportunities for independence, closeness to nature, tranquility, and self-reliance through the application of outdoor skills abound and present high degrees of challenge and risk.

Only formal wilderness areas fall under this ROS setting. These are normally federally designated but can be state designated. Along the North Country NST several are encountered: High Peaks in the Adirondack Forest Preserve (NY), Rock River Canyon Wilderness on the Hiawatha National Forest (MI), McCormick Wilderness on the Ottawa National Forest (MI), Porcupine and Rainbow Lakes Wildernesses on the Chequamegon National Forest (WI), and, perhaps some day, the Boundary Waters Canoe Area Wilderness on the Superior National Forest (MN). The lowest level of trail development exists in these areas.