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# National Trails Assessment 

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# NATIONAL TRAILS ASSESSMENT 

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1986
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U. S. DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

The National Trails Assessment was prepared by the Recreation Resources Assistance Division, National Park Service, U.S. Department of the Interior, Washington, D.C. The report was compiled and edited by Shirley D. Patterson and Robert J. Karotko. Special recognition is given to Karen-Lee Ryan for her efforts in proofreading, editing and final copy preparation. Contributors include various National Park Service offices and several other Federal agencies. In addition, case studies, discussions, and brief descriptions of particular programs were provided by a wide variety of trails organizations, for which we are grateful. Individual authors are noted. These case studies, discussions, and program descriptions, however, do not necessarily represent official views or policies of the National Park Service.


## CONTENTS

Foreword ..... iii
Acknowledgments ..... v
List of tables ..... ix
List of Figures ..... xi
Introduction and Overview ..... 1
Legislation of the National Trails System ..... 5
National Trail Studies ..... 11
Trail Conferences as a Model for Involvement ..... 23
Heritage National Recreation Trails ..... 31
Trail Needs: The User's Perspective ..... 33
Trail Activities Reported in the 1982-83 Nationwide Recreation Survey ..... 39
Federal Trail Activities ..... 59
Selected Current and Projected State Activities ..... 65
Trail Design for Accessibility to Disabled Persons ..... 81
Trail Concerns ..... 85
Case Studies, Discussions, and Brief Program Descriptions from the Trails Community
Introduction to Case Studies ..... 91
Urban Trails
Planning and Implementing ..... 93
The Pathway System in Reston, Virginia ..... 101
Long-Distance Hiking Trails
An Experiment in Cooperation Between Public and Private
Sectors: Trail Volunteers Set a Pattern for the Future (Appalachian Trail Conference) ..... 103
The Challenge of Volunteer Trail Management ..... 107
American Hiking Society ..... 109
Multiuse Trails
The Buckeye Trail ..... 113
A New Trend--Hiking Inn to Inn ..... 117
Horse Trails
The Southern New England Trunkline Trail ..... 119
American Endurance Ride Conference ..... 121
Other Trails
Vermont Association of Snow Travelers, Inc. ..... 123
Everglades Canoe Trails ..... 125
Wenatchee National Forest Motorized Trails. ..... 127
Appendix
Directory of Sources to Trails Information ..... 131
National Recreation Trails Guide (in separate document)

## List of Tables

Table l: Status of Trail Routes Authorized for Study by Public Law 90-543 (Page 19)

Table 2: Mileage of National Scenic and Historic Trails (Page 22)
Table 3: Current SLatus of Trail Activities: l2-month Participation Rates and Implicit Number of Participants (Page 45)

Table 4: Activity Participation Trends, 1960 to 1982 (Page 46)
Table 5: Population Characteristics of Trail Activity Participants (Page 47)

Table 6: Activity Participation by Demographic Categories (Page 5l)
Table 7: Annual Volume of Trail Activity per Participant (Page 54)
Table 8: Percentage of the Total Sample Who Said They "Particularly Enjoyed" Selected Trail Activities (Page 55)

Table 9: Favorite Trail Activities (Page 56)
Table 10: Characteristics of Trips and Outings to Engage in Selected Trail Activities in Previous 12 Months (Page 57)

Table ll: Trails Planning and Management by Federal Land Managing Agencies (Page 62)

Table 12: Developed Trails by Activity for Federal Land Managing Agencies (Page 63)

Table l3: Fxistence of Trails Legislation, State Coordination, Plan, and Inventory (Page 68)

Table 14: Trail Lands Covered by State Inventory (Page 69)
Table 15: State Trail Program Provisions (Page 71)
Table l6: States Having Metropolitan Area Planning Commissions with Trail Activities (Page 73)

Table 17: Activities Provided for by State Policy on State-Owned Lands (Page 75)

Table 18: Trails-Related Recreation Activities by Land Ownership by State (Page 77)

Table 19: Number of State, County and Local Land and Water Conservation Fund Projects that Include Trails (Page 79)
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## List of Figures

Figure 1: National Trails System (Page 9)
Figure 2: Regions to Accompany Table 6 (Page 49)

A March 28, 1983 amendment, Public Law 98-11, to the National Trails System Act, Public Law 90-543, calls for the Secretary of the Interior to submit to Congress a National Trails System Plan indicating the scope and extent of a complete nationwide system of trails.

This legislation points out the need to identify current and prospective nationally significant scenic and historic trails that would constitute essential components of a national system as well as other trails that would be desirable as part of a completed system. The legislation further calls for a plan to serve as a guide to Congress in considering routes to be studied for future authorization. It will also assist Government and the trails community in identifying trails to be made part of the system. This assessment, drawn from limited information available, is a part of a process for the National Trails System Plan.

This assessment:
Reviews the National Trails System Act, which provides for the study and designation of long-distance trails, the establishment of National Recreation Trails, encouragement of volunteers, and conversion of railroad rights-of-way to trails.

Describes studies for and development of long-distance trails.
Details the unique role of users as trail managers through trail conferences and gives several examples as models.

Explores the concept of national heritage trails and gives examples from the Eastern United States.

Summarizes trail needs.
Reports on participation rates, trends, demographic attributes, and other characteristics of trail activities and trail users.

Reports on selected trails efforts of Federal land-managing agencies and of the States.

Discusses the problem of providing trail opportunities for the disabled and the advisability of trails accessible to all.

States some of the major trails concerns, with some recommendations for alleviating these concerns.

Presents 12 case studies and brief descriptions of programs for various types of trails from geographically diverse parts of the country.

Issues raised by this assessment, which will require further study, include the following:

1. Congress identified 30 long-distance trail routes to be studied for possible designation as national scenic and historic trails. The studies of these trail routes concluded that 17 did not qualify for designation. The most common reasons for failure to qualify are cited in chapter 2. At issue is the investment of time and dollars to study trail corridors that do not eventually become designated, as well as the study and justification process which prevents some trails from qualifying.
2. The 13 trails designated by the Congress as national scenic and historic trails total 23,620 miles. About 10,374 miles, or 44 percent of the total mileage, are available for use. At issue is the implementation of management plans to expand existing mileage.
3. The use of abandoned railroad rights-of-way for trails is encouraged by both the National Trails Systems Act and the Railroad Revitalization and Regulatory Reform Act. In the last 3 years, over 10,000 miles of railroad track have been abandoned. How to implement suitable conversions needs to be addressed.
4. Trail conferences have been demonstrated as an efficient way for users to manage trails. Users would like more technical assistance in organizing trail conferences. At issue is how to provide this assistance best and identify who needs the assistance.
5. People living in large urban areas participate proportionately less in trail activities than those in small urban and rural areas, according to the 1982-83 Nationwide Recreation Survey. Users perceive one of the greatest trail needs to be more trails in or near urban areas, according to a 1981 Department of Interior study. At issue is how to provide more trail opportunities near metropolitan areas.
6. Another need perceived by users is for adequate information about trails, such as "Where can I find bicycle, or horse, or hiking trails in my home State?" "How difficult are the trails?" Two Federal agencies and two States do not have inventories of their trails. The Forest Service's inventory is maintained for management purposes, and is not directly accessible by trail users. Currently, there is no commonality among Federal or State inventories, or among methods for maintaining them. The National Park Service has conducted one trails inventory, and is currently developing the first stage of a national inventory to be focused on the information needs of the recreating public.
7. The disabled should be accommodated on trails developed for all, rather than on special trails. At issue is the extent to which existing trails should be modified and new trails designed to accommodate the disabled.
8. The greatest concern of trail users is funding. Some user groups offer to help meet this need through licenses, excise taxes on special equipment, and increased entrance and user fees. At issue are providing mechanisms for setting and collecting such fees and raising additional funds from the private sector.
9. The variety of trail activities and the limited supply of trails often leads to use conflicts. Although steps have been taken to mitigate conflicts, they remain an issue.

Future assessments will further address these issues, as well as other issues that surface.

The assessment does not cover one major trail function--the administrative issues pertaining to designation of trails by the Congress. These issues require coordination and cooperation from the States and other interest groups to develop and implement Congressionally mandated trails management plans. This function is being dealt with in other forums with the States and the National Park Service.

Comments on this assessment and suggestions for future efforts and further involvement of trails interest groups in this planning process will be most welcome.

## CHAPTER 1

## LEGISLATION OF THE NATIONAL TRAILS SYSTEM

This chapter gives an overview of the provisions of the National Trails System Act and its amendments over the last 18 years. Basically, the legislation authorizes studies for and the designation of recreation, scenic, and historic trails throughout the United States. Their acquisition, development, and maintenance is outlined in individual authorizations. The Congress has frequently limited the use of these authorities.

The following are congressional legislative actions that have affected and modified the National Trails System from 1968 to 1984.

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\text { Public Law 90-543, 90th Congress, October 2, } 1968
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This initial legislation, which established the National Trails System, designated the Appalachian Trail and the Pacific Crest Trail as the initial components of that system. The legislation further states:
> "In order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas of the Nation, trails should be established primarily near the urban areas of the Nation, and secondarily, within established scenic areas more remotely located."

The act divides the national system of trails into three components: National Recreation Trails, National Scenic Trails, and Connecting and Side Trails.

1. National Recreation Trails. The act provides for the Secretary of the Interior, or the Secretary of Agriculture, to establish and designate national recreation trails "with the consent of the Federal agency, State, or political subdivision having jurisdiction over the lands involved." National recreation trails must also be "reasonably accessible to urban areas or be located in state or national parks and forests." These trails are the largest component of the National Trails System. As of June 30, 1986, there were 501 Federal, 79 State, 140 local, and 28 private National Recreation Trails. In addition, there are 12 National Recreation Trails jointly administered by more than one agency.
2. National Scenic Trails. Authorized only by an act of Congress, these are long-distance trails providing both outdoor recreation and protection of nationally significant scenic, historic, national, or cultural qualities of the areas such trails traverse.
3. Connecting and Side Trails. These are to provide additional points of public access to nationally designated trails or connections between such trails and are to be administered by the Secretary of the Interior or, if situated on national forest lands, the Secretary of Agriculture. No connecting and side trails have yet been designated.

In addition to designating the Appalachian Trail and the Pacific Crest Trail as the first two National Scenic Trails, the act authorized studies of 14 trail routes for possible designation. Half of these were subsequently designated. (See table l.) However, it must be noted that the designation of a trail does not necessarily imply the trail is "on the ground," accessible, and usable.

The act further specifies that "the development and management of each segment of the National Trails System must be designed to harmonize with and complement any established multiple-use plans for that specific area."

The Secretary of the Interior and the Secretary of Agriculture are both directed to encourage States, political subdivisions, and private interests, including nonprofit organizations, to establish trails. Specifically, the Secretary of the Interior is to encourage States to consider trail needs in their Statewide Comprehensive Outdoor Recreation Plans (SCORPs) and in their proposals for funding under the Land and Water Conservation Fund.

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\text { Public Law 94-527, 94th Congress, October 17, } 1976
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Eight more trails were authorized for study as possible additions to the system, only one of which, the Florida Trail, has subsequently been designated. (Two of these, the Bartram Trail and the Daniel Boone Trail, although not designated as National Trails, were subsequently "recognized" by the Congress as Heritage Trails.)

Public Law 95-625, 95th Congress, November 10, 1978
Recognizing that certain trail routes authorized for study had as their principal characteristic nationally significant, factual historic origin or use, Congress established National Historic Trails as a fourth component of the National Trails System. The act states:
"National Historic Trails . . . will be extended trails which follow as closely as possible and practicable the original trails or routes of travel of national historical significance. Designation of such trails or routes shall be continuous, but the established or developed trail, and the acquisition thereof, need not be continuous on site."

Further, "Only those selected land and water based components of an historic trail which are on federally owned lands . . . are established as initial Federal protection components of a National

Historic Trail. The appropriate Secretary may subsequently certify other lands as protected segments of an historic trail upon application from State or local governmental agencies or private interests involved if such segments meet the National Historic Trail criteria . . . and are administered by such agencies or interests without expense to the United States."

Historic trail studies and designations are described in the next chapter. The Act also authorized five trails: Continental Divide National Scenic Trail, Lewis and Clark National Historic Trail, Mormon Pioneer National Historic Trail, Oregon National Historic Trail, and Iditarod National Historic Trail. It also established and authorized trail advisory councils, and established requirements for trail management plans.

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\text { Public Law 96-344, 96th Congress, September 8, } 1980
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Authorized the Overmountain Victory National Historic Trail, with no final study required.

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\text { Public Law 96-199, 96th Congress, March 5, } 1980
$$

Authorized the North Country National Scenic Trail.

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\text { Public Law 96-370, 96th Congress, October 3, } 1980
$$

Authorized the Ice Age National Scenic Trail, with no study required.
Public Law 98-11, 98th Congress, March 28, 1983
Directed studies of six trails for possible designation. They are currently under study and are also discussed in the next chapter. They are: Juan Bautista de Anza Trail, Trail of Tears, Illinois Trail, Jedediah Smith Trail, General Crook Trail, Beale Wagon Road Trail.

Authorized three trails: Potomac Heritage National Scenic Trail, Florida National Scenic Trail, and Natchez Trace National Scenic Trail. Public Law 98-11 also addressed three other important trail matters.

The first is the need for a system plan. The amendment directs the Secretary of the Interior to biennially:
"Submit to the Speaker of the United States House of Representatives and to the President of the United States Senate, an initial and revised (respectively) National Trails System plan. Such comprehensive plan shall indicate the scope and extent of a completed nationwide system of trails, to include (l) desirable nationally significant scenic and historic components which are considered necessary to complete a comprehensive national system, and (2) other trails which would balance out a complete and comprehensive nationwide system of trails.

Such plan, and the periodic revisions thereto, shall be prepared in full consultation with the Secretary of Agriculture, the Governors of the various States, and the trails community."

Public Law 98-11 also addresses the use of railroad corridors for trails. It directs the Secretary of the Interior, the Secretary of Transportation, and the Chairman of the Interstate Commerce Commission to encourage State and local agencies and private interests to establish trails on railroad rights-of-way not currently in use, in order to protect rail corridors for future reactivation, in accord with the Railroad Revitalization and Regulatory Reform Act of 1976. Neither the Railroad Revitalization and Regulatory Reform Act nor Public Law 98-11 specifies how such encouragement is to be given, although the former does direct the Interstate Commerce Commission to develop regulations to do so.

Finally, volunteers and volunteer organizations are to be encouraged by the Secretary of the Interior, the Secretary of Agriculture, and the heads of any other Federal land-managing agencies to plan, develop, maintain, and manage trails throughout the Nation, using, where appropriate, the Volunteers in the Parks Act of 1969 and the Volunteers in the Forests Act of 1972.

Public Law 98-405, 98th Congress, August 28, 1984
The Pony Express/California Trails were authorized for study.

## Summary

Through the National Trails System Act, over 750 National Recreation Trails, totaling well over 8,000 miles, have been established. In accord with the direction of Congress, these are accessible to urban areas, or in national or state parks and forest areas. Furthermore, the Congress has designated eight National Scenic Trails and five National Historic Trails. (See figure 1.) Mileage of the designated corridors totals 23,620; 14,348 Scenic Trail miles and 9,272 Historic Trail miles.

Thirty long-distance trail routes have been studied for their suitability as National Scenic or Historic Trails. Of these, 12 have been recommended to the Congress as suitable for designation. Designation does not usually provide for direct federal acquisition or development but does require a management plan.

Legislation has called for a national trails plan. This assessment is the initial step toward that plan.

The use for trails of rail corridors not currently in service is encouraged by both trails and railroad legislation.

# Trails System 

Recreation Trails
Total number of Federal, State, local, and privately
 managed trails by State.


National Trails System
Scenic Trails
Historic Trails
$\qquad$ (6)

NATIONAL TRAIL STUDIES

## Background

Long-distance scenic and historic trails can be designated only by the Congress. In designating the Appalachian Trail and the Pacific Crest Trail as initial scenic trail components of the National Trails System, the 90 th Congress established prototypes "to provide for maximum outdoor recreation potential, . . . conservation and enjoyment of the nationally significant scenic, historic, natural or cultural qualities of the areas through which such trails may pass."

Other known routes in the Nation with significant qualities were assessed to determine their suitability for designation as National Scenic Trails. Congress initially authorized that 14 such routes be studied and reports be prepared and submitted to the Congress for its consideration. In later amendments 16 studies for 17 additional trail routes were authorized. Also in the National Trails System Act, the procedures to be followed by the Secretary of Agriculture and the Secretary of the Interior in such studies are set forth, including study coordination with all affected public and private entities in the area of the potential trail route. Specific criteria for evaluating a trail route to determine if it qualifies as a National Historic Trail were stipulated in an amendment.

## Structure of Studies

Following authorization of a trail route for study, a determination is made as to which agency, the Forest Service (U.S. Department of Agriculture) or the National Park Service (U.S. Department of the Interior), should have lead responsibility for the study. This determination is based on whether the trail route is substantially located on national forest lands or on other public and privately owned lands. In the first instance the Forest Service would have lead responsibility, and in the second, the National Park Service.

National Trails Studies
Trail study reports for proposed National Scenic and National Historic Trails are combined with required compliance documents including those under the National Environmental Protection Act.

In National Park Service studies, a task directive or plan of study is prepared before a study is begun. The directive identifies a schedule of events, proposes a budget, describes actions to be taken, and includes a preliminary determination of whether an environmental assessment or an environmental impact statement should be prepared.

National trail proposals are normally evaluated through an environmental impact statement, unless it seems clear that there are no significant environmental issues. In such cases, the directive proposes that an environmental assessment be undertaken. If, during the course of the assessment, potentially significant environmental issues arise, the environmental assessment can be converted to an environmental impact statement.

Task directives also reflect Departmental and Service policy, including policy related to Federal land acquisition, establishment of new federally administered areas, management participation, and responsibilities by State and local governments.

Content of the study as provided in the act includes:

- The proposed route of the trail;
- Areas adjacent to the trail to be used for interpretive or development purposes;
- Characteristics that make the trail a worthy addition to the system;
- Current status of landownership and current and potential use of land along the route;
- Estimated costs of lands;
- Plan for developing and maintaining the trail and related costs;
- Proposed Federal administering agency;
- Extent to which other interests will participate in support and administration of the trail;
- Type and quantity of use the trail will sustain;
- Analysis of the impacts of the proposal including benefits and costs;
- For National Historic Trails, the relationship to criteria stated in the act, and the recommended action of the National Park Service Advisory Board as to historic significance based on the criteria developed under the Historic Sites Act of 1935.

Trail studies usually involve natural resources owned or administered by various entities. These include private and corporate interests, State and local governments, Indian tribes, and Federal agencies. Because of this varied ownership, issues addressed in the study are defined and worked out in close cooperation with the affected entities throughout the study process. Also, care is taken to ensure that appropriate cooperating agencies participate in any environmental report.

The following section describes a typical study report format.

## Primary Study Report Elements

Purpose of the Study and Characteristics That Make the Trail Route a Worthy Addition to the National Trails System: First it is determined whether the trail route or any part of it is eligible for addition to the national system. For National Scenic Trails, the trail route must be located so as to provide for maximum outdoor recreation potential and for conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the area through which it passes. For National Historic Trails, the route must have been established by historic use, must be historically significant with respect to a broad facet of American history, and must have significant potential for public recreational use based on historic interpretation and appreciation.

A determination must be made as to whether a potential trail route found eligible for inclusion in the system should be proposed for inclusion on the basis of feasibility and desirability. Determinations of feasibility and desirability are made through consultation with Federal agencies, State and local government agencies, public and private organizations, and landowners and users based on their desire and willingness to support the trail.

Factors considered include (but are not limited to) costs of establishment and operation, competing or conflicting land uses, existing supply of public trail opportunities, and support by entities that would be affected should the trail be established.

Proposal (Preferred Alternative) and Other Alternatives: The study makes an analysis of the continuation of present trends and conditions. This is referred to as the "no action alternative" or maintaining the status quo. The "no action alternative" is used as the reference base for developing the proposal (preferred alternative) and other alternatives.

All alternatives must reflect pertinent issues, conditions, and needs. They will vary depending upon specific trail routes. However, every study report presents at least three alternatives. They include:

- Addition of eligible trail route segments to the national system under Federal and/or State administration;
- Reasonable concepts for protecting the trail route without inclusion in the National Trails System; or
- No action proposed.

A variety of possible alternatives may be suggested. Additional alternatives may be advanced by the public and other agencies during the study process. From these, a set of reasonable alternatives are selected for exploration and evaluation. Alternatives that are eliminated from detailed study are discussed briefly and the reasons for their elimination described. Reasons for eliminating alternatives include (l) conflict with the intent and purposes of the National Trails System Act or other pertinent statutes and regulations, (2) costs related to establishment and annual operation and maintenance, and (3) unsuitable use of land and water resources.

The Affected Environment: Descriptions and illustrations for the following subjects are included for understanding the issues, proposal, and alternatives, and the differences in environmental impact among the alternatives:

Natural Resources: Scenery, geology, plants, and animals (including any endangered species) and effect upon those resources by the proposal and alternatives.

Cultural Resources: The condition, significance, and use of any cultural resources within the trail route.

Existing Public Use: Quantity and type of public use, and seasons when it occurs.

Status of Landownership and Use: Maps with description by category (e.g., private, public, commercial, agricultural, residential, etc.).

Environmental Consequence: Description of the economic and environmental consequences of each alternative.

## Study Findings/Recommendations to Congress

Of the studies that have been completed by the National Park Service or the Forest Service, study findings indicate that 17 trail routes have not qualified for designation based upon the criteria in the National Trails System Act.

Each finding was because of one or several reasons listed below.

- Excessive costs;
- Insufficient scenic, natural, historic, cultural, or recreation qualities to qualify for national significance;
- Natural or historic qualities significantly altered;
incompatible development along trail route, such as highways or commercial and residential development;
- Lack of public ownership; corporate and individual landowners opposed;
- In the case of historic trails, no way to adhere to historic trail route; original route no longer visible or not known;
- Trail would cause significant adverse impacts on endangered species or fragile systems;
- Lack of widespread public support;
- Lack of support from local clubs, organizations, or governments. For example, in the case of the Long Trail in Vermont, the State and the Green Mountain Club reported significant increase in public use would have a detrimental effect on the trail and on the quality of trail experience. The Governor requested that the trail not be included in the system.


## Studies in Progress

Of trail routes authorized for study by the National Trails System Act, all but seven have been completed and work on these is in progress. They are:

Trail<br>Juan Bautista de Anza<br>Trail of Tears<br>Illinois Trail<br>Jedediah Smith<br>General Crook<br>Beale Wagon Road<br>Pony Express<br>California

## Study Agency

National Park Service
National Park Service
National Park Service
National Park Service
Forest Service
Forest Service
National Park Service
National Park Service

Procedures for trail studies differ slightly between the Forest Service and the National Park Service. Usually Forest Service studies are conducted by planning personnel of the national forest or forests traversed by the trail route. In contrast, National Park Service studies are usually conducted by planners assigned to a regional office (or offices, in the case of an extensive route which traverses more than one region). In addition, the Denver Service Center of the National Park Service may participate at the request of the region for specialized research and technical tasks.

As mentioned in the preceding chapter, Public Law 98-1l amending the National Trails System Act included a provision encouraging volunteer assistance in Federal trail establishment. Such input has varied considerably. An example is the participation of the Heritage Trails Fund in the study of the Juan Bautista de Anza trail route in California and Arizona. This group has greatly assisted the Western Region of the National Park Service by providing staff assistance in the office and also in the field.

The following is a brief description of each of the trail routes currently under study.

Juan Bautista de Anza Trail, following the overland route taken by Juan Bautista de Anza in his travels from the United Mexican States to San Francisco, California. The trail route extends from the Mexico-United States border near Nogales, Arizona, to San Francisco, California.

Trail of Tears, extending from the vicinity of Murphy, North Carolina, through Georgia, Alabama, Tennessee, Kentucky, Illinois, Missouri, and Arkansas, to the vicinity of Tahlequah, Oklahoma. This route was traveled by Cherokee Indians during their tragic removal to Oklahoma. Participation in the study is being provided by the States traversed by the route, their subdivisions, other Federal agencies, interest groups, and individuals.

Illinois Trail, extending from the Lewis and Clark Trail at Wood River, Illinois, to the Chicago Portage National Historic Site and generally following the Illinois River and the Illinois and Michigan Canal.

Subsequent to authorization of the study, Congress enacted legislation in August 1984 creating the Illinois and Michigan Canal National Heritage corridor. This calls for establishment of a 90 -mile trail along the canal from Summit to La salle, Illinois. This trail could comprise a significant segment of the Illinois Trail.

Study of the Illinois Trail will assess the route both as a potential National Scenic Trail and National Historic Trail. An extensive number of entities, public and private, have been contacted to act as consultants during the study.

Jedediah Smith Trail, to include the routes of the explorations led by Jedediah Smith: (l) extending from the Idaho-Wyoming border, through the Great Salt Lake, Colorado River Valley, and the Mojave Desert, to the San Gabriel Mission, California; thence through the San Joaquin and Stanislaus River Valleys to Bear Lake, Utah; and (2) extending from the Sacramento River Valley along the Pacific coastline, through the Willamette River Valley, to the Fort Vancouver National Historic Site on the Columbia River in Washington.

The Smith Trail route traverses federally administered lands for much of its length.

General Crook Trail, extending from Prescott, Arizona, across the Mogollon Rim to Fort Apache. The Crook Trail was the chief supply and tactical route of General Crook in his campaign against the Apaches.

Beale Wagon Road, within the Kaibab and Coconino National Forests in Arizona, was a major migration route in the expansion of the nation; it is considered the first federally funded road in the Southwest.

Pony Express Trail, extending from Saint Joseph, Missouri, through Kansas, Nebraska, Colorado, Wyoming, Utah, Nevada, to Sacramento, California; and the California Trail, extending from the vicinity of Omaha, Nebraska, and Saint Joseph, Missouri, to various points in California. These two trails are being studied concurrently because, for substantial parts of their length, they occupy the same route.

## Development of Designated Trails

Table 2 shows the mileage of each of the 13 trails that have been designated. Miles are referenced under the following headings: enabling legislation, study, management plan, estimated existing, and the percentage of each trail developed. The 13 trails have a total mileage of 23,620 ; however, only an estimated 10,374 miles have been developed.

## Summary

Seventeen of the long-distance trail studies authorized by the Congress and completed by the National Park Service or the Forest Service found that the trails were not qualified for designation. The reasons range from high cost and lack of national significance to lack of public support and landowner opposition.

Only 44 percent of the total trail mileage of the 13 designated trails has been developed.

TABLE 1. Status of Trail Routes Authorized Administering Agencyl

| tomac ritage | P.L. 90-543 | 10-02-68 | Qualified As NST | Suitable for Designation | NST Established P. L. 98-11 (03-28-83) | Park Service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d Cattle | P.L. 90-543 | 10-02-68 | Not Qualified | Action-State, Local\&Other |  |  |
| wis \& Clark | P.L. 90-543 | 10-02-68 | Qualified As NST | Suitable for Designation | NHT ${ }^{3}$ Establ ished P.L. 95-625 (11-10-78) | Park Service |
| tchez Trace | P.L. 90-543 | 10-02-68 | Qualified As NST | Suitable for Designation | NST Established P.L. 98-11 (03-23-83) | Park Service |
| rth Country | P.L. 90-543 | 10-02-68 | Qualified AS NST | Suitable for Designation | NST Established P.L. 96-199 (03-05-80) | Park Service |
| ttanning <br> th | P.L. 90-543 | 10-02-68 | Not Qualified | Action-State, Local\&Other |  |  |
| egon | P.L. 90-543 | 10-02-68 | Qualified As NST | Suitable for Designation | NHT Established P.L. 95-625 (11-10-78) | Park Service |
| nta Fe | P.L. 90-543 | 10-02-68 | Not Qualified | Action-State, Local\&Other |  |  |
| ng | P.L. 90-543 | 10-02-68 | Qualified As NST | No Designation Support |  |  |
| rmon Pioneer | P.L. 90-543 | 10-02-68 | Qualified AS NST | Suitable for Designation | NHT Established P.L. 95-625 (11-10-78) | Park Service |
| ld Rush Alaska |  |  |  |  |  |  |
| a. Iditarod | P.L. 90-543 | 10-02-68 | Qualified as NST | Suitable Desiqantion - NHT | NHT Established P.L. 95-625 (11-10-78) | Bureau of Land Management |
| b. Wamcats | P.L. 90-543 | 10-02-68 | Not Qualified | Unsuitable for Designation |  |  |
| c. Valdez | P.L. 90-543 | 10-02-68 | Not Qualified | Unsuitable for Designation |  |  |
| d. KoyukukChandalar | P.L. 90-543 | 10-02-68 | Not Qualified | Unsuitable for Designation |  |  |
| e. Dalton | P.L. 90-543 | 10-02-68 | Not Qualified | Unsuitable for Designation |  |  |

Recommendations to
the Congress
by the National Trails System Act and Amendments
Study
Study
Qualified as NST
$T^{2}$ Suitable for Designation
Status

TABLE 1. Status of Trail Routes Authorized
by the National Trails System Act and Amendments (contin

| Name | Authorized | Date | Study Findings | Recommendations to the Congress | Status | Administering Agency |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f. Chilkoot | P.L. 90-543 | 10-02-68 | Not Qualified | Unsuitable for Designation |  |  |
| g. White Pass | P.L. 90-543 | 10-02-68 | Not Qualified | Unsuitable for Designation |  |  |
| Mormon <br> Battalion | P.L. 90-543 | 10-02-68 | Not Qualified | Action-State, Local\&Other |  |  |
| El Camino Real | P.L. 90-543 | 10-02-68 | Not Qualified | Action-State, Local\&Other |  |  |
| Bartram | P.L. 94-527 | 10-17-76 | Not Qualified | Action-State, Local\&Other | $\mathrm{HT}^{4}$ Established P.L. 98-11 (03-28-83) | Park Service |
| Daniel Boone | P.L. 94-527 | 10-17-76 | Not Qualified | Action-State, Local\&Other | HT Established P.L. 98-405 (08-28-84) | Park Service |
| Desert | P.L. 94-527 | 10-17-76 | Not Qualified | Action-Federal, State\&other |  |  |
| Dominquez Escalante | P.L. 94-527 | 10-17-76 | Qualified-NST/NHT | Action-Federal, State\&Other |  |  |
| Florida | P.L. 94-527 | 10-17-76 | Qualified as NST | Suitable for Designation | NST Established P.L. 98-11 (03-28-84) | Forest Service |
| Indian Nations | P.L. 94-527 | 10-17-76 | Not Qualified | Action-Federal, State\&other |  |  |
| Nez Perce | P.L. 94-527 | 10-17-76 | Qualified as NHT | Suitable for Designation |  |  |
| Pacific Northwest | P.L. 94-527 | 10-17-76 | Qualified as NST | Unsuitable for Designation |  |  |
| overmountain Victory | P.L. 95-625 | 11-10-78 | Qualified as NHT | Suitable Designation - NHT | NHT Established P.L. 96-344 (09-08-80) | Park Service |
| Ice Age ${ }^{5}$ |  |  |  | Suitable designation - NST | NST Established P.L. 96-370 (10-03-80) | Park Service |
| Juan Bautista de Anza | P.L. 98-11 | 03-28-83 | In Progress |  |  |  |

TABLE 1. Status of Trail Routes Authorized
by the National Trails System Act and Amendments (co


Table 2
Mileage of National
Scenic and Historic Trails

| Trail | Enabling Legislation | Study | Management Plan | Estimated Existing | Percentag Developed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Appalachian | 2,000 | no study | 2,100 | 1,900 | 95 |
| Pacific Crest | 2,350 | no study | 2,653 | 2,511 | 100 |
| Continental Divide | 3,100 | 3,100 | 3,100 | 1,817 | 59 |
| North Country | 3,200 | 3,246 | 3,200 | 1,000 | 31 |
| Ice Age | 1,000 | no study | $\begin{aligned} & 1,000 \\ & \text { (950 on bik } \end{aligned}$ | $\begin{aligned} & 350 \\ & \text { e route) } \end{aligned}$ | 35 |
| Lewis and Clark | 3,700 | 3,700 | $\begin{aligned} & 4,500 \\ & (3,250 \text { on } w \\ & 1,250 \text { on } \end{aligned}$ | $200^{2}$ <br> ater and) | 5 |
| Oregon | 2,000 | 2,000 | 1,930 | 1902 | 10 |
| Mormon Pioneer | 1,300 | $\begin{aligned} & \quad 700 \\ & \text { (23 } \\ & \text { segments } \end{aligned}$ | $1,624$ <br> (to be mark | $\text { ed) } 470^{2}$ | 36 |
| Iditarod | 2,000 | 2,037 | in progress | 1,460 | 73 |
| Over Mountain Victory | $272^{3}$ | $164$ <br> (add would | 313 <br> segments <br> total 272) | $10$ | 6 |
| Florida | 1,300 | 1,300 | in progress | 240 | 18 |
| Natchez Trace | 694 | 513 | in progress | 25.5 | 4 |
| Potomac Heriatge | 704 | 874 | in progress | 200 | 23 |
| TOTAL | 23,620 |  |  | ,373.5 | 44 |
| $\mathrm{l}_{\text {Based }}$ on mileage in enabling legislation. |  |  |  |  |  |
| $2^{\text {Routes }}$ follow roadways and rivers. |  |  |  |  |  |
| 3as reported in draft study, a final study was never completed. |  |  |  |  |  |

TRAIL CONFERENCES AS A MODEL FOR INVOLVEMENT

It is important that long-distance trails go where users want to go and provide the types of experiences they want. Long-distance trails are very specialized recreation facilities. While each portion of a long-distance trail may serve important local recreation needs along its route, the trail also has a character and a value that is greater than the sum of its parts. It is essential in planning and developing such trails to fully involve users.

The long, linear nature of long distance trails further argues strongly for user participation. Extended trails inherently involve many governmental jurisdictions and many types of public and private land ownerships; these fragmented patterns of responsibility present significant obstacles to long-distance trail projects. Assembling long, continuous corridors of land across public and private holdings is extremely difficult, as is routine maintenance and management of the trail.

Users can often bridge the institutional barriers that exist when many jurisdictions are involved in a trail project. Involvement of users in securing easements, rights-of-way, or other permission for long trails to cross private lands has proven to be effective and often less costly than similar efforts by public agencies. Once a trail has been established, users are able to make a further contribution by taking responsibility for long-term monitoring, maintenance, and management of the trail, as well as maintaining good relations with cooperating private landowners. The willingness of users to accept responsibility for these continuing tasks often influences public agencies to decide that it is financially feasible to become involved in helping to establish the trail, since long-term management costs far exceed initial costs.

## Organization: A Prerequisite for Effective Action

Individual users, working by themselves, generally cannot make a significant impact on the feasibility or long-term viability of a long-distance trail. However, if they join together, coordinate their efforts, and pool their knowledge, skills, and abilities, their participation can be a significant factor in a trail project. Also, public agencies responsible for an entire trail or major portions of it are very likely unable or unwilling to commit the resources required to establish and maintain working relationships with many individual volunteers.

However, if an agency can work with responsible private trail organizations, which in turn can direct the work of many individual volunteers, results are achieved in a cost-effective manner.

Thus, from both perspectives--that of users who want the trail and are willing to work for it, and that of public agencies which must use their limited resources effectively--organization of users is a prerequisite for their effective involvement.

## The Trail Conference Concept

Many types of citizen or user groups function as a channel for organized involvement in establishing and/or managing a trail. These include groups of participants in a particular trail activity (such as hiking clubs), environmental advocacy groups, and others. However, in the case of long-distance trails, an organization that is solely or primarily oriented to a particular trail is the most effective. Long-distance trails are a complex phenomena; for a user group to play a major role in the life of such a trail requires people, organization, and knowledge.

Organizations created by users to establish and manage a particular long-distance trail are generally known as "trail conferences," but are sometimes called "trail councils," "trail associations," and so on. Whatever their name they generally have a similar structure.

Trail conferences are organized to coordinate local or "grassroots" efforts to build and maintain segments of the overall trail. The most important organizational units of the conference are the local entities responsible for specific sections of the trail. These entities may be chapters of the conference organized on a uniform (e.g., State, county) or random geographical basis, or they may be local trail or outing clubs, scout groups, civic organizations, or individuals. Each entity sponsoring a section of the trail may be given representation on the conference's board of directors, or the directors may be elected by the membership as a whole.

The board of directors is responsible for managing the affairs of the conference, setting goals and objectives, establishing policies and standards relating to the development and management of the trail by local sponsors, determining the financial needs of the conference (and how they will be met), and deliberating on problems and issues encountered in managing the trail. The board may also enter into agreements and memorandums of understanding with landowners and with other private organizations or public agencies. Most trail conferences hold an annual or biennial meeting of their members and publish trail maps or guidebooks and a periodical newsletter or magazine. In addition to the sponsoring clubs, chapters, or individuals--the backbone of the organization--most trail conferences offer membership to anyone interested in the trail.

A wider membership is usually necessary and advantageous because there are many people interested in supporting and using the trail who cannot actually work on it because of their physical condition, lack of time, or distance. However, they support the conference with membership dues.

## Examples of Well-Established Trail Conferences

The Appalachian Trail Conference
One of the oldest and best known trail conferences is the Appalachian Trail Conference. Headquartered in Harpers Ferry, West Virginia, the conference coordinates the efforts of 31 member trail clubs that have responsibility for establishing and maintaining sections of the trail. The conference and the clubs also work with many of the public agencies that are responsible for sections of the trail.

The Appalachian Trail concept began in 1921, when Benton McKaye shared his vision with others in a Journal of the American Institute of Architects article. Others were captivated by his idea, and in 1922 volunteers began marking and cutting the Appalachian Trail. Existing sections of hiking trails built and maintained by the New York/New Jersey Trail Conference, Dartmouth Outing Club, Appalachian Mountain Club, and Green Mountain Club (all Appalachian Trail Conference member clubs today) were soon incorporated into the route.

In 1925, the Appalachian Trail Conference was formed to unify and coordinate the efforts of these clubs, and by 1937, the Appalachian Trail in its original configuration was completed. Over the years, efforts to protect and improve the trail have necessitated numerous route changes. In 1968, Congress designated the Appalachian Trail as the first National Scenic Trail. Today the trail is a 2,100 -mile footpath extending from Springer Mountain in Georgia to Mount Katahdin in Baxter State Park, Maine.

The Appalachian Trail Conference has 18,000 members, and the combined membership of the 31 participating clubs is between 60,000 and 80,000 . The conference's activities require the services of hundreds of volunteers and 19 paid staff. It is governed by a 25 -member Board of Managers elected by the membership attending its biennial conferences. The board membership includes 7 officers and 18 other members, 6 representing each of 3 regions into which the trail is divided.

As the Appalachian Trail Conference has grown over the years, its level of commitment to and involvement in the trail has increased. The conference coordinates the efforts of the 31 clubs, publishes promotional literature, guidebooks, and "how-to" books for trail workers. It also works very closely with participating Federal, State, and local agencies. These working relationships have been formalized in written agreements. The conference is actively participating in Federal and State agency land acquisition programs to permanently protect the trail. Recently, the National Park Service signed an agreement turning over management responsibility for 42,000 acres of land acquired for the trail to the conference.

In 1982, the conference created the Trust for Appalachian Trail Lands to supplement the land-acquisition program of the Federal Government by purchasing important protection areas adjacent to the trail corridor and assisting with purchases within the corridor.

Today, the Appalachian Trail Conference is considered the model for citizen involvement in long-distance trail development and management.

## The Finger Lakes Trail Conference

The Finger Lakes Trail Conference was organized in 1962 to establish a continuous east-west footpath south of the Finger Lakes in New York State. The idea was conceived by Wallace Wood as he hiked the Appalachian Trail in 1961. As currently planned, the Finger Lakes Trail will extend from Allegheny State Park in western New York to the Catskill Mountains in southeastern New York. Much of the main trail, as well as five branch trails extending northward, has been completed and is open to the public. When finally completed, the entire system will total more than 700 miles.

The volunteer sponsors of sections are both trail clubs and individuals. Both are considered principal members of the conference and have one vote for every 5 miles of trail they maintain. Other members of the conference have one vote each. The affairs of the conference are directed by a 15 -person Board of Managers elected to staggered 3-year terms.

The Finger Lakes Trail Conference is a very active organization that sponsors year-round hikes, campouts, and workdays along the trail. The conference publishes a quarterly newsletter and an up-to-date, inexpensive set of maps for the trail. All of these activities are accomplished by volunteers, since the conference has no paid staff.

The Finger Lakes Trail Conference works closely with the New York State Department of Environmental Conservation and Office of Parks, Recreation, and Historic Preservation. Portions of the Finger Lakes Trail that cross properties managed by these agencies are maintained by conference volunteers. In 1983, the conference signed a memorandum of understanding with the National Park Service for the purpose of including approximately 300 miles of the Finger Lakes Trail into the 3,200-mile North Country National Scenic Trail now being developed from eastern New York to the Missouri River in North Dakota.

The Buckeye Trail Association
The history of the Buckeye Trail in Ohio and of the association that built and maintains it is the story of an expanding vision. Originally conceived as a trail from Cleveland to Cincinnati, it was later extended northward to Toledo and eventually back to Cleveland for a total of 1,200 miles.

The Buckeye Trail Association, composed entirely of volunteers, has accomplished much since its organization in 1959, and currently is attempting to establish permanently protected off-road routes for the entire trail. A detailed case study of the Buckeye Trail Association is included in section II of this assessment.

More Recent Long-Distance Trail Support Efforts
The Ice Age Trail Council
Organized in 1975, the Ice Age Trail Council promotes and coordinates citizen involvement in the development and management of Wisconsin's Ice Age Trail, a l,000-mile route following the terminal moraines that mark the farthest advance of the most recent glaciation in Wisconsin. The national significance of the trail and the scientific and recreational resources it traverses led the Congress to designate it a National Scenic Trail on October 5, 1980.

Like the Appalachian Trail, the Finger Lakes Trail, and the Buckeye Trail, the Ice Age Trail began as a citizen effort led by Ray zillmer, a Milwaukee attorney. In the 1950's, he proposed that an Ice Age Glacier National Forest Park be established along the entire terminal moraine in Wisconsin with a continuous trail, similar to the Appalachian Trail.

In 1958, interested Wisconsin citizens formed the nonprofit Ice Age Park and Trail Foundation to promote the idea. Congressional action in 1964 and 1971 created the Ice Age National Scientific Reserve. The reserve protects only nine separate tracts of land containing outstanding examples of glacial topography, but the Federal legislation recognized the value of the trail concept and left its implementation to Wisconsin citizens.

In many of the counties along the proposed route of the trail, the foundation fostered the formation of groups of people interested in developing the trail and, in 1975, created the Statewide Ice Age Trail Council to coordinate the efforts of the county "chapters."

Working closely with the Wisconsin Department of Natural Resources, county forestry agencies, and hundreds of private landowners, the council and its chapters have succeeded in establishing approximately 350 miles of trail and marking temporary routes along county roads for much of the remainder.

When the task of building and maintaining a trail is shouldered by a small group of volunteers, "burnout" can occur. In recent years, certain chapters of the council have experienced this phenomenon and their activities decreased.

The Ice Age Park and Trail Foundation, which channels tax-deductible gifts of land and money to the trail, took action to remedy this situation by hiring a person to work as full-time coordinator for the council. The improved communication to and support for the chapters that resulted have revitalized many of the chapters; activity statewide is on the increase.

The foundation and council also recognized the need to restructure the council as a general membership organization (rather than as a mere coordinator among county chapters). Steps are being taken to establish the council as an independent, nonprofit, tax-exempt organization. Short-range plans include major membership development efforts.

The Ice Age Trail Council has benefited from the National Scenic Trail designation given the Ice Age Trail by Congress in 1980. The increased status and visibility of the trail have enabled the council to obtain increased media attention and to gain audiences with public and private landowners.

The council and foundation have worked closely with the National Park Service and, through a cooperative agreement, have played a major role in preparing a National Park Service informational brochure for the trail.

The North Country Trail Association
Among the trails discussed in this chapter, the North Country National Scenic Trail is unique. A 3,200-mile route from New York to North Dakota, the North Country Trail did not begin as a citizen effort but rather, began as a Federal Government proposal that received wide support from Federal and State recreation agencies and a variety of trail interest groups.

The North Country Trail proposal was different from other trails. Rather than follow a range of mountains, like the Appalachian, Pacific Crest, and Continental Divide National Scenic Trails, the North Country Trail would traverse a variety of scenic environments and take users through a cross section of northeastern and north central America. Various groups gave public support for the trail and on March 5, 1980, Congress authorized its establishment as a National Scenic Trail.

A small nucleus of people interested in working for development of the trail joined together in 1981 to form the North Country Trail Association. Its purpose is to promote, develop, maintain, and protect the North Country Trail along its entire length.

The North Country Trail Association has faced a number of challenges. The geographical extent of the trail, 3,200 miles across 7 States, has made membership development difficult. Memberships still number only a few hundred.

A turnover of leadership has hindered the strengthening and growth of the organization. Another challenge faced by the North Country Trail Association is the fact that private volunteer efforts to develop and maintain the trail in Ohio and New York were already well underway through the efforts of the Buckeye Trail Association and the Finger Lakes Trail Conference, respectively.

Therefore, in its role as an organizer and coordinator of volunteer participation in building and maintaining the trail, the North Country Trail Association is cooperating with these organizations and focusing its own efforts on Michigan, Wisconsin, Minnesota, and North Dakota, where there are no existing organizations to play that role. Actual trail development activities by association members are underway in western Michigan.

While its direct involvement in building and maintaining North Country Trail segments is geographically limited, the North Country Trail Association continues to function as the sole private-sector voice for the interests of the entire trail. On a voluntary basis, the association is assisting the National Park Service in developing an informational brochure and a slide-sound program about the North Country Trail and also, is raising private funds to print the brochure. A 1982 memorandum of understanding and a 1984 cooperative agreement established these working relationships.

The voluntary involvement of the North Country Trail Association in trail building and trail promotion projects has been mutually beneficial to the National Park Service (and other Federal agencies) and to the association. The National Park Service will have a brochure and slide show, and agencies such as the Forest Service have new trail segments that these agencies could not have accomplished with their own limited budgets and staff resources. The association benefits from the enthusiasm generated among its membership by involvement in such meaningful projects.

## Sumnary

These examples illustrate the useful and vital role trail users have in the development and management of trails, particularly long-distance trails. They also show the varied experiences of and challenges faced by trail conferences.

Some might conclude that the growing emphasis on user involvement in trail development and management is due to decreasing availability of public agency resources for trails. However, the primary reason appears to be that the trails community, public and private, realizes that there are roles that users appropriately should play in the life of a trail. There are functions related to trail development, management, and promotion that organized user volunteers can do more effectively, more efficiently, and in a more timely manner than public agencies. The record of experiences of trail conferences such as those described in this chapter has convinced the trails community of this fact.


The concept of heritage National Recreation Trails, as trails that combine various aspects of cultural, historic, and natural heritage, has evolved in the northeast and mid-Atlantic regions of the country. The development of this concept is traced here, with examples, as other regions in the country may be interested in adopting this concept.

The idea of a heritage trail emerged from a 1969-71 study of a proposed Potomac Heritage National Scenic Trail. The Potomac Heritage study discerned whether a long-distance trail bordering the shores of the Potomac River could exhibit the heritage of the river and its lands. (The Potomac Heritage Trail was designated a National Scenic Trail in 1983. Subsequently, two other long-distance trails, the William Bartram Trail and the Daniel Boone Trail, were recognized by the Congress as Heritage Trails.)

The first group of National Recreation Trails designated in June 1971 showed some heritage characteristics. The Fort Circle Parks Trail links the ring of forts around Washington, D.C., constructed during the Civil War to protect and defend the Capital. The two Palisades National Recreation Trails, Palisades Long Path and Palisades Shore Trail, overlook the Hudson River to one of the greatest repositories of national historic, cultural, and artistic heritage, New York City. The Cliff Walk at Newport, Rhode Island, has been used by the public since colonial times for promenades along the bluffs overlooking Rhode Island Sound and the Atlantic Ocean. Boston's Freedom Trail exhibits our Revolutionary War heritage.

The first National Recreation Trail, however, to bear the word "heritage" in its title was the Lehigh Canal Heritage Trail. During the 2 years of deliberation establishing the trail, it became clear that the heritage of the Lehigh Coal and Navigation Company Canal, and not just the canal itself, justified a trail. The canal showed the range of the Lehigh Valley heritage from the colonial settlements that predated the canal's existence to the postcanal industry and technology now found in the Lehigh Valley. A survivor of the Nation's industrial period, the canal offers local and regional recreation opportunities, possible tourism benefits, and access to the Appalachian National Scenic Trail for nearby Philadelphians.

The next heritage National Recreation Trail named was the Central Park Heritage Trail. It emphasized the 1858 Vaux-Olmsted park-scape of New York City as contrasted with the present-day cityscape.

The Lowell Canal Heritage Trail is a touring route through Massachusetts' Lowell National Historical Park. This trail deals with cultural heritage from the Industrial Revolution, as does the Hudson-Mohawk Urban Cultural Heritage Trail.

The Old Erie Canal State Park Trail, a 35-mile National Recreation Trail east of Syracuse, New York, and the Erie Canal Heritage Trail, a 65-mile National Recreation Trail adjacent to the Erie Canal in Orleans and Monroe Counties, New York, present aspects of that great engineering feat that opened the continent to development.

Other National Recreation Trails without the official designation of Heritage Trails show certain features of that trail concept. New Jersey's Patriots' Path in Morris County exhibits aspects of both historic and natural heritage. At Albany, New York, the proposed King's Highway/Pine Bush National Recreation Trail retraces a portion of the old Iroquois Trail, which has not been improved since 1663 when it was widened to accommodate wheeled carts.

Rural Heritage Trails tend to be more extended and dispersed than urban trails. Although they may be foot trails, often the extent of the route makes biking more appropriate.

## Mixed-Use Shared Rights-of-Way

The Seaway Trail, which extends 360 miles along Lake Ontario in New York State, is an example of the evolving principle of "mixed-use shared right-of-way." The biking trail exists within roads and highways making them truly public rights-of-way, not merely motoring rights-of-way. The trail is the initial element of a projected bike trail focusing on the Great Lakes with a possible Canadian portion, making it an international bike-touring route.

Partly following old Indian routes along the lakeshore, the trail links some 70 Land and Water Conservation Fund projects with an investment of over $\$ 19$ million in public monies. The cities, towns, and villages, the natural resources of Niagara Falls, Lake Ontario, the Thousand Islands, and the St. Lawrence River Valley, and the complex cultural heritage of the area all contribute to making this a rich and diverse route.

Using the principle of mixed-use shared rights-of-way, other rural areas are potential bases for Heritage Trails.

## Summary

Heritage National Recreation Trails patterned on the examples developed in Northeastern and Mid-Atlantic States may be developed by trail sponsors in other areas of the U.S. Rural Heritage Trails may be extended routes, along already-established roadways, providing for use by bikers as well automobile drivers, and by linking areas of interest to enhance tourism.

## CHAPTER 5

TRAIL NEEDS: THE USER'S PERSPECTIVE

This chapter presents trail needs as viewed by trail users. The Heritage Conservation and Recreation Service of the Department of the Interior drafted a report on trails in 1981. In its study for this report, the Service held 38 regional workshops in 31 States, distributed 3,800 questionnaires to trail interest groups, and held 30 meetings on specific issues with special groups. The study was conducted in cooperation with the Federal Interagency Trails Council, State and local agencies, and private trail interests. The material in this chapter is drawn from that report.

Generally, according to the users, the nationwide supply of trail opportunities does not meet the demand, especially in and near urban areas where the need is greatest. According to the respondents, more urban trails would enable people to enjoy trails more frequently and would also significantly reduce energy spent traveling to existing trails.

Another general need is for improved information about existing trails. Users cannot make use of trails of which they are not aware. Many participants seek more information on trail opportunities.

Needs for specific trail-related activities expressed by the trail users follow.

## Bicycling

Opportunities for recreational bicycling should be considered in two separate categories: (l) special paths and lanes designated for bicycles and (2) long-distance routes located on paved, primarily rural roads. The former generally requires acquisition of land and/or development of special facilities. The latter requires only identification of a continuous, appropriately marked, and or mapped route.

Most existing bike paths and bike lanes are located in urban areas where they serve as both transportation and recreation. Unfortunately, they are not extensive enough to provide safe bicycling to all common destinations. Since bicyclists must share streets with automobiles, serious safety concerns arise. The need for urban bicycle trails, therefore, far exceeds the supply of those already designated.

It is impractical and unnecessary to consider developing special long-distance bicycle trails since more than enough miles of suitable low-volume roads already exist everywhere in the country. What is lacking is a sufficient number of identified, marked, and mapped routes.

In urban areas the need is more serious because there are more bicyclists and they bicycle more regularly and frequently, usually in competition with the automobile.

Bicycle racing and bicycle touring are becoming increasingly popular activities. Both require space and safety conditions.

Bicycling is an activity that is most frequently pursued close to home, beginning at one's own doorstep, as opposed to most other trail activities in which participants travel at least some distance to a trail facility. More maps and other information on existing routes are needed to reach a wider number of current and potential users. There is also a need for effective enforcement programs and educational materials for both bicyclists and automobile operators.

## Physical Fitness and Jogging

Most existing jogging and exercise/physical fitness trails are located in and near population centers. Participants in these activities generally do so regularly and are not willing to travel any great distance to a trail.

More trails are needed. Joggers do not necessarily require a special path, although this is preferred. They can jog along roadways, on sidewalks, or through parks. Conflicts with pedestrians, bicyclists, and motorists do arise. Jogging has worn permanent dirt pathways across some parklands. Joggers also use bicycle paths which can lead to safety problems.

Consideration should be given to providing more trails that meet the needs of long-distance runners (who run 4 or more miles). Developing long loops or designing interconnections among trails could meet this need.

## Day Hiking

If sheer numbers and miles of trails are the measure, day hiking trails are in great supply. In most regions, trail users and administrators believe that there is an adequate quantity of day hiking trails. In terms of geographic distribution of trails near population centers, however, day hiking opportunities received the same poor rating as most other trail activities. Trails for day use must be developed in and near (within 2 hours' travel time) urban areas.

In the last several years, a new phenomenon, volksmarching, has grown rapidly. It attracts walkers and hikers by the hundreds, which places strain on existing support facilities.

An interpretive trail is one on which the natural or cultural environment is interpreted by a guide or through self-guiding methods. The adequacy of these trails varies from State to State. Because many people do not differentiate between an interpretive trail and a hiking trail, the lack of such trails does not appear to be as significant as for other trails, but the overall national picture is one of need for additional opportunities, particularly in urban areas. It is especially desirable to have such trails reasonably accessible to schools for outdoor and environmental education classes. The interpretation of the trail environment can be tailored to each individual group using the trail.

The report noted that hiring guides to conduct walks and maintain trail signs often makes interpretive trails costly and suggested that providers of such trails need to further explore the use of volunteer trail guides.

## Trails for the Handicapped

The supply of trails that are accessible and usable by persons with physical disabilities is very inadequate in all parts of the Nation.

In meeting this need, emphasis should be on constructing and modifying trails where feasible for all persons, including the handicapped, rather than on constructing trails specifically for the handicapped. Trails developed specifically for the handicapped often receive little use since the handicapped feel isolated from the general public. Publicity about the accessibility and usability of existing trails for handicapped persons is needed.

See chapter 9 for further discussion of trail accessibility for the disabled.

Four-Wheel and All-Terrain/Off-Road (Highway) Vehicle Driving
Few trails have been developed specifically for off-road vehicles. In many States, back-country and unmaintained roads through public lands are open to motorized trail vehicles. In some States, large tracts of land, with and without specific trails, have been set aside for off-road vehicle use. The off-road vehicle trail situation varies greatly from State to State, largely depending on the size of each State's public lands and the State's policies toward off-road vehicles.

In general, the study found that more off-road vehicle opportunities are needed in all areas of the country, especially near urban areas, and that public managers must be careful not to foreclose existing opportunities, as this problem has already occurred in many areas. Land managers should involve off-road vehicle users when planning facilities or revising policies on off-road vehicle use.

The off-road vehicle users must face up to the problem of damage to natural resources and be responsible for their actions. Usually this awareness involves an educational process. Off-road vehicle users have a legitimate need for trails and use areas. Providing such opportunities will help reduce the conflicts that occur when trails intended for other activities are used by off-road vehicles. These conflicts could also be reduced by increased publicity about trails, areas, and back-country roads open to off-road vehicles. However, this information is difficult to locate.

## Motorcycle/Trail Biking

Opportunities for off-road motorcycle and trail bike riding appear to be generally inadequate in all areas of the country, particularly near urban areas. This situation, however, varies from State to State. Michigan, for example, has a 662-mile cross-country/motorcycle trail sponsored by the Cycle Conservation Club of Michigan. As is generally the case, however, the cross-country trail is not easily accessible for urban populations.

Existing recreation lands generally do not accommodate recreation motorcycling because of its adverse impact on the environment. Separate trails are usually necessary to avoid conflicts between motorcyclists and other users. The study showed a need for additional and longer
motorcycle trails. The need is greatest near urban areas, since the cost of transporting motorcycles and trail bikes to trailheads is significant. Public trail providers need to take a positive approach to planning for motorcycle trail use and to involve users in the planning process.

## Horseback Riding

Horseback riding opportunities are inadequate in all areas of the country in terms of both quantity and geographic distribution, according to users reporting in the 1981 Department of Interior study. More trails are needed, especially near urban areas, since, the financial and energy costs of transporting horses to remote trailheads are significant. Some public trails formerly open to riding are now being closed; this sometimes occurs because of urban and suburban development.

Horseback riders have become well organized and more vocal in bringing their needs to the attention of trail providers. Organized groups are building and maintaining trails. In addition to more trails near urban areas, horseback riders want long-distance trails with overnight facilities. Endurance and competitive rides of 25,50 , and 100 miles are increasing in number each year. Existing riding trails in rural areas are often designed only for day use. Parking areas suitable for horse trailers are needed.

## Water Trails/Routes

Nationwide there is a lack of water trails. Although some States publish guides to good canoeing streams, these streams often lack adequate public access and support facilities. Other States are struggling with legal questions about the public's right to use the surface of streams and the definition of a navigable waterway. In these States, water trail opportunities are severely limited.

Many States are establishing scenic rivers systems modeled after the National Rivers System. However, water trails need not be limited to such streams. Floatable streams with developed access points and support facilities need to be inventoried and an effort made to increase public information about these opportunities.

## Overnight, Long-Distance Backpacking

Existing opportunities for backpacking are seriously inadequate in most areas of the Nation. The trails are few in number and miles and unequally distributed across the country. The Pacific Northwest and the State of Alaska have sufficient backpacking trails, but they are not well distributed in relation to population.

Respondents in the study felt that most backpacking trails currently being promoted are too short for an extended experience (more than just a long weekend) and frequently lack adequate overnight camping facilities. More trails are being developed by both the public and private sectors, but it will take time to fill the current needs. Continuing major problems are securing easements on private lands to connect existing public recreation areas and providing the facilities necessary to support extended trips. Also, more readily available information on backpacking trails is needed.

## Cross-Country Skiing

Opportunities to cross-country ski are considered inadequate throughout the Snow Belt. There are not enough trails. Those that do exist tend to be located away from urban areas where users live. Providers of ski trails simply have not been able to keep pace with the phenomenal growth of cross-country skiing.

In an attempt to provide opportunities, public recreation agencies have designated unplowed roads, summer hiking trails, and local public golf courses as cross-country ski areas. Trail grooming is costly. Signs, parking provisions, access, and proper maintenance of ski trails are often overlooked. In addition, proximity to snowmobile routes has caused complaints and conflicts between the two user groups.

New, single-use ski trails are not necessary; existing trails or roadways can be used but they must be properly designed or modified to accommodate ski touring and then they must be well maintained. Also, experienced skiers desire longer, challenging trails.

## Snowmobiling

In States where snow conditions are varying and uncertain, there are significant numbers of resident snowmobilers who want to enjoy the sport close to home.

Well-organized, active snownobile user groups and snowmobile manufacturers, however, have worked closely with government agencies and private landowners to develop many miles of trail. Efforts are needed to develop more trails near urban areas, sign them, improve trail grooming and maintenance, and police them.

## Summary

This chapter has looked at trail needs as expressed by trail users. The consensus is that more trails are needed for all trail activities, particularly in and near urban areas. Users also point out the need for improved information about existing trails, and that such information needs to be more readily available. Education is another point stressed--for safety, for protection of the environment, and for understanding of the outdoors. Although trails can serve more than one activity, conflicts are common, particularly between motorized and nonmotorized activities.

## CHAPTER 6

## TRAIL ACTIVITIES REPORTED IN THE 1982-83 NATIONWIDE RECREATION SURVEY

How many people in the United States participate in various trail activities? What trail activities have increased over the last several years? What are the demographic characteristics of trail users? Do urban people use trails as much as those from less-populated areas? The 1982-83 Nationwide Recreation Survey ${ }^{1}$ helps provide answers to such questions.

The Nationwide Recreation Survey was sponsored by the National Park Service in cooperation with several other Government agencies to update information on the Nation's recreation habits and interests. The U.S. Bureau of the Census completed 5,757 personal interviews under a contract with the Survey Research Center of the University of Maryland which held the National Park Service survey contract. The interviews were conducted in September 1982, and January, April, and June of 1983, providing a seasonally balanced sample. Sampling and weighting procedures reflect the noninstitutionalized United States population 12 years of age and older. The other agencies participating in the survey were the U.S. Forest Service (Department of Agriculture), Bureau of Land Management (Department of Interior), and the Administration on Aging (Department of Health and Human Services).

By reviewing the survey's report, participation rates, trends, demographic attributes, and other characteristics of trail activities and trail users can be seen. Of the 36 recreation activities studied in the survey, 10 are trail related. However, all characteristics are not reported for all trail activities, as those cases were dropped in which the subsample became so small that the finding was not considered reliable. All trail-type activities are not necessarily carried on in what would conventionally be considered a trail environment. Pleasure walkers use city sidewalks and suburban streets, bicyclists use city streets, and runners use sidewalks. Canoeists and kayakers plot their runs along established waterways.

Eight tables follow derived from the survey, with a brief description of each. This chapter concludes with a statement on each of the 10 trail activities based on the survey findings.

Tables
Table 3: How many people in the United States bicycle, or hike, or jog?

A rough idea can be gathered from table 3, which shows the percentage of the total sample $(5,757)$ who said they participated once or more in a particular trail activity during the 12 months prior to the survey interview.

The last column gives the implicit number participating in each of the activities in the U.S. population, 12 years of age or older. These implicit numbers are derived by multiplying the participation rate by the Census Bureau's estimate of the number of noninstitutionalized persons 12 years of age or older in the U.S. population at the time of the survey-$188,092,000$ persons. It must be borne in mind that these figures do not reflect participation by children under 12 years of age.

Table 4: By how much is bicycling or canoeing increasing over the years? Table 4 addresses such questions by comparing participation rates for three trail activities over three surveys--1960, 1965, and 1982--for the summer season. Unfortunately, no other trail activities were comparable over the three surveys, and 12 -month participation rates were not available for the earlier surveys. The table shows the percentage of the respondents in each of the surveys who said they participated once or more in that activity during the 3 months before the interview.

Table 5 answers the question, "What kinds of people are bicycling, hiking, walking, or jogging these days?" The demographic profile in this table was derived by first separating out the people who said they did the activity and then determining what percentage of those participants fell in certain levels of characteristics such as age, education, and income. The activities included in this profile are those for which there were at least 550 participants out of the 5,757 survey respondents. The sampling error was considered too great for a smaller number. Hence, only four trail activities are included in this table.

Table 6: "What kinds of trail activities are young people, women, big-city residents, etc., doing these days?" is answered in table 6. This table gives an activity profile of each demographic segment, for example: percentage of males who bicycle, hike, backpack, etc.; percentage of respondents over 60 years old who engage in each trail activity.

Participation rates are given for respondents living in four regions: Northeast, North Central, South, and West. See map l for States included in each region.

Table 7 shows the annual volume of activity per participant, that is, the number of days on which participants estimated that they did the activity during the previous 12 months. A day is counted for each day on which the participant said he/she did the activity, which might have been 10 minutes or 10 hours. Only seven trail activities are rated, as the number of activities for which this question was asked was restricted by interview length.

Table 8 can be considered an indicator of depth of involvement in or commitment to an activity. Before being shown an activity list, respondents were asked to name up to three activities that they particularly enjoyed doing. Nine trail activities were chosen by sufficient numbers to be included in this table. The table shows what percentage of the 5,757 respondents chose these specific trail activities as 1 of 3 they particularly enjoyed.

Table 9 answers the question, "Why do people like to bicycle, to hike, to walk?" Those people who, in table 7, reported particularly enjoying an activity were asked to choose from a list their reasons for liking that activity. Three trail activities were chosen by enough respondents (at least 300 ) to constitute subgroups large enough to be used for this analysis.

Table 10: How many trips a year do people make to participate in certain trail activities? How far do they go? How long does it take them? How do they get there? How long do they stay? Such questions are addressed in table 10, for canoeing/kayaking, backpacking/hiking, and off-road driving over a year's time. Activities were limited due to the length of the interview. Also of interest is the percentage of trips for each of the activities requiring user fees, the amount of the fee, and the size of the traveling party.

## Activities

Based upon findings from the 8 tables, each of the 10 trail activities studied in the Nationwide Recreation Survey is discussed below.

## Walking for Pleasure

Walking for pleasure is by far the Nation's most popular trail-type activity. More than half of the respondents said they walk for pleasure. Even 42 percent of the elderly, whose trail activities are quite markedly below those of other age groups, walk for pleasure. Participation increases both with education and with income and includes almost half the black respondents. Among regions, walking for pleasure is least popular in the South. As with most trail activities, participation drops among big-city residents. Forty-three percent of respondents in cities with a population of over a million are walkers. Significantly more women than men walk for pleasure.

## Bicycling

The proportion of bicyclists in the 12 -and-older population appears to have more than tripled since 1960; almost one-third of the survey sample participates in bicycling. More than a third of young adults and over a fifth of the middle aged bicycle. The annual volume of bicycling per participant also tops all other trail activities--38 percent of bicyclists estimate they pedal on more than 25 days during the year.

Bicycling, like walking, is significantly less popular in the South than in the other regions. About a quarter of the residents of cities of all size categories bicycle.

## Running and Jogging

Running was not considered significant enough to be included in the 1960 survey. However, today over a quarter of the respondents report that they run or jog. Moreover, one-fifth of respondents say that they particularly enjoy this activity.

The proportion of runners among participants increases with education, and, although it decreases with age, 13 percent of the middle aged still participate. Running is significantly more popular in the West than in other regions, and also is the only trail activity in which the proportion of black participants outnumbers that of whites.

Day Hiking
Hiking ranks fourth among trail activities according to the percentage of the total sample who said they participate once or more during the year. This is considerably below the percentage walking for pleasure. Hiking requires special preparation, clothing, supplies, and equipment, while walking does not. However, 37 percent of hikers said that they particularly enjoy the activity. The sexes are about evenly divided on hiking. Less than a third as many of the older respondents hike as in each of the other age groups. Regionally, southern respondents have the lowest proportion of hikers; western respondents have the highest, perhaps reflecting climate, topography, and scenic interest, as well as accessibility to nonposted areas. As with most trail activities, there is a significant drop in participation by residents of both rural communities and large metropolitan areas. Only 9 percent of big-city dwellers and 11 percent of rural dwellers hike, as opposed to 13 to 15 percent in smaller cities and communities.

## Off-Road Vehicle Driving

This activity includes driving motorcycles, vehicles with four-wheel drive, all-terrain vehicles, and beach buggies. Eleven percent of the sample said they participate in this activity, but only $l$ percent of the total sample (or 9 percent of the off-road vehicle participants) said they particularly enjoy it. However, next to bicycling, off-road vehicle driving ties with horseback riding as the trail activity in which the most participants do the activity 25 days or more per year. The average off-road vehicle driver makes 12 trips per year, travels over 100 miles or 3 hours to get to his trip destination, stays there only one day, and has 2 companions with him. Eight percent of off-road vehicle outings require a user fee, which averages $\$ 10$ per person.

Participation in horseback riding has remained quite stable since 1960, varying by only a couple of percentage points. Only 9 percent of the present survey respondents ride horses, but of those, 40 percent said they particularly enjoy it. Unlike all other trail activities in the survey, except walking, there are more women equestrians than men. Participation declines steadily with age, from 18 percent of young adults to 1 percent of the elderly. Regionally, horseback riding is more popular in the West than in other regions, and least popular in the Northeast.

## Canoeing and Kayaking

Although canoeists and kayakers constitute only 8 percent of the survey sample, the participation rate has shown the greatest growth of all trail activities, quadrupling since 1960. However, over half of those participating in water trails do so only 1 or 2 days a year. Like all trail activities except walking, canoeing and kayaking drops dramatically with age, from 14 percent of young adults to only 1 percent of the elderly. Regionally, this activity is least popular in the South, and significantly less popular in the West than in the northeast and north-central regions. Along with walking and snowmobiling, canoeing/kayaking is one of the few trail activities most popular in rural areas. The average canoeist/kayaker makes 3 outings a year, drives 150 miles or 4 hours to get to a destination, stays 2 days, and travels with 6 other persons. More than half the trips require user fees, averaging $\$ 17$ per person. These relatively high fees may be partly accounted for by boat rentals.

## Backpacking

Backpacking, a combination of hiking and primitive camping, attracts only 5 percent of survey participants, 15 percent of whom said they particularly enjoy it. Backpackers are disproportionately male, highly educated, and drop off sharply with age. A significantly higher proportion of westerners are backpackers, which might be expected from the topography and scenic interest, as well as lack of access to "posted lands" in other regions. Thirty-nine percent of backpackers spend only 1 to 2 days, and 47 percent spend 3 to 10 days on this activity. Backpackers average 5 trips a year, drive 244 miles or 6 hours to their destination, travel in parties of 4 , and pay user fees for 17 percent of their trips, averaging $\$ 5$ per person.

## Snow Trail Activities

Cross-country skiing, or ski touring, and snowmobiling each have 3 percent of the respondents as participants. Slightly more men than women participate in these snow trail activities, particularly snowmobiling.

Unlike most trail activities, snowmobiling decreases for the college educated. Forty percent of snowmobilers practice their sport on only l to 2 days per year; only 10 percent spend more than 24 days a year on their sport. Although relatively few persons cross-country skied or snownobiled in 1983, they represent an increase from practically zero in earlier surveys.

## Summary

Americans are increasing their trail activities as reported in the 1982-83 Nationwide Recreation Survey. A few trail activities, now well established, hardly had appeared on the scene in the early 1960's. These are running, cross-country skiing, and recreational snowmobile use. Extraordinary growth has taken place in bicycling and canoeing/kayaking. Not only do almost one-third of the people in the United States more than 11 years old bicycle, but also far more bicyclists participate on more than 25 days per year ( 38 percent) than any other trail activity.

Those who live in the biggest cities participate less in all trail activities except running and jogging. Among population segments, the elderly and those in lower income and education categories tend to participate in fewer trail activities than the general population.

The only trail activity measured by the survey in which the black participation rate exceeds the white is in running/jogging. Female participation rates exceed male only in walking and horseback riding. As for trail activities particularly enjoyed by participants, horseback riding tops the list with 40 percent, followed by hiking with 37 percent, and bicycling with 30 percent.

[^0]
## TABLE 3. Current Status of Trail Activities: <br> 12-Month Participation Rates and Implicit Number of Participants

|  | Percentage of Total <br> Sample Who Said <br> They Participated <br> Once or More During <br> l2 Months Prior to <br> Interview | Implicit Number of <br> Participants in <br> the U.S. Population <br> l2 Years of Age <br> or Older <br> (Millions) |
| :--- | :---: | :---: |
| Activity <br> Walking for pleasure | 53 | 100 |
| Bicycling | 32 | 61 |

TABLE 4. Activity Participation Trends, 1960 to 1982

## (Percentage of respondents participating)

| Activity | Summer <br> 1960 | Summer <br> 1965 | Summer <br> Bicycling |
| :--- | :---: | :---: | :---: |
| 1982 |  |  |  |
| Horseback riding | 6 | 16 | 28 |
| Canoeing or kayaking | 2 | 8 | 7 |

Note: Percentage of respondents who said they participated once or more in selected activities during the 3 months before the interview, June, July, and August 1960, 1965, and 1982.

## Percentage of Those Respondents Who Said They Participated Once or More in the Previous 12 Months

| Characteristic | Total Sample | Bicycling | Hiking | Walking | Jogging |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 100 | 100 | 100 | 100 | 100 |
| Sex |  |  |  |  |  |
| Male | 48 | 48 | 52 | 40 | 54 |
| Female | 52 | 52 | 48 | 60 | 46 |
| Age |  |  |  |  |  |
| 12-24 | 27 | 46 | 36 | 28 | 52 |
| 25-39 | 29 | 33 | 36 | 32 | 35 |
| 40-59 | 25 | 17 | 21 | 25 | 12 |
| 60 or older | 19 | 4 | 7 | 15 | 1 |
| Education |  |  |  |  |  |
| Less than high school | 26 | 12 | 7 | 17 | 8 |
| High School | 36 | 37 | 29 | 38 | 32 |
| Less than 4 years of college | 19 | 23 | 26 | 21 | 26 |
| 4 or more years of college | 19 | 28 | 38 | 24 | 34 |
| Race |  |  |  |  |  |
| White | 89 | 90 | 98 | 89 | 87 |
| Black | 11 | 10 | 2 | 11 | 13 |
| Annual family income |  |  |  |  |  |
| Under \$5,000 | 10 | 7 | 7 | 8 | 8 |
| \$5,000 -\$14,999 | 30 | 22 | 22 | 26 | 23 |
| \$15,000-\$24,999 | 27 | 29 | 25 | 27 | 27 |
| \$25,000-\$49,999 | 28 | 35 | 36 | 33 | 34 |
| \$50,000 or more | 5 | 7 | 10 | 6 | 8 |
| Number of persons |  |  |  |  |  |
| in household |  |  |  |  |  |
| 1 | 11 | 6 | 8 | 10 | 7 |
| 2 | 30 | 22 | 28 | 29 | 20 |
| 3 | 20 | 21 | 20 | 21 | 21 |
| 4 | 20 | 28 | 26 | 21 | 27 |
| 5 or more | 19 | 23 | 18 | 19 | 25 |

a Limited to those activities in which 10 percent or more (550 or more) respondents said they participated once or more in the 12 previous months.
$x=$ less than one-half of 1 percent.

```
TABLE 5. Population Characteristics of Trail
    Activity Participantsa (continued)
```

Percentage of Those Respondents Who Said They Participated Once or More in the Previous 12 Months

| Characteristic | Total Sample | Bicycling | Hiking | Walking | Jogging |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Marital status |  |  |  |  |  |
| Married | 60 | 55 | 58 | 61 | 46 |
| Widowed, divorced, separated | 17 | 10 | 9 | 15 | 10 |
| Never married | 23 | 35 | 33 | 24 | 44 |
| Household cars owned |  |  |  |  |  |
| None | 9 | 6 | 4 | 8 | 7 |
| 1 | 27 | 22 | 21 | 26 | 22 |
| 2 | 35 | 37 | 40 | 36 | 37 |
| 3 | 16 | 20 | 18 | 17 | 17 |
| 4 or more | 13 | 15 | 17 | 13 | 17 |
| Employment status |  |  |  |  |  |
| At work | 54 | 62 | 64 | 55 | 64 |
| Not at work | 5 | 5 | 6 | 5 | 5 |
| Unemployed | 4 | 6 | 5 | 5 | 7 |
| Keeping house | 20 | 13 | 12 | 20 | 8 |
| Going to school | 3 | 6 | 5 | 3 | 8 |
| Unable to work | 2 | x | x | 1 | x |
| Retired | 7 | 2 | 2 | 5 | x |
| Other | 5 | 6 | 6 | 6 | 8 |
| Size of place of residence |  |  |  |  |  |
| Under 5,000 | 14 | 14 | 13 | 15 | 13 |
| 5,000 - 24,999 | 24 | 28 | 29 | 25 | 22 |
| 25,000-99,999 | 26 | 27 | 25 | 26 | 29 |
| 100,000-999,999 | 25 | 23 | 25 | 25 | 25 |
| 1,000,000 or more | 11 | 9 | 8 | 9 | 11 |


TABLE 6. Activity Participation by Demographic Categories
(Percentage who said they participated once or more during 12 months before the interview)

Education $^{\text {a }}$

School High School
But Less Than

4 Years of | 4 Years of |
| :--- |
| College |

n ํㅜNNNㄱㄱ $\infty$ mon



[^1]| Number of Persons <br> in Household |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 1 | 2 | 3 | 4 | More |
| 11 | 29 | 20 | 20 | 19 |
|  |  |  |  |  |
| 47 | 52 | 57 | 56 | 53 |
| 19 | 24 | 35 | 44 | 39 |
| 17 | 18 | 27 | 36 | 34 |
| 10 | 14 | 14 | 18 | 13 |
| 6 | 8 | 13 | 14 | 13 |
|  |  |  |  |  |
| 6 | 6 | 9 | 14 | 11 |
| 5 | 7 | 8 | 11 | 10 |
| 4 | 4 | 5 | 6 | 5 |
| 2 | 3 | 3 | 5 | 3 |
| 1 | 3 | 4 | 4 | 4 |


| Annual Family |  |  |  |  | Income |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars) |  |  |  |  |  |



Activity
Percentage of total sample
included in each category
Walking for pleasure
Bicycling
Running or jogging
Day hiking
Off-road vehicle driving
(includes motorcycles but
not snowmobiles)
Horseback riding
Canoeing or kayaking
Backpacking
Cross -country skiing and ski
touring
Snowmobiling
$\mathrm{x}=$ less than one-half of 1 percent.
Activity Participation by Demographic Categories (Continued)
TABLE 6.

TABLE 6. Activity Participation by Demographic Categories (Continued)

| Activity | Total Sarmple | Employment Status |  |  |  |  |  |  |  | Size of Place of Residence |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | At Work | Not at Work | Unemployed | $\begin{aligned} & \text { Keep- } \\ & \text { ing } \\ & \text { House } \end{aligned}$ | $\begin{aligned} & \hline \text { Going } \\ & \text { to } \\ & \text { School } \\ & \hline \end{aligned}$ | Unable to Work | Retired | Other | $\begin{aligned} & \text { Under } \\ & 5,000 \\ & \hline \end{aligned}$ | $\begin{array}{r} 1 \\ 5,000- \\ 24,999 \\ \hline \end{array}$ | $\begin{gathered} \hline \text { ulation) } \\ 25,000- \\ 99,999 \\ \hline \end{gathered}$ | $\begin{aligned} & 100,000- \\ & 999,999 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,000,000 \\ & \text { or More } \end{aligned}$ |
| Percentage of total sample included in each category | 100 | 55 | 5 | 4 | 20 | 3 | 2 | 7 | 5 | 14 | 24 | 26 | 25 | 11 |
| Walking for pleasure | 53 | 54 | 59 | 58 | 55 | 51 | 30 | 40 | 57 | 56 | 55 | 53 | 53 | 43 |
| Bicycling | 32 | 33 | 28 | 41 | 18 | 55 | 2 | 9 | 33 | 32 | 34 | 33 | 30 | 26 |
| Running or jogging | 26 | 27 | 24 | 36 | 10 | 54 | 2 | 1 | 35 | 24 | 24 | 30 | 27 | 26 |
| Day hiking | 14 | 15 | 17 | 14 | 8 | 19 | 2 | 4 | 15 | 11 | 15 | 13 | 13 | 9 |
| off-road vehicle driving (includes motorcycles but not snowmobiles) | 11 | 12 | 13 | 13 | 5 | 23 | 0 | 2 | 11 | 10 | 11 | 14 | 9 | 5 |
| Horseback riding | 9 | 10 | 8 | 10 | 5 | 13 | 2 | 1 | 9 | 8 | 8 | 10 | 8 | 6 |
| Canoeing or kayaking | 8 | 9 | 8 | 9 | 3 | 10 | 1 | 2 | 10 | 10 | 9 | 8 | 6 | 5 |
| Backpacking | 5 | 5 | 5 | 6 | 1 | 8 | 0 | 1 | 5 | 4 | 5 | 6 | 5 | 3 |
| Cross-country skiing or ski touring | 3 | 4 | 4 | 1 | 1 | 3 | 0 | x | 4 | 4 | 4 | 4 | 2 | 1 |
| Snownobiling | 3 | 3 | 5 | 7 | 2 | 2 | 1 | x | 2 | 5 | 3 | 2 | 1 | 1 |

TABLE 7. Annual Volume of Trail Activity per Participant
(Percentage of participants who gave different estimates of the number of different days on which they participated during the 12 months prior to the interview)

| Activity | $\begin{aligned} & 1-2 \\ & \text { Days } \end{aligned}$ | $\begin{aligned} & 3-10 \\ & \text { Days } \\ & \hline \end{aligned}$ | $\begin{aligned} & 11-25 \\ & \text { Days } \end{aligned}$ | More Than 25 Days |
| :---: | :---: | :---: | :---: | :---: |
| Bicycling | 12 | 32 | 19 | 38 |
| Day hiking | 28 | 47 | 14 | 12 |
| Off-road vehicle driving (includes motorcycles but not snowmobiles) | 23 | 39 | 21 | 17 |
| Horseback riding | 47 | 27 | 8 | 17 |
| Canoeing and kayaking | 51 | 39 | 8 | 3 |
| Backpacking | 39 | 47 | 9 | 6 |
| Cross-country skiing or ski touring | 51 | 35 | 10 | 4 |
| Snowmobiling | 40 | 36 | 14 | 10 |

Table 8. Percentage of the Total Sample Who Said They "Particularly Enjoyed" Selected Trail Activities
Percentage
Walking for pleasure ..... 9
Bicycling ..... 10
Running or jogging ..... 5
Day Hiking ..... 5
Off-road vehicle driving ..... 1 (includes motorcycles but not snowmobiles)
Horseback riding ..... 4
Canoeing or kayaking ..... 1
Backpacking ..... 1
Snowmobiling ..... $x$$x=$ less than one-half of 1 percent.
(Percentage of respondents who gave selected reasons why they enjoy their favorite trail activities ${ }^{\text {a }}$ )

| To enjoy nature and the outdoors | 59 | 84 | 61 |
| :--- | :---: | :---: | :---: |
| To get exercise or keep in shape | 55 | 42 | 55 |
| To get away from day-to-day <br> living or problems | 33 | 54 | 37 |
| It gives me a chance to be with <br> family and friends | 32 | 35 | 20 |
| It 's quiet and peaceful where <br> I go | 27 | 65 | 38 |
| I like the people who do that <br> activity | 12 | 20 | 10 |
| I have the special equipment for |  |  |  |
| it; I like using the equipment |  |  |  |

[^2]
## Table 10. Characteristics of Trips and Outings to Engage in Selected Trail Activities in Previous 12 Months

| Characteristic | Canoeing/ Kayaking | Backpacking/ Hiking | Off-road Driving |
| :---: | :---: | :---: | :---: |
| Average number of trips or outings per participant | 3 | 5 | 12 |
| Average distance of destination from residence (miles) | 151 | 244 | 103 |
| One-way travel time (hours) ${ }^{\text {a }}$ | 4 | 6 | 3 |
| Transportation mode (percentages) |  |  |  |
| Automobile | 91 | 87 | 61 |
| Other | 9 | 13 | 39 |
| Travel to other destinations on same trip (percentage yes) | 22 | 28 | 20 |
| Average length of stay (days) ${ }^{\text {b }}$ | 2 | 2 | 1 |
| Average number of people in traveling partyc | 7 | 4 | 3 |
| User fee: |  |  |  |
| Percentage of trips requiring user fee | 59 | 17 | 8 |
| Dollars/persond | 17 | 5 | 10 |

a Rounded to the nearest hour.
b Rounded to the nearest day.
C Rounded to the nearest person.
d Rounded to the nearest dollar.


## CHAPTER 7

FEDERAL TRAIL ACTIVITIES

Trails are a partnership of Federal, State, local, and private-sector efforts. All members of the partnership need to understand the present roles of the other members. This chapter addresses current activities of the seven Federal land-managing agencies. A survey of the agencies, conducted in the spring of 1985, identified current and proposed activities regarding trails planning, managing, and programming. The following discussion and tables include trails planning and management, private-sector involvement, and volunteerism.

Federal agency activities regarding trail development, management, and maintenance differ markedly among the agencies, as do the agencies' organizational responsibilities for trails. To some agencies, trails are explicit and separate functions within their organizational structures or are an integral part of an identifiable program's function. In other agencies, trails are dependent upon site demands or management preferences or the willingness of local groups and organizations to support trail-related activities.

## Trails Planning and Management

As can be seen from table ll, only two of the seven land-managing agencies, the Forest Service and the Tennessee Valley Authority, identify a current (Fiscal Year 1986) and projected budget (Fiscal Year 1987) for trails. The Forest Service's current and projected budgets are $\$ 16,200,000$ and $\$ 13,400,000$, respectively, while the Tennessee Valley Authority's budget is the same for both the current and projected: \$108,000.

The Forest Service is the only agency to update its trails inventory annually. As a component of the agency's computerized Recreation Information System, the inventory is structured for use in trail management and provides the basic data for user publications. The inventory system is not directly accessible by trail users. The National Park Service inventoried its trails in 1981. According to the data collected, over 54 million persons used National Park System trails in 1981.

There is no standard inventory system among agencies. The extent of the agencies' trails ranges from 235 miles managed by the Tennessee Valley Authority to over 98,000 miles managed by the Forest Service. Two agencies, the Corps of Engineers and the Fish and Wildlife Service, do not separately list or inventory trail mileage figures. Four agencies provide trails technical assistance while all agencies provide trails information for visitors, primarily in the form of on-site brochures.

The kinds of trails provided by each agency are presented in table 12. Three agencies--the Corps of Engineers, the Forest Service, and the Bureau of Land Management--provide trails for all 13 activities. All agencies provide trails for day hiking, bicycling, horseback riding, and canoeing.

## Private-Sector Involvement/Volunteerism

Each agency was asked to describe its use of the private sector. The Bureau of Reclamation reported that the private sector has little or no role in managing its trails. For the other six, involvement of the private sector was primarily limited to use of volunteers.

The National Park Service, through its Volunteers in the Parks program, the Forest Service, through its Volunteers in the Forests program, and the Bureau of Land Management, Corps of Engineers, Fish and Wildlife Service, and Tennessee Valley Authority, through their recently granted authorities, offer various incentives to encourage volunteers in trail-related work efforts. These programs reimburse volunteers for some costs of supplies, lodging, and subsistence.

Several agencies, namely the Forest Service, National Park Service, and Bureau of Land Management, pointed out that the greatest incentive for the volunteer is the sense of accomplishment in having improved trails and trail opportunities. Other incentives are patches, certificates, potluck suppers, and signs along a trail crediting a particular volunteer group for the services rendered.

The Forest Service estimated that through numerous agreements with volunteer groups, volunteers helped maintain over 10,000 miles of trails in Fiscal Year 1984. According to the Forest Service, volunteer efforts throughout the forest system have grown steadily over the last several years and this growth will probably continue for several more years. The most substantial, organized volunteer activities in the forest system are those sponsored by the Appalachian Trail Conference and the Florida Trail Association and their member clubs. In 1984 about 4,500 members of the Appalachian Trail Conference put in 70,000 hours on the Appalachian Trail in Forest Service lands.

The National Park Service's Volunteers in the Parks program was authorized by Public Law 91-357, which was enacted in 1970. A recent modification in the program allows volunteers to maintain trails. As a result of the program the service took the unprecedented step of turning over to the Appalachian Trail Conference a 250 -mile sector of the Appalachian Trail to manage and administer.

Budget restrictions and recent legislative authorities granted to the Bureau of Land Management, Corps of Engineers, and Tennessee Valley Authority have resulted in volunteers playing a greater role in planning, constructing, and maintaining trails for those agencies.

The agencies reported that their problems were historically recurring issues, such as motorized versus nonmotorized use on the same trail, resource damage, and use impacts; and that new issues centered on new activities such as mountain bikes on the trails.

Since Fish and Wildlife Service trail use is directed primarily toward wildlife/wildlands interpretation and educational programs, potential conflicts occur when nonwildlife users such as joggers use Fish and Wildlife Service trails.

While agencies like the Forest Service, National Park Service, and Bureau of Land Management are concerned about issues on existing trails, the Bureau of Reclamation is looking at issues on new trails such as canal rights-of-way. The principal conflicts center around (1) trail use versus operational and maintenance activities, (2) trespass of trail users on adjacent private lands, and (3) off-road vehicles versus other trail users. The Bureau of Land Management also expressed concern about changing technology and how best to address a growing number of new trail users. The Bureau of Land Management reported the reluctance of some landowners to convey linear strips of land for trails or to have their property encumbered by linear easements. It also noted that any type of land negotiation for trail purposes is generally very time consuming.

## Summary

Federal land-managing agencies have varying degrees of trails activities. Some agencies have an aggressive trails program, while others tend to wait to see who might initiate some trail support. While agencies maintain National Scenic and Historic Trails on their managed lands, they make little or no mention of extending the development and maintenance of these trails beyond Federal boundaries, even though authorities for such effort exist in Section 7 (e) of the National Trail System Act.

Four of the agencies have trails inventories and one (the Forest Service) updates its inventory regularly. However, its inventory is geared to management purposes, rather than users. There is no common trails inventory system among Federal agencies. The users' need for improved and more readily available information about trails, discussed in chapter 5 , was not addressed by the agencies.






| Current/Projected |
| :---: |
| Budgets |

$\$ 16,200 / \$ 13,400$
$\$ 108,000 / \$ 108,000$
TABLE 11. Trails Planning and Management by Federal Land-Managing Agencies

[^3]TABLE 12. Developed Trails by Activity for Federal Land-Managing Agencies$x \times x$
$\times$ Exercise
Day Bicy- Jog- back
Hiking
$x$ $X$
$x$
x Cross snow
National Park
Service

## Forest Service <br> Bureau of Land <br> Management

Reclamation
Fish \& Wildlife
Heral
Exercise

$$
x
$$

$$
x
$$

Corps of Engineers $X$
Horse-

$$
\begin{aligned}
& \text { Back- } \\
& \text { packing }
\end{aligned}
$$

$$
\begin{aligned}
& \text { Cross- } \\
& \text { Country } \\
& \text { Skiing } \\
& \hline
\end{aligned}
$$

$$
x
$$

$$
\begin{aligned}
& \text { 4-Wheel/ } \\
& \text { ATV } \\
& \text { Driving }
\end{aligned}
$$

4-Wheel/ Special

$$
\begin{aligned}
& \text { Popula- } \\
& \text { tion } \\
& \hline
\end{aligned}
$$

## Other

Underground (cave)
interpretation interpretation

$$
\begin{aligned}
& \text { Ultra-light } \\
& \text { aircraft }
\end{aligned}
$$ -asion


$\qquad$
$x$ Unknown
x
Service
Authority

In 1985 the regional offices of the National Park Service surveyed the States on trails planning, managing, and programming. With this survey, the National Park Service has developed the beginnings of a data base on State trails activities. The survey was not intended to be comprehensive or totally accurate, but the results give some indication of state policies and programs. The tables in this chapter are derived from information gathered by the regional offices.

According to table 13 on State plans and management, 21 States have legislation to establish statewide trails systems and 31 States employ trails coordinators. Most States cover trails planning either in their Statewide Comprehensive Outdoor Recreation Plans (SCORPs) or as a separate planning document, or both. Six States have no trails plans.

North Dakota was one state which identified trails as one of its three major concerns through the SCORP process. It held 9 regional workshops, attended by 242 citizens representing 82 communities, to define the needs and future trends of outdoor recreation in the state. One of three major concerns identified through this process was the need for trails of all types.

Table 14 shows whether Federal, State, local, or private lands are covered in each State's trails inventory. Thirty-one States inventory their trails in all four land catagories. Four States-Oklahoma, Illinois, Montana, and Nebraska--inventory trails only on State-managed lands. North Dakota does not indicate which of its trails are in each land category. There appears to be no standard criteria or series of elements included in all State inventories.

According to the survey, six states--Alabama, California, Hawaii, Iowa, Montana, and South Carolina--do not provide technical assistance or information services on trails. Fifteen States, as shown in table 15, earmark funds for local/private trail activities. Table 16 lists the 14 States in which metropolitan area planning commissions conduct ongoing trails planning and programs. Table 17 shows which States have policies on providing trails for four activities at State-owned areas and facilities. The four activities were chosen because they have a range of users and support facilities. In 31 States, policies exist for providing trails for horseback riding; in 28 States, bicycling; in 27 States, canoeing; and in 2 States, mountain biking, a relatively new trail activity.

Table 18 outlines which government agency in each State has responsibility for 14 different trail activities. According to this table, only two trail activities, day hiking and horseback riding, are provided by a Federal or State government agency in every State. Local and private trail providers contribute significantly now and are expected to contribute even more in the future.

Table 19, the last table to be discussed in this section, looks at the number of projects and total obligated monies spent on Land and water Conservation Fund projects which contained trails or trail facilities. Although the total number of miles of trail and the total dollars obligated specifically for trails are not available, the figures presented are indicative of the importance of trails and trail activities as related to Land and Water Conservation Fund projects. It should be mentioned that some states fund some trail activities with monies derived from off-road vehicle registrations and highway gasoline rebates. See discussion of Wenatchee Forest motorized trails in the last section as a case in point.

Of the total number of projects containing trails, bicycling was the most popular activity, occurring on 894 projects. Hiking trails appeared in 778 projects, while exercise trails followed closely appearing in 633 projects. Obligated funds followed in much the same order. Funding of projects that included bicycling totaled $\$ 161,882,000$; projects that included hiking totaled $\$ 150,069,000$.

## Summary

Twenty-one of the States have trails legislation, and 30 have trails coordinators. Most States indicate that they have trails plans and offer trails information and technical assistance. According to Land and Water Conservation Fund projects that include trails, bicycling is the trail activity most frequently provided by the States, followed by hiking and exercise trails.

All but two States have trails inventories, but there is no known commonality of elements or criteria among them.
TABLE 13. Existence of Trails Legislation, State Coordination, Plan, and Inventory




\author{
$x \times x \times x \times x$

} $x$ $x \quad x \times x$ $x \times x \quad x$ | Trails |
| :---: |
| Legislation |

$x x$

 :-品药 Indiana Iowa Kansas
Kentucky
Louisiana Louisiana
Maine Maryland Massachusetts Michigan Mississippi
Missouri
TABLE 13. Existence of Trails Legislation, State Coordination,


|  |  |
| :---: | :---: |
| $c$ 0 0 0 0 0 0 0 0 0 |  |

$$
\begin{array}{r}
x \times \\
\times \times \times
\end{array}
$$

Trails Plan

|  | Trails |
| :---: | :--- |
| Trails | Coordi- |
| Legislation | nator |

$x$
$x \quad x \times x \times x \quad x \times x \times$ $x \times$ $x$
$\times$
$x$
$x$
$x$ $x$
$x \times$ Nil $\underset{\sim}{-1}$

$m \mid$ |  | $\begin{array}{l}\text { Trails } \\ \text { Trails } \\ \text { Legislation }\end{array}$ |
| :---: | :--- | $x \times x$ $x \times x$

$x$

 $\times$ $\times x$ $x \quad x$ $\times$ $x \times$ $x$ $x$
相 -$x \quad x x$ $\cdots$ State
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
는
0
2
$\frac{3}{0}$
2
North Carolina North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania South Carolina
South Dakota Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virgin
Wisconsin
Wyoming


| State | Federal | State | Local | Private |
| :---: | :---: | :---: | :---: | :---: |
| Alabama | $X$ | X | X | X |
| Alaska | X | X | X |  |
| Arizona | X | X | X | X |
| Arkansas | X | X | X |  |
| California | X | X | X | X |
| Colorado |  | X | X |  |
| Connecticut |  |  |  |  |
| Delaware | X | X | X | X |
| District of Columbia | X | X | X | X |
| Florida | X | X | X | X |
| Georgia | X | X | X | X |
| Hawaii | X | X | X |  |
| Idaho | X | X | X | X |
| Illinois | X | X |  |  |
| Indiana |  | X |  |  |
| Iowa | X | X | X | X |
| Kansas |  | X | X | X |
| Kentucky | X | X | X | X |
| Louisiana | X | X | X |  |
| Maine | X | X | X | X |
| Maryland | X | X | X | X |
| Massachusetts | X | X | X | X |
| Michigan | X | X | X | X |
| Minnesota | X | X | X |  |
| Mississippi | X | X | X | X |
| Missouri | X | X |  |  |
| Montana |  | X |  |  |
| Nebraska |  | X |  |  |
| Nevada | X | X | X |  |
| New Hampshire | X | X | X | X |


| State | Federal | State | Local | Private |
| :---: | :---: | :---: | :---: | :---: |
| New Jersey |  | X | X | X |
| New Mexico | X | X | X | X |
| New York | X | X | X | X |
| North Carolina | X | X | X | X |
| North Dakota |  |  |  |  |
| Ohio | X | X | X | X |
| Oklahoma |  | X |  |  |
| Oregon | X | X | X | X |
| Pennsylvania | X | X | X | X |
| Rhode Island | X | X | X | X |
| South Carolina | X | X | X | X |
| South Dakota | X | X | X | X |
| Tennessee | X | X | X | X |
| Texas |  |  |  |  |
| Utah | X | X |  |  |
| Vermont | X | X | X | X |
| Virginia | X | X | X | X |
| Washington | X | X | X | X |
| West Virginia | X | X |  |  |
| Wisconsin | X | X | X | X |
| Wyoming | X | X | X |  |
| TOTAL | 41 | 48 | 40 | 32 |

State
Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia Florida

Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi

State Provides

|  |  | Funding |
| :--- | :--- | :--- |
| Technical | Information | Local/Private |
| Assistance | Services | Activities |

Funding Local/Private Activities

X
X
X

```
X
```

X

X
X
X
X
X
X

X
X
X
X

X
X
X
X

X
X
X

## X

X

X
X
X

X
X X
X
X X

## X

X
X
X
$X$
X
X

TABLE 15. State Trail Program Provisions (continued)

| State | State Provides |  |  |
| :---: | :---: | :---: | :---: |
|  | Technical Assistance | Information Services | Funding Local/Private Activities |
| Missouri | X | X |  |
| Montana |  |  |  |
| Nebraska |  | X |  |
| Nevada | X | X |  |
| New Hampshire | X | X |  |
| New Jersey | X | X | X |
| New Mexico |  | X |  |
| New York | $X$ | X |  |
| North Carolina | X | X |  |
| North Dakota | X | X | X |
| Ohio | X | X |  |
| Oklahoma | X | X |  |
| Oregon | X | X |  |
| Pennsylvania | X | X | X |
| Rhode Island |  | X |  |
| South Carolina |  |  |  |
| South Dakota | X | X |  |
| Tennessee | X | X |  |
| Texas | X | X |  |
| Utah | X | X |  |
| Vermont | X | X | X |
| Virginia | X | X | X |
| Washington | X | X |  |
| West Virginia |  | X |  |
| Wisconsin | X | X | X |
| Wyoming | X | X |  |
| TOTAL | 36 | 44 | 15 |


| State | On-Going Plan | On-Going Programs |
| :---: | :---: | :---: |
| Alabama | X | X |
| Alaska | X | X |
| Arizona |  |  |
| Arkansas |  |  |
| California |  |  |
| Colorado | X | X |
| Connecticut | Unknown | Unknown |
| Delaware |  |  |
| District of Columbia |  |  |
| Florida | X | X |
| Georgia | X | X |
| Hawaii |  |  |
| Idaho |  |  |
| Illinois |  |  |
| Indiana | X |  |
| Iowa | X | X |
| Kansas | X |  |
| Kentucky | X | X |
| Louisiana |  |  |
| Maine |  |  |
| Maryland | X | X |
| Massachusetts | X | Unknown |
| Michigan | Unknown | Unknown |
| Minnesota | X |  |
| Mississippi | X |  |
| Missouri |  |  |
| Montana |  |  |
| Nebraska | Unknown |  |
| Nevada |  |  |

TABLE 16. States Having Metropolitan Area Planning Commissions with Trail Activities (continued)

## State

New Hampshire
New Jersey
New Mexico
New York
North Carolina X
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

TOTAL
2415

| State | Bicycling | Horseback Riding | Canoeing | Mountain Biking |
| :---: | :---: | :---: | :---: | :---: |
| Alabama | x | x | x |  |
| Alaska |  |  |  |  |
| Arizona |  |  |  |  |
| Arkansas |  | x |  |  |
| California | x | x | x | - |
| Colorado | x | x | x | $x$ |
| Connecticut | x | x | x |  |
| Delaware | x | x | x |  |
| District of Columbia | x |  |  |  |
| Florida | x | x | X |  |
| Georgia | x | x | x |  |
| Hawaii | Unknown | Unknown | Unknown | Unknown |
| Idaho |  |  |  |  |
| Illinois |  | x |  |  |
| Indiana |  |  | x |  |
| Iowa | x | x | x |  |
| Kansas |  | x | x |  |
| Kentucky | x | x | x |  |
| Louisiana |  | x |  |  |
| Maine | x | x | x |  |
| Maryland | x | x | x |  |
| Massachusetts | x | x | Unknown |  |
| Michigan | Unknown | X | X |  |
| Minnesota | X | x | x |  |
| Mississippi | x | x | x |  |
| Missouri | x | X |  | x |
| Montana |  |  |  |  |
| Nebraska |  | Unknown | X |  |

TABLE 17. Activities Provided for by State Policy on State-Owned Lands (continued)

|  | Horseback |  |  | Mountain |
| :---: | :---: | :---: | :---: | :---: |
| State | Bicycling | Riding | Canoeing | Biking |
| New Hampshire | X | X | X |  |
| New Jersey | X | X | X |  |
| New Mexico | X | X |  |  |
| New York | X | X | X |  |
| North Carolina |  | X |  |  |
| North Dakota |  |  |  |  |
| Ohio |  |  |  |  |
| Oklahoma | X | X | Unknown | Unknown |
| Oregon | X | X | Unknown |  |
| Pennsylvania | X | X | X |  |
| Rhode Island | X | X | X |  |
| South Carolina |  |  |  |  |
| South Dakota |  |  |  |  |
| Tennessee | X | X | X |  |
| Texas |  |  |  |  |
| Utah |  |  | X |  |
| Vermont | X | X | X |  |
| Virginia | X | X | X |  |
| Washington |  |  |  |  |
| West Virginia | Unknown | X |  |  |
| Wisconsin | X | X | X |  |
| Wyoming |  |  |  |  |
| TOTAL | 28 | 34 | 27 | $\underline{2}$ |

TABLE 18. Trails-Related Recreation Activities by Land Ownership by State

| State | Day Hiking | $\begin{aligned} & \text { Bicy- } \\ & \text { cling } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Jog- } \\ & \text { ging } \end{aligned}$ | Horseback Riding | Backpacking | CrossCountry Skiing | Snow- <br> mobil- <br> ing | Trail <br> Biking | $\begin{aligned} & \text { Canoe- } \\ & \text { ing } \end{aligned}$ | FourWheel Driving | Mountain Biking | All- <br> Terrain <br> Vehicle <br> Riding | Special <br> Popula- <br> tions | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | FSLP | FSL | L | FSLP | FSLP |  |  | F | FSL | F P |  | F | FSLP |  |
| Alaska | FSLP | SLP | FSLP | FSLP | FSLP | FSLP | FSLP | FSLP | FSLP | FS | FSL | FS | FSLP | FSLP |
| Arizona | FSL | FSL | FSLP | FSLP | FSL | F | F | FSL | FSLP | FS | FSLP | FS | FSL |  |
| Arkansas | FSLP | FSLP | FSLP | FSLP | FS |  |  | F P |  |  |  | F | FSL |  |
| California | FSLP | FSLP | FSLP | FSLP | FS | FSLP | FS | FSLP | FSLP | FSLP | FSLP | FSLP | FSLP |  |
| Colorado | FSLP | FSLP | FSLP | FSLP | FSL | FSLP | FSL | F L | FSL | F | FSLP | FS | FSLP |  |
| Connecticut | FSLP | SL | FSLP | SLP | FS P | FSLP | S P | FSLP | FSLP | P |  | P | SL |  |
| Delaware | FSLP | FSLP | FSLP | SLP | S P | FSLP | SLP | S P | FSLP | S P |  | P | SLP | FSLP |
| District of Columbia | FS | FS | FS P | F | F |  |  |  | F |  |  |  | FS | FS |
| Florida | FSL | FSLP | FSLP | FSLP | FS P |  |  | FS P | FSLP | FS P |  | FS P | FSLP |  |
| Georgia | FSLP | FSL | FSLP | FSLP | FS P |  |  | FSLP | FSLP | FSLP | F | FSLP | FSLP |  |
| Hawaii | FSL | FSLP | FSLP | FSLP | FSL |  |  |  |  | SLP |  |  | FSL |  |
| Idaho | FSLP | SL | SL | FSP | FS | FSLP | FSL | FS | FS | FSL | FS | FS |  |  |
| Illinois | FS |  |  | FS | S | S | S |  | S |  |  |  |  |  |
| Indiana | FS | SL | FSLP | FS | FS | SL | SP | P |  | P | S P | P | SL |  |
| Iowa | FSLP | FSLP | FSLP | SLP |  | FSLP | FSLP | LP | FSLP | L |  | L | FS |  |
| Kansas | FSLP |  | FSLP | FS | FSLP | S |  |  | S |  |  |  |  |  |
| Kentucky | FSLP | FSLP | FSLP | FSLP | FS P | FSL |  | FSLP | FSLP | FSLP |  |  | FSLP |  |
| Louisiana | FSL | L | L | SL | FS |  |  | F |  |  |  | FS | L |  |
| Maine | FSLP | FSL | FSLP | FS P | FS P | FSLP | FS P | LP | FSLP | P | P | P | FSL |  |
| Maryland | FSLP | FSL | FSL | FSLP | FSLP | FSLP | S P | SLP | FSLP | SLP |  | SLP | FSLP | FSLP |
| Massachusetts | FSLP | FSLP | FSLP | FSLP | FSLP | FSLP | SLP | SLP | SLP | SLP | SL | S P | FSL . |  |
| Michigan | FSL | L |  | FS | FS | FSL | FSLP | FSL | FSLP | FSLP |  | FSL |  |  |
| Minnesota | FS | FSL | FSL | FS | FS | FSL | FSL |  | S | S |  | FS | SL |  |


. 1











 State
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

TABLE 19. Number of State, County and Local Land and Water Conservation Fund Projects That Include Trails*

| Type of Trails | Number of Projects |  |
| :--- | ---: | ---: |
|  |  | Total Fund |
| Ski | 63 | 18 |
| Snowmobile | 633 | $\$ 10,371,000$ |
| Exercise | 499 | $4,836,000$ |
| Nature |  | $83,550,000$ |
|  | 37 | $92,957,000$ |
| Motorized | 894 |  |
| Bicycle | 181 | $6,317,000$ |
| Horse | 778 | $165,882,000$ |
| Hiking |  | $43,897,000$ |
|  |  | $150,069,000$ |

*Figures on those from the inception of the program to date, include acquisition, development, redevelopment, and combination projects.


TRAIL DESIGN FOR ACCESSIBILITY TO DISABLED PERSONS

Trail providers are having to give increased attention to the design and modification of trails for disabled individuals. The number of people who have some type of disabling condition has increased significantly over the past two decades and these people are being encouraged to live as normal and independent lives as possible. Thus, there are larger numbers of disabled people desiring outdoor recreation experiences. Also, Federal legislation, such as the Architectural Barriers Act of 1968 and Section 504 of the 1973 Rehabilitation Act, mandates that certain facilities and programs be accessible to disabled people.

Initially, the efforts to design accessible trails and trail systems focused on developing "special" trails for wheelchair users or blind persons. Disabled persons, however, generally disliked trails that separated them from other park visitors. Consequently, most trails are currently being designed for the widest cross section of the public, including individuals who happen to have a disability.

As official standards for accessibility have been developed and refined, a legal definition of the term has emerged. In the Minimum Guidelines and Requirements for Accessible Design, developed by the U.S. Architectural and Transportation Compliance Board, accessible means "compliance with the specifications and requirements of this part and with any applicable standards issued by a standard setting agency." The Heritage Conservation and Recreation Service in the U.S. Department of Interior published A Guide to Designing Assessible Outdoor Recreation Facilities in 1980, ${ }^{1}$ but did not define standards for accessibility to such facilities as picnic areas, campsites, and trails. Therefore, it is difficult to give a precise definition of an "accessible trail."

However, both the Minimum Guidelines and the Uniform Federal Accessibility Standards contain certain criteria that can be applied to trails. For instance, the standards have criteria for "accessible routes of travel." These criteria are based upon research to determine the specifications needed to allow the majority of disabled persons to traverse independently and safely. These criteria include the following:

- Width--The minimum clear width of an accessible route shall be 36 inches. If an accessible route has less than 60 inches clear width, passing spaces at least 60 inches by 60 inches shall be located at reasonable intervals not to exceed 200 feet.
- Surface Textures--Ground and surfaces along accessible routes shall be stable, firm, and slip resistant.
- Slope--An accessible route shall be no greater than 1:20 (one foot of rise for every 20 feet of length). The cross slope of an accessible route shall not exceed 1:50.
- Head Room--Walks shall have 80 inches minimum clear head room. If vertical clearance is less than 80 inches, a barrier to warn blind or visually-impaired persons shall be provided.

All trails cannot or should not be designed to meet these criteria. It is impracticable or impossible to design or modify simple footpaths for the disabled through wilderness or natural areas, intended to blend in with the topography of the natural environment. Other highly developed trails, where man has modified the natural environment a large amount, better lend themselves to such modification.

The National Park Service has established an internal policy document with regard to accessibility that, in part, states: "It is the policy of the National Park Service to provide the highest level of accessibility in all . . . facilities as is possible and feasible, consistent with the nature of the area and facility. The degree of accessibility provided will be proportionately related to the degree of manmade modification made to the area and to the significance of the facility."

This policy can be applied to nature trails. If the trail is a highly developed one, it should be designed to meet the specific accessibility criteria to the highest degree feasible. Varying degrees of development would then result in varying degrees of accessibility. The important task is to clearly identify the specifications of a trail that would allow a trail to be designated as "accessible," and then provide additional information on other trails so disabled people can decide whether to use the trail based upon their levels of ability or disability.

The U.S. Architectural and Transportation Barriers Compliance Board is currently investigating the status of standards and guidelines for outdoor recreation facilities including trails. A national task force has just been established by the Board to identify and evaluate practices and guidelines currently being used by recreation planners. A representative from each Federal agency concerned with developing recreation facilities is on the task force. Following its evaluation, the task force will recommend official Federal standards.

Architectural or physical accessibility is only one part of the concept of total accessibility. Individuals with mobility, visual, or hearing impairments need different access to the interpretive information. The task force will address all of these programmatic issues as well as the design and construction of trails.

It is clear that a significant percentage of our Nation's population has mobility or sensory limitations. It is also clear that these individuals desire and deserve the opportunity to participate in outdoor recreation activities including nature hikes and trail experiences. Some criteria already exist to guide the development of trails that meet the legal definition of accessibility. These criteria should be evaluated and used to create accessible trails whenever feasible and possible. When it is not feasible, trails should be designed to be as accessible as possible and information provided to allow the disabled participants to determine their own abilities to participate.
$l_{\text {U.S. Department }}$ of the Interior, Heritage Conservation and Recreation Service, Lake Central Region, Ann Arbor, Michigan. A Guide to Designing Accessible Outdoor Recreation Facilities, $19 \overline{8} 0$.


## CHAPTER 10

TRAIL CONCERNS

This chapter presents some of the major concerns expressed by trail users, and some of their suggestions for resolution of these concerns. These are drawn from the same Heritage Conservation and Recreation Service report referred to in chapter 5. They were elicited through 38 regional workshops in 31 States, 30 meetings of trail interest groups, and a large questionnaire study.

These concerns are presented here so that all partners in the trails efforts--Federal, State, and local agencies, and the private sector including trail providers, landowners, and trails interest groups--can become aware of common concerns widely expressed by users.

## Adequate Funding

Throughout the Nation, inadequate funding for trail planning, acquisition, development, and maintenance was identified as the chief obstacle. No level of volunteer effort could substitute for land acquisition funding and for equipment and materials needed to build and maintain trails.

Most users expressed a willingness to provide funds through increased license fees for activities such as snowmobiling and trail biking; excise taxes on trail-related recreation equipment earmarked for trail purposes; and increased entrance and user fees. However, this willingness is contingent upon such revenues being earmarked for trails and not going into a general account.

They also felt nongovernmental funds could be sought through corporate gifts, foundation grants, donations (such as "adopt-a-trail"), and fundraising activities through sale of publications, patches, maps, and guidebooks.

## Volunteer Organizations

Effective volunteer organizations/interest groups must be able to sustain themselves on the commitment and energy of their own membership. A sound volunteer trail organization is normally a prerequisite for successful local trails projects. Local governments should not attempt to organize such groups, but rather identify them and work with them on projects with common goals.

A successful trails project between a volunteer organization and an agency involves a learning process in which both parties benefit. Volunteers are often unskilled in researching, preparing and articulating their positions. Agencies have to explain their policies and constraints, determine the skills of the volunteers, and adjust time tables to that of the volunteer.

Government planners/managers can propose worthwhile objectives, such as development of trail plans, trail maintenance, and information dissemination and should be receptive to the volunteer organizations' ideas and suggestions. Volunteer organizations must be welcomed in the planning process and be made to feel they share a responsibility for the success or failure of a trails program.

A major problem many volunteers encounter is helping the managers of Federal and State landowning agencies understand what the users want. There are three parts to this difficulty. l) The manager's vision and responsibility is frequently limited to his own geographic boundaries; he wants the volunteers help within his designated area and often is less cooperative when the planned trail merely passes through his land. 2) Not understanding user preferences, he may provide trails unsuited to their needs, and therefore, too many trails will go underutilized. 3) Managers may assign volunteers to litter patrol and vegetation clipping, underestimating the capability and enjoyment of some for hard physical labor.

Trail user organizations can be effective and should be encouraged at the State and local levels of government. Government agencies can aid in sharing information and providing a framework for citizen participation. Volunteer trail organizations can help government planners identify the trail-using public, asses its needs, get adequate input for trail planning, resolve landowner opposition, and capitalize on the energy of trail interest groups. One volunteer trail organization is often able to unite disparate trail users to lend support for a variety of trail proposals.

All agency staff need to realize that there are two ways of working with volunteers -- as the organization or as the individual. Agencies should be aware of what each can accomplish and make full use of both.

## Coordination Among Trail Interests

There are numerous governmental and nongovernmental agencies across the Nation that are directly or indirectly responsible for planning, developing, and maintaining trails. For any given geographic area there are a dozen or more public agencies and private organizations that have responsibility for or an interest in trails.

Frequently, there is little coordination among various agencies and between agencies and private interests. Few mechanisms, such as a trails council representing all trail interests in a given area, exist to coordinate trail efforts, eliminate duplication, foster interconnections among trail systems, and maximize the effectiveness of all parties involved.

The users recommend that trails councils be established at Federal, regional, State, and local levels, representing all trail interests and providers.

## Community Support

The users felt that trail initiatives have relatively low priorities for political, financial, and administrative support. They recommended that trails interests enlarge their constituency by including elected and agency officials and representation from other groups such as boards of education, historical societies, and chambers of commerce on their trails councils and conduct media events such as workshops in conjunction with outfitters.

## Trail Information and Education

Many areas lack information about existing trail opportunities. Where information does exist, the potential users often do not receive it. More information and education programs on trails would contribute to increased interest in trail activities.

Increased trail information and education will benefit not only the potential trail user but also the experienced one. A State-level source of trails information is needed along with possibly a national trails clearinghouse. The private sector could operate the clearinghouse which could assist inter- and intrastate coordination.

## Adjacent Landowner Opposition

Landowners uncertainty over liability is a major obstacle to their allowing trails through their lands. Private property owners also fear vandalism, theft, noise, property devaluation, and loss of privacy, particularly when the land is in or near urban areas.

There has been very little investigation of trail projects after implementation to determine actual effects on private property. Information on these problems would be useful to have during the preliminary phases of a trail project. Few incentives exist to encourage private landowners to open up their lands or to allow existing trails to remain open.

## Comprehensive Planning for Trails

Trails frequently are not perceived as essential community assets or included in comprehensive planning, such as the Statewide Comprehensive Outdoor Recreation Plan. The interrelationship of various types of trails to each other or to other public and private projects is not always considered. Without knowledge of where existing trails are located and where more are needed, it is difficult to plan action effectively to get more trails.

Because of limited available public resources, it is imperative that efforts focus on specific trail activities and locations for which needs are the greatest. The public cannot afford to have its resources spent on trail development just because a nice opportunity comes along. Projects should be undertaken only if they meet the needs identified in a comprehensive trails plan. The plan should identify each agency or private interest responsible for each project. A comprehensive trails plan should include an assessment of trail issues, a complete and accurate inventory of existing trails, an identification of potential trail corridors, an evaluation of existing mechanisms for establishing trails, and a prioritized plan of action.

Trail Maintenance
In the long run, the costs of operating, policing, and maintaining a trail minimize the initial costs of acquiring and developing the facility. Maintenance and protection should be considered an integral part of trail
planning. Design, construction materials, and proper signing are important considerations that can help reduce maintenance needs.

To further reduce maintenance and policing needs, public agencies and trail organizations might cooperate in conducting programs and publishing literature to educate users about proper trail use.

## User Conflicts

The variety of trail activities and the limited supply of trails nationwide create trail use conflicts.

The primary type of conflict is between two different types of trail users; the severest, however, is usually between motorized and nonmotorized activities. A secondary type of conflict occurs when too many users of the same activity crowd the trail.

User conflicts should be a consideration in the earliest stages of both comprehensive and specific trail planning. Representatives of the various trail activity groups, motorized and nonmotorized, should be involved in trails planning. Planners can attempt to eliminate conflict through trail location, design considerations, controlled access points, or individual treadways for different activities separated by buffers.

Trailheads should be adequately signed to indicate clearly which uses are designated and which uses are prohibited. To the extent possible, trails should be planned and scheduled for multiple uses by different activities on a seasonal basis, e.g., hiking and cross-country skiing, or driving recreational vehicles and snowmobiles.

Technical Assistance to Trail Developers
A wide variety of information, advice, ideas, "know-how," and other forms of technical assistance is necessary for successful completion of trail projects. The users suggest a Federal role of technical assistance to other Federal, State, and local agencies and private trail interests, although State and private organization roles are also suggested. Technical assistance can be given through workshops, publications, or directly to trail sponsors.

Technical assistance is needed in the following areas:

- Trail design specifications;
- Training in techniques for working with private landowners to secure trail rights-of-way;
- Sources of financial assistance from governmental or private sources;
- Land acquisition;
- Dealing with the Interstate Commerce Commission or railroads to secure use of abandonded railroad rights-of-way;
- Developing, in cooperation with other trail interests, a set of clear, precise, and universal definitions and criteria identifying all trail types. Such a glossary would aid in clarifying terms and establishing consistent terminology.


## Regulations

There is a lack of uniformity in the regulations issued by various Federal, State, and local agencies. Conflicting and duplicative regulations cause confusion. Regulations, however, are necessary to guide trails planning and management, protect environmentally fragile areas, minimize impact in heavily used areas, ease conflicts between various trail users and other interests, and control vandalism, theft, and littering.

Regulations should be reasonable, succinct, and consistent among agencies. They should not be expected to satisfy all interests. Regulations might be developed in concert with major trail user groups.

Public information and education on regulations should point out the reasons for them and should ease the burden of enforcement. Trail user groups might be encouraged to conduct "trail watches," policing the resource and reporting infractions to the enforcement authorities.

## State Trails Legislation

A number of States do not have legal mandates (i.e., authorities) to develop effective statewide trail organizations, nor to establish a statewide trails system to maintain, manage, and protect existing trails. Few States maintain full-time trail coordinators to administer their trails programs. In some States, consideration should be given to introducing trails legislation, while in other states, consideration should be given to amending existing legislation to strengthen established authorities and programs.

## Summary

A dozen of the major concerns voiced by trail users are summarized in this chapter. Throughout, the users stress the need for cooperative action by all parties involved in the concerns, including users, volunteers, governmental agencies, landowners, and the private sector. Additionally, some resolutions are offered in response to the concerns discussed.

The chief concern was adequate funding for trails. Users expressed their willingness to help pay for trails through such means as increased entrance and user fees, special excise taxes on equipment, and activity license fees.

Users also suggested that they help police trails by reporting violations of regulations to enforcement authorities.

The following case studies, discussions, and brief program descriptions touch on various aspects of how trails are planned, developed, implemented, and maintained and use conflicts resolved, from the point of view of trails organizations and local park officials. A variety of types of trails from geographically diverse parts of the country are included. Authors or principal contributors are noted except in the case of National Park Service staff.

The studies are listed below by categories.
Urban Trails
Planning for and Implementing an Urban Trail System (East Bay Regional Park District, Oakland, California)

The Pathway System in Reston, Virginia

## Long-Distance Hiking Trails

An Experiment in Cooperation Between Public and Private Sectors: Trail Volunteers Set a Pattern for the Future (Appalachian Trail Conference)

The Challenge of Volunteer Trail Management (from an address by the Superintendent of Shenandoah National Park to Appalachian Trail club presidents)

American Hiking Society
Multiuse Trails
The Buckeye Trail (Ohio)
A New Trend--Hiking Inn to Inn (Vermont)
Horse Trails
The Southern New England Trunkline Trail
American Endurance Ride Conference

## Other Trails

Vermont Association of Snow Travelers, Inc.
Everglades Canoe Trails
Wenatchee National Forest Motorized Trails


Note: Robert Doyle, Trail Coordinator for the East Bay Regional Park District, Oakland, California, has directed the largest multiuse urban trail system in the United States for the past 5 years. He has provided the information for the following case study.

The greatest demand for trails is in or near the metropolitan areas. Rural areas do not have the need nor the public demand for a welldeveloped trail system. In the urban and suburban areas people want recreation without going very far from home or work, and in these same areas the opportunity for advanced trail planning exists.

An urban trail system provides a safe location for relaxation or exercise for the whole family. Many city dwellers are getting their recreation from walking, running, and riding on urban trails. Trails are also increasingly used as an alternative route to work.

Urban trail development is a new concept in recreation planning. To have a successful large recreation trail system all aspects of the trail program must work together, and the system must be coordinated closely with the public. It also requires flexibility and cooperation from other departments and local jurisdictions.

In the 1970's the East Bay Regional Park District incorporated into its master plan a 2-county multiuse trail system covering hundreds of miles, connecting its 46 parks and 59,000 acres of parkland to the communities they serve. The Trail Master Plan was put together through citizen involvement and public hearings and resulted in basic trail guidelines including design standards.

Today, the district has completed 14 regional trails covering about 100 miles and internal park trails totaling over 600 miles.

A trail system cannot function without a systemwide plan to guide its development. The East Bay Regional Park District's trail system provides for a variety of nonmotorized uses, including hiking, jogging, walking, bicycling, and horseback riding. Each user group was considered in designing the trails. The trails in the master plan are regional in scope and do not have just a local orientation. The regional trails must connect to other regional park facilities and comunities.

The district's trails manual gives details and standards on each type of trail facility. Safety, enjoyment, and cost are strongly considered in each trail project. Trails are more cost effective when one route has many types of uses. Although many trails within the system have separate paths for each type of user, this is not always possible. The cost of acquiring the trail route is often the limiting factor.

In designing a multiuse trail system, it is important to evaluate the conflicts between each type of use and resolve them at an early stage. Many conflicts can occur between bicyclists, pedestrians, and equestrians, which are further complicated by the unavoidable contact with vehicular traffic.

Bicycles have their own State-mandated guidelines that must be met for an agency to receive grants through the California Department of Transportation or the State Parks Department. Bike paths have a much higher cost because they are paved. During the energy crises of the 1970's, bike paths became very popular and new sources of funds became available during that period for bike path construction. The major source of funding for trail construction is still bicycle funding.

Design demands and costs are taken into full consideration during the four primary phases of trail development. These four phases are: planning, acquisition, development, and operation. Although all four phases are separate elements in the implementation of the trail system, they must all be administered closely together.

## The Planning Process

The planning process is the first step in developing a trail system. After a trails plan is approved by the governing body, each trail must be identified on a project-by-project basis and implemented. The staff will list projects by priority and after the list is reviewed by the district's board of directors, the trails are placed on a capital project list. Sometimes there are several trail projects during the same year. The planning and acquisition divisions must commit staff time to the projects.

A Trail Corridor Study and Draft Environmental Impact Report must be prepared, which is a long and detailed process. Several potential trail routes in a given area are evaluated for difficulties in development. The routes must serve the most people possible and be close to local parks, recreation centers, and schools. A list of routes is compiled with the pros and cons of each route.

Often there is little or no direct impact to the natural surroundings in constructing a trail. Many times the trail can actually improve or protect the natural surroundings. Trails by design are intended to blend into and use the natural setting. But the impacts to the human environment are often long debated. Urban trails go through developed areas, and the Environmental Impact Report must include an evaluation of potential impacts and proposals to mitigate them. Residents adjacent to a proposed trail are often concerned about a loss of privacy and the potential for a loss of security. The district has dealt with this by distributing a survey of trail neighbors who found the impacts to be minimal. Pointing out the good example of existing trails has also helped.

Local jurisdictions play a key role in determining the final route since they have authority over local land use policy; trail projects cannot be effectively implemented without their support. About half an administrator's time is thus spent dealing with local agencies.

Other agencies, land owners, and interested parties review and comment on the draft report. The district's board of directors holds a public hearing and depending on citizen comments, the board may approve, add to, delete, or change the recommended route. Some projects are very controversial, while others have strong local support. After getting local approval, the project must comply with the California Environmental Quality Act and then it is ready for implementation.

Some trail corridor projects are never constructed; priorities change or funding is not obtained. While plans are essential, the development of a trail system depends on more than good plans. Land must be available. The trail coordinator in the district works under the direction of the Chief of Land Acquisition because most of the activity in developing trails is in the acquisition of the trail route.

## Acquisition

Trail acquisition is far more difficult than the park acquisition. A park is located in one area, while trails go long distances on land having many owners and many uses. An agency can acquire land before it has made a corridor study or environmental impact report, or even before it has a project, because parkland acquisition is exempt from the California Environmental Quality Act. However, construction and planned use may require an environmental document.

Trail acquisition does in fact occur in many areas without a specific corridor study for the project. This is essential to the overall success of an urban trail system. Without the authority to act when opportunities for obtaining trail rights-of-way are available, an agency may lose a trail connection. Once buildings or freeways block a route, the trail will be difficult if not impossible to complete. The alertness of the local planning authority can make the difference in getting lands.

Acquisition planning is different from general park planning since acquisition focuses on specific sites and specific actions. The trail coordinator monitors all actions, governmental and private, which may affect properties needed for the trail. This may involve maintaining contact with 20 cities, each with its staff, commissions, and councils.

A focused land ownership study is the first step in acquiring land for the recommended route. A practical approach is necessary in obtaining land for the recommended route. For example, if a freeway project makes a recommended trail route impractical, the trail is moved to an alternate route. For acquisition purposes, planning must be both flexible and practical.

Once the land owners are identified, they can be contacted. If the entire route is owned privately, acquisition costs and conflicts may prohibit the completion of the trail. It is always desirable to keep as much of the trail route as possible on public or quasi-public land.

Major methods of trail acquisition are: (1) fee title; (2) easement;
(3) license agreement; (4) lease; (5) land dedications and gifts; and
(6) encroachment permits.

The acquisition of fee title is the most desirable way to obtain trail land. This means purchasing land after negotiation at an appraised, fair-market value. It is the most secure form of land ownership and gives the buyer all the underlying rights. It is also the most difficult acquisition to make.

Most acquisitions for trail purposes are partial land takings. For example, a common trail width is 25 to 50 feet. Property owners will commonly fight a partial acquisition claiming they were left with a less valuable portion or that the trail is not the best use of their property. The acquisition may be contested in court. The district has the right of eminent domain, but applying it can result in higher costs, delays, and bad public relations. This is not desirable. In the entire history of the Regional Trails program, the right to condemn land for trail use has been employed only three times.

The purchase of a trail easement is, next to fee title, the best method for acquiring trail rights on private property. An easement is a specific right for a specific use or uses. In the case of the district, an easement purchase for a multiuse, recreational trail gives it the right to construct, fence, maintain, and operate a recreational trail over the described area. Trail easements are bought when the property owner wants to have some remaining uses for that parcel. This can be underground utilities, driveways, landscaping, plottage, or some other future use. Easements are less costly because only a portion of the parcel value is bought. The private property owner can place conditions and restrictions on the easement to further protect the land.

License agreements with public agencies that own land is a very cost-effective means of acquisition. Flood control and public works agencies, water supply districts, gas and electric utilities, school districts, recreation districts, and others have all cooperated in licensing trails through their lands. The district has acquired the majority of its existing trails by this method. Under multiagency agreements, many miles of trail can be acquired though one agreement. This of course requires cooperation with the other agencies.

The license agreement covers liability, the right to review plans, and the protection of property rights. A common additional clause includes signing and fencing, the right to cancel the agreement upon written notice, and the right to cancel for noncompliance with the conditions.

The license usually recognizes the licensor's existing use of the property, and places trail use secondary to that use. These agreements take a long time to negotiate and there is a great deal of legal review. License agreements are, however, the most cost-effective and practical way to acquire long distances for trails.

Another method commonly used for trail acquisition is the lease agreement, which is similar to the license except that a lease usually carries a fee. The long-range costs of leases should be considered. A lease can be arranged with a public or private owner. Leases usually have shorter terms and more restrictive conditions than licenses. Dedications and gifts of property have no direct acquisition costs. The district has acquired more land from the dedication of fee or easement by developers than by any other acquisition method in recent years. Local governments have the authority to require developers to give land and/or funds for trails and parks. The California State Quimby Act, challenged and upheld in the U.S. Supreme Court, gives "the governing body of a city or county the right to require by ordinance dedications as a condition of approval of a final subdivision map." The most productive way to achieve a dedication is by contacting the developer early about trail ideas. Early discussions can help eliminate later battles before a city planning commission or council. A positive professional relationship with the developer pays off many more times than a confrontation before the public body.

Instances of public giving are on the increase. Gifts come in all shapes and sizes from a few extra feet of trail to large parcels. People give land gifts for many reasons, from tax deductions to clearing up estates or a divorce. A gift small or large, and for whatever purpose, is acknowledged and appreciated.

One final method of acquisition is the encroachment permit which is used only for specific purposes. Agencies or private owners will grant a portion of land for a limited use such as a shoulder along a public road, or at a road crossing. An encroachment permit can be used for other purposes but it carries a very limited right.

Most trail projects involve a combination of all acquisition methods. Implementing a trail plan on a project-by-project basis requires flexibility and a keen sense of timing. Negotiations involve personal contact, mutual respect, and a great deal of persistence. Missing an opportunity to acquire a trail segment can set a project back indefinitely, while seizing an opportunity can spur acquisition of adjoining segments. Projects can be built in phases, allowing a portion of the trail to be opened for public use, and this increases public support for completing the project.

## Development

Trail development occurs after acquisition when funds are available. Construction costs can be very expensive. Bike paths can run as high as $\$ 100,000$ per mile; simple hiking trails can run from nearly nothing to $\$ 30,000$ per mile. Many hiking and horseback trails have been built with volunteer labor. Highly developed urban trails, however, where construction requirements are very complex, require skilled, paid labor.

Most recreation trail development in urban areas requires joint funding agreements or grants by local jurisdictions. For example, the Contra Costa Canal Trail received funding from three cities, two recreation districts, Cal Trans, State parks grants, and the Metropolitan Transportation Comnission. The total cost of this l2-mile trail was $\$ 1.3$ million. Grants carry deadlines and restrictions so the timing of the acquisition and construction must be closely monitored.

The design of the trail must conform to the district's Trail Manual. The requirements of easements, licenses, leases, permits, and deeds also dictate design and construction.

Developer contribution is another element of trail construction. Developers may want to include the trail in the overall design of the development and also build it. This can benefit both sides. The developers can advertise the community's access to an adjacent park and the project gets a free trail portion.

The construction of a major trail project follows the standard capital project procedures for a public agency. This includes development of construction plans, review, notification to contractors, public bid period, review, acceptance of the low bid, and the board authorization to award the contract. If grants are used, the grantor also has a review period. An inspector is assigned to the project. When the contract is completed, a final walk-through and punch list are done, resulting in the final acceptance of the project. The contract can cover all the work for the trail development including grading, paving (for bikes), signing, fencing, and landscaping. Quite often the smaller work will be given to a subcontractor specializing in that area. This is a simple explanation of the process for a major capital project.

Many trail projects involve a shorter process. Construction is completed by force accounts, youth crews, in-house projects, and volunteers. The district's force account is limited to $\$ 20,000$. Using it requires three estimates without formal bids. Youth crews such as the California Conservation Corps or the East Bay Conservation Corps can be a very cost-effective method of developing trails in rugged or sensitive terrain involving hand labor and basic skills. Some projects are also completed by park crews. Most of this work is done with its own equipment which is often used for trail connections within the existing parks. Volunteers are also used for trail projects; they are effective but limited in time available.

## Operation and Maintenance

The final element of an urban trail system is the operation of the trail. Although it is last, it must be mentioned that the operation of the completed trails is vital to the overall success of the entire plan. The proper maintenance and patrol of the trail facilities create credibility for the trail program. Other trail projects will be opposed if local support dwindles because of problems and complaints.

Volunteer maintenance and patrol can cut costs and supplement trail operations. The East Bay Regional Park District has a trained volunteer equestrian patrol and also has volunteer trail maintenance projects. Groups can adopt a trail or sponsor the upkeep of trails through fundraising. But these efforts do not eliminate the need for professional maintenance and patrol of the trails.

The success of the trail system has depended on credibility, persistence, and conflict resolution. In turn trail users have given the regional trail system strong support and a positive public image. Although different types of users may have conflicts with each other, the trail system has a broad base of support throughout the communities. Many projects are completed because individuals and groups in the communities have made a personal commitment to work for trails.

To continue the success of this complex recreational trail system, the East Bay Regional Park District remains open and flexible to the ideas and concerns of others.


Note: John Sauter, Pathways Committee, Reston Homeowners Association, wrote this case study and Ron Moran, Assistant Director of Open Space, Reston Homeowners Association, provided background information.

Reston, Virginia, an unincorporated community of more than 40,000 people, has over 70 miles of pathways. About half of this system is asphalt paved trails (mostly 8 feet wide) which are the property of the Reston Homeowners Association. The association also holds 6 miles of natural surface bridle trails. The remaining trails in Reston are held by cluster associations, businesses, Fairfax County, and the State of Virginia.

## Origins

When Robert E. Simon founded Reston 20 years ago, he wanted its citizens to be able to reach shopping, schools, recreation, and even work sites without encountering automobiles. Indeed, the original plans anticipated no need for traffic lights! The town was designed as six small centers connected to each other by trails. The town has extended beyond the original centers but still is connected by paths.

Each builder is obligated to construct pathways around each development per Simon's plans. Upon satisfactorily completing a pathway segment, the builder passes maintenance responsibility to the homeowners association. It allocates a portion of its dues collections to cover pathway maintenance expenses and liability insurance costs.

The builder's obligation to properly construct a pathway is assured by a performance bond. In case of bankruptcy or other failure by the builder, Fairfax County would deal with the surety company to enforce the conditions of the performance bond.

## Development of the System

The association's pathway network has advanced about 1 or 2 miles per year. Current construction costs by private contractors are about $\$ 12$ per foot. (Fairfax County estimates more fully allocated costs for their own noncontract construction at $\$ 60$ per foot.) The trails are built with a 4 -inch gravel base topped by $1-1 / 2$ inches of asphalt. The $40-\mathrm{mile}$ paved network contains 53 bridges, 53 benches, 25 underpasses, 23 curb cuts, and 402 walkway lights. The entire pathway network is valued at $\$ 3.5$ million.

While most of the paths have been constructed by builders, the county and the association have also constructed paths. In one instance when the
county budget timetable called for a l5-year delay in constructing a path, the association constructed the trail with its own funds and gave it to the county for maintenance.

However, the county maintenance standards don't always satisfy the association, and it chooses to do some maintenance itself. The association has also built missing links to the system. When "goat trails" of worn grass in high usage areas have appeared, it has responded by constructing links (still 8 feet of asphalt) with its own funds.

Thus, Reston has a "dual pathway" system of scenic routes and direct routes. The scenic paths meander through woods, up and down hills, over streams, and under roads, reflecting the emphasis on nature that is the essence of Reston. That primary system is complemented by the sidewalk type of trail, which in some instances offers less travel time, less vigorous exercise, and perhaps a perception of greater safety. All of the paths carry a smaller share of traffic than once envisaged for this community in the woods.

## Some Problems

Crimes have occurred on the trails, but they are only a small portion of Reston's robberies. Also, only two of eight Reston rapes that occurred over the last several years involved persons on the pathway. When such serious crimes are reported, trail use declines but then rebounds as citizens "reclaim" their pathway system.

Broken glass, defaced tunnels, and vandalism to lights continue to be a problem. Some progress has been made with new tunnel wall surfaces, community art in tunnels, and vandal-resistant lighting. The association discovered that 15 -watt bulbs were not as vandal prone as 100 -watt bulbs and also lessened the usual difficulty users had in moving from bright tunnels to darkness.

Maintenance on the system includes clearing snow, mowing, removing litter, and patching. The association discovered that its own maintenance equipment was a major cause of pathway deterioration and thus has restricted equipment weight and limited use during inadequate temperature or moisture conditions. The grass is mowed 1 yard on each side of the paths to control poison ivy and weeds and to accommodate heavier traffic.

## Promotion

The homeowners association has supported a variety of activities such as walkathons, triathalons, volksmarches, and spring cleanups to encourage use and awareness of its pathway system. Residents also are encouraged to "adopt" a portion of pathway to keep it clean and discourage vandalism and crime. Adopt-a-Path also emphasizes Reston's heritage of citizen involvement and appreciation of nature.

## AN EXPERIMENT IN COOPERATION BETWEEN PUBLIC AND PRIVATE SECTORS: TRAIL VOLUNTEERS SET A PATTERN FOR THE FUTURE (Appalachian Trail Conference)

Note: Tom Floyd, who provided materials for the following discussion, is Vice President for Volunteer Activities, American Hiking Society.

We hear a lot these days about "public involvement" and "private-sector initiatives" as something new, but to the volunteers of the Potomac Appalachian Trail Club these concepts are as old as the trail itself.

For nearly 60 years, volunteers have done most of the construction and maintenance on the Appalachian Trail in Maryland, Virginia, West Virginia, and Pennsylvania, including areas in national and State parks where the trail passes. Recently, the volunteers have even taken over the administration and management of this part of the Government-owned Appalachian Trail. This has saved scarce tax dollars and freed park rangers for other duties.

Citizen involvement is an acknowledged rule of the governmental process. Seldom is a law passed or a regulation adopted without public hearings or town meetings and the opportunity for private citizens to comment.

But now we are moving toward volunteers' helping the Government make decisions and carry out a major part of the work. This approach is not new to members of the Potomac Appalachian Trail Club nor to this Nation. The foundations of our democracy were built by private citizens and their volunteer militia. The private sector can do things on its own and lessen the burdens on the Government.

Look at the accomplishments of the club's volunteers. In the short span of 4 years, they opened over 400 miles of new hiking trails in their 4-State area. Most of the trails are in public parks and forests; some are on private land.

Several volunteers worked out arrangements with the National Park Service to build 26 miles of hiking trails in Rock Creek Park, a forest enclave in Washington, D.C. They finished the job in 3 years and now maintain the trails for the Government.

One hiker in the club had the idea of a new 20-mile trail crossing two State parks, a city watershed, and a Federal park in the Catoctin Mountains of Maryland. He and his companions got the approval of park officials and then went to work on weekends to open the trail.

The Northern Peaks Trail, a 5-mile woodland circuit in Maryland's Sugarloaf Mountains, was initiated and built by volunteers. The club got the permission of the landholders and worked several months clearing and blazing the new footpath.

The clubs's most ambitious project in recent years was building the new Big Blue Trail, a l44-mile footpath through the mountains and valleys of Virginia and West Virginia. What started as an idea in the minds of some volunteers soon grew into a major cooperative venture involving three Government agencies and a number of private landowners.

Several members of the club scouted and laid out the southern 70 miles of the trail, mostly in Shenandoah National Park and George Washington National Forest. They obtained permission from the Government agencies, then organized work parties of volunteers to clear and blaze the new footpath. Where possible, volunteers linked up existing trails and abandoned roads, but a lot of the trail was new and had to be cleared.

Later, other volunteers started work on the north end of the trail. Their job was about the same except for one important difference: most of the trail would have to be routed across private land--the forests and farms of Northern Virginia and the West Virginia eastern panhandle.

Piecing together U.S. Geological Survey maps and studying the land from roads, the volunteers were able to trace out possible routes for the Big Blue Trail. Next, the workers went to the courthouses and searched land records, obtaining the mailing addresses of all the landowners. They wrote individual letters to each landowner, and followed up with personal visits. About 85 percent of the landowners gave permission for the trail to cross their lands.

In the end, about 30 miles of the trail crossed private land, and the volunteers worked out arrangements with about 40 private landowners. Four of the owners donated land to the club, and others opened their private forests for small campgrounds. The club later raised money from private contributors to buy more land for protecting other parts of the Big Blue Trail. After 14 years of dedicated work the volunteers finished the job, an example of private- and public-sector cooperation.

The club's volunteers now maintain over 700 miles of footpaths including the Big Blue. Their efforts save government agencies thousands of dollars.

In 1 year alone, the club's volunteers devoted over 14,000 hours of their time to trail building and maintenance. One member has been a volunteer trail overseer for 48 continuous years. Volunteers also put in a few thousand hours maintaining 25 hiker shelters, 20 primitive cabins, and several campgrounds.

That sounds like hard work, but to these volunteers it is a form of recreation. It also provides private citizens with the opportunity to manage what are usually considered government programs. It is a sample of what volunteers in the private sector can do without a lot of government involvement at little or no expense to the taxpayers.


Note: Robert R. Jacobsen is Superintendent of Shenandoah National Park. This case study was developed from a transcript of a talk given by the author at the invitation of the Appalachian Trail Conference to an assembly of 31 Appalachian Trail club presidents on April 27, 1985.

The spirit of volunteerism in trail management is exemplified in the Appalachian Trail community. The management of a trail or specific segments of trail by volunteer groups has become increasingly important as well as difficult. In order to maintain effective trail management, it is necessary that a volunteer group completely understand the scope and content of its responsibility, capability, and commitment to manage the trail on a long-term basis. Long-distance trails are simple yet complex phenomena and it takes a lot of people, organization, and know-how on the part of volunteer groups to play a major role in maintaining the life of a trail.

For a number of years, members of the Appalachian Trail Conference and its affiliate clubs and many involved State and Federal officials have struggled to find and to define their individual and collective roles in operation and management of a unique institution, the Appalachian National Scenic Trail. Individual clubs with greater or lesser amounts of support and assistance from one another, the Appalachian Trial Conference, cooperating youth groups, involved landowners and the adjoining land-management agencies largely have been successful in their trail maintenance activities.

The idea of a Federal, State, private sector, and volunteer partnership is both noble and timely. It fits well with the traditions of the Appalachian Trail and is well received by trail interests. However, there are concerns--deep concerns--about the ability of the volunteer and volunteer organizations like the Appalachian Trial Conference and its trail clubs to manage and protect long-distance trails.

Many volunteer groups are organized, yet concerns surface as to whether these groups really comprehend the extent of trail management responsibility that they have agreed to undertake.

Trail management by volunteer groups involves several major tasks. These tasks encompass dealing with a land base, the resources upon the land base, and the visitors to and users of the land base. Each task is examined below.

First, there is the land itself which a trail traverses. The volunteer groups will have to understand deeds, the exact extent of ownership of the land, and the reservations in the deeds on each parcel of land that
is assigned. Miles of boundaries need to be marked and protected from trespass. It is a real task to refresh the markings on these boundaries on a continuing basis and into perpetuity. The land has to be protected from encroachments. Often arrangements must be established and nutured with local law enforcement agencies to cooperate with volunteer groups in protecting the land base.

Second, resources need protection. The natural, cultural, and scenic attributes must be inventoried and management actions performed to protect and perpetuate desirable features and characteristics. Steps must be taken to defend against undesirable agents such as fire, insect infestations, and thefts of firewood, timber, and minerals.

Last, the volunteer groups must deal with the attitudes and behavior of visitors and users of the trail. Rules of acceptable conduct expressed as enforceable regulations are absolutely necessary to protect the land base, the resources, and users from thoughtless or deliberate impacts.

Each of these tasks needs to be organized and articulated in written plans so that volunteers have a sense of purpose and direction, goals and objectives, and timetables. Written plans are essential! Volunteers who are capable and willing must take the time to gather and analyze the necessary data and coordinate with all the parties that need to be involved and prepare the various required plans and update these plans over a never-ending basis.

Volunteer trail management will not be easy, and it really is not all fun. It is a task of tasks that is never-ending. Furthermore, when trail management is done well it becomes virtually invisible and is taken for granted. The volunteer and volunteer groups have a very big job in trail management. Hopefully, they are willing and able to take it on.

Note: Eric Seaborg is Past President of the American Hiking Society. He provided materials on techniques and tools that the society finds successful in working with volunteers.

The American Hiking Society is the principal national, nonprofit organization dedicated to protecting the interests of hikers and preserving America's footpaths. The society is located in Washington, D.C., and represents 1,500 members and 33 club affiliates. The combined membership of the society and its affiliates is more than 100,000 hikers.

The American Hiking Society works with the federal agencies that manage land and set policies important to trail users. The Society represents the interests of hikers in the political decision-making process from budget hearings on the trails program of the National Park Service to rulings by the Interstate Commerce Commission on rails-to-trails conversions, to user fee proposals by the Forest Service.

The goals of the society are as follows:

1. To educate the public in the appreciation of walking and the use of foot trails;
2. To provide for and protect the interests of hikers;
3. To encourage hikers to build and maintain footpaths;
4. To encourage others to enjoy the aesthetic and spiritual experience of hiking in the natural world;
5. To foster research related to these goals.

In attempting to meet its goals, the society has developed a number of programs. Currently, it is seeking to expand further three specific programs that involve volunteer efforts. These programs are volunteer work vacations, a directory of volunteer work opportunities, and supervisory training for volunteer trail workers.

## Volunteer Work Vacations

The society operates a trail-building and maintenance program in several national parks and national forests where there are no local trail clubs to do trail-related work. This program has contributed over $\$ 500,000$ worth of labor to public agencies while providing volunteers with an unforgettable experience.

The program consists primarily of trail maintenance and construction performed by groups of 10 to 15 individuals under the supervision of a staff person or a certified volunteer supervisor. The work trips range in length from 10 to 14 days and usually take place in remote, back country areas.

The society's Volunteer Vacation program has been very successful in the national parks and national forests. It receives far more applicants than it has had the resources to place. The program has grown from 2 teams in 1979 to its present 21 projects and 215 participants. In 1984, the society received 3,000 requests for information about the program; this figure doubled in 1985. Work accomplishments have increased steadily each year: about 13,000 hours of work are contributed annually. Participants have found the experience so satisfying that one in three repeat a second year.

Different vacation projects have included building suspension bridges in Yellowstone National Park, weeding out non-native plants in Haleakala National Park, and reconstructing trails in Alaska. Volunteer Vacation groups have worked on projects in Arizona, California, Maine, Michigan, Montana, New Hampshire, and Wyoming. For the summer of 1985, projects were scheduled for Tahoe National Forest, Boston Harbor Island State Park, Buffalo River National Park, Chugach National Forest, Admiralty Island National Monument, Baxter State Park, and Absaroka-Beartooth Wilderness Area.

The program is helping to continue a long tradition of volunteerism in trail building, a tradition that is once again growing in importance as budget restrictions trim back the Government workforce.

Because the program is so successful, the society is now proposing to expand it and to establish central financing to cover all or part of the subsistence expenses of the work crews. Central financial support would enable it to train and transport volunteer supervisors, administer the program more efficiently, and carry out details connected with the program. Central funding would be more cost effective and would advance volunteer involvement. In addition, central funding would reduce the administrative burden on each volunteer manager and enable some sites that may be unable to provide food to use work crews.

## Directory of Volunteer Work Opportunites

The society solicits listings for its directory, Helping out in the Outdoors, from any agency, public or private, that has a volunteer work project or internship connected with the outdoors. The directory is mailed to about 3,000 community and school libraries nationwide and to numerous other organizations and individual subscribers.

Additionally, it reaches the placement and career counseling offices of almost 100 colleges. Thus, the directory reaches thousands of possible volunteers among trail clubs, youth groups, retired groups, college students, school groups, families, and public-spirited individuals.

The directory is publicized through releases to leading newspapers, radio stations, and magazines. Through this national and international publicity campaign, Helping Out in the Outdoors has brought many highly qualified volunteers and interns to agencies that have been listed in the directory. The cost is now covered by the parks and forests that have entries in the publication. A proposal is now underway to explore the possibility of partial central funding, which would give the program greater stability and simplify administrative and accounting procedures.

## Supervisor Training for Volunteer Trail Workers

In 1984, the society, in conjunction with the National Park Service, conducted a training course in volunteer supervision. The purpose of the course was to certify volunteer supervisors to lead crews for trail maintenance activities on Federal and State lands. The participants learned such elements of supervision as: similarities and differences between procedures of the various Federal agencies; how to organize and sustain volunteers; trail design and construction; standards; and the psychology of leadership.

The American Hiking Society is now exploring possibilities of continuing and expanding such training. Possibilities might include conducting full-scale seminars or workshops or serving as consultants, moderators, or speakers in other ongoing courses conducted by Federal and State agencies.

## Developmental Projects

Detailed guide-book type descriptions have been compiled for Hikanation, a society-sponsored cross-country hike through 15 states to dramatize the need for more and better trails and the pleasure of hiking as an energy-efficient activity for people of all ages.

The Society also plans to offer guided hikes in more remote sections of the country, including Alaska as well as some trips in foreign countries, such as the Islands of the Carribean.


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## THE BUCKEYE TRAIL

Note: Edward W. DeLaet, Executive Director of the Buckeye Trail, provided material for the following case study.

Through towns and cities as well as rural and wilderness areas, the l,200-mile Buckeye Trail loops within Ohio's borders passing historical sites, canals, lakes, parks, and urban areas. Many trails in the United States are confined to hiking. The Buckeye Trail is different.

The Buckeye Trail encourages multiple nonmotorized use. Urban portions are heavily used by joggers and on-road and off-road portions are for bikers. In the winter, much of the trail is suitable for cross-country skiers and snowshoers. Portions of the trail can be used by the handicapped.

The Buckeye Trail is routed through urban areas, incorporating existing city parks into its route. In 1959, when Meryl Gilfillan of the Ohio Department of Natural Resources wrote an article for the Columbus Dispatch advocating a State trail, the Buckeye Trail was born. Many of those persons who attended that first meeting are still active; some are now over 80 years old.

The original concept called for a trail from Lake Erie, near Cleveland, to the Ohio River, at Cincinnati. That segment was completed in 1969. Early in 1970, it was decided to extend the trail through western Ohio to Toledo. In 1975, the Buckeye Trail Association Board approved closing the gap between Toledo and Cleveland. Today, the Buckeye Trail completely encircles the State and includes some side and alternate trails. Eventually the association wants to have the entire trail off road.

The Buckeye Trail Association, Inc., is a nonprofit organization and is operated by more than 1,000 volunteers of whom about 10 percent are actively involved. There is no paid staff.

The memberships provide the main source of income. For the past 10 years, membership has been between 1,000 and 1,100 members and dues currently are $\$ 5$ for individuals and $\$ 8$ for families. This yields about \$6,000 per year.

A second source of income is the sale of section maps, patches, guidebooks, T-shirts, and caps, which yields about $\$ 3,000$ to $\$ 4,000$ per year. The association also has a trust fund, used mainly for land acquisition. The fund now has nearly $\$ 5,000$.

The association divides the trail into 5 regions and about 100 persons provide day-to-day trail maintenance. Four regions have a regional coordinator, and two or more assistants and section supervisors who are each in charge of about $35-50$ miles of trail. Each section supervisor is assisted by trail maintainers whose number depends on the complexity of the trail. The fifth region is the Central Region. Its membership does not touch the trail but it furnishes administrative help and maintenance personnel to those regions where membership is light.

The association conducts a major workday every October, devoted mainly to major trail relocations. The workdays usually draw many people not assigned on a regular basis. Workdays are the best way to accomplish major projects. Maintenance of the trail in State and municipal parks is handled by park personnel.

The many off-road portions of the Buckeye Trail are possible because of the close relationship and cooperation provided by the many agencies, both public and private. Some examples include the 2 -mile trail relocation and marking in the Dayton-Montgomery County Park District completed in less than 2 months. This was done by the park manager and his staff after being asked to help search for a new route. He made several recommendations. He pointed out the need for some shoring, to prevent erosion. He suggested a bridge to cross a small stream. A month later, it was found that his staff had cleared the new trail, put up the shoring, and erected the bridge. The Buckeye Trail personnel only had to paint blazes. The park district also helped the association form the Dayton Chapter by providing a meeting place.

Another example of speed and cooperation in trail relocation occurred at Caesar Creek State Park, where the Ohio Department of Natural Resources completed and blazed 27 miles of new off-road trail less than a year after meeting with the association. About the same time, the Department had acquired the abandoned railroad right-of-way between Cincinnati and the vicinity of Caesar Creek. The department asked the association if it could blaze the right-of-way and in one weekend over 70 miles of trail were relocated and blazed. The owners of certain private lands have invited the association to relocate the trail on their property and corporations have generously accommodated the Buckeye Trail.

The Quaker State Oil Company, when it planned to drill a well in the middle of the Buckeye Trail on its lands, wrote the association that, "When our drilling operations are completed, we will do our best to reclaim the disturbed area to everyone's satisfaction." In the meantime, it would reroute the trail. Mead Corporation granted permission for use of much of their extensive land holdings and donated paper for a new association brochure. Personal visits and on-site investigations with Mead Corporation officials led to a new route being cleared, blazed, and mapped. In one weekend another 35 miles had been relocated off roads thanks to the cooperation of all involved. This relocation was more difficult since practically all of the new route had to be cleared as well as blazed.

The Forest Service has cooperated over use of Wayne National Forest and the National Park Service has assisted in relocating the Buckeye Trail through the Cuyahoga Valley National Recreation Area. The association has also had good relationships with the Cleveland and Akron Metro Parks. When the North Country National Scenic Trail was being routed through Ohio, much of the Buckeye Trail was chosen. The Buckeye Trail Association granted permission for such use and agreed with the National Park Service that where the North Country National Scenic Trail deviates from the Buckeye Trail, the association will be responsible for those portions that coexist.

Since it has blazed and mapped on-road links as well as off-road portions, a user of the North Country National Scenic Trail can follow a continuous trail across the entire State of Ohio. Because the Buckeye Trail touches so many historic areas, such as Serpent Mound, Fort Hill State Memorial, and Fort Defiance, it is often called the "Walking History of Ohio." Since the Buckeye Trail follows rivers, a person can hike one way and return by canoe. The Buckeye Trail serves as a link between State parks, and is the only major trail that provides pocket-size waterproof maps, with distances shown in both directions in both miles and kilometers.

Goals for the future include acquiring additional off-road routes and campsites, exploring alternatives to campsites for urban areas, and improving the existing trail by grading and adding water bars, switchbacks, bridges, steps, and other amenities. Wherever practical, the Association wants to widen the trail to a 2 -meter width. This is especially important in high-use areas such as State and local parks. It also permits a mower or brush hog to be used for trail clearing and accomnodates a four-wheel drive vehicle to transport heavy tools and materials. A 2 -meter-wide trail, already in place in western Ohio, is easier to maintain and promotes fellowship on the trail by permitting two people to walk side by side instead of one behind the other.

The association also would like to incorporate additional links, loops, and other trails into the system, where justified and where manpower is available. In addition to North Country Trail links, the association is planning two other projects. One is a link at Portsmouth, Ohio, with the Jenny Wiley Trail in Kentucky. This will give access to Chattanooga, Tennessee. The second is a link between Spencerville and the Indiana line connecting with a new trail in Indiana. This will give access to Chicago.

The ultimate long-range goal is the dream of publicly owned parkways around the entire State where the trail now links State and local parks. The first step in that dream will soon become a reality. As a result of the purchase of an abandoned railroad right-of-way, John Bryan State Park and Caesar Creek State Park will soon be linked by a publicly owned off-road route.

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Some trail users on Vermont's rugged Long Trail sleep in good beds, eat big meals, carry little water and maybe a camera; their cars await them at trail's end each day. These trail users are participating in a style of outdoor recreation that has grown into fashion and tourism in Vermont. It is called hiking inn to inn which is just what the user of the trail usually does. Inn-to-inn outdoor travel, usually on foot but can also be by bike or cross-country skis, has become the new way in Vermont's recreation industry.

The leading operators of inn-to-inn hiking tours are a group of eight country hostels strung in sequence off an $80-\mathrm{mile}$ section of the Long Trail. It appears that the inn-to-inn style is advantageous for both the user and the trail. Inn-to-inn hiking has helped reduce overuse on parts of the trail.

Many inn-to-inn hikers are experienced backpackers who appreciate wilderness but like the inn-to-inn style. Hikers register for all or a part of the eight-inn sequence and prepay in a package. Each morning they drive their cars to the end of the day's trail and are driven back to the start of their hike, a distance of usually 8-10 miles. They are unguided.

Some hikes are more difficult than others. An injured or sore hiker can rest at the inn and if someone doesn't reach the inn by early evening, the innkeepers go out searching.

Inn-to-inn trail use is new but catching on. It may not be roughing it, but it is ambitious and it is part of America seeking yet another form of trails experiences.


Note: Ed Whalley, Executive Director of the Bay State Riders Association, contributed information to this case study.

The story of the Southern New England Trunkline Trail is impossible to separate from that of the Bay State Trail Riders Association since it gave birth to the Trunkline Trail. Over a two-State area (Massachusetts and Connecticut), the trail has developed on the roadbeds of abandoned railroads for use by horse riders, bikers, walkers and others.

The association was organized in 1973 by horse riders to do something about the lack of horse trails in Massachusetts. A number of horse-related events--the Cross-State Trail Ride of 1970, the Suffolk Resolves Reenactment of 1974, and the Bicentennial Wagon Train of 1976--had pointed out the need for and contributed to the development of lengthy trail routes. The rallying cry among horse people became, "Aren't you tired of riding in circles?"

The system proposed by the association involved three different railbeds. In 1974, horsemen were regularly riding west on the old New York, New Haven, and Hartford (Penn Central, at this time) roadbed in Massachusetts to the Connecticut line and into that State. There were campsites in Douglas, Connecticut, and scouted-out routes around all the downed bridges.

As a result of the nationally recognized rides of this period, the Resolves and the Wagon Trail, the association learned that the abandoned Penn Central railroad that ran down to Willimantic, Connecticut, was already State owned from Putnam, Connecticut, to Willimantic.

At a public meeting of the Heritage Conservation and Recreation Service, Department of Interior, the association proposed acquiring the Massachusetts segment of the Penn Central and creating a National Recreation Trail from Franklin, Massachusetts, to Willimantic. The resolution was not supported. The association then sponsored a meeting in March 1980 at Ubridge, Massachusetts, called the Southern New England Trails Conference. The conference was an unqualified success. Every major horse outfit in Massachusetts, Connecticut, and Rhode Island had sent representatives as well as trail bikers, hikers, and other interested groups. Other people came from Rhode Island and Massachusetts Departments of Environmental Management, the Heritage Conservation and Recreation Service, and the American Horse Council. The upshot of the meeting was the formation of the Southern New England Trails Conference with the immediate goal of gaining National Recreation Trail status for the Penn Central corridor and the long-range goal of establishing a triangular trail connecting the tri-State region. The Penn Central corridor was designated a National Recreation Trail in 1981, and the trunkline was dedicated in April 1982.

The Massachusetts segment of the old Penn Central Railroad was bought by the Massachusetts Department of Environmental Managment. Since the Connecticut Department of Transportation had already bought the Putnam-to-Douglas segment, the entire Franklin-to-Willimantic corridor was 100 percent in the public domain. The association and the conference now are gearing up to do what has to be done to complete the triangle.

Note: Ann-Therese Ronan is Executive Director of the American Endurance Ride Conference. She provided material for the following.

In the beginning endurance riding was done just for the fun of it, but it is now a structured sport with precise rules. The American Endurance Ride Conference was founded in the fall of 1971 out of the idea of a Nevada association. Only 3 years earlier, there were only five rides in Western Nevada and California and there were no rules. The sport suddenly started to go in different directions as people began experimenting with various ways of judging, setting time limits, and even including obstacle courses. Nothing was consistent.

As more rides were created and more people joined the sport, it became obvious that an organization was necessary to define the sport, as compared to other types of equine events. An organization was also needed to represent the sport, to help other riders learn about the sport, and help create new rides.

The sport is now defined as: an athletic course of not less than 50 miles (usually 50 to 150 miles) within a maximum time limit (usually 12 hours per 50 miles in length) and conforming to the following conditions:

1. The horses must be under the control of veterinarians experienced with horses or endurance riding.
2. All riders who successfully complete the ride must receive a completion reward.
3. An award must be available for the horses judged to be in the best condition.
4. The winner of the ride is the horse(s) and rider who successfully complete the ride in the fastest time.
5. There may be no minimum time limit for completion.
6. The ride must be open to all breeds of horses at least 60 months of age.

In 1972, there were only 24 sanctioned endurance rides through the American Endurance Ride Conference. Now there are over 550 sanctioned rides. Endurance rides are held on private trails or use public land such as that held by the Bureau of Land Management. The people and the clubs who sponsor the rides maintain the trails, clear paths, and make the trails safe for riding a horse. Many of these same trails are used by hikers and pleasure horsemen.


Note: Carmi J. Duso, who provided information for the following, is Executive Director of the Vermont Association of Snow Travelers, Inc.

The Vermont Association of Snow Travelers, Inc., founded in 1967, is made up of approximately 12,000 members in 165 clubs with 25,000 registered snowmobiles. It maintains some l, 800 miles of groomed snowmobile trails in the main trail system and more than 5,000 miles of secondary club trails in the statewide snowmobile trails program.

Upkeep of the trails is financed by State snowmobile registration fees and channeled to the association. On an annual contract through the State Agency of Environmental Conservation, the association pays the clubs' grooming fees and buys the materials needed to maintain culverts and bridges. It also pays for rental equipment (chain saws, cranes, bulldozers, etc.) and labor used on State or Federal lands.

The trail system is managed by a full-time trails coordinator and part-time secretary, both paid from the trails fund. The trails coordinator is paid mileage for the use of his personal vehicle to inspect trails and to attend meetings. Volunteer county trail coordinators work with the local clubs in developing, constructing, and maintaining the trail system. They are also reimbursed for mileage and other expenses.

The clubs are responsible for obtaining landowner permission for using trails in their areas. Ninety percent of the statewide snowmobile trails program is on private property in Vermont. The clubs are also responsible for regular trail maintenance such as cutting brush, clearing downed trees, repairing minor washouts, signing, and opening and closing fences and gates. Signs are purchased by the association's trails coordinator and furnished to the clubs free of charge.

Trail seminars are held to instruct members how to properly construct and maintain the trails and, especially, how to place the signs effectively. A trails manual on construction and maintenance is available to the clubs for reference.

Grooming is the major expense in maintaining the corridor system since the clubs, or sometimes the private owner, must purchase and care for the necessary expensive equipment. The fund does not pay for grooming secondary trails.


Six canoe trails totaling approximately 130 miles offer the best way to enjoy the unique back-country of Everglades National Park with its thick mangrove swamps, lakes, and bays. Two of the trails are short loops for day use only, but the others provide opportunity for several days or more of wilderness experience. A canoeist needs nautical charts and a compass, in addition to the park's sketch maps and markers, to navigate the twisting, branching sloughs and creeks, and interconnected lakes and bays.

Campsites are available either on high ground or on chickees, small elevated wooden platforms that provide minimum impact on the environment. (Chickee is the Miccosukee Indian name for dwelling place.) The park issues back-country camping permits to ensure resource protection and to offer the canoeist an opportunity for solitude and a high-quality wilderness experience. The size of parties is limited depending on the site, and stays at any one site are limited to 2-14 nights, depending upon demand and fragility of the environment. Sites are closed as necessary for vegetation regeneration or to protect wildlife habitat. One of the chickees is accessible by wheelchair.

The 88 -mile Wilderness Waterway, which is part of the park's canoe trails, is also open to power boats. So the park provides informational handouts to canoeists on alternate routes. These routes are not physically marked to discourage power boats from using them. In five areas along the waterway canoeists can be separated from most power-boat traffic because of the alternated routes and judicious placement of chickees. Other canoe trails are not accessible to power boats because of shallow depth and narrow, winding passages through the swamps.


Note: Roy Janson is Land Use Coordinator, Government Relations for the American Motorcyclist Association. He provided information for the following.

The Wenatchee National Forest has more than 275 miles of trail open to off-road motorcycles and all-terrain vehicles, from late spring until late fall.

The trails are maintained by volunteers, including members of the Northwest Motorcycle Association and the American Motorcyclist Association, and are funded through the State Interagency Committee for Outdoor Recreation. The Committee is provided for by State legislation, and the funds it disburses for motorized trails are derived from registration fees for off-road vehicles, along with one percent of the State's fuel taxes. (Off-road vehicles are considered to consume one percent of the gasoline used in the State.)

These trails are particularly popular not only because of the scenic beauty of the Cascade Mountain Range, but also because of their diversity in trail difficulty, which provides for a variety in user experience. The trails are also used by equestrians.


NATIONAL TRAILS ASSESSMENT

## APPENDIX

National Park Service
U.S. Department of the Interior


## CONTENTS

Page
NATIONAL TRAILS SYSTEM ..... 133
INFORMATION SOURCES ON NATIONAL SCENIC AND HISTORIC TRAILS ..... 136
Appalachian National Scenic TrailPacific Crest National Scenic TrailContinental Divide National Scenic TrailNorth Country National Scenic TrailIce Age National Scenic TrailPotomac Heritage National Scenic TrailNatchez Trace National Scenic Trail
Florida National Scenic Trail
Iditarod National Historic TrailOregon National Historic TrailLewis and Clark National Historic TrailMormon Pioneer National Historic TrailOvermountain Victory National Historic Trail
FEDERAL LAND-MANAGING AGENCIES ..... 138
National Park Service
Forest Service
Tennessee Valley Authority
Corps of EngineersFish and Wildlife ServiceBureau of Land Management
OTHER SOURCES OF TRAILS INFORMATION ..... 143
National OrganizationsState and Private Organizations
NATIONAL RECREATION TRAILS are in a separate appendix.
For this appendix, the NATIONAL RECREATION TRAILS GUIDE, pleasewrite to:
National Park ServiceRecreation Resources Assistance Division (765)Post Office Box 37127Washington, D.C. 20013-7127


The National Trails System was established by the Congress in 1968 under Public Law 90-453. The act, as amended, states that:
> "In order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of public access to travel within, and enjoyment and appreciation of the open-air, outdoor areas, and historic resources of the Nation, trails should be established, primarily, near the urban areas of the Nation, and secondarily, within scenic areas and along historic travel routes of the Nation, which are often more remotely located."

In addition, the Congress recognizes the valuable contribution that volunteers and private, nonprofit trail groups have made to the development and maintenance of the Nation's trails. As a result, the Congress has expanded the purpose of the act to encourage and assist volunteer citizens' involvement in the planning, developing, maintaining, and managing of trails.

The National Trails System is jointly administered by the Department of the Interior through the National Park Service and the Department of Agriculture through the Forest Service. There are four kinds of trails in the system:

1. National Recreation Trails. These provide a variety of outdoor recreation uses in or reasonably near urban areas. With increasing demands for recreation opportunities near urban areas, National Recreation Trails are continuously being designated throughout the country. Currently there are 752 National Recreation Trails totaling over 8,050 miles located in all 50 States, the District of Columbia, and Puerto Rico. The Federal Government administers 501 of the trails; 12 are jointly administered by Federal, State, and local governments; 79 are State administered; 140 are administered by local governments; and 28 are administered by private organizations.
2. National Scenic Trails. These are extended trails which provide both for maximum outdoor recreation use and for the conservation and enjoyment of nationally significant scenic, historic, natural, or cultural areas. There are eight trails in the system.
3. National Historic Trails. These are extended trails following as closely as possible and practical to original trails or routes of national historical significance. In this way historic routes are identified and protected for public use and enjoyment. Only the parts of an historic trail that are on federally owned lands have Federal protection. There are five trails in the system.
4. Connecting or Side Trails. These connecting or side trails provide access to national recreation, scenic, or historic trails. Presently, there are no connecting or side trails in the National Trails System.

In the beginning, the National Trails System was comprised only of the Appalachian National Scenic Trail and Pacific Crest National Scenic Trail.

The Appalachian Trail, which is approximately 2,000 miles in length, travels from Maine to Georgia. The National Park Service has the coordination responsibility for the acquisition, development, and protection of this trail.

The Pacific Crest Trail is 2,350 miles and the trail route is from Washington to California. The Forest Service has similar responsibility for this trail.

Eleven Scenic and Historic Trails have been added after studies on their desirability and feasibility had been completed. The studies are directed by the National Park Service which consults and cooperates with other Federal agencies and interested interstate, State, and local government agencies, public and private organizations, landowners, and land users. Only Congress can authorize the studies and designate additions to the system. Only some of the trails provide long-distance, continuous trips. In some instances, the original routes have been obliterated by commercial, industrial, residential, agricultural, or transportation developments. In other instances, some sections are usable, while other sections do not exist at all. The 11 additional National Scenic and Historic Trails are listed below.

## National Scenic and Historic Trails

1. The Continental Divide Trail (approximately 3,100 miles) generally follows the Continental Divide from the Montana-Canada border to the New Mexico-Mexico border (designated a National Scenic Trail on November 10, 1978).
2. The Potomac Heritage Trail ( 704 miles ) extends generally from the mouth of the Potomac River to its source in Pennsylvania and West Virginia, including the $175-\mathrm{mile}$ Chesapeake and Ohio Canal Towpath (designated a National Scenic Trail on March 28, 1983; no designation was made in West Virginia).
3. The Lewis and Clark Trail (approximately 3,700 miles) extends from Wood River, Illinois, to the Pacific Ocean at the mouth of the Columbia River, following the outbound and inbound routes of the Lewis and Clark Expedition (designated a National Historic Trail on November 10, 1978).
4. The Natchez Trace ( 694 miles) extends from Nashville, Tennessee, to Natchez, Mississippi (designated a National Scenic Trail on March 28, 1983).
5. The North Country Trail (approximately 3,200 miles) traverses from eastern New York State, through Pennsylvania, Ohio, Michigan, Wisconsin, and Minnesota, to the Lewis and Clark Trail in North Dakota (designated a National Scenic Trail on March 5, 1980).
6. The Oregon Trail (approximately $2,000 \mathrm{miles}$ ) extends from the vicinity of Independence, Missouri, to the vicinity of Portland, Oregon (designated a National Historic Trail on November 10, 1978).
7. The Mormon Pioneer Trail (approximately 1,300 miles) extends from Nauvoo, Illinois, to Salt Lake City, Utah, following the primary historical route of the Mormon Trail (designated a National Historic Trail on November 10, 1978).
8. The Iditarod Trail (approximately $2,000 \mathrm{miles}$ ) extends from Seward to Nome, Alaska, following a Gold Rush trail (designated a National Historic Trail on November 10, 1978).
9. The Florida Trail (approximately l,300 miles) extends from the Everglades National Park and includes the Big Cypress Swamp, Kissimmee Prairie, Withlacoochee State Forest, Ocala National Forest, Osceola National Forest, and Black Water River State Forest (designated a National Scenic Trail on March 28, 1983).
10. The Overmountain Victory Trail ( 272 miles) extends from the vicinity of Elizabethton, Tennessee, to Kings Mountain National Military Park, South Carolina (designated a National Historic Trail on September 8, 1980).
11. The Ice Age Trail (1,000 miles) extends from Door County, Wisconsin, to Interstate State Park in Polic County, Wisconsin (designated a National Scenic Trail on October 3, 1980; the trail already existed and was instantly designated).

## Appalachian National Scenic Trail

Appalachian Trail Conference P.O. Box 2365

Harpers Ferry, West Virginia 25425
Appalachian Trail Project Office
National Park Service
P.O. Box 236

Harpers Ferry, West Virginia 25425

Appalachian Mountain Club
Joy Street
Boston, Massachusetts 02108
Potomac Appalachian Trail Club
1718 N Street, N.W.
Washington, D.C. 20036

Pacific Crest National Scenic Trail

| Pacific Northwest Regional Office | California Regional Office <br> Forest Service |
| :--- | :--- |
| Forest Service |  |

## Ice Age National Scenic Trail

Midwest Regional Office National Park Service 1709 Jackson Street Omaha, Nebraska 68102

Ice Age Trail Council
2302 Lakeland Avenue Madison, Wisconsin 53704

## Potomac Heritage National Scenic Trail

National Capital Regional Office
National Park Service 1100 Ohio Drive, S.W. Washington, D.C. 20242

Southeast Regional Office
National Park Service
75 Spring Street, N.W.
Atlanta, Georgia 30303

## Florida National Scenic Trail

| Southern Regional Office | Florida Trail Association, Inc. |
| :--- | :--- |
| Forest Service | P.O. Box 13708 |
| 1720 Peachtree Road, N.W. | Gainesville, Florida 32604 |

P.O. Box 13708

Gainesville, Florida 32604

## Iditarod National Historic Trail

Anchorage District
Bureau of Land Management
4700 East 72 nd Avenue
Anchorage, Alaska 99507

Iditarod Trail Committee
Knik Road, Box 5460
Wasilla, Alaska 99687

Oregon National Historic Trail
Pacific Northwest Regional Office
National Park Service
Westin Building
2001 6th Avenue
Seattle, Washington 98121
Lewis and Clark National Historic Trail
Midwest Regional Office Lewis and Clark Trail Heritage
National Park Service 1709 Jackson Street Omaha, Nebraska 68102

Foundation, Inc.
5054 S.W. 26th Place
Portland, Oregon 97201

Mormon Pioneer National Historic Trail
Rocky Mountain Regional Office
National Park Service
P.O. Box 25287

Denver, Colorado 80225
Overmountain Victory National Historic Trail
Southeast Regional Office
National Park Service
75 Spring Street, N.W.
Atlanta, Georgia 30303

For information about trails in the National Park System, contact one of the following regional offices of the National Park Service:

North Atlantic Regional Office National Park Service 15 State Street Boston, Massachusetts 02109
Phone: (617) 223-3769

National Capital Regional Office
National Park Service
$l 100$ Ohio Drive, S.W.
Washington, D.C. 20242
Phone: (202) 426-6612
Rocky Mountain Regional Office
National Park Service
P.O. Box 25287

Denver, Colorado 80225
Phone: (303) 236-8700
Southwest Regional Office
National Park Service
P.O. Box 728

Santa Fe, New Mexico 87501
Phone: (505) 988-6388
Pacific Northwest Regional Office
National Park Service
83 South King Street
Suite 312
Seattle, Washington 98104
Phone: (206) 442-5565

Mid-Atlantic Regional Office
National Park Service
143 South Third Street
Philadelphia, Pennsylvania
19106
Phone: (215) 597-7013
Midwest Regional Office
National Park Service 1709 Jackson Street
Omaha, Nebraska 68102
Phone: (402) 221-3431
Southeast Regional Office
National Park Service
75 Spring Street, S.W.
Atlanta, Georgia 30303
Phone: (404) 221-5185
Western Regional Office
National Park Service
450 Golden Gate Avenue
San Francisco, California 94102
Phone: (415) 556-4196
Alaska Regional Office National Park Service
252 Gambell Street, Room 107
Anchorage, Alaska 99501
Phone: (907) 271-4195

For information about trails in the National Forest System, contact one of the following regional offices of the Forest Service:

Northern
Federal Building
Missoula, Montana 59801
(406) 329-3511

Rocky Mountain
11177 W. 8th Avenue, Box 25127
Lakewood, Colorado 80225
(303) 236-9499

Southwestern
517 Gold Avenue, S.W.
Albuquerque, New Mexico 87102
(505) 842-3292

Intermountain
342 25th Street
Ogden, Utah 84401
(801) 625-5164

Alaska
Federal Office Building
P.O. Box 1628

Juneau, Alaska 99802
(907) 586-8729

## Pacific Southwest

630 Sansome Street, San
Francisco, California 94111
(415) 556-6986

Pacific Northwest
319 S.W. Pine Street P.O. Box 3623

Portland, Oregon 97208 (503) 221-3644

## Southern

1720 Peachtree Road, N.W. Atlanta, Georgia 30367
(404) 347-4278

Eastern
633 West Wisconsin Avenue Milwaukeee, Wisconsin 53203 (414) 291-3693

For information about trail opportunities on Tennessee Valley Authority lands contact:

Tennessee Valley Authority
Recreation Resources Branch
Forestry Building
Norris, Tennessee 37828

For information about trail opportunities on U.S. Army Corps of Engineers projects, contact the following division offices:
U.S. Army Engineer Division

Lower Mississippi Valley
Recreation Resource Management Branch
P.O. Box 80

Vicksburg, Mississippi
U.S. Army Engineer Division

Missouri River
Recreation Resource Management Branch
P.O. Box 103, Downtown Station

Omaha, Nebraska 68101
U.S. Army Engineer Division
New England
Recreation Resource Management
Branch
424 Trapelo Road
Waltham, Massachusetts 02154
U.S. Army Engineer Division
North Central
Recreation Resource Management
Branch
536 Clark Street
Chicago, Illinois 60605
U.S. Army Engineer Division
Ohio River
Recreation Resource Management
Branch
P.O. Box ll59
Cincinnati, Ohio 45201
U.S. Army Engineer Division
Southwestern
Recreation Resource Management
Branch
l200 Main Street
Dallas, Texas 75202
U.S. Army Engineer Division North Atlantic
Recreation Resource Management Branch
90 Church Street New York, New York 10007
U.S. Army Engineer Division North Pacific
Recreation Resource Management Branch
P.O. Box 2870

Portland, Oregon 97208
U.S. Army Engineer Division

South Atlantic
Recreation Resource Management Branch
30 Pryor Street, S.W.
Atlanta, Georgia 30303
U.S. Army Engineer Division South Pacific
Recreation Resource Management Branch
630 Sansome Street, Room 1216
San Francisco, California 94111

For information about trail opportunities in the National Wildlife Refuge System, contact one of the following Fish and Wildlife Service's regional offices:

Regional Director, Region 1
Fish and Wildlife Service
Lloyd 500 Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97208
Phone: (503) 231-6136
Regional Director, Region 2
Fish and Wildlife Service
U.S. Post Office \& Court House

500 Gold Avenue, S.W.
Albuquerque, New Mexico 87103
Phone: (505) 766-2081

Regional Director, Region 5
Fish and Wildlife Service
One Gateway Center, Suite 700
Newton Corner, Massachusetts 02158
Phone: (617) 965-5100

Regional Director, Region 6
Fish and Wildlife Service
P.O. Box 25486

Denver Federal Center
Denver, Colorado 80225
Phone: (303) 234-3865

Regional Director, Region 3
Fish and Wildife Service Federal Building, Fort Snelling Twin Cities, Minnesota 55111 Phone: (612) 725-3585

Regional Director, Region 4 Fish and Wildlife Service Richard B. Russell Building Suite 1200
75 Spring Street, S.W. Atlanta, Georgia 30303 Phone: (404) 221-3588

Alaska Area Office
Fish and Wildlife Service
1011 East Tudor Road
Anchorage, Alaska 99507
Phone: (907) 276-3800

For information about trail opportunities on Bureau of Land Management lands in the following States, contact:

## Alaska

State Director Bureau of Land Management 701 C Street
P.O. Box 13

Anchorage, Alaska 99513
Phone: (907) 271-5076
California
State Director
Bureau of Land Management
Federal Building, Room E-2841 2800 Cottage Way
Sacramento, California 95825
Phone: (916) 484-4821
Idaho

State Director
Bureau of Land Management
3380 Americana Terrace
Boise, Idaho 83706
Phone: (208) 334-1401
Arizona
State Director
Bureau of Land Management3707 North 7th StreetP.O. Box 16563
Phoenix, Arizona 85011
Phone: (602) 241-5501
Colorado (Also Kansas)
State Director
Bureau of Land Management2020 Arapahoe StreetDenver, Colorado 80205Phone: (303) 294-7090
Montana (Also North Dakota and SouthDakota)
State Director
Bureau of Land Management
$222^{\circ}$ N. 32nd Street
P.O. Box 36800
Billings, Montana 59107Phone: (407) 657-6561

Nevada
State Director
Bureau of Land Management
300 Booth Street
P.O. Box 12000

Reno, Nevada 89520
Phone: (702) 784-5451
Oregon (also Washington)
State Director
Bureau of Land Management
825 N.E. Multnomah Street
P.O. Box 2965

Portland, Oregon 97208
Phone: (503) 231-6251
Wyoming (also Nebraska)
State Director
Bureau of Land Management 2515 Warren Avenue
P.O. Box 1828

Cheyenne, Wyoming 82003
Phone: (307) 328-2326

New Mexico (also Oklahoma and Texas)

State Director Bureau of Land Management Joseph M. Montoya Federal Building P.O. Box 1449<br>Santa Fe , New Mexico 87504-1449<br>Phone: (505) 988-6030<br>Utah

State Director
Bureau of Land Management
324 South State Street
Salt Lake City, Utah 841ll-2303
Phone: (801) 524-5311

Eastern United States (also States
bordering on and east of Mississippi River)

State Director
Bureau of Land Management 350 South Pickett Street Alexandria, Virginia 22304 Phone: (703) 274-0180

## NATIONAL ORGANIZATIONS

American Canoe Association
7217 Lockport Place
Lorton, Virginia 22079
American Cycling Association 107 Barron Street
Petal, Mississippi 39465
The American Hiking Society 1701 18th Street, N.W. Washington, D.C. 20009

American Historical Trails P.O. Box 810

Washington, D.C. 20044
American Horse Council, Inc. 1700 K Street, N.W.
Washington, D.C. 20006
American Motorcyclist P.O. Box 141

Westerville, Ohio 43081
Anerican Recreation Coalition
1915 Eye Street, N.W.
Suite 700
Washington, D.C. 20006
American Rivers Conservation Council
1316 Pennsylvania Avenue
Washington, D.C. 20005
American Youth Hostels, Inc. P.O. Box 37613

Washington, D.C. 20013-7613
Apaloosa Horse Club, Inc. P.O. Box 8403

Moscow, Idaho 83843

Bicycle Federation of America
1818 R Street, N.W. Washington, D.C. 20009

Bicycle USA
6907 Whitestone Road Baltimore, Maryland 21207

Bikecentennial, Inc. P.O. Box 8308

Missoula, Montana 59807
Boy Scouts of America 1325 Walnut Hill Lane Irving, Texas 75062-1296

Camp Fire, Inc.
4601 Madison Avenue Kansas City, Missouri 64112

Girl Scouts of the USA
830 Third Avenue
New York, New York 10022
Heritage Trail Fund
2321 Tile Valley Boulevard Walnut Creek, California 94595

National Campers and Hikers Association, Inc.
7172 Transit Road
Buffalo, New York 14221
North American Trail Ride Conference
P.O. Box 20315

El Cason, California 92021
Rails to Trails Conservancy
1701 K Street, N.W.
Suite 304
Washington, D.C. 20006

Walking News
P.O. Box 352

New York, New York 10013

## STATE AND PRIVATE ORGANIZATIONS

## NORTHEAST

## Connecticut

Connecticut Forest and Park Association, Inc.
1010 Main Street
P.O. Box 389

East Hartford, Connecticut 06108
Connecticut Horse Council
104 Mott Hill Road
East Hampton, Connecticut 06424
Department of Environmental Protection
State Office Building
165 Capitol Avenue
Hartford, Connecticut 06108
Maine
Department of Conservation
Bureau of Parks and Recreation
State Office Building
Augusta, Maine 04330
Maine Snowmobile Association
P.O. Box 77

Augusta, Maine 04330
Massachusetts
Appalachian Mountain Club
5 Joy Street
Boston, Massachusetts 02108

## Walkways

733 15th Street, N.W. Washington, D.C. 20005

Bay State Trail Riders
Association, Inc.
89 Lakeview Avenue
Bellingham, Massachusetts 02019

Department of Environmental Management
100 Cambridge Street
Boston, Massachusetts 02202
Department of Natural Resources
State Office Building
100 Cambridge Street
Boston, Massachusetts 02202
New England Trails Conference
33 Knollwood Drive
East Longmeadow, Massachusetts 01028

New England Trail Riders Association
29 Burley Street
Wenham, Massachusetts 09184
Southern New England Trails Conference
89 Lakeview Avenue
Bellingham, Massachusetts 02019

## New Hampshire

Department of Resources and Economic Development
Division of Parks
State House Annex
P.O. Box 856

Concord, New Hampshire 03301

New Hampshire Horse Council
219 Kendall Hall
University of New Hampshire Durham, New Hampshire 03824

## New Jersey

Department of Environmental Protection
Division of Parks and Forestry
Labor and Industry Building
P.O. Box 1390

Trenton, New Jersey 08625
New Jersey Horse Council
Schley Mountain Road
Bedminster, New Jersey 07921
New York
Adirondack Mountain Club, Inc. 172 Ridge Street
Glen Falls, New York 12801
Finger Lakes Trails Conference
Box 18040
Rochester, New York 14618
New York-New Jersey
Trail Conference
20 West 40th Street
New York, New York 10018
New York Snowmobile
Coordinating Group
P.O. Box 1278

12 West Lamoka Avenue
Savona, New York 12238
New York State Horse Council
1400 East Genessee Street
Silaneateles, New York 13152
Office of Parks and Recreation
Agency Building \#l
Empire State Plaza
Albany, New York 12238

Illinois
Department of Conservation
Lincoln Tower Plaza
425 l/2 E. Washington Street Springfield, Illinois 62706

Indiana
Department of Natural Resources 612 State Office Building Indianapolis, Indiana 46204

Hoosier Horse Council
Rural Route 2, Box 233
Sheridan, Indiana 46069
Indiana Bike and Hike Association 4012 Buesching Drive
Fort Wayne, Indiana 46805
Iowa
Iowa Conservation Commission
Wallace State Office Building
East 9th and Grand
Des Moines, Idaho 50319
Iowa Horse Industry Council
Rural Route l, Box 70
Redfield, Iowa 50233
Kansas
Kansas Canoe Association
Kansas Department of Economic Development
503 Kansas, 6th Floor
Topeka, Kansas 66603
Kansas Park and Resources Authority
503 Kansas Avenue
P.O. Box 977

Topeka, Kansas 66601

Kansas Trails Council
P.O. Box 3162

Shawnee Mission, Kansas 66203

## Michigan

American Youth Hostels
3024 College Road
Berkeley, Michigan 48072
American Youth Hostels
West Michigan Council
1013 West Burton Street
Grand Rapids, Michigan 49509
Cycle Conservation Club of Michigan, Inc.
1208 Pulaski Street
Lansing, Michigan 48910
Department of Natural Resources
P.O. Box 30028

Lansing, Michigan 48909
Great Lake Camp and Trail Association
P.O. Box 10144

Lansing, Michigan 48901
Michigan Association of Recreational Snowmobilers 80025 North Road
Armada, Michigan 48005
Michigan Horse Council
P.O. Box 12074

Lansing, Michigan 48901
Michigan Snowmobile Council
3701 Buttrick Avenue, S.E. Ada, Michigan 49301

Michigan Trail Finders
2680 Rockhill Drive, N.W.
Grand Rapids, Michigan 49505
Michigan Trail Riders Association, Inc.
1179 Grand Road
Traverse City, Michigan 49684
Michigan Upper Peninsula Snowmobile Association
1006 Sherman Street
Marquette, Michigan 49855
Southern Michigan Snowmobile Council
12150 North Sherman Lake Drive
Augusta, Michigan 49012
Western Michigan Snowmobile Council
1654 34th Street
Wyoming, Michigan 49509
Western Upper Peninsula Snowmobile Association
P.O. Box 216
Watersmeet, Michigan 49969
Minnesota
Department of Natural Resources Centennial Office Building
St. Paul, Minnesota 55155
Minnesota Horse Council
P.O. Box 75481
St. Paul, Minnesota 55175
Minneapolis Municipal Hiking Club
331 Busch Terrace Minneapolis, Minnesota 55409
Minnesota Rivers Outing Club, Inc.
P.O. Box 14133
University Station
Minneapolis, Minnesota 55414

Minneapolis Saddle and Bridle Club
6616 Iroquois Trail
Edina, Minnesota 55435
North Star Ski Touring Club
P.O. Box 15144, Commerce Station

Minneapolis, Minnesota 55415
Minnesota Trail Riders Association
Route 2, Box 116A
Northfield, Minnesota 55057
Minnesota United Snownobilers Association
26 Cherry Street, N.W.
Waite Park, Minnesota 56387
Missouri
Department of Natural Resources
1203 Jefferson Buildong
Box 176
Jefferson City, Missouri 65102
Ozark Trail Coordinator
Box 176
Jefferson City, Missouri 65102
Nebraska
Nebraska Game and Parks Commission
2200 North 33rd Street
Box 30370
Lincoln, Nebraska 68503
North Dakota
North Dakota Department of Parks and Recreation
Pinehurst Office Park
1424 West Century Avenue
Suite 202
Bismarck, North Dakota 58502

Ohio

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American Youth Hostels
Lima Council
250l Dogwood Drive
Lima, Ohio 45805
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Buckeye Trail Association, Inc.
138 Bonita Drive
Dayton, Ohio 45415
Buckeye Trail Riding Club
P.O. Box 531
Logan, Ohio 53138
Department of Natural Resources
Outdoor Recreation Service
Fountain Square, Building C
Columbus, Ohio 43224
The Metropolitan Horse
Association, Inc.
1291 Lakeland Avenue, Suite 2
Lakewood, Ohio 44107
Ohio Bicycle Federation
1980 Winters Bank Towers
Dayton, Ohio 45423
Ohio Horseman's Council
P.O. Box 191
Miamitown, Ohio 45041
Ohio State Snowmobile Association
Box 93
Wellington, Ohio 44090
Pennsylvania
Department of Environmental
Resources
Division of State Forest
Management
P.O. Box 1467
Harrisburg, Pennsylvania 17120
Keystone Trails Association
P.O. Box 251
Cogan Station, Pennsylvania 17728

Pennsylvania Trail Riders Association
P.O. Box 103

Monroeville, Pennsylvania 15146
Rhode Island
Department of Natural Resources Division of Parks and Recreation 83 Park Street
Providence, Rhode Island 02903
Vermont
Department of Forests and Parks Agency of Environmental Conservation
Montpelier, Vermont 05602
Green Mountain Club
Box 54
Rutland, Vermont 05701
Vermont Association of Snow Travelers, Inc.
P.O. Box 839

Montpelier, Vermont 05602
South Dakota
Department of Game, Fish and Parks
State Office Building, Suite 1 Pierre, South Dakota 57501

South Dakota Horse Council
Route 3, Box 79
Gettysburg, South Dakota 57442
Wisconsin
Association of Wisconsin
Snowmobile Clubs
P.O. Box 1029

Neenah, Wisconsin 54956
Wisconsin Department of Natural Resources
Box 7921
Madison, Wisconsin 53707

Wisconsin State Horse Council
1675 Observatory Drive
Madison, Wisconsin 53706

## WEST

## Alaska

Alaska Alpine Club
c/o John Davies
Geophysical Institute
University of Alaska
P.O. Box 81-200

Fairbanks, Alaska 99701
Alaska Bicycle Association
P.O. Box 4-2442

Anchorage, Alaska 99509
Alaska Division of Parks
519 Warehouse Avenue, Suite 210
Anchorage, Alaska 99501
Alaska Motorcycle Racing Association
c/o Motorcycle Shop
412 W. Potter Drive
Anchorage, Alaska 99502
Alaska Travel Division Pouch E
Juneau, Alaska 99801
Anchorage Motor Mushers
2157 Sunrise Drive
Anchorage, Alaska 99504
Haines Ski Club
P.O. Box 39

Haines, Alaska 99827
Knik Kanoers and Kayakers
P.O. Box 3763

Anchorage, Alaska 99510
Mountaineering Club of Alaska
P.O. BOX 2037

Anchorage, Alaska 99510

Nordic Ski Club
Box 3504
Downtown Station
Anchorage, Alaska 95510
Southeast Alaska Mountaineering Club
c/o Ed Brown
P.O. Box 895

Ward Cove, Alaska 99928

## Arizona

Arizona Hiking and Equestrian Trails
Route 4, Box 739
Flagstaff, Arizona 86001
Arizona Historical Society
949 East Second Street
Tucson, Arizona 85719
Arizona State Parks Board
1688 West Adams
Phoenix, Arizona 85007
Arizona Outdoor Recreation Coordinating Commission
4433 N. 19th Avenue, Suite 203
Phoenix, Arizona 85015
Pima County Citizens' Trail Access Committee
1045 E. Elm Road
Tucson, Arizona 85719
Southern Arizona Hiking Club P.O. Box 12122

Tucson, Arizona 85711
Southwest Environmental Service P.O. Box 2231

Tucson, Arizona 85702
4-Wheelers
2839 North 49th Place
Phoenix, Arizona 85008

## California

Alpine Guide
P.O. Box 291

Culver City, California
California Association of Bicycling Organizations
28014 Natoma Road
Los Altos, California 94022
California Department of Transportation
P.O. Box 1499

Sacramento, California 95807
California State Horsemen's Association
897 Third Street
Santa Rosa, California 95404
Department of Parks and Recreation
Recreation Trails Commission
P.O. Box 2390

Sacramento, California 958ll
East Bay Regional Park District
11500 Skyline Boulevard
Oakland, California 94619
Equestrian Trails, Inc.
P.O. Box 2086

North Hollywood, California 91602
High Sierra Packers Association
P.O. Box 123

Madera, California 93637
International Bicycle Touring Society
846 Prospect Street
La Jolla, California 92037
La Canada-Flintridge Trails Council
P.O. Box 852

La Canada, California 91011

North American Trail Ride Conference
5301 Pine Hollow Road
Concord, California 94521
Northern California Trails Council
Wilderness Road
Branscomb, California 95417
San Luis Obispo Trails Council
8979 Junipero Avenue
Atascadero, California 93422
San Mateo County Bikeways Committee
36 Berenda
Portola Valley, California 94025
Santa Barbara County Trails Council
4140 Marina Drive
Santa Barbara, California 93109
Santa Cruz Mountains Trail Association
P.O. Box 1141

Los Altos, California 94022
Skyline Regional Trails Council
P.O. Box ll4l

Los Altos, California 94022
Western States Trail Ride, Inc. P.O. Box 1228

Auburn, California 94602
Colorado

Colorado Horse Council
P.O. Box 1678

Denver, Colorado 80216
Colorado Mountain Club
2530 W. Alameda
Denver, Colorado 80219
Colorado Mountain Trails Foundation
P.O. Box 15427

Denver, Colorado 80215

Division of Parks and Outdoor Recreation
1313 Sherman Street, Room 618
Denver, Colorado 80203
Hawaii
Division of State Parks (Kauai)
3060 Elwa Street
Lihue, Hawaii 96766
Division of State Parks (Maui and Molokai)
54 High Street
Wailuku, Hawaii 96793
Hawaii Department of Land and Natural Resources
P.O. Box 621

Honolulu, Hawaii 96509
Idaho
Cascade Nordic Ski Club c/o Wilderness Sports
Main Street
Cascade, Idaho 83611
Idaho Alpine Club
P.O. Box 2885

Idaho Falls, Idaho 83401
Idaho Department of Parks and Recreation
2177 Warm Springs Avenue
Boise, Idaho 83720
Idaho Horse Council
Route l, Box 84
Castleford, Idaho 83321
Idaho Trails Council
1049 Colt Road
Moscow, Idaho 83843
Mountain West Outdoor Club
P.O. Box 6815

Boise, Idaho 83707

North Central Nordic Ski Club 722 Court Street Grangeville, Idaho 83530

Pocatello Nordic Ski Association
c/o Tom Amberson
1347 Pershing
Pocatello, Idaho 83201
SW Idaho Trail and Distance Riders
6656 Pierce Park
Boise, Idaho 83703
Upper Snake River Valley
Arabian Horse Club
P.O. Box 2743

Idaho Falls, Idaho 83401

## Montana

Department of Game and Fish
1420 E. 6th Avenue
Helena, Montana 59601

## New Mexico

New Mexico Department of Natural Resources
Villagra Building
409 Galisteo Street
Santa Fe, New Mexico 87503
New Mexico Horse Council
P.O. Box 10206

Alameda, New Mexico 87114
New Mexico Motorcycle Council
333 San Pedro, N.E.
Albuquerque, New Mexico 87108
New Mexico National Recreation and Park Association
505 Central Avenue, N.W.
Albuquerque, New Mexico 87102
State Parks and Recreation Department
P.O. Box 1147

Santa Fe, New Mexico 87503

Volunteers for the Outdoors
P.O. Box 13895

Albuquerque, New Mexico 87192
Nevada
State Parks
1923 N. Carson Street, Room 210
Carson City, Nevada 89710
Trails West, Inc.
630 Stanford Way
Sparks, Nevada 89413
Oregon
Desert Trail Association
P.O. Box 589

Burns, Oregon 97720
Oregon Horsemen's Association
3525 Garden Avenue
Springfield, Oregon 97478
Oregon Recreation Trails System
State Parks Division
525 Trade Street, S.E.
Salem, Oregon 97310
Santiam Alpine Club
P.O. Box 1041

Salem, Oregon 97308
Trails Club of Oregon
P.O. Box 1243

Portland, Oregon 97207
Wyeast Climbers
4929 N.E. Fremont
Portland, Oregon 97213
Washington
Backcountry Horsemen of Washington
20617 Polar Way
Alderwood Manor, Washington 98036
Cascade Bicycle Club
P.O. Box 12714

Seattle, Washington 98111

Interagency Commission on Outdoor Recreation
4800 Capitol Boulevard
Tumwater, Washington 98504
The Mountaineers
300 Third West
Seattle, WA 98119
Mountaineers Books
719-B Pike Street
Seattle, Washington 98101
Northwest Motorcycle Association
351 Crystal Creek Circle
Issaquah, Washington 98027
Northwest Trails Association
16812 36th Avenue, West
Lynwood, Washington 98036
Pacific Northwest Four-Wheel Drive
4707 Carol Avenue
Yakima, Washington 98908
Pacific Northwest Ski Association
2721 N.W. 97th Street
Seattle, Washington 98115
Pacific Northwest Trail
Association
P.O. Box 1048

Seattle, Washington 98111
Paddle Trails Canoe Club
5638 N.E. 59th Avenue
Seattle, Washington 98108
Washington Kayak Club
7724 21lth Avenue, N.E.
Redmond, Washington 98052
Washington Nordic Ski Federation
P.O. Box 88892

Seattle, Washington 98188
Washington State Horsemen
4148 Oyster Bay Road, N.W.
Olympia, Washington 98502

Western River Guides Association 23020 S.E. 6th Place
Redmond, Washington 98052
White Water Sports, Inc. 307 N.E. 71st
Seattle, Washington 98115
Wyoming
Recreation Commission
604 E. 25th
Cheyenne, Wyoming 82001
Wyoming Mountain Men's Trails Foundation
Route 1, Box 75
Cheyenne, Wyoming 82001
Wyoming Outdoor Council, Inc. 202 l/2 S. Second
Laramie, Wyoming 82070
Wyoming Recreation Commission
122 West 25 th
Cheyenne, Wyoming 82002
Utah
Department of Natural Resources
807 E. South Temple, \#101
Salt Lake City, Utah 84102
Utah Trails Council
Weber County Planning Commission
Municipal Building, Room 714
Ogden, Utah 84401
Wasatch Mountain Club
1420 E. 6th Avenue
Salt Lake City, Utah 84106
SOUTH

Alabama
Alabama Trails Association 938 S. 80th Street
Birmingham, Alabama 35206

Department of Conservation and Natural Resources
Administrative Building
Montgomery, Alabama 36130
Vulcan Trail Association
4609 7th Court South
Birmingham, Alabama 35222

## Arkansas

Arkansas Department of State
Parks and Tourism
One Capitol Mall
Little Rock, Arkansas 72201
Arkansas Trails Council c/o Arkansas State Parks
One Capitol Mall
Little Rock, Arkansas 72201
Ozark Society
c/o Arkansas Highway Department P.O. Box 2261

Little Rock, Arkansas 72203
Delaware
Department of Conservation
Division of Parks and Recreation
Box 1401
Dover, Delaware 19901
District of Columbia
D.C. Recreation Department

3149 l6th Street, N.W.
Washington, D.C. 20010
Department of Transportation
412 12th Street, N.W.
Washington, D.C. 20004
Potomac Appalachian Trail Club 1718 N. Street, N.W. Washington, D.C. 20036

## Florida

Department of Natural Resources Division of Recreation and Parks 3900 Commonwealth Boulevard Tallahassee, Florida 32304

## Georgia

Trails Planner
Department of Natural Resources 270 Washington Street, S.W. Atlanta, Georgia 30334

Kentucky
State Department of Parks Capitol Plaza Tower
Frankfort, Kentucky 40601

## Louisiana

The Backpacker
3378 Highland Road
Baton Rouge, Louisiana 70802
Crescent City Cyclists
P.O. Box 6832

Metarie, Louisiana 70009
Kisatchie Bicycle Club
1220 MacArthur Drive
Alexandria, Louisiana 71301
Louisiana Office of Program Development
P.O. Box 44247

Baton Rouge, Louisiana 70804
Pack and Paddle
601 East Pinhook
Lafayette, Louisiana 70501
Mississippi
Bureau of Recreation and Parks Department of Natural Resources P.O. Box 10600

Jackson, Mississippi 39209

Maryland
Bicycle USA
6707 Whitestone Road Baltimore, Maryland 21207

Mountain Club of Maryland 14 Solar Circle Baltimore, Maryland 21207

State Department of Planning 301 W. Preston Street Baltimore, Maryland 21201

Trail Riders of Today (TROT)
2112 Countryside Drive
Silver Spring, Maryland 20904
North Carolina
Carolina Mountain Club
P.O. Box 68

Asheville, North Carolina 28802
Department of Natural Resources and Community Development
P.O. Box 27687

Raleigh, North Carolina 27611
Nantahala Hiking Club
Route 1
Franklin, North Carolina 28734
North Carolina Horse Council
P.O. Box 25871

Raleigh, North Carolina 26711
Oklahoma
Division of State Parks
Oklahoma Tourism and
Recreation Department
4040 N. Lincoln
Oklahoma City, Oklahoma 73105
Oklahoma Trail Riders Association 4020 N. Lincoln
Oklahoma City, Oklahoma 73105

Ozark Society
2811 East 22nd
Tulsa, Oklahoma 74114
Puerto Rico
Public Parks and Recreation Administration
P.O. Box 4340

San Juan, Puerto Rico 00904
South Carolina
South Carolina Department of Parks, Recreation and Tourism 1205 Pendleton Street, Suite 113
Columbia, South Carolina 29201
Tennessee
Department of Conservation
4823 Newcom Avenue
Knoxville, Tennessee 37919
Tennessee Trails Association P.O. Box 4913

Chattanooga, Tennessee 37405
Trails Administrator
Department of Conservation
701 Broadway
Nashville, Tennessee 37203
Texas
Texas Bicycling Committee
2800 Rio Grande, \#8
Austin, Texas 78705
Texas Parks and Wildlife
Department
4200 Smith School Road
Austin, Texas 78744
Virginia
Bike Virginia
P.O. Box 203

Williamsburg, Virginia 23187

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Virginia Division of Parks
    and Recreation
101 North 14th Street
Richmond, Virginia 23219
Virginia Horse Council
P.O. Box }7
Riner, Virginia 24149
Virginia Trails Association
13 West Maple Street
Alexandria, Virginia 22301
West Virginia
Appalachian Trail Conference,
    Inc.
P.O. BOx }80
Harpers Ferry, West Virginia
25425
Department of Natural Resources
1800 Washington Street, East
Building 3, Room 330
Charleston, West Virginia 25305
West Virginia Scenic Trails
    Association, Inc.
P.O. Box 4042
Charleston, West Virginia 25304
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## DATE DUE




[^0]:    $l_{\text {U.S. Department of the Interior, National Park Service. } 1985 .}$ 1982-83 Nationwide Recreation Survey. Government Printing Office, Washington, D.C.

[^1]:    a Education frequencies refer to respondent population 22 years of age and older. $x=$ less than one-half of 1 percent.

[^2]:    a Percentages are based on the total ( 76 percent of all respondents) who cited one or more activities they "particularly enjoyed."

[^3]:    1 National Recreation Trails Maintenance Guide (1981)
    National Recreation Trails
    Trails Walks Inventory and 4 Recreation Information Systems (RIM-annually)
    5 Not formalized but listed

    5 By number and type only

