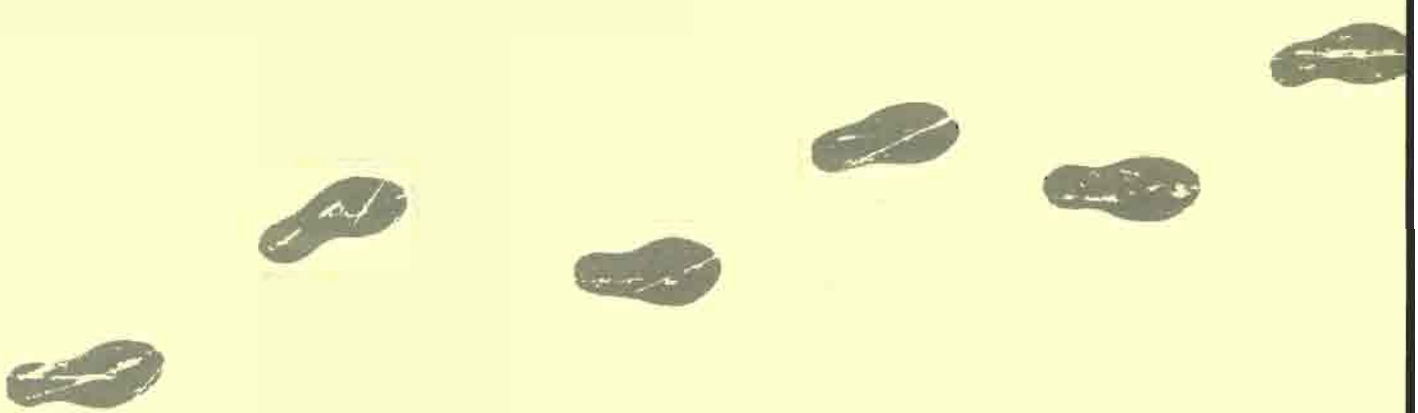
Trails for America

Report on the Nationwide Trail Study

DEPARTMENT OF THE INTERIOR Bureau of Outdoor Recreation



Bureau of Outdoor Recreation DEPARTMENT OF THE INTERIOR December 1966

TRAILS FOR AMERICA

REPORT ON THE NATIONWIDE TRAILS STUDY

2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OUTDOOR RECREATION
WASHINGTON, D.C. 20240

September 16, 1966

3

Hon. Stewart L. Udall
Secretary of the Interior

Hon. Orville L. Freeman
Secretary of Agriculture
Washington, D.C.

Dear Secretary Udall and Secretary Freeman:

In April 1965 Secretary Udall requested the Bureau of Outdoor Recreation to take the lead in a nationwide trails study. This assignment was made in response to President Johnson's Natural Beauty Message of February 8, 1965, in which he called for development and protection of a balanced system of trails—in the Nation's metropolitan areas as well as in the countryside—in cooperation with State and local governments and private interests. He called for such a trail system to help protect and enhance the total quality of the outdoor environment as well as to provide much needed opportunities for healthful outdoor recreation. The President said:

The forgotten outdoorsmen of today are those who like to walk, hike, ride horseback, or bicycle. For them we must have trails as well as highways. Nor should motor vehicles be permitted to tyrannize the more leisurely human traffic.

Old and young alike can participate. Our doctors recommend and encourage such activity for fitness and fun.

I am requesting, therefore, that the Secretary of the Interior work with his colleagues in the Federal Government and with State and local leaders and recommend to me a cooperative program to encourage a national system of trails, building up the more than hundred thousand miles of trails in our national forests and parks.

There are many new and exciting trail projects underway across the land. In Arizona, a county has arranged for miles of irrigation canal banks to be used by riders and hikers. In Illinois, an abandoned railroad right-of-way is being developed as a "Prairie Path." In Mexico utility rights-of-way are used as public trails.

As with so much of our quest for beauty and quality, each community has opportunities for action. We can and should have an abundance of trails for walking, cycling, and horseback riding, in and close to our cities. In the back country we need to copy the great Appalachian Trail in all parts of America, and to make full use of rights-of-way and other public paths.

A four-member Steering Committee was appointed to conduct the study. The Steering Committee, representing four Federal agencies, consisted of: Daniel M. Ogden, Jr., Assistant Director for Planning and Research, Bureau of Outdoor Recreation, Department of the Interior, chairman; Hamilton K. Pyles, Deputy Chief, Forest Service, Department of Agriculture; Theodore L. Swem, Assistant Director, Cooperative Activities, National Park Service, Department of the Interior; and Eldon F. Holmes, Chief, Recreational Staff, Bureau of Land Management, Department of the Interior.

4

In formulating a nationwide trails program, the Steering Committee's objectives were to:

1. Describe existing trail systems.
2. Assess the adequacy of existing trail programs to serve present and prospective users.
3. Suggest the appropriate role for the Federal Government, State governments, local governments, and private interests in providing new recreation trails.
4. Recommend Federal legislation to foster development of a balanced and adequate Nationwide System of Trails.

The Steering Committee considered three principal types of recreation trails: long "trunk" trails which would permit extended hiking or riding trips; trails on units of public land which would open important recreation areas to public use and enjoyment; and trails which could be located in and near urban centers to provide more limited hiking and riding experiences within easy reach of people's homes.

Many agencies assisted in gathering data, exploring new concepts, and preparing material. Among participating Federal agencies, in addition to those represented on the steering committee, were the Bureau of Sport Fisheries and Wildlife, the Bureau of Reclamation, and the Bureau of Indian Affairs in the Department of the Interior. Cooperation also was extended by many interested State and local agencies and by private groups and individuals.

The Steering Committee called upon the participating agencies to study particular long trails and invited all Federal land managing agencies to review their systems of recreation trails and to recommend specific actions to strengthen them.

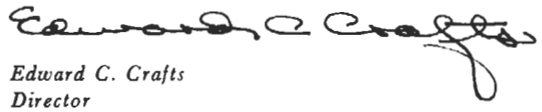
The Bureau of Outdoor Recreation in carrying out study assignments cooperated closely with State and local governments to determine trail opportunities in State parks and forests, and developed criteria for trails in and near metropolitan areas.

The study served as a basis for an Adminstration bill which would authorize the establishment of a Nationwide System of Trails. This bill, submitted to the Congress March 31, 1966, was followed by the introduction of legislation in the Senate and House of Representatives.

The study also led to the granting of a total of $367,436 to 12 urban areas for trail development. Grants were made by Secretary Udall in July 1966 from the Land and Water Conservation Fund to Arlington County, Virginia; Atlanta, Georgia; Chicago, Illinois; Denver, Colorado; Detroit, Michigan; Milwaukee, Wisconsin; New York City; Omaha, Nebraska; Philadelphia, Pennsylvania; Phoenix, Arizona; San Francisco, California; and Seattle, Washington. These pilot projects were intended to demonstrate the benefits of urban trail development and point the way to similar development in other populated areas.

I am pleased to submit the report of the Steering Committee: "Trails for America." It contains necessary detail and other information to support the proposed Nationwide System of Trails. The Administration's legislative proposal and this report, together, form a blueprint for a comprehensive, long range program of recreation trail development in this country.

Sincerely yours,



Edward C. Crafts
Director

(Photo: National Park Service, No. 1924-1)

"We need to copy the great Appalachian Trail in all parts of America!"—President Johnson

CONTENTS

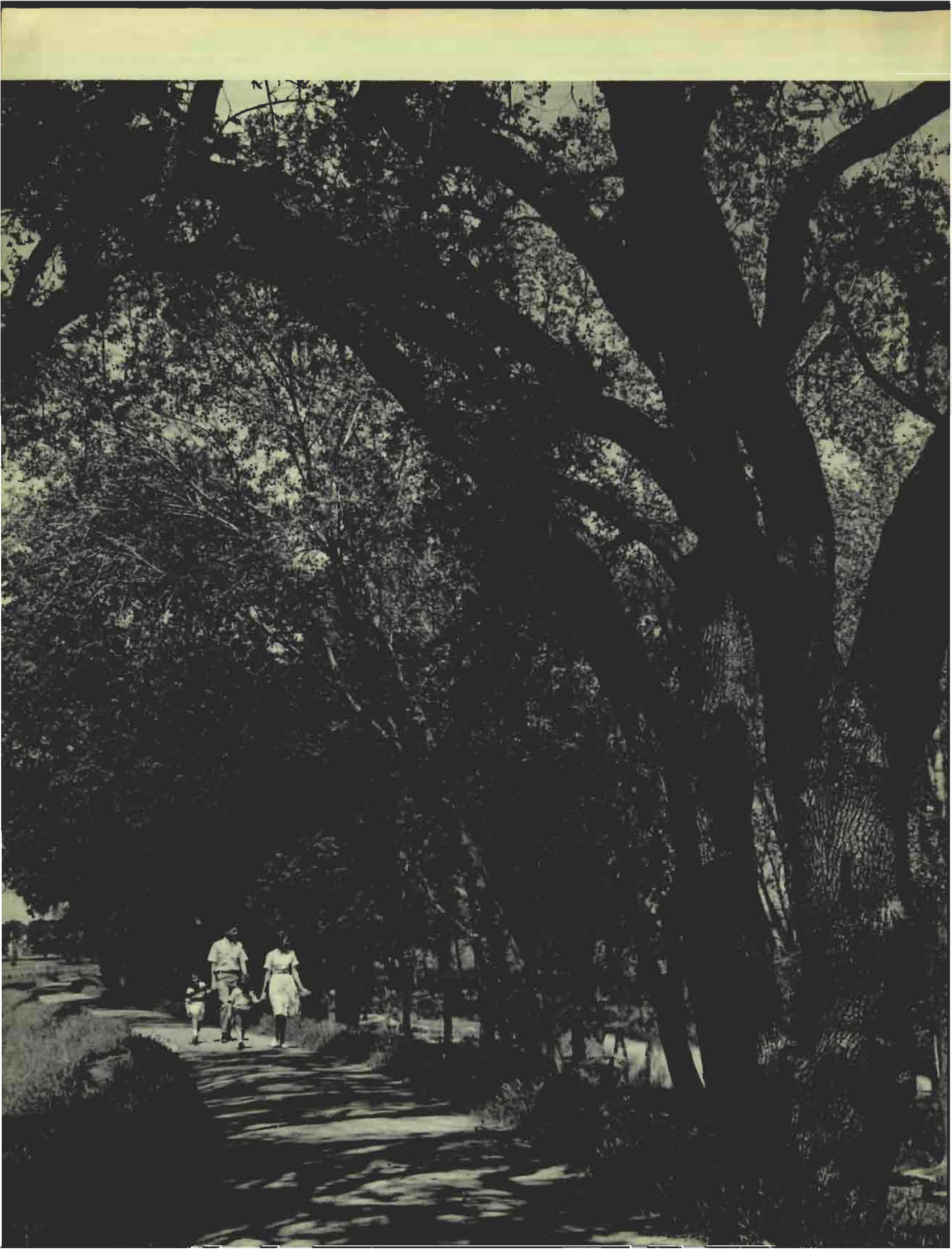
NATIONAL SCENIC TRAILS

PARK AND FOREST TRAILS

METROPOLITAN AREA TRAILS

TABLES

MAPS



SUMMARY OF RECOMMENDATIONS

Walking, hiking, and bicycling are simple pleasures within the economic reach of virtually all citizens. Horseback riding, even though increasingly expensive for urban dwellers, is available to a large proportion of Americans.

Opportunities to enjoy these basic activities have become increasingly limited for the American people as the society has urbanized and as economic development has preempted areas which had earlier been devoted to outdoor recreation uses. Today, with more leisure time and with rising amounts of disposable income available for recreation uses, more and more Americans are seeking relaxation and physical and spiritual renewal in the enjoyment of the traditional simple pleasures.

A favorite family pastime — walking for pleasure. (Photo: No. S-1)

Walking for pleasure ranks second only to driving for pleasure among recreation activities of the American people. Upon determining this basic fact in its national recreation survey of 1960, the Outdoor Recreation Resources Review Commission observed in its final report:

> It is something of a tribute to Americans that they do as much cycling and walking as they do, for very little has been done to encourage these activities, and a good bit, if inadvertently, to discourage them. We are spending billions for our new highways, but few of them being constructed or planned make any provision for safe walking and cycling. Many of the suburban developments surrounding our cities do not even have sidewalks, much less cycle paths.
>
> Europe, which has even greater population densities, has much to teach us about building recreation into the environment. Holland is constructing a national network of bicycle trails. In Scotland, the right of the public to walk over the privately owned moors goes back centuries. In Scandinavia, buses going from the city to the countryside have pegs on their sides on which people can hang their bicycles. Car ownership is rising all over Europe, but in the planning of their roads and the posting of them, Europeans make a special effort to provide for those who walk or cycle.
>
> Why not here? Along the broad rights-of-way of our new highways—particularly those in suburban areas—simple trails could be laid out for walkers and cyclists. Existing rights-of-way for high tension lines, now so often left to weeds and rubble, could at very little cost be made into a "connector" network of walkways.

Beyond the expressed wishes of the people reflected in the 1960 national survey, there are no reliable measures of the volume of public use of hiking, bicycling, and horseback trails. We know that the Appalachian Trail receives tens of thousands of visitors a year. In addition a large share of the visitors to the National Parks and National Forests each year use trails. How many more people would enjoy the simple pleasures of walking, hiking, horseback riding, or bicycling if there were adequate opportunities can only be surmised. We know only that expressed desire surpasses existing opportunities.

To enhance opportunities for these activities, a Nationwide System of Trails should be established. Federal agencies should be directly authorized to put the trail program into effect, and State and local agencies should be encouraged to participate vigorously. Federal technical and financial assistance should be made available to State and local agencies, as needed, to promote this endeavor.

Three trail categories should be developed:

National Scenic Trails

A limited number of national scenic trails should be established to provide opportunities of extended foot, horseback, and bicycle trips for Americans in all parts of the Nation. National scenic trails should have natural, scenic, or historic qualities that give them recreation potential of national significance. Such trails typically should be several hundred miles in length, have overnight shelters at appropriate intervals, and be interconnected with other major trails that provide opportunity for extended hiking or riding experiences. They would be the major axes of networks of trails branching out to nearby points of special attraction serving areas of population throughout the country.

As the initial unit of the system, the existing Appalachian Trail, which extends 2,000 miles from Mt. Katahdin, Maine, through 14 States to Springer Mountain, Georgia, should be authorized immediately as a national scenic trail.

Next in the development of an adequate number of national scenic trails, pre-authorization studies of three other trails should be initiated. Each of these trails exists in whole or in part and each can be placed in operation at an early date. Completion of the studies should be followed by prompt authorization.

These trails are:

1. Pacific Crest Trail, 2,300 miles, from the Washington-Canadian border down the backbone of the Cascade and Sierra Nevada Mountains, to the California-Mexican border.
2. Potomac Heritage Trail, 825 miles, from the mouth of the Potomac River to the sources of the river in Pennsylvania and West Virginia, including the 170-mile Chesapeake and Ohio Canal towpath.
3. Continental Divide Trail, 3,082 miles, from the Montana-Canadian border in Glacier National Park, through many National Forests and scenic areas in the States of Montana, Idaho, Wyoming, and Colorado, to Silver City, New Mexico.

Five other trails appear from preliminary study to merit consideration in whole or in part for possible national scenic trail status. Detailed study should, therefore, be undertaken promptly of the following:

1. Lewis and Clark Trail, 4,600 miles, from the St. Louis, Missouri, area to the mouth of the Columbia River, Oregon and Washington, following the route of the Lewis and Clark Expedition up the Missouri River, across Lolo Pass, and down the Clearwater, Snake, and Columbia Rivers.
2. Oregon Trail, 2,000 miles from Independence, Missouri, to the vicinity of Portland, Oregon, through the States of Missouri, Kansas, Nebraska, Wyoming, Idaho, and Oregon.
3. North Country Trail, 3,170 miles, from the Appalachian Trail in Vermont through New York, Pennsylvania, Ohio, Michigan, Wisconsin, and Minnesota, to the Lewis and Clark Trail in North Dakota.
4. Natchez Trace, 600 miles, from Nashville, Tennessee, to Natchez, Mississippi, following the historic route used by Indians and early settlers.
5. Santa Fe Trail, extending 800 miles from Independence, Missouri, through Kansas, Oklahoma, and Colorado, to Santa Fe, New Mexico.

A number of other trails were suggested for consideration in the Nationwide Trail Study but were deferred for possible future consideration. Most if not all of these should receive early attention and study:
1. Chisholm Trail, extending from San Antonio, Texas, northerly through Oklahoma, to Abilene, Kansas.
2. Pacific Coast Trail, extending along the more picturesque sections of the Washington-Oregon-California coastline.
3. Upper Colorado River Trail, extending from the Flaming Gorge Recreation Area in Utah and Wyoming, down the Green and Colorado Rivers, to the Glen Canyon Recreation Area in Utah and Arizona, with branches leading into the spectacular side canyons.
4. Rio Grande International Trail, extending along the Rio Grande that forms the United States-Mexican boundary.
5. Mississippi River Trail, paralleling generally the Great River Road.
6. Great Lakes International Trail, circling the more scenic portions of the Great Lakes in the United States and Canada.
7. Ozarks Trail, leading through the picturesque Missouri and Arkansas plateau country with its high scenic ridges and pleasant river valleys.
8. Gulf Seacoast Trail, extending from the tip of Florida along the coastline of Alabama, Mississippi, and Louisiana, to the southern tip of Texas.
9. Atlantic Coast Trail, extending along the more scenic sections of the Atlantic seaboard from Maine to Florida.
10. Daniel Boone Trail, from Cumberland Gap, Kentucky, to Nashville, Tennessee.
11. Gold Rush Trail, following one or more of the historic and picturesque routes taken by the early gold seekers in Alaska.
12. Mormon Trail, extending from Nauvoo, Illinois, to Salt Lake City, Utah, through the States of Iowa, Nebraska, and Wyoming.
13. Trail of Tears, beginning in the Southeast and extending to Oklahoma.
14. DeSoto Trail, extending from Tampa Bay, Florida, through the States of Georgia, South Carolina, North Carolina, Tennessee, Alabama, Mississippi, and Arkansas, ending at the Mississippi River.
15. California Trail, extending from the Oregon Trail in Wyoming to the Sacramento Valley in California, through the States of Idaho, Utah, and Nevada.
16. Long Trail, extending from the Massachusetts border northward through Vermont to the Canadian border.

Detailed recommendations for administrative arrangements of national scenic trails are presented in Chapter 1. Specific recommendations for individual national scenic trails appear in Chapters 2, 3, and 4.

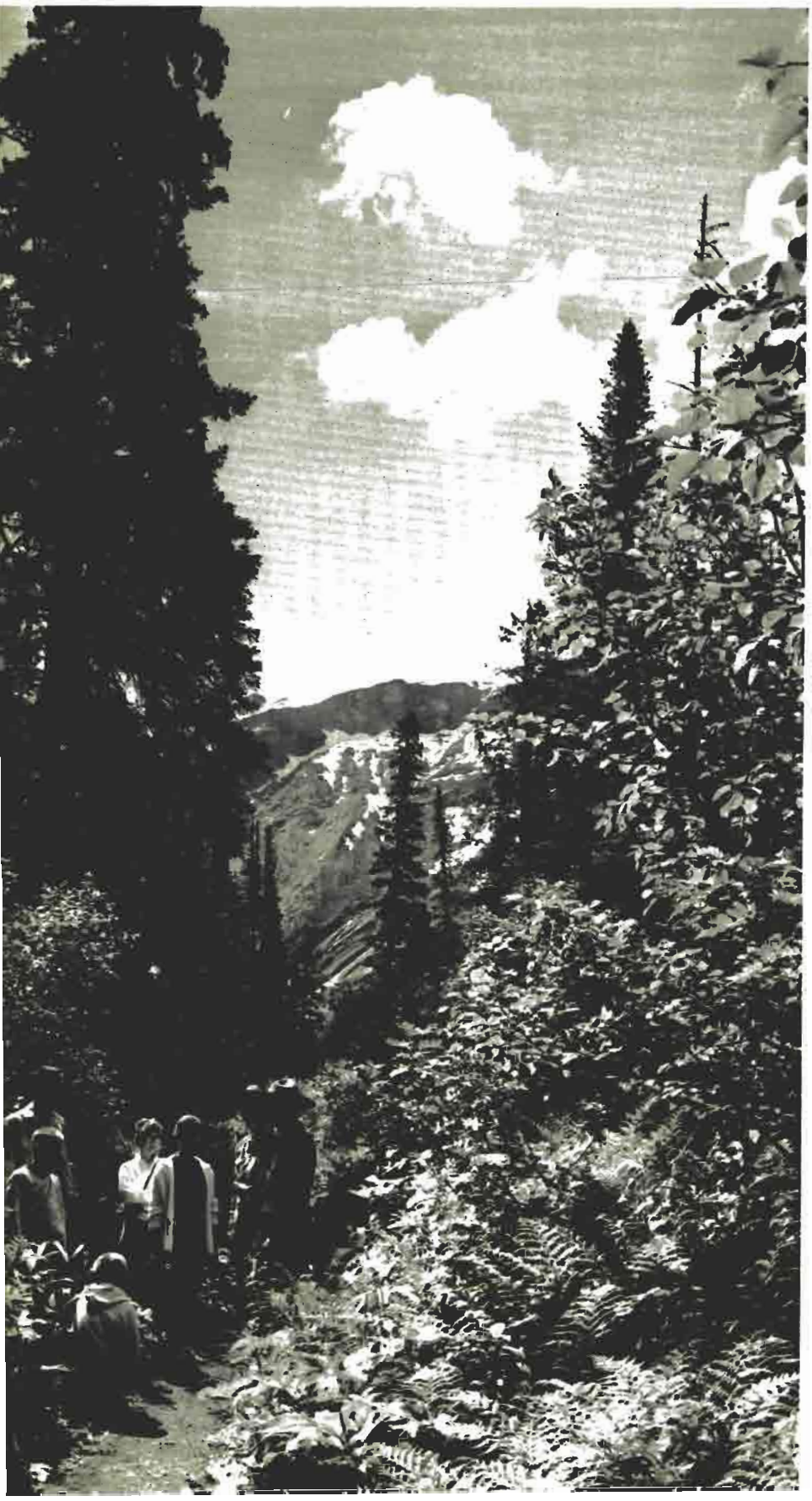
National Scenic Trails should provide opportunities for extended foot, horseback or bicycle trips. (Photo: Forest Service, No. 494684)

Park and Forest Trails

Trail opportunities on public lands administered by the various Federal and State agencies should be developed to their full recreation potential. Emphasis and priority should be given to trail development where population pressure is greatest. Recreation trails on Federal lands should be increased from the present 88,000 miles to 125,000 miles, and existing trails upgraded. States administer a reported 14,865 miles of trail, and have plans to build an additional 12,278 miles. Emphasis should be given to needs and opportunities for park and forest trail development in Statewide outdoor recreation plans, and in the allocation of matching grants to States under the Land and Water Conservation Fund Program. Specific recommendations for park and forest trails are presented in Chapter 5 and 6.

Metropolitan Area Trails

The most urgent need is for trails in and near metropolitan areas. Although cities and counties have made a start toward meeting the need, a much larger program is required. For each 50,000 residents, local governments should plan 25 miles of foot trail, 5 miles of bridle paths, and 25 miles of bicycle trails. Although some metropolitan area trails can serve two or more of these uses, where use is heavy, separate trails designed for the intended use should be developed. For motorcycle riders, local governments should seek areas totaling 15 acres for each 50,000 residents.



Trails on public lands open parks, forests, and recreation areas for public use and enjoyment. Trail to Avalanche Lake, Glacier National Park, Mont. (Photo: National Park Service, No. 60-JB-329)

Trail systems should be included as an integral part of broader outdoor recreation planning, and within the framework of comprehensive metropolitan planning.

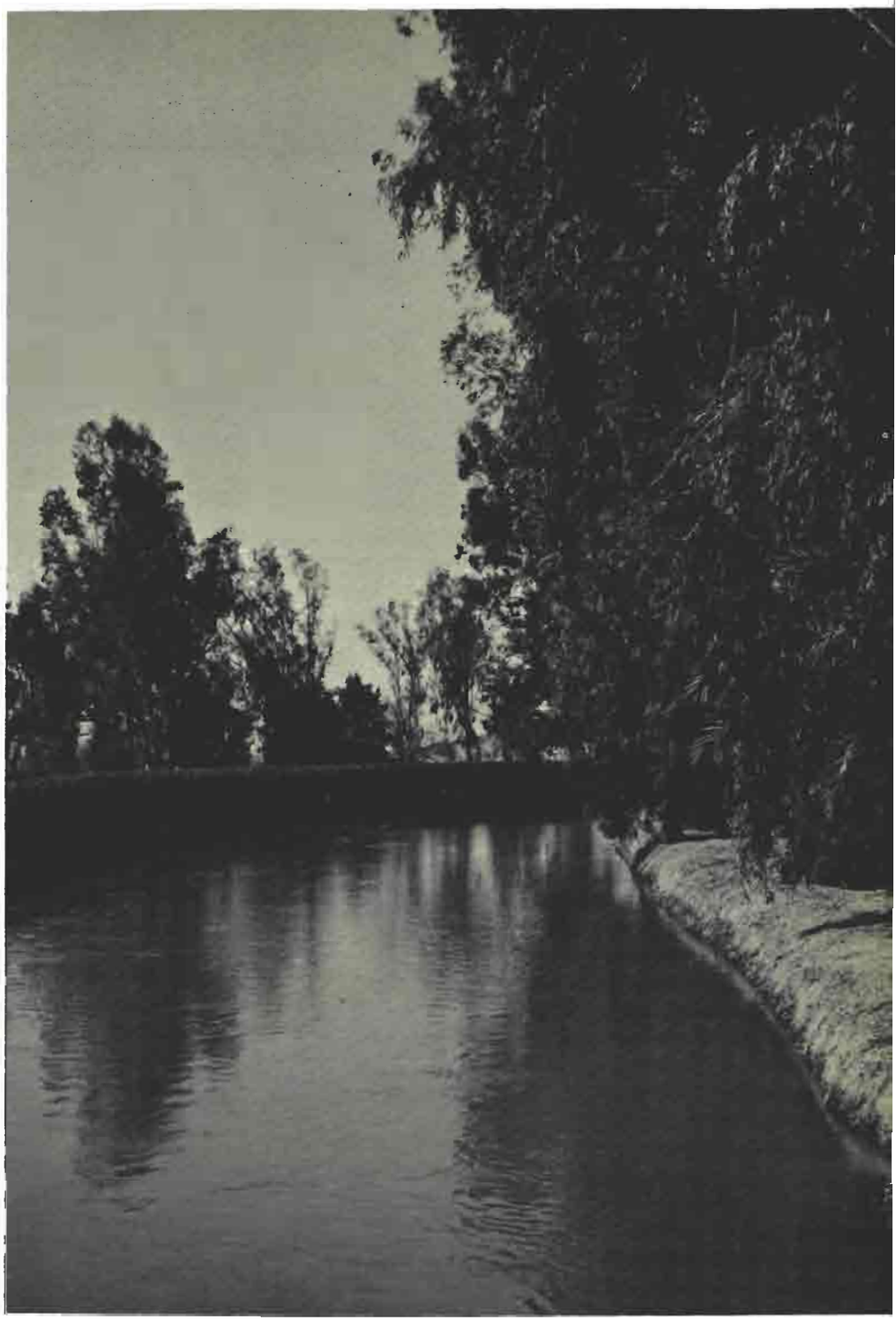
Federal financial and technical assistance to the States and their political subdivisions for metropolitan area trail development is authorized and available in existing programs of the Department of the Interior, the Department of Agriculture, and the Department of Housing and Urban Development. Although no additional authority is essential, some reorientation of existing programs is needed to give increased emphasis to the acquisition and development of metropolitan area trails.

Public utility rights-of-way offer special opportunity for metropolitan area trails. Abandoned railroad lands can become useful trail corridors. Trails sometimes can be constructed beneath electric utility, telephone, and telegraph transmission lines. Canal banks, river banks, and quiet streets also lend themselves to hiking or bicycle routes. All Federal agencies having jurisdiction over the allocation and use of such rights-of-way should cooperate fully in the development of trails to serve metropolitan areas. State agencies having similar jurisdiction also should encourage and support development.

State outdoor recreation plans should reflect consideration of the needs and opportunities for metropolitan area trails, as should grants from the Land and Water Conservation Fund Program and Open-Space Land Program.

Specific recommendations for metropolitan area trails are presented in Chapter 7. An illustration of a proposed metropolitan area trail system for Washington, D.C., is presented in Appendix A.

All trails designated in the proposed Nationwide System should bear a uniform marker. Each national scenic trail should, in addition, be identified by a distinctive symbol of its own which would be placed on the uniform marker.



Public utility rights-of-way, such as canal banks, offer excellent opportunities for trail location. View of the Arizona Canal in the Salt River Valley, Ariz. (Photo: Bureau of Reclamation, No. P25-300-4898NA)

The most urgent need for trails is in and near metropolitan areas within easy reach of people's homes. (Photo: No. S-2)

Trails often provide major access routes to prime hunting, fishing, and camping areas. Box Lake, Rocky Mountain National Park, Colo. (Photo: National Park Service No. WASO-D-835)

INTRODUCTION

The Nation faces a "crisis in outdoor recreation." A surging demand for opportunities to enjoy outdoor activities presses upon natural resources which are shrinking under the impact of our rapidly expanding population and economy. One of the great challenges of today is to plan adequately to meet these demands. Only if we are successful in this effort can there be assurance that future generations will be able to enjoy some of the same opportunities now available to the American people.

Trails represent a major opportunity to satisfy the demand for outdoor recreation. By their nature, they afford a low-concentration, dispersed type of recreation that is much sought after today. Trails are the means to some of the most beneficial kinds of exercise—walking, hiking, horseback riding, and cycling. Trails enable people to reach prime areas for hunting, fishing, and camping; they lead to areas prized by students of nature and history; they are used by artists and photographers; they help to satisfy the craving many people have for solitude and the beauty of untrammelled lands and waters.

Trail Efforts Today

Wild animals, and then Indians, formed the first trails. The early explorers and trappers used these natural trails and later the pioneers settling the land followed them. Today, several of the major Federal land management agencies —Forest Service, National Park Service, Bureau of Land Management, and Bureau of Sport Fisheries and Wildlife—support programs of trail development and maintenance. Some State park and forest agencies also support extensive systems of trails. Although many of these trails are built primarily for such fire protection and livestock use, increasing attention is being devoted to trails designed for public recreation.

Recreational trails have been the subject of proposed Federal legislation. In 1945, Representative Hoch of Pennsylvania introduced legislation to establish a national system of trails. This bill (H.R. 2142) would have amended the Federal Highway Act of 1944 by providing for construction and maintenance of not to exceed 10,000 miles of trails by the Forest Service in cooperation with other Federal agencies and the States and their political subdivisions. Authority was included for the acquisition of land and easements, and for shelters, signs, maps, and guidebooks. Included, also, were $50,000 for three years and necessary funds thereafter. The Appalachian Trail would have been part of the system. Committee hearings were held but no further action was taken.

In 1963, Senator Jennings Randolph introduced S. 1147 for the development of an adequate system of roads and trails in the National Forests. No action was taken.

Senator Gaylord Nelson has sought through Federal legislation to gain Congressional recognition of the Appalachian Trail, to promote Federal cooperation with State, local, and nongovernmental interests in preserving and protecting the trail, and to authorize limited Federal participation in the location and perpetuation of the trail. He introduced a bill (S. 622) for this purpose in the 88th Congress and again in the 89th. Public hearings on the bill were held by the Senate Interior and Insular Affairs Committee in September 1965.

Senator Nelson also introduced a bill, S. 2590, in the 89th Congress which would authorize establishment of a national hiking trail system. The bill directed the Secretaries of the Interior and Agriculture to establish hiking trails on the lands they administer. Federal grants would be made to the States for the full cost of planning trail systems, and for half the cost of construction.

Private nongovernmental groups are active in trail establishment and maintenance in many sections of the country, especially the Northeast. The world-famous Appalachian Trail, crossing 14 States and 2,000 miles in length, is the result of efforts by private groups and individuals sustained over a period of many years in cooperation with the Forest Service and National Park Service.

The Long Trail in Vermont, which predates even the Appalachian Trail, is another outstanding example of private initiative. Started by local trail groups in 1910 and completed in 1931, this 250-mile trail is still maintained.

A more recent example of private efforts is the Finger Lakes Trail, a continuous footpath system across New York State from the Catskills to the Allegheny Mountains. When completed, it will include 650 miles of trail, 350 miles in the main east-west trunk and 300 miles in branch trails.

Through efforts of the Boy Scouts of America, 150 historic trails of varying lengths have been identified, developed, and used. Many are sponsored by Boy Scout Councils and others by private groups. These trails help the Scouts gain an appreciation of the ideals, principles, and traditions that have shaped the Nation.

Thousands of volunteers have contributed unsparingly of their time and efforts in planning, building, and maintaining these trails, each of which is open for public benefit.

Need for Trails

The changing population characteristics of the United States point to a multiplying demand for outdoor recreation opportunities of all kinds. An expected twofold increase in the number of people by the year 2000 will mean at least a threefold increase in the demand for recreation, according to the Outdoor Recreation Resources Review Commission. Trails, with all other forms of outdoor recreation, will be in short supply unless adequate facilities systematically are provided.

Trails near metropolitan centers where a disproportionate share of the increasing population will be located are especially inadequate. The Outdoor Recreation Resources Review Commission observed:

> Three-quarters of the people will live in these areas by the turn of the century. They will have the greatest need for outdoor recreation, and their need will be the most difficult to satisfy as urban centers have the fewest facilities (per capita) and the sharpest competition for land use.

Walking for pleasure, the Commission predicted, will increase from 566 million occasions of participation in 1960 to 1,569 million by the year 2000, a 277 percent increase. Hiking will jump 368 percent, from 34 million to 125 million.

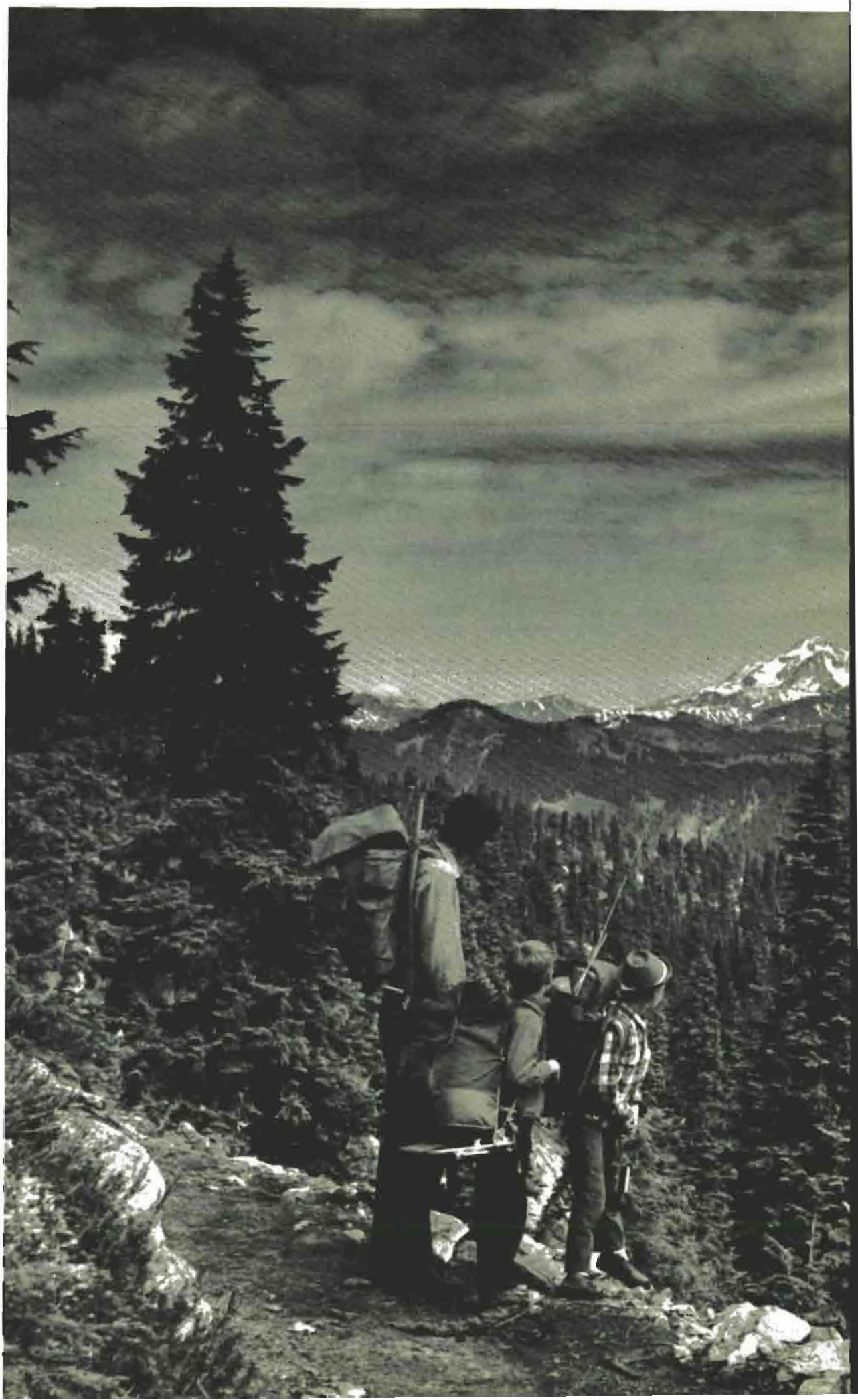
The number of bicycles and cyclists also is multiplying with almost explosive suddenness. According to a 1965 report of the American Institute of Park Executives Inc., *Bike Trails and Facilities,* more than 57 million children and adults, over 30 percent of the Nation's population at that time, participated in the activity. In 1964, 5 million bicycles were sold, twice the number sold 10 years earlier. Projections indicate that there will be 63 million cyclists by 1970, and that by 1975 more than 10 million bicycles will be sold annually.

There is a pressing need for places in which to ride bicycles safely. Recreational riding, bike hikes, youth hostel activities, bicycle clubs, and the like are becoming increasingly popular for all ages. The need is especially acute in urban areas.

Similar growth is being experienced in horseback and trail scooter (trail bike) demand. *The Breeders Gazette* reports horse registrations are on the increase and the demand for quarter horses is growing. More than 5 million Americans were reported to be riding trail scooters or motorcycles in 1965.

Increasing numbers come on light trail bikes. (Photo: Bureau of Outdoor Recreation, No. T-2)

Boy Scouts and other organizations have helped develop and maintain many outstanding trails. (Photo: Michigan Department of Conservation, No. 1)



PART 1

NATIONAL SCENIC TRAILS

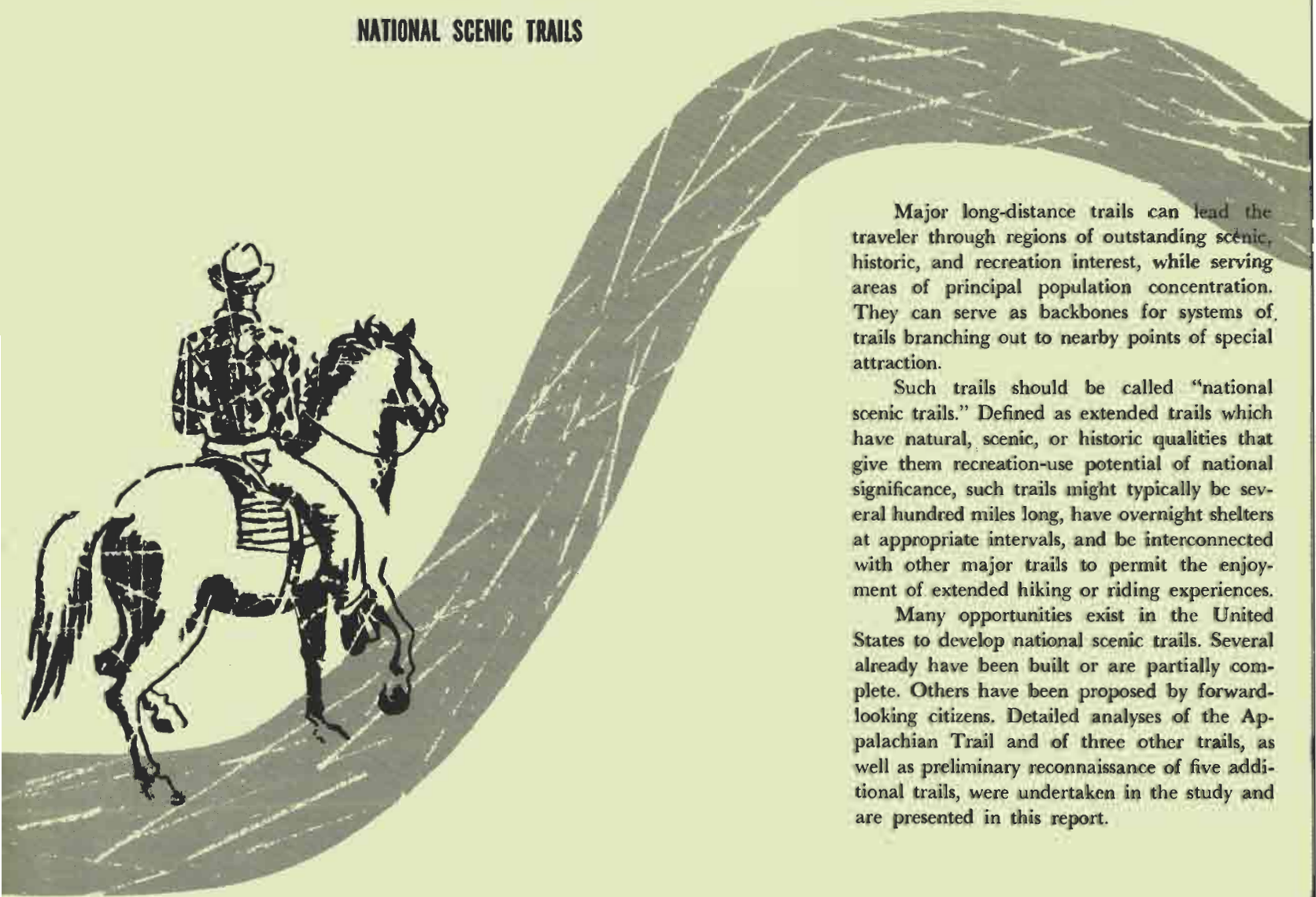
The routing, construction, maintenance, and marking of National Scenic Trails should set a standard of excellence. Scene on the Cascade Crest Trail in the Glacier Peak Wilderness, State of Washington. (Photo: Wenatchee Daily World)

CHAPTER 1

PRINCIPLES IN THE ESTABLISHMENT NATIONAL SCENIC TRAILS

The spirit of adventure springs ever anew in the hearts of Americans, young and old. In no way is it better satisfied than in the exploration of unfamiliar terrain or in the discovery of the beauties of nature.

Long-distance trails can provide unparalleled opportunities for such adventure and such satisfaction. Designed primarily for walking or riding, they are within the economic reach of all citizens. Routed to open the scenic wonders of ridgelines, mountaintops, countryside, streams, and lakeshores, and to provide access to scenes of historic significance, they offer varied and exciting experiences. Built to harmonize with the natural areas they cross, they afford the visitor closeup instruction in nature and her ways. Healthful exercise and the opportunity to break away from the pace of automated urban living add to the values of extended hiking and riding experiences.



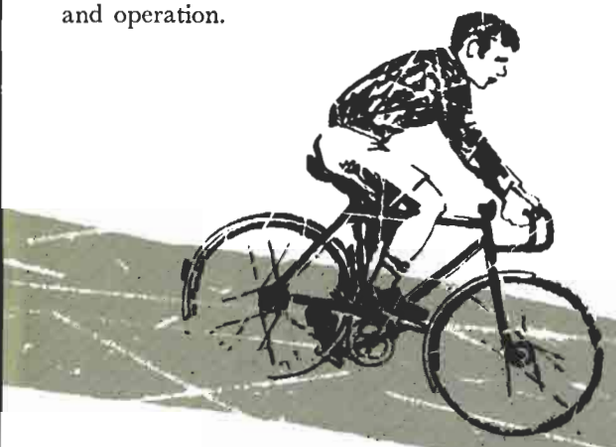
Major long-distance trails can lead the traveler through regions of outstanding scenic, historic, and recreation interest, while serving areas of principal population concentration. They can serve as backbones for systems of trails branching out to nearby points of special attraction.

Such trails should be called "national scenic trails." Defined as extended trails which have natural, scenic, or historic qualities that give them recreation-use potential of national significance, such trails might typically be several hundred miles long, have overnight shelters at appropriate intervals, and be interconnected with other major trails to permit the enjoyment of extended hiking or riding experiences.

Many opportunities exist in the United States to develop national scenic trails. Several already have been built or are partially complete. Others have been proposed by forward-looking citizens. Detailed analyses of the Appalachian Trail and of three other trails, as well as preliminary reconnaissance of five additional trails, were undertaken in the study and are presented in this report.

The Secretary of the Interior and the Secretary of Agriculture, jointly, should study the feasibility and desirability of designating other trails as national scenic trails by Congressional authorization. Such studies should be made in consultation with the heads of the Federal agencies administering lands through which the trails would pass and in cooperation with interested interstate, State, local governmental, and private interests. Sixteen trails that appear to merit early evaluation as study candidates are listed in the Summary of Recommendations section of this report. Other possibilities exist.

A standard of excellence in the routing, construction, maintenance, and marking consistent with each trail's character and purpose should distinguish all national scenic trails. Each should stand out in its own right as a recreation resource of superlative quality and of physical challenge. To insure such distinction, the Congress should adopt uniform administrative procedures governing their development and operation.



Administration

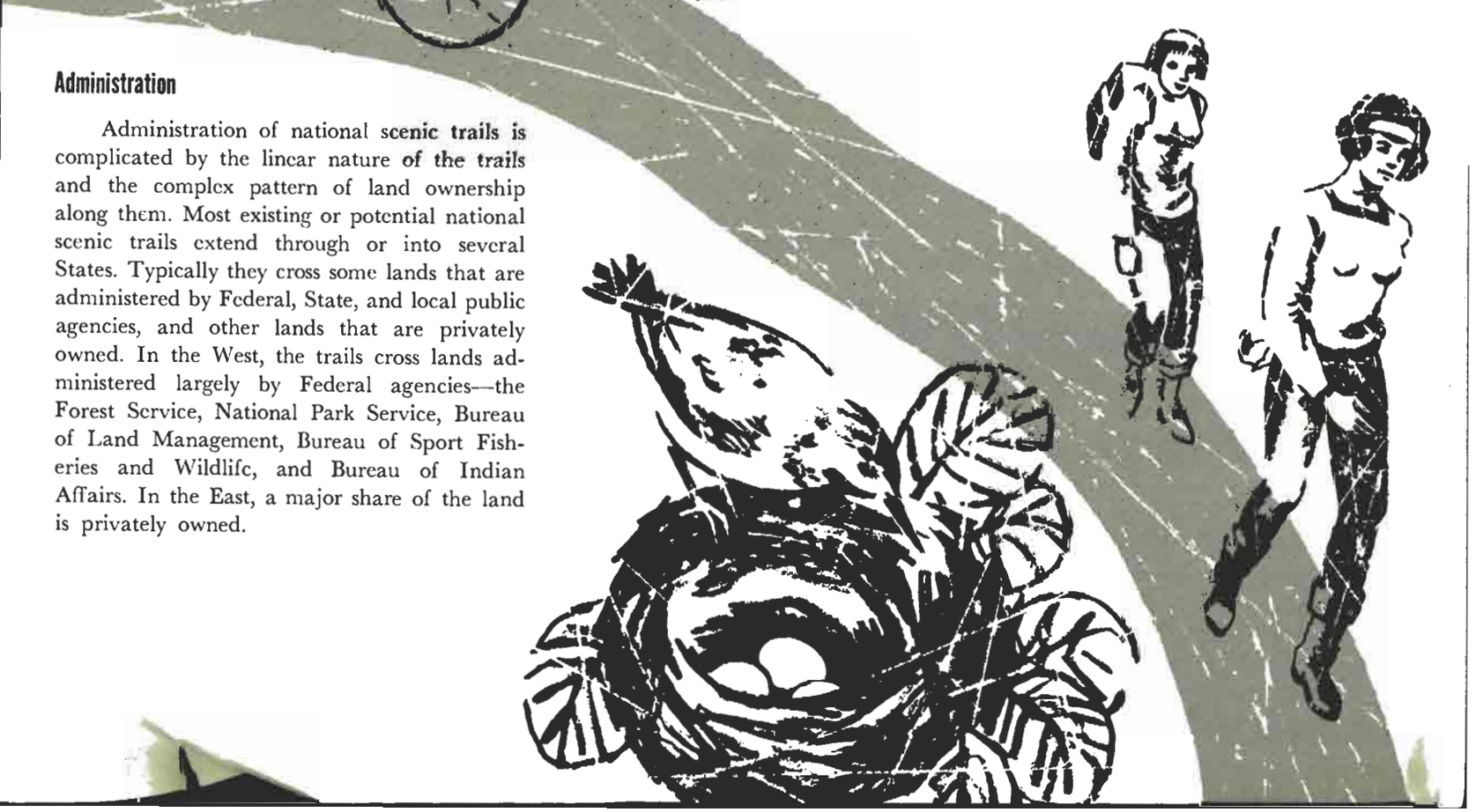
Administration of national scenic trails is complicated by the linear nature of the trails and the complex pattern of land ownership along them. Most existing or potential national scenic trails extend through or into several States. Typically they cross some lands that are administered by Federal, State, and local public agencies, and other lands that are privately owned. In the West, the trails cross lands administered largely by Federal agencies—the Forest Service, National Park Service, Bureau of Land Management, Bureau of Sport Fisheries and Wildlife, and Bureau of Indian Affairs. In the East, a major share of the land is privately owned.

As a general rule, the management of national scenic trails should be shared by several Federal and State agencies. Single-agency management, as with a National Forest or a National Park trail appears impractical. The land management agency having jurisdiction of the land on which any particular segment of the trail lies, should be responsible for management.

In view of these considerations, administration of national scenic trails should be governed by the following principles:

1. Ownership, construction, maintenance, and management of each national scenic trail should be shared by the several Federal, State and local agencies, and private organizations and individuals that own or control land along each trail route, as well as by private organizations and individuals that may have entered into appropriate agreements to further the purposes of the trail.

2. Primary administrative authority to insure continuity of each national scenic trail and to coordinate the efforts of the participating agencies should be assigned to either the Secretary of the Interior or the Secretary of Agriculture. It is logical for the Secretary of the Interior to have the primary Federal responsibility for the Appalachian Trail and the Potomac Heritage Trail and the Secretary of Agriculture to have the primary Federal responsibility for the Pacific Crest and Continental Divide Trails where a large proportion of the trails lie within or adjacent to the National Forest.



3. Each Secretary should have the authority to establish an advisory council for each national scenic trail. These councils should give him advice and counsel on all matters pertaining to the selection and marking of the route of the trail, control of land, construction, operation, maintenance, use, and any other matters he believes appropriate. Advisory councils should be composed of one representative from each Federal bureau or independent agency which administers land through which the trail passes, one representative of the Governor of each State through which the trail passes, and one or more representatives from private organizations that, in the opinion of the Secretary, have an established and recognized interest in the trail. Federal representatives on trail advisory councils should be designated by the head of the Department or independent agency they represent. State and private organization representatives should be selected by the Secretary responsible for the trail from nominees recommended respectively by the Governors of the concerned States and the private organizations.

Advisory council members should serve for terms of five years and should be eligible for reappointment. They should serve without compensation, but should be reimbursed for expenses incurred from serving on the council.

Advisory councils should meet at the call of the responsible Secretary as often as he deems necessary, but at least once a year. They should consider holding their meetings near various points along the trails in order to become familiar with the routes and to call the trails and their purposes to the attention of the people living in the vicinity.

4. The entire length of each national scenic trail, together with sufficient land area on both sides to safeguard adequately and preserve its character, should be protected in some from of public control. Within the exterior boundaries of areas under their administration, the heads of Federal agencies should be able to acquire lands or interests in lands for trails by donation, purchase with donated or appropriated funds, or exchange. The agency heads should utilize condemnation only in cases where, in their judgment, all reasonable efforts to acquire such lands by negotiation have failed. Then, they should acquire fee simple title only where, in their judgment, lesser interests in land (including scenic and public use easements) would not be adequate.

5. The Secretary having primary administrative responsibility should be able to enter into cooperative agreements with the States, local governments, and private organizations and individuals concerned to achieve the necessary protection.

6. Each Secretary should encourage State and local public agencies to acquire, develop, and manage sections of the trails that are outside the exterior boundaries of Federal areas, or to enter into cooperative agreements with the private owners to achieve the necessary protection. However, if the State and local agencies are unable to do this within a reasonable time after the selection of the right-of-way, the Secretary should have the necessary authority to do so.

7. Each Secretary should have authority to arrange with private interests, including Indian tribal councils, for the management of trail portions lying outside Federal areas. Participation in trail management by responsible private, nonprofit, trail organizations should be encouraged. Contractual agreements should be concluded between public agencies which acquire the right-of-way and private groups which agree to accept the responsibility to construct, operate, and maintain the trail. These groups should not expect to realize a profit or return upon investment. All construction should become and remain public property.

8. The Secretary responsible, after agreement with the other Federal agencies involved and consultation with the interested States, local governments, private organizations, and advisory councils, should select a distinctive identifying symbol for each trail. The symbol should be placed on all nationwide system of trail markers located at appropriate points along the trail route. Where the route passes through Federal lands, the marker should be erected and maintained by the Federal agency administering the lands. Where the route passes through non-Federal lands and is administered under cooperative agreements, the Secretary should require the cooperating agencies to erect and maintain the markers.

9. The responsible Secretary, after agreement with the other Federal agencies involved and consultation with appropriate States, local governments, private organizations, and advisory councils, should:

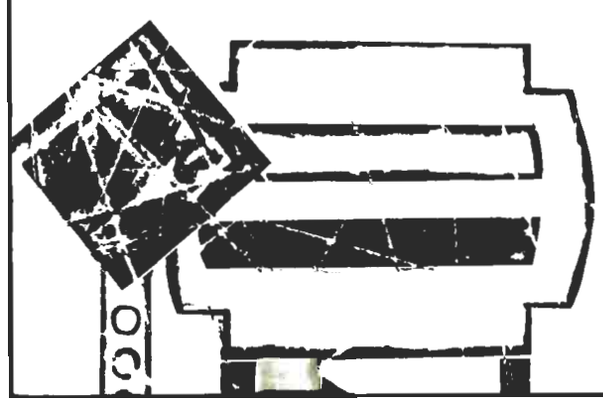
a. locate and designate the route and width of right-of-way of each trail assigned him. The right-of-way should be wide enough to protect adequately the natural and scenic character of the lands through which the trail passes and the historic features along and near along the trail, and to provide campsites, shelters, and related public-use facilities as necessary. It should avoid, insofar as practicable, established highways, motor roads, mining areas, power transmission lines, private recreational developments, public recreational developments not related to the trail, existing commercial and industrial developments, range fences and improvements, private operations, and any other activities that would be incompatible with the protection of the trail in its natural condition and its use for outdoor recreation. Formal designation should be accomplished by publishing notice of the route and right-of-way in the Federal Register, together with appropriate maps and descriptions. Minor changes in route and right-of-way should be handled in the same manner.

b. define the kinds of recreation use that are appropriate on the trail and in keeping with its objectives, and define the kinds of nonrecreation uses, if any, that may be permitted within the right-of-way; issue the necessary regulations; and provide enforcement.

c. establish construction and maintenance standards including standards for related facilities that will adequately protect trail values and provide for optimum public use.

Land Requirements and Control

The natural and scenic qualities and historic features along and near national scenic trails must be protected. In addition, public access to the trails at appropriate intervals and right of passage along the routes need to be guaranteed. Public control of the trail and of the lands immediately adjacent to each side, therefore, should be obtained.



The Chief legal devices available for land control are acquisition of full titles, purchase of easements, and zoning. These devices should be used separately or in appropriate combination to achieve desired results. The determination of which control or combination of controls to use will depend largely upon the nature of public use envisioned. The power of eminent domain should be available for use as a last resort.

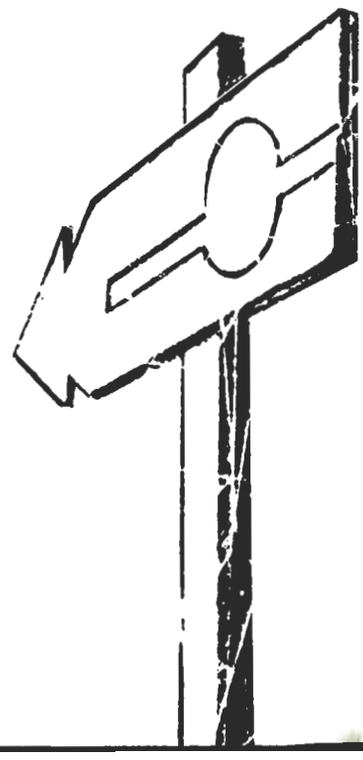
Public acquisition in fee simple of all property rights which guarantees full public control and use is desirable at most major public-use facilities accommodating trail users, such as access points, parking areas, and campgrounds.

Purchase and leaseback arrangements may be appropriate along some sections of trail. The trail can thus be protected and at the same time the previous landowner can continue to pursue activities compatible with the trail.

Scenic easements will, in many instances, suffice to protect trail values. A public agency would acquire the private owner's right to develop or use his land in ways that could damage recreation values, while title to the lands would remain in the owners hands. Such partial public control permanently restricts specified development on the private lands.

To provide for public right of passage or use of the lands, right-of-way easements should be used wherever possible. Public agencies would acquire from the owners of lands through which the trail passes perpetual right for individuals to walk or ride along the specified trail.

Local zoning would be appropriate in certain situations to protect trail values as an alternative to acquisition of fee title or easements. Such zoning regulations should be obliged to meet standards of exactness and enforcement required by the Secretary of the Interior or the Secretary of Agriculture. Such a provision has been proposed in wild or scenic rivers legislation and could be similarly applied to national scenic trails.



Opportunities exist for flexibility in the location of trails. The route of a trail, unlike the course of a river, often can be diverted around an incompatible development. Where practicable, national scenic trails would be routed initially to avoid roads, mines, utility lines, recreation developments unrelated to the trail, commercial and industrial sites, livestock installations, residential areas, and similar activties that are inconsistent with the purposes of the trail.

Construction Standards

Strict standardization among national scenic trails or even among segments of the same trail is impractical because of vast differences in topography and other physical characteristics and because of dissimilarities in kinds and extent of use. Standards should vary according to the management objectives of the different trails or segments of trails. However, certain basic standards for construction and maintenance of the trails and their related facilities should be adopted.

The location and design of national scenic trail and associated facilities should harmonize with the surrounding country. Bridges, shelters, and other similar structures, including place and directional signs, should be held to a minimum consistent with demands of safety and convenience, should harmonize with the landscape, and should be attractively designed.

Public-use facilities, including shelters, campgrounds, parking areas, toilets, and water, should be provided along the trail at points suitably convenient to the trail and as appropriate for public safety and the kind of use planned.

Winter use, where feasible, should be taken into account in the design and location of trails and related facilities.

Recreation Use

Recreation use of national scenic trails includes both the activities possible along the trails and the means of travel employed.

Common activities are camping, fishing, hunting, climbing, nature study, scenic and historic appreciation, wilderness enjoyment, tests of stamina, picnicking, photography, and painting. There are few, if any, serious conflicts between these activities.

Public use facilities should be provided along National Scenic Trails. Type of trail shelter commonly used. (Hawkins and Boyd Photographers, No. 1)

Conflicts exist, however, among the several means of travel possible along the trails—foot, horseback, bicycle, and trail scooter.

Trail scooters designed for trail travel pose the greatest problem of incompatibility. Beginning about five years ago with the introduction of small, light, relatively inexpensive machines, the popularity of trail scooters has grown rapidly. A survey of trail scooter owners in 1962 revealed that the typical owner utilized the vehicle chiefly for fishing and hunting or recreational riding.

Trail scooters are prohibited on trails in National Parks and National Wildlife Refuges, as they are in wilderness and primitive areas of the National Forests. Forest Service regulations also prohibit motor vehicle use of National Forest trails where it may cause damage, harm other values, or constitute a safety hazard. Trail scooters are not permitted on the portions of the Appalachian Trail within National Forests. However, much trail mileage in National Forests is open to trail scooters.

Reasonable restrictions on the weight, speed, and horsepower of trail scooters, and effective devices to reduce their noise and fire danger are advisable. Where special wild- land, wilderness, or wildlife values are involved, as in the National Parks, National Forests, National Wildlife Refuges, wilderness areas, and on the Appalachian Trail, the present exclusion of motor vehicles, including trail scooters, should remain.

Where horseback and trail scooter traffic or demand is heavy, it may eventually be desirable to develop trails for each of these uses and another trail for foot and bicycle use. At the same time, unnecessary proliferation of trails that reduce natural values should be avoided. Regulations that spell out the kinds and extent of travel permitted along each trail should be formulated by the appropriate Secretary, posted in prominent places, and enforced.

Feeder and Access Trails

National scenic trails should serve as backbones to many side trails that branch out to points of particular natural, historic, or recreational interest. A national scenic trail also might tie together numerous networks of trails centered in areas of special attraction and use. The Appalachian Trail, for example, has extensive trail networks located in many of the State parks, National Parks, and National Forests. These networks receive a major share of the total use along the trail.

The Long Trail, extending 250 miles through Vermont, was one of the first major hiking trails developed. (Photo: Hawkins and Boyd Photographers, No. 2)

Usually, the location, construction, and maintenance of side trails should be left to Federal, State, or local public agencies administering the land over which they pass and to local private trail interests. Overall coordination should be achieved by consultation and agreement among the affected agencies through the advisory councils, where such councils exist.

Financing

Federal land management agencies have general authority to finance planning, construction, operation, and maintenance of trail facilities on lands they administer. In most instances, however, Federal agencies are unable to finance trail operations outside of the specific areas they administer. Additional authority for financing would be required, for portions of most national scenic trails.

A portion of the funding required for the establishment of national scenic trails, whether under national, State, or local management, is available from the Land and Water Conservation Fund Act. Where acquisition authority already exists, the Land and Water Conservation Fund Act permits the appropriation of Fund moneys for the acquisition of land or interests in land by the National Park Service, Forest Service, and Bureau of Sport Fisheries and Wildlife. The Fund Act also authorizes grants for acquisition and development on a 50 percent matching basis by State and local agencies.

States and their political subdivisions also have other sources of Federal funds available. The Open-Space Land Program is one. Under this program the Secretary of the Department of Housing and Urban Development is authorized to help communities acquire and develop certain open-space lands in urban areas having value for park, recreation, conservation, scenic, or historic purposes. Funds are available for such acquisition and development, including foot paths and related facilities, under plans and programs approved by the Secretary.

Private groups and individuals can make a significant contribution to national scenic trails through the donation of lands, interest in lands for trail purposes, and in volunteering construction and maintenance assistance. Such public-spirited acts should be encouraged and accorded appropriate recognition.

Impact on Localities

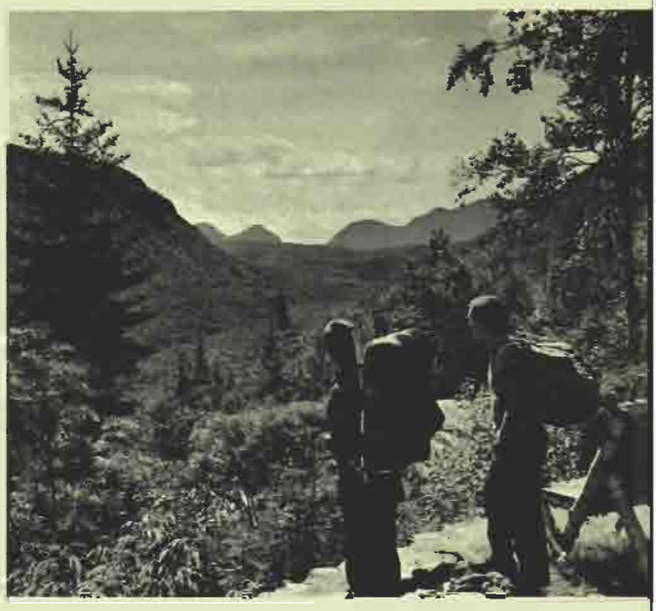
Experience has shown that National Parks and National Forests and other major recreation areas produce an important effect on surrounding localities by upgrading the quality of the general environment. National scenic trails could be expected to have a somewhat similar effect on the localities through which they pass.

The principal benefits from national scenic trails are the intangible values they provide, such as the opportunities for healthful outdoor recreation and for scenic appreciation. However, they also can result in certain tangible benefits. National scenic trails will attract hikers and other recreationists and thereby create a demand for eating places, lodging, suppliers of trail equipment and provisions, and liveries. While the economic impact on any one locality would not be large, the impact over the total distance of the trail would be considerable.

The resulting economic benefit of a national scenic trails program should be highly significant.

Spectacular views await the hiker in the Three Sisters Wilderness in Oregon. (Photo: Forest Service, No. 483585)

CHAPTER 2



"Remote for detachment, narrow for chosen company, winding for leisure, lonely for contemplation . . ." Zealand Notch from Zealand Hut on the Appalachian Trail in New Hampshire. (Photo: Dick Smith, No. 63250)

APPALACHIAN TRAIL

Historical Development

The Appalachian Trail traces its origin to an article entitled, "The Appalachian Trail, A Project in Regional Planning," published in the *Journal of the American Institute of Architects* in October 1921. Its author, Benton MacKaye, set forth the need for a trail—a sort of backbone system linking wilderness areas suitable for recreation-- that would be readily accessible to the people living in the metropolitan centers along the Atlantic seaboard.

Earlier regional trail networks along the proposed route had been constructed with the help of volunteer hiking associations. The Appalachian Mountain Club operated trails in New Hampshire which dated from 1876. The Dartmouth Outing Club trail system in New Hampshire, the Long Trail in Vermont, and the trail system in the Palisades Interstate Park in New York also served many outdoorsmen.

Encouraged by the established trail clubs, MacKaye's idea spread and took root. The following year, the first mile of the Appalachian Trail was cut and marked in Palisades Interstate Park. Fifteen years later, on August 15, 1937, the 2,000-mile trail was completed by private groups working with the Forest Service and other public agencies.

The Appalachian Trail through the White Mountain National Forest of New Hampshire and Maine attracts heavy use. A hiker at the base of the last pitch up Mount Washington singles out Mount Monroe to his companion. (Photo: Forest Service, No. 476941)

From the beginning, a major effort was carried on by volunteer groups, organizations, and individuals. In 1925, the Appalachian Trail Conference, a federation of these groups, was made a permanent body to unify and coordinate the efforts through the years. The work of many recreationists dedicated to the concept of the Appalachian Trail has made the project possible and has brought the trail to the unique position of being the longest continuous marked recreation pathway in the world.

Traversing regions of varied charm, the Appalachian Trail has won the devotion of trail enthusiasts. Harold Allen has caught their feelings in his well-known description:

> "Remote for detachment, narrow for chosen company, winding for leisure, lonely for contemplation, the Trail leads not merely north and south but upward to the body, mind and soul of man."

Present Use

Intensity of use along the Appalachian Trail varies widely. Segments which have special scenic charm or which are easily accessible to the hiker receive the greatest traffic. The summer months bring greater numbers of visitors than the other seasons.

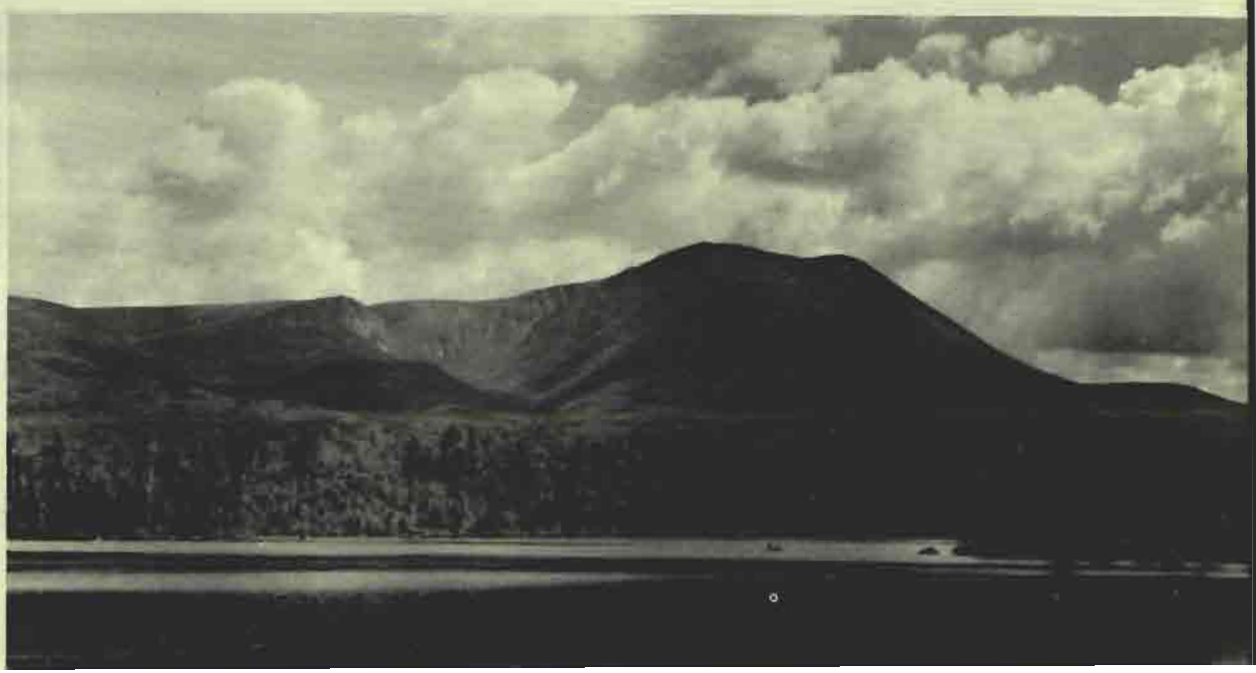
The northernmost portion of the trail, 5.2 miles in Baxter State Park in north central Maine, receives concentrated use from June through August. Thousands of outdoor enthusiasts circulate over the foot trails in the 201,000-acre State Park. The area of the White Mountain National Forest of New Hampshire and Maine also serves as a focal point of hiking activity; it has done so for more than 115 years. Accommodation in the Appalachian Mountain Club huts in these areas reached an all-time high of almost 25,000 in 1965.

The familiar " ♣ " insignia that marks the route of the Appalachian Trail is known among trail users the World over. (Photo: Appalachian Trail Conference, No. 1)

"Charlies bunion" is one of the most scenic and visited points on the Appalachian Trail in Great Smoky Mountains National Park, N.C. (Photo: Appalachian Trail Conference, No. 2)

(Photo: Appalachian Trail Conference, No. 4)

5,267-foot Mount Katahdin, Me., northern terminus of the Appalachian Trail, with Daicey Pond in the foreground. (Photo: Appalachian Trail Conference, No. 3)



The Long Trail, extending through the Green Mountains National Forest in Vermont and maintained by the Green Mountain Trail Club, has numerous trail registers which regularly show use by hundreds of people from most of the States and Canada as well as from many foreign countries.

The mountain gaps of Pennsylvania also are areas of concentrated heavy use. Hikers stream north and south along the trail from each gap. For example, a clear Sunday afternoon will find about 400 people using the trail in the vicinity of Lehigh Gap.

Every weekend hundreds from the Washington-Baltimore area use the section of the Appalachian Trail extending from Michaux State Forest in southern Pennsylvania to and through Shenandoah National Park in Virginia.

In Great Smoky Mountains National Park, a reported 177,000 visitors used the 639 miles of hiking trails in 1964. The Appalachian Trail portion alone, serving as the nucleus of the network, attracted more than 100,000 hikers.

Many miles of the trail are located close to organized camps as well as metropolitan areas. Such proximity further increases use.

The trail may see as many as one million of users visits in 1966, including hikers, campers, fishermen, hunters, nature lovers, photographers, skiers and snowshoers. Regional use patterns, overnight and day use, and closeness to metropolitan areas, accounts for the intensive use.

Location

The northern terminus of the Appalachian Trail is 5,267-foot Mount Katahdin in Baxter State Park, Maine. See Map 1. From this point the trail winds southwesterly along the shores of numerous lakes and ponds, traversing wilderness terrain.

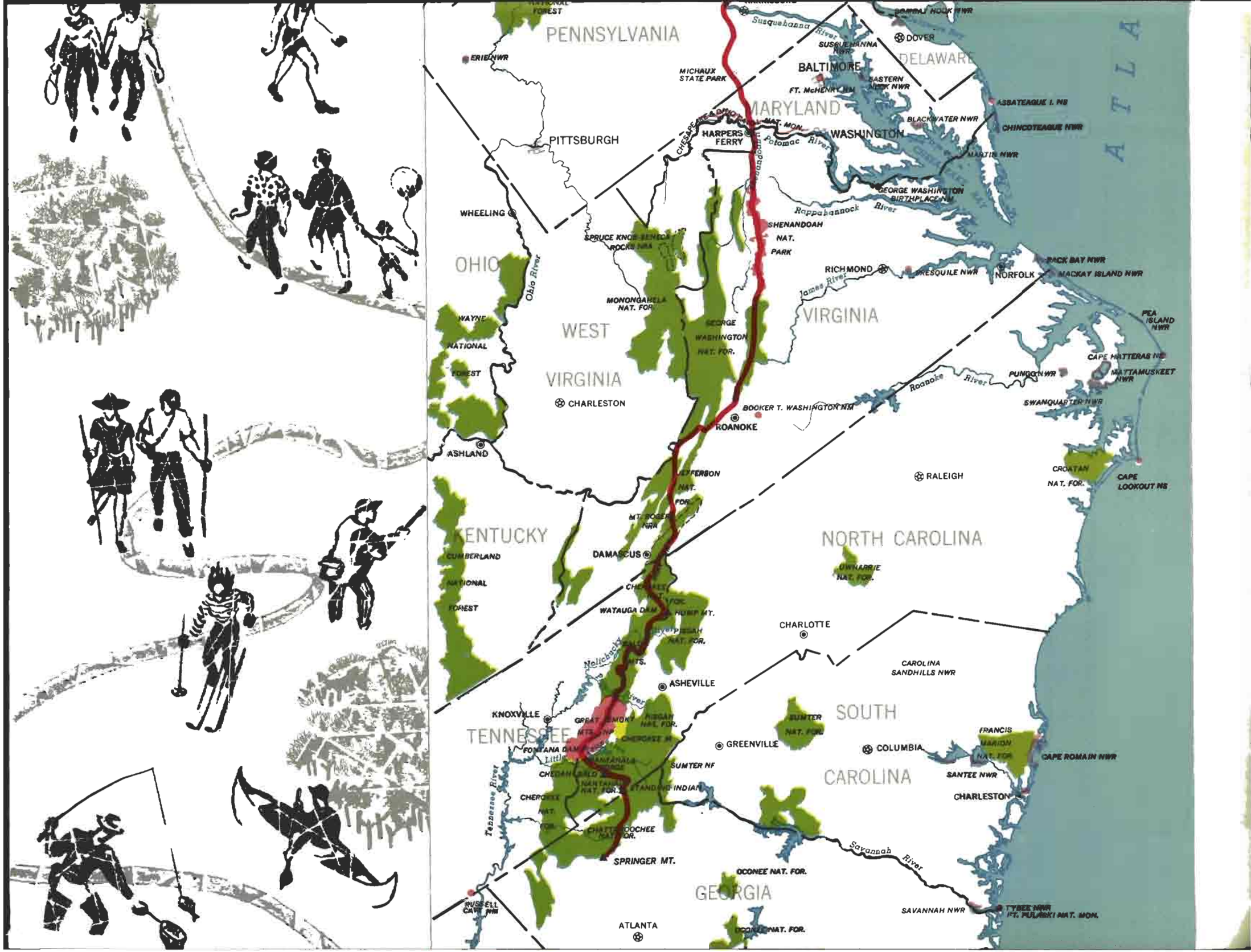
In New Hampshire, it enters the Presidential Range, famous for its peaks above timberline and the Great Gulf Wilderness. Stretching southwesterly through the White Mountain National Forest, the trail reaches areas abounding in geological interest and scenic grandeur that have attracted hikers for generations. Crossing into central Vermont, it meanders through rural and pastoral scenes, and begins a southern traverse of the Green Mountains along the route of the well-established Long Trail.

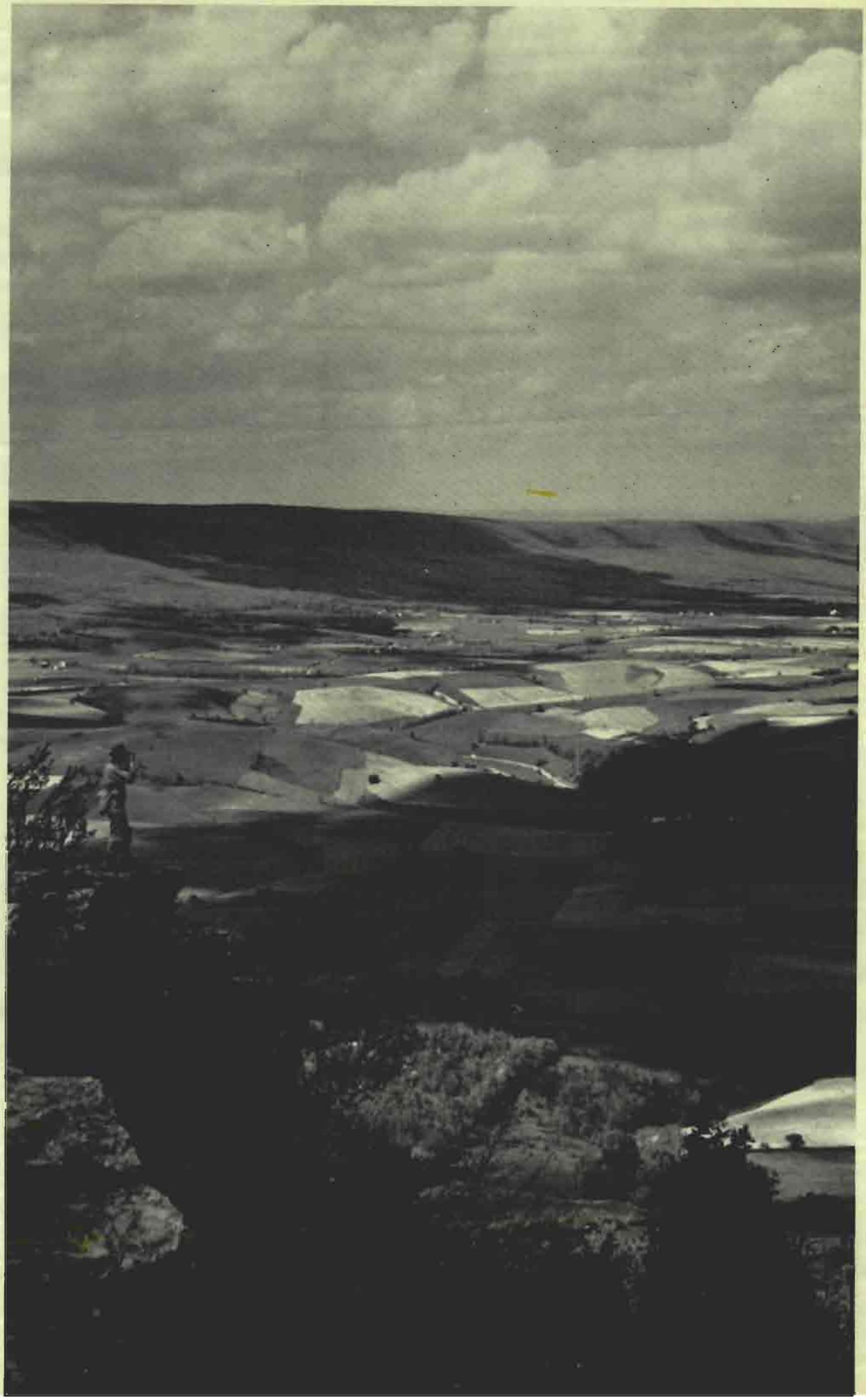
Entering Massachusetts, the trail leads over impressive Mount Greylock, 3,419 feet, into the Berkshires, and thence south into northwestern Connecticut. Today this section provides scenic vistas as well as glimpses of Colonial-Indian battlegrounds.

Crossing through the Schaghticoke Mountain area, named for an Indian reservation at its base, the trail winds into the Harlem Valley near Pawling, New York. It then passes through Clarence Fahnestock Memorial State Park and dips into the Hudson River Valley at Bear Mountain Bridge. Crossing into the long-established Palisades Interstate Park, the oldest portion of the trail works its way through the Bear Mountain and Harriman areas.

National Forest ranger points to cairns which mark the Appalachian Trail above timberline on Mount Washington, N.H. (Photo: Dick Smith, No. 59469)

N
MAP 1
APPALACHIAN TRAIL
National Park or Monument
National Forest
Indian Reservation
National Wildlife Refuge
Trail Route
CANADA
QUEBEC
MONTREAL
OTTAWA
BAXTER STATE PARK
MT. KATAHDIN
MOOSEHORN NWR
MOOSEHORN NWR
MAINE
Penobscot River
AUGUSTA
PORTLAND
WHITE
MT. PRESIDENTIAL RANGE
NAT. FOR.
NEW HAMPSHIRE
CONCORD
MANCHESTER
PARKER RIVER NWR
CAPE COD N.S.
MONOMOY NWR
BOSTON
GREAT MEADOWS NWR
MONTPELIER
BURLINGTON
VERMONT
GREEN MOUNTAIN NAT. FOR.
GREEN MOUNTAINS
MASSACHUSETTS
PROVIDENCE
R.I.
Connecticut
MT. GREYLOCK
BERKSHIRES
SPRINGFIELD
HARTFORD
River
ALBANY
Hudson River
CONNECTICUT
NEW YORK
SYRACUSE
LAKE ONTARIO
MONTEZUMA NWR
OAK ORCHARD NWR
BUFFALO
SCHAGHTICOKE I.
PAWLING
CLARENCE FAHNESTOCK MEMORIAL STATE PARK
MORTON NWR
WERTHEIM NWR
FIRE I. NS
PALISADES INTERSTATE PARK
NEW YORK
STATUE OF LIBERTY NM
KITTATINNY MTS.
GREAT SWAMP NWR
DELAWARE WATER GAP NRA
SCRANTON
LEHIGH GAP
NEW
Delaware River
TRENTON
PHILADELPHIA
OCEAN
TIC


PENNSYLVANIA
ERIE NWR
PITTSBURGH
MICHAUX STATE PARK
Susquehanna River
SUSQUEHANNA NWR
DOVER
DELAWARE
BALTIMORE
EASTERN SHORE NWR
FT. McHENRY NM
MARYLAND
CHESAPEAKE & OHIO CANAL NAT. MON.
HARPERS FERRY
WASHINGTON
Potomac River
ASSATEAGUE I. NS
BLACKWATER NWR
CHINCOTEAGUE NWR
MARTIN NWR
GEORGE WASHINGTON BIRTHPLACE NM
Rappahannock River
WHEELING
SPRUCE KNOB-SENECA ROCKS NRA
SHENANDOAH NAT. PARK
OHIO
Ohio River
RICHMOND
PRESQUILE NWR
NORFOLK
BACK BAY NWR
MACKAY ISLAND NWR
James River
MONONGAHELA NAT. FOR.
WAYNE NATIONAL FOREST
WEST VIRGINIA
GEORGE WASHINGTON NAT. FOR.
VIRGINIA
PEA ISLAND NWR
CAPE HATTERAS NS
MATTAMUSKEET NWR
PUNGO NWR
Roanoke River
SWANQUARTER NWR
CHARLESTON
BOOKER T. WASHINGTON NM
ROANOKE
ASHLAND
JEFFERSON NAT. FOR.
RALEIGH
CROATAN NAT. FOR.
CAPE LOOKOUT NS
MT. ROGERS NRA
KENTUCKY
CUMBERLAND NATIONAL FOREST
DAMASCUS
NORTH CAROLINA
UWHARRIE NAT. FOR.
WATAUGA DAM
ROAN MT.
PISGAH NAT. FOR.
CHARLOTTE
Nolichucky River
CAROLINA SANDHILLS NWR
ASHEVILLE
KNOXVILLE
GREAT SMOKY MTS. NP
PISGAH NAT. FOR.
SOUTH
SUMTER NAT. FOR.
TENNESSEE
FONTANA DAM
GREENVILLE
COLUMBIA
FRANCIS MARION NAT. FOR.
CAPE ROMAIN NWR
SUMTER NF
CHEROKEE NAT. FOR.
STANDING INDIAN
CAROLINA
SANTEE NWR
CHARLESTON
Tennessee River
CHATTAHOOCHEE NAT. FOR.
SPRINGER MT.
Savannah River
OCONEE NAT. FOR.
GEORGIA
RUSSELL CAVE NM
SAVANNAH NWR
TYBEE NWR
FT. PULASKI NAT. MON.
ATLANTA
OCONEE NAT. FOR.



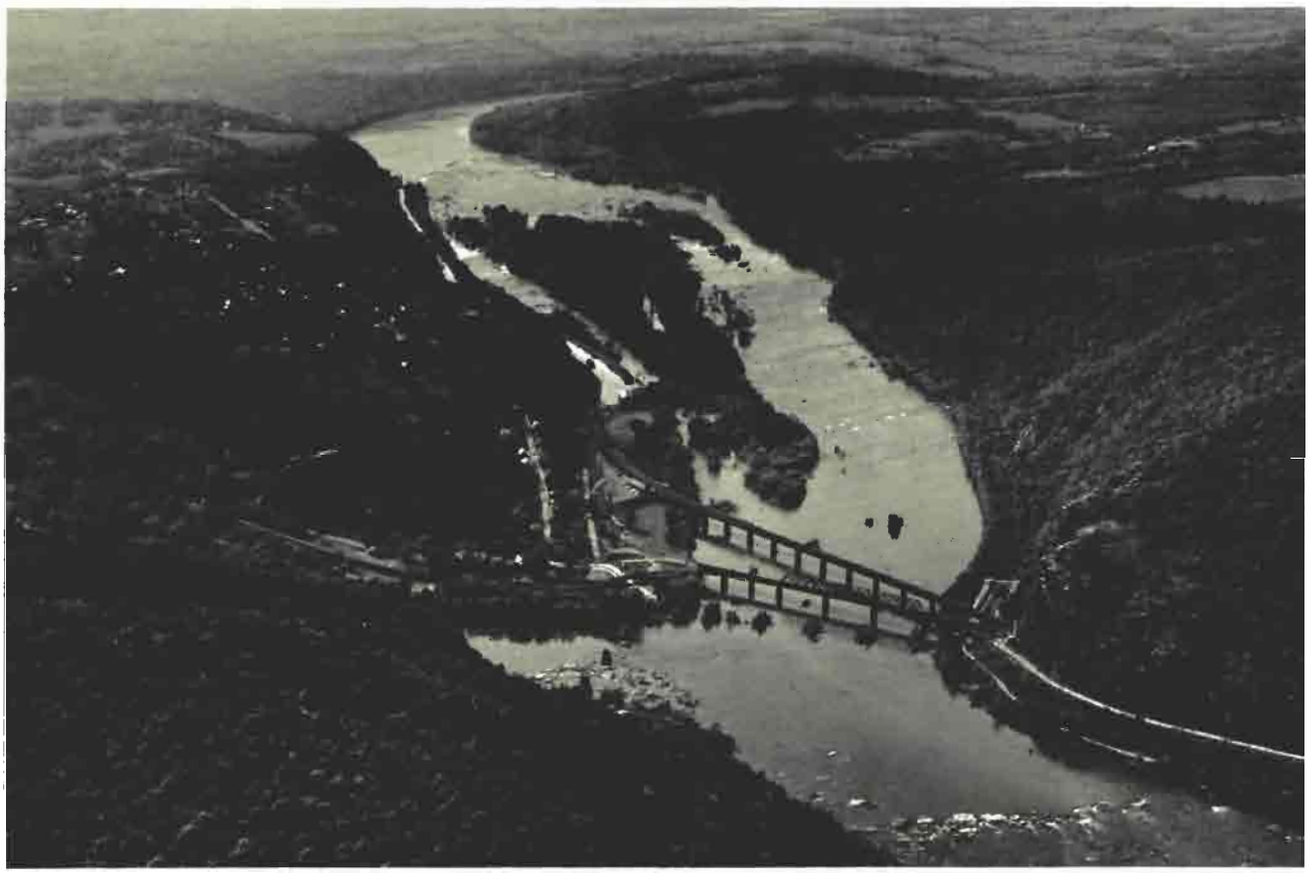
Heading south along the Kittatinny Mountains of New Jersey, the trail follows a narrow crest. At Delaware Water Gap, famous in American history, the trail crosses into Pennsylvania. Passing sites of forts dating back to the French and Indian Wars, the trail proceeds westerly to cross the Susquehenna River north of Harrisburg. Once in this Pennsylvania heartland, the trail swings south across an agricultural valley and to the southern Pennsylvania highlands.

The 37 miles of trail in Maryland hug a narrow, forested range of mountains. Crossing the Chesapeake and Ohio Canal towpath, the trail reaches historic Harpers Ferry. From there, with a short span tracing the West Virginia State line, it follows the narrow crest of the Blue Ridge in Virginia through areas of Civil War activity. Shenandoah National Park and the George Washington National Forest provide extensive networks of side trails for the hiker. The trail parallels the Shenandoah Valley and, beginning north of Roanoke, follows mountain ranges west of the valley for a considerable distance through southwestern Virginia where it crosses the newly authorized Mount Rogers National Recreation Area.

The Virginia-Tennessee line is reached near Damascus, Virginia. The trail follows the backbone of Iron Mountain down through the Cherokee National Forest to Watauga Dam, a Tennessee Valley Authority project.

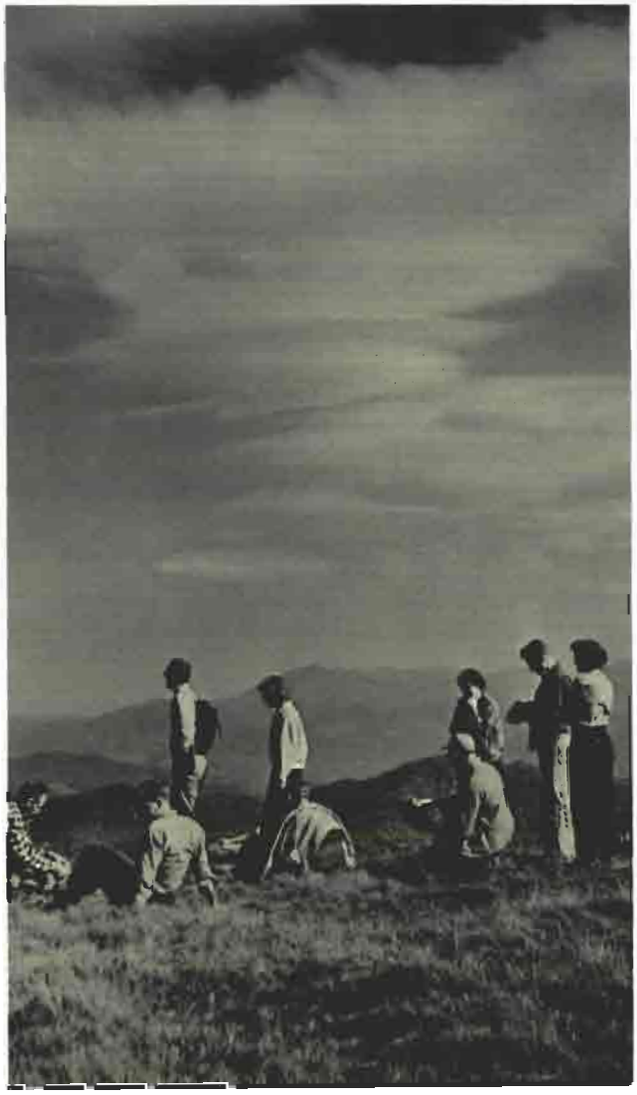
The Appalachian Trail affords trail users panoramic views of Pennsylvania farmlands. (Photo: Appalachian Trail Conference, No. 5)

View of historic Harpers Ferry from the Appalachian Trail on the crest of the Blue Ridge. (Photo: National Park Service, No. NHF 1642)



The glory of the southern Appalachians is in the floral displays. Rhododendren on Roan Mountain on the Tennessee-North Carolina border. (Photo: Appalachian Trail Conference, No. 6)

Hikers stop to catch their breath on mile high Big Bald, Tennessee-North Carolina border. (Photo: Appalachian Trail Conference, No. 7)



Leading southeast, the trail reaches the Tennessee-North Carolina State line in the vicinity of Hump Mountain, 5,587 feet in elevation. The State line is traced for many miles along ridgetops, across magnificent balds, and through extensive stands of rhododendron and laurel. From the crossing of the Nolichucky River to Big Pigeon River, the Bald Mountains afford spectacular grandstands for viewing sweeping panoramas at numerous points.

The trail passes through Great Smoky Mountains National Park for 70 miles. As it leaves the Park, the trail drops 2,000 feet down to the Little Tennessee River at Fontana Dam, enters the Nantahala National Forest, and affords a breathtaking vista of the southern Appalachians at Cheoah Bald.

For a few miles it parallels the dramatic Nantahala Gorge. Here the Appalachian Trail again dons a wilderness cloak to traverse the Nantahala crest, which includes peaks in excess of 5,000 feet elevation. Reaching a monarch of the southern Appalachian region, 5,499-foot Standing Indian Mountain, it offers views of the deeply entrenched Tallulah Gorge. Beyond the Georgia State line, the quality of remoteness continues as the trail swings along the majestic swag of the Blue Ridge in the Chattahoochee National Forest. Heading southwesterly the great trail measures out its last 70 miles to its southern terminus at Springer Mountain, Georgia.

The 2,000-mile route is long and varied and its character changes often. There are alpine tundra in New England; pastoral scenes of yesteryear in Vermont, Pennsylvania, and Virginia; areas containing timber for mills; lands that have contributed minerals since the birth of the Nation; flora ranging from the Greenland sandwort of the north to the vivid flame azalea of the south; fauna from the bull moose to the short-tailed shrew. The Appalachian Trail invites the traveler to come humbly on foot to see.

(Photo: Forest Service, No. 494683)

Springer Mountain, Ga., the southern terminus of the Appalachian Trail. (Photo: Appalachian Trail Conference, No. 8)

The Appalachian Trail affords unique opportunities to view wildlife and study natural history. (Photo: Frank H. Wood)

Land Ownership

The Appalachian Trail passes through 14 States and over lands in Federal, State, and private ownership (see Table 1). Forty-three percent of the total mileage, 866 miles, is on private lands; 452 miles or 23 percent is on State lands; and 682 miles or 34 percent is on Federal lands. Eight National Forests contain 507 miles of the trail, 172 miles ore in National Parks, and three miles are on TVA lands.

The ownership varies from State to State. Through much of New England, the trail crosses private lands. Especially in Maine, virtually all of the 280 miles lie on tracts owned by large timber companies. In Pennsylvania, State lands predominate. From Virginia south, the ownership is largely Federal.

On State lands the trail passes through a variety of areas, including wildlife refuges, parks, forests, water districts, and highway rights-of-way. In some instances conflicting management practices interfere with trail interests. For example, some States prohibit the building of needed shelters on State game lands, or permit indiscriminate mining or timber harvesting.

Table 1. Land ownership along the Appalachian Trail, by States, in miles

State	Federal	State	Private	Total
Maine	0	20	260	280
New Hampshire	71	9	74	154
Vermont	26	19	89	134
Massachusetts	0	55	28	83
Connecticut	0	24	32	56
New York-New Jersey	0	94	65	159
Pennsylvania	0	154	60	214
Maryland	0	7	30	37
West Virginia-Virginia	254	62	146	462
Tennessee-North Carolina	255	8	80	343
Georgia	76	0	2	78
Total	682	452	866	2,000

Administrative Responsibility

Responsibility for the Appalachian Trail is divided at present largely among the Appalachian Trail Conference, the Forest Service, and the National Park Service. Where the trail crosses non-Federal lands, the Appalachian Trail Conference, in cooperation with the landowners, share responsibility for construction, maintenance, and operation through its individual clubs. Within National Forests, the Forest Service and the Appalachian Trail Conference share responsibility for construction and maintenance. Within National Parks, virtually full responsibility is borne by the National Park Service, except for marking.

The Appalachian Trailway Agreement signed by the U.S. Forest Service and the National Park Service on October 15, 1938, was perhaps the most important step taken by the Appalachian Trail Conference in protecting the Appalachian Trail for the use of future generations. The Federal agencies agreed to designate a zone with a minimum width of one mile on each side of the Appalachian Trail within their respective jurisdictions, except where the trail descends into the main valleys. Within the zone no new paralleling routes for the passage of motorized transportation or developments which, in the judgment of the administering agency, are incompatible, will be constructed. No cutting primarily for timber production will take place within 200 feet of the trail. Agreements signed by all the States through which the trail passes allow for a one-fourth mile zone on each side of the trail. These contractual agreements do not have the strength of Federal law and it has not always been possible for the signatory entities to adhere strictly to them.

Along many privately owned segments of the trail, the trail clubs have reached only verbal agreements with the landowners.

Through the years, member clubs of the Appalachian Trail Conference have shouldered responsibility for many miles of trail location, facility development, and maintenance. Usually they have been able to surmount most of the problems that have beset the trail. Often member clubs have relocated segments away from the path of developments. The demands of an expanding population, however, have so multiplied in number and complexity in recent years that long stretches of the trail are seriously threatened with incompatible encroachments. These problems will increase.

Physical labor in maintaining the trail is a pleasure and a source of personal pride to the members of the Appalachian Trail Conference. (Photo: Appalachian Trail Conference, No. 9)

The Appalachian Trail Conference is as viable as ever. However, the problems now being faced are the disappearance of suitable and available wild lands and a growing conflict of uses near the existing route. These are problems which the Conference has insufficient means to combat. If the trail is to survive, large-scale land acquisition and coordinated management practices are required. It is apparent that public agencies must begin to assume a larger share of the burden of protection.

For maximum long-range protection of the Appalachian Trail, public agencies should be able to exercise adequate controls along the entire length. At present, the integrity of hundreds of miles of the trail rests solely with private landowners. Control should rest instead with the Secretary of the Interior, the Secretary of Agriculture, and responsible State and local agencies.

Bills were introduced in the 89th Congress to provide for a Nationwide System of Trails, including the establishment and administration of the Appalachian Trail.

Wherever possible, operation and maintenance should be shared among the Federal, State, and local agencies which manage lands the trail crosses, and cooperating private groups and individuals. Those segments not now in public ownership should be given some form of protective public control and become the responsibility of the public agencies which acquire them.

A special problem exists with respect to scenic parkways. The Blue Ridge Parkway, built in Virginia subsequent to the trail's original development, forced extensive relocations of the trail. Other parkways have been proposed from time to time close to the trail. The needs of parkway and trails both are legitimate. However, too close proximity of parkways tend to degrade trail's wilderness values and diminish its intended sense of remoteness from civilization. Wherever possible, parkways and trails should be at least a mile apart. Preferably they should be located on separate ridges so that they can enjoy the full latitude of placement and provide widest views without interfering with fragile trail values.

Within the State of Maine, the trailway is about 80 percent owned by a few, large, pulp and paper companies. Control of these trail lands there should be assured by agreements entered into with an appropriate State agency and the Maine Appalachian Trail Club. The Maine State Forest Service now provides fire protection for woodland owners and also maintains many public recreation areas throughout the State. Because of its continuing relationship with the large landowners, the State Forest Service probably would be the best agency to work out adequate safeguards with the landowners for the protection and perpetuation of the trail route.

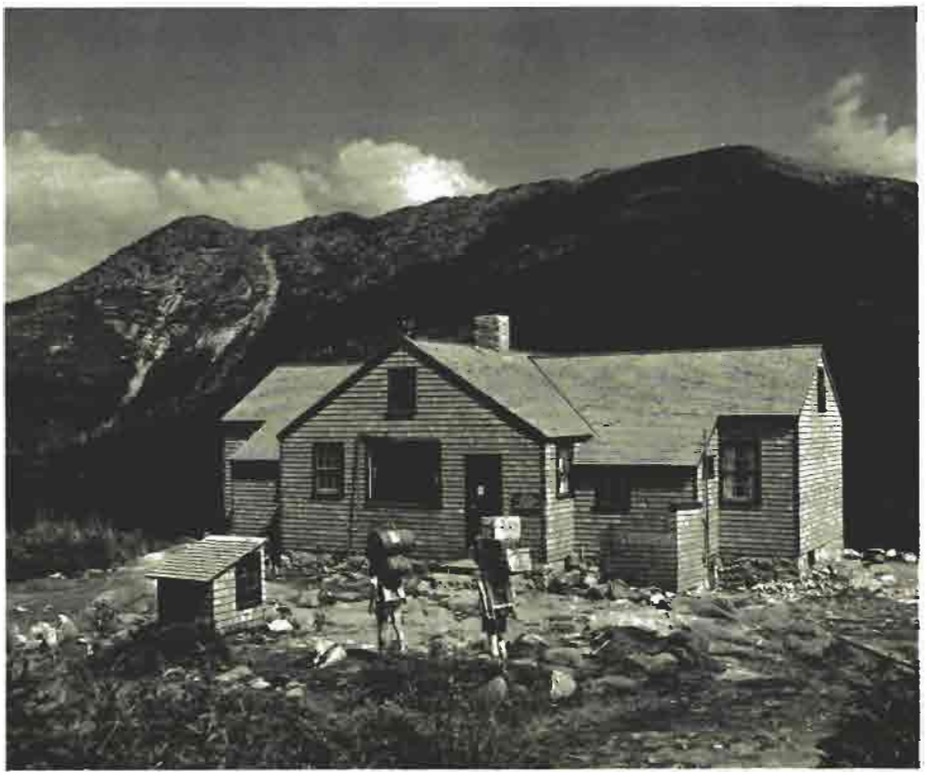
In New Hampshire, Vermont, Massachusetts, Connecticut, and New York, all lands presently in private ownership along the trail should be acquired in fee simple or through purchase of easements by the States, or by a Federal agency, or the uses controlled by appropriate agreements. Much of this mileage lies close to the Nation's largest population concentration where it is susceptible to incompatible development.

New Jersey already has expressed an interest in using its Green Acres Program to secure necessary easements along the Appalachian Trail route. Recent Congressional authorization of the Delaware Water Gap National Recreation Area will permit Federal acquisition of Appalachian Trail lands in that portion of New Jersey.

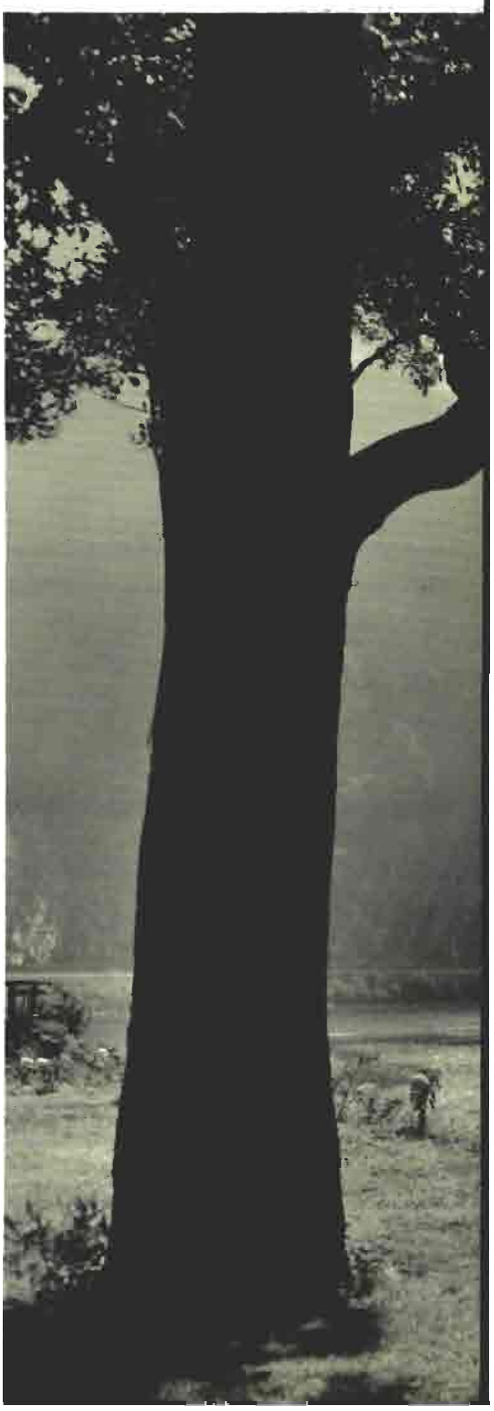
In Pennsylvania, 154 miles of the trail already are in State ownership. The State has indicated that it hopes to acquire the remaining 60 miles now in private hands. Federal protection in the Delaware Water Gap National Recreation Area will complete public control of the trail in Pennsylvania.

In Maryland, a major portion of the trail's 37 miles is privately owned. A program of State acquisition in fee simple or through purchase of easements or in which agreements are secured with the private owners is encouraged.

Forty miles of trail over privately owned land in northern Virginia are under immediate threat of urban development, and need to be safeguarded. The State should take the lead. An additional 106 miles of trail over private lands also should be placed in either Federal or State protection. Because much of this private land lies within the proclaimed boundaries of the George Washington and Jefferson National Forests, the Forest Service should acquire it through exercise of its existing authority. Control of the balance should be obtained by the State.



Back-packing supplies to Greenleaf Hut on the Appalachian Trail in New Hampshire. (Photo: Dick Smith, No. 60578)



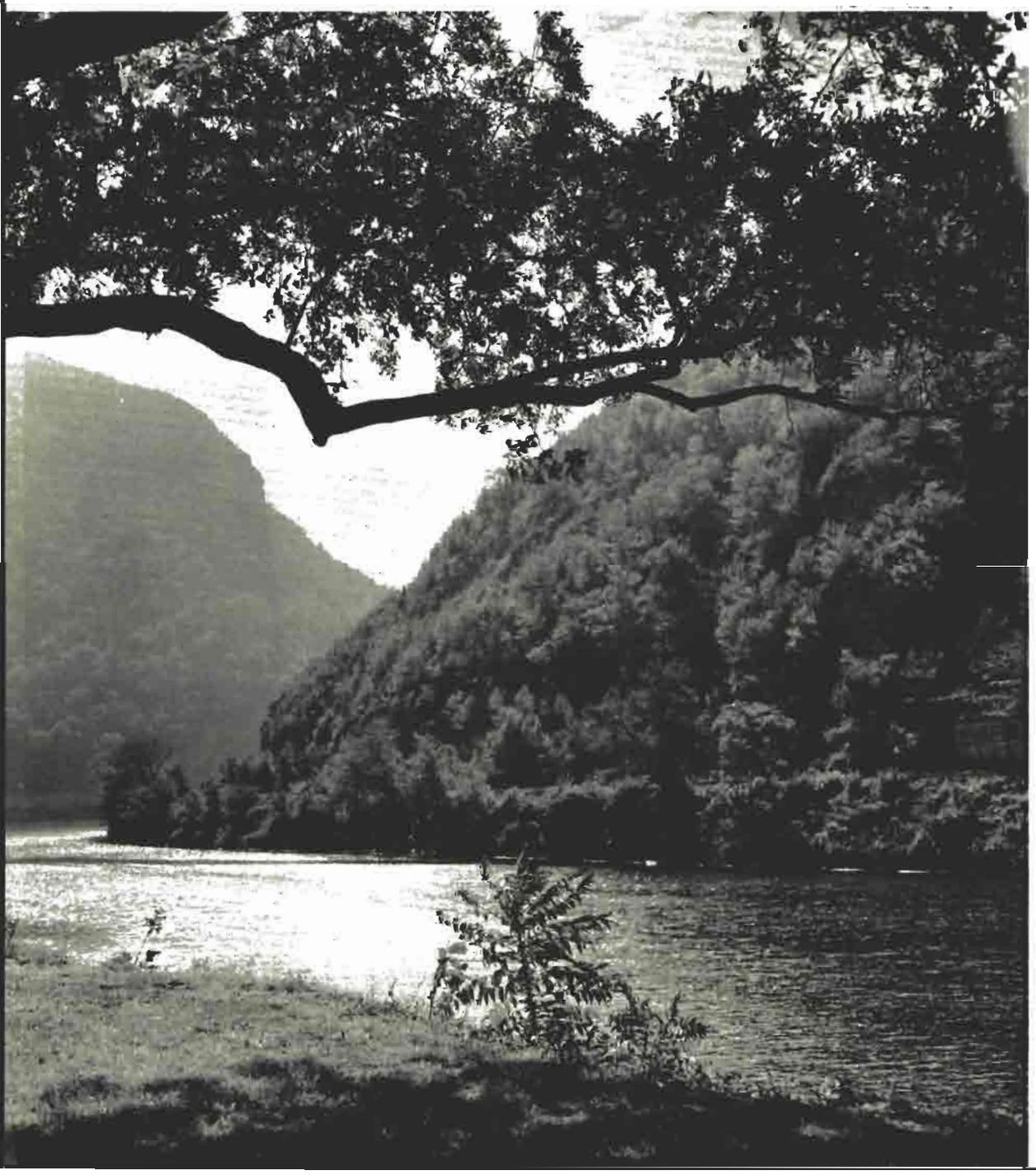
Various commercial conflicts with trail purposes and values at points along the trail in Tennessee and North Carolina require attention. A stepped-up program of Federal acquisition, coupled with efforts by both States, is needed. Other sections in western North Carolina lying within the Nantahala National Forest, though less critically threatened at this time, should be considered and Federal acquisition.

Private land holdings affecting the trail in the State of Georgia are negligible. With planned relocation, the entire mileage in Georgia will be on National Forest lands.

Many States along the trail are empowered to acquire land for recreational purposes. In those which have no such authority, enabling legislation is needed.

The longtime personal stewardship by members of the Appalachian Trail Conference should be continued and expanded. Physical labor on the trail is a pleasure and a source of personal pride for the membership. Many members have a personal interest and close working knowledge of the trail, and are familiar with its problems. The Appalachian Trail Conference itself is a source of information about the trail to users. It is encouraged to continue these services.

Hikers enjoying the serenity of the Appalachian Trail through the Jefferson National Forest on Walker Mountain, Va. (Photo: Forest Service, No. 505772)



The Appalachian Trail passes through the historic Delaware Water Gap in New Jersey. (Photo: National Park Service, No. 7041-8)

So that all public and private interests mesh in future Appalachian Trail development efforts, an advisory council should be established. This should be composed of representatives of Federal agencies administering lands crossed by the trail, the 14 States, the Appalachian Trail Conference, and other organizations having an established and recognized interest in the trail. This council, meeting regularly, should advise and assist the Secretary of the Interior, promote needed unity of purpose, coordinate efforts, and assure continuity of action.

Construction Standards

The Appalachian Trail Conference has established basic standards for maintenance, marking, and construction of the trail, and for overnight facilities. These standards are intended to serve only as guidelines. Because of the tremendous diversity in topography and character of the trail, strict standardization is impractical.

An overall cleared trail width of four feet is desirable. Attention should be given to a reasonable evenness of terrain, the occasional removal of rocks, roots, and excessive vegetation, and the control of water and erosion. The appearance of a "worked" footway should be avoided, however. The degree of slope should harmonize with the topography, varying with local practices and established routes. Stream crossings should be handled unobtrusively. Bridges may be desirable where use is heavy, but in remote or less heavily used areas natural crossings should suffice.

The spacing and location of shelters and other accommodations needs to be re-evaluated with the increase in demand along the Appalachian Trail. Alternatives to the present frequency and location should be studied. The present spacing of seven to eight miles between shelters caters to family use. It allows hardy hiker to "leap-frog." With an increase in demand, smaller and more closely spaced units may meet the needs better than larger units at less frequent intervals. Shelters should not be located adjacent to roadways in order to discourage use by non-hikers.

In order to avoid excessive wear and disturbance of the trailside area by camping groups where use is heavy, it may be desirable to locate shelters away from the immediate area of the trail, but near water.

Along parts of the trail, consideration should be given to developing "core" facilities for large groups, including water, sanitary installations, and fire pits, with campsites nearby. Such group accommodations should be located a suitable distance off the main trail.

Increased attention should be given to the need for adequate sanitary facilities.

Trail Use

Recreation use of the Appalachian Trail includes hiking, climbing, camping, hunting, fishing, nature study, photography, picnicking, assisting with the maintenance of the trail, and other leisure time activities that is available to individuals traveling on foot. The key point is *foot* travel. The Appalachian Trail was created for the recreationist who enjoys activities associated with walking. The use of motor vehicles is not compatible with the purposes of the trail.

Non-recreational activities, including logging, agriculture, mining, and military training near certain portions of the trail may be accommodated by requiring safeguards which protect against any significant loss of trail values.

Feeder and Access Trails

Several segments of the Appalachian Trail have extensive systems of feeder or access trails. Trail webs are provided in the vicinity of Mount Katahdin in Baxter State Park in Maine, along the Long Trail in Vermont, and in the Palisades Interstate Park in New York. In Pennsylvania, the Horse-Shoe Trail offers numerous attractive sections for the foot traveler as well as hostels for overnight lodging developed in cooperation with the American Youth Hostels.

The Potomac Appalachian Trail Club maintains an elaborate trail system in and around Washington, D.C. Many of these lead from Shenandoah National Park and the George Washington and Monongahela National Forests to the Appalachian Trail. Great Smoky Mountains National Park is famous for its more than 639 miles of trails, many of which tie into the Appalachian Trail.

There are unlimited opportunities for locating new side trails as needs arise. The number and location of these should be controlled so that they will enhance the overall system and provide access thereto without diminishing the quality of remoteness sought by trail users.

Costs

Acquisition of fee simple titles or through purchase of easements on the 866 miles of private land along the trail by Federal and State governments would be major costs in an Appalachian Trail project. The securing of these 866 miles should be given first priority.

Trail lands to be acquired in fee simple should average not less than 25 acres per mile. This would provide a publicly owned trailway corridor averaging 100 feet on each side of the footpath, with actual width varying according to circumstances. Where the state of development of adjacent lands will permit, or where special wild land and wilderness values exist, a wider buffer zone protected against incompatible developments by scenic easements or agreements should be provided, with width in specific areas depending upon availability of land, costs, and the requirements necessary to safeguard trail values. Within the National Forests, the area to be designated for control for trail purposes should in general be no less in width than the two miles provided for under the Appalachian Trailway Agreement of 1938. Similarly provision should continue to be made on State-owned lands for a width of one-half mile.

Fee simple donations of land of scenic easements could reduce appreciably the costs of acquisition. Substantial savings also could be achieved through the continued services of volunteers in trail maintenance. See Table 2 for a summary of costs.

Table 2. Summary of costs, Appalachian Trail (10-year period)

Acquisition of lands or interests in lands		
Fee	$2,165,000	
Easement	2,500,000	
Subtotal		$4,665,000
Construction		
New trail	525,000	
Rebuilt trail	750,000	
Shelters	500,000	
Signs and markers	225,000	
Subtotal		2,000,000
Operation and Maintenance		2,500,000
10-year total		**$9,165,000**

The Appalachian Trail follows the route of the Long Trail for 150 miles in Vermont before veering east at Sherburne Pass. The scene is Little Rock Pond in Vermont, as viewed from the Long Trail. (Photo: Forest Service, No. 501424)

Shelters such as this are spaced at intervals along the Appalachian Trail. They serve as welcomed havens for many a weary hiker. (Photo: Forest Service, No. 494685)

Financing

Sources of funds for the trail have been as varied as its ownership. Private support of the trail has been provided in the form of money, time, and labor donated by individual members and by member clubs and organizations of the Appalachian Trail Conference. Each person or club assigned the responsibility for a segment has striven to meet the needs of the trail in that segment. There is no accurate way to calculate the dollar value of goods and services volunteered by the Conference membership in developing and maintaining the trail and its facilities through the years. Obviously the amount has been substantial. The Conference itself provides no funds for trail construction and maintenance. Its moneys, which come from dues, gifts, and bequests, are channeled primarily into the publication of information and related operating expense. Its administrative and secretarial staff for the most part have donated their time.

Portions of the trail in National Parks and National Forests have been developed and operated with general funds appropriated by Congress; there have been no special appropriations earmarked for the trail. The National Park Service and Forest Service are authorized to acquire lands for recreational purposes within present boundaries of authorized projects under the Land and Water Conservation Fund Act, subject to Congressional appropriations. At the earliest possible date these bureaus should acquire lands needed for the trail. Enabling legislation would be needed and moneys should be appropriated for necessary land acquisition and development outside these boundaries.

States and their political subdivisions also depend upon their own general appropriations. In the past, State and local governments have made no large-scale expenditure of funds for the trail. A number of States now indicate that they plan to allocate funds for this purpose. The others are encouraged to follow suit.

States and local governments are eligible for financial assistance from the Land and Water Conservation Fund on a 50 percent matching basis. States should be urged to include the trail in their Statewide Comprehensive Outdoor Recreation Plan, and to seek matching funds for needed planning, acquisition, and development projects.

Where the trail passes through or near urban areas, cities and counties should explore the possibility of obtaining funds for trail maintenance or development through the Open-Space Program of the Department of Housing and Urban Development.

Individuals, foundations, and corporations should be encouraged to provide increased financial support for the trail.

With the coming of public ownership by many Federal, State, and local agencies, as proposed, the trail will continue to be funded, segment by segment. The total financial picture therefore should be reviewed regularly by the proposed trail council to insure that there is adequate financing along all parts of the trail.

Impact on Localities

The Appalachian Trail has had a major impact on many localities. Its impact will grow as its reputation and use increase. Representing the best of a particular type of recreational resource, the trail helps to sustain a high quality environment and makes nearby localities more attractive places in which to live and work.

In areas beyond the trail zone, private enterprise could develop many varied supporting services to accommodate trail users. Lodging and meals, craft and hobby shops, centers for rental and purchase of recreational equipment and supplies, instruction in the outdoor skills popular in the area, and guided trips emphasizing history and local color are a few of the services that could be provided away from the trail. In many areas, trail travelers might prefer to walk during the day and leave the footpath to find board and bed in nearby towns at night. Frequently, some members of a family or party hike along the trail while others wait in the general area. Activities geared to the non-walkers could prove lucrative.

Use of the Appalachian Trail is not necessarily limited to warm weather. With proper encouragement, off-season use could be increased substantially.

Within the portion of the trail zone which would be protected by scenic easements, certain uses compatible with trail values could continue, leaving the land in production and on local tax rolls. Grazing, for instance, could normally be continued on nearly all trail lands where it has heretofore been practiced. Logging, while being prohibited within 200 feet of the trail in accordance with long-established practice on Federal and State lands, might be practiced in most places within the buffer zone protected by scenic easements.

Winter use of the Appalachian Trail is popular. Glastenbury Mountain, Vt. in late November. (Photo: Appalachian Trail Conference, No. 10)

CHAPTER 3

PROPOSED NATIONAL SCENIC TRAILS

In addition to the Appalachian Trail, three routes analyzed during the study appear to merit further consideration for national scenic trail status. One is in existence—the Pacific Crest Trail in Washington, Oregon, and California. The other two—a Potomac Heritage Trail in the East and a Continental Divide Trail following the Rocky Mountains—are only ideas, although segments of trail stretch along portions of their proposed routes.

Formal designation by the Congress as a national scenic trail would serve to upgrade and perpetuate the Pacific Crest Trail. Like designation also would provide for the full development and permanent protection of the Potomac Heritage Trail and Continental Divide Trail.

Pacific Crest Trail

In the Cascade Mountains of Washington and Oregon and the Sierra Nevada of California is found some of the earth's most sublime scenery. Beloved by the famous naturalist John Muir, they include a generous share of the continent's most verdant forests, tallest and oldest trees, highest mountains, and most breathtaking waterfalls. The unique golden trout and the almost extinct giant condor call them home. The great California grizzly once roamed their high slopes. The mountains still abound with deer, black bear, and other interesting varieties of game. For the recreationist they offer a lifetime of inspiration and adventure with a stimulating new experience over every rise and around every bend.

As early as 1920, the Forest Service began surveys of trails along sections of the Cascade and Sierra Nevada ranges. The idea of an esthetically pleasing route for foot and horseback travelers extending the full length of the crest from Canada to Mexico was conceived by Clinton C. Clark of Pasadena, California, and first proposed in 1932. Soon after, the Pacific Crest Trail Conference was organized to seek recognition of the concept and promote actual construction.

By 1937, the Pacific Crest Trail was continuously passable for 2,313 miles, from border to border. The portion in Washington is known as the Cascade Crest Trail. Through Oregon's Cascades, the trail is known as the Oregon Skyline Trail. The several segments in California are known as the Lava Crest Trail, the Tahoe-Yosemite Trail, the John Muir Trail, the Sierra Trail, and the Desert Crest Trail.

The trail includes 457 miles in the State of Washington, 406 miles in the State of Oregon, and 1,450 miles in the State of California. Its northern end is at International Monument 78 on the Canadian-United States border. On the Mexican border, the trail ends at International Boundary Marker 251.

Location

In Washington, the trail extends south along the high ridges of the Cascade Mountains, threading through many famous mountain passes and the Okanogan, Mount Baker, Wenatchee, Snoqualmie, and Gifford Pinchot National Forests. See Map 2. Spectacular scenery characterizes the trail in the State, notably in the North Cascade Primitive Area, Glacier Peak Wilderness, Mount Rainier National Park, Goat Rocks Wilderness, and Mount Adams Wilderness. Outstanding are the high, barren ridges with unrestricted views of mountain ranges, snow-covered peaks, and glaciers. Alpine meadows with clear springs and brooks, small lakes, and rushing rivers are frequent. Mountain goat, elk, deer, bear, rock rabbit, marmot, grouse, and ptarmigan add interest. At lower altitudes, dense stands of Douglas fir predominate on the western slopes. Abandoned mines, old frontier towns, and other relics of pioneer days still remain.

At the Columbia River, the Pacific Crest Trail crosses from Washington to Oregon on the Bridge of the Gods. In Oregon, as in Washington, the trail follows the ridges of the Cascades much of the distance and stays largely on Federal lands. The trail successively crosses the Mount Hood, Willamette, Deschutes, Umpqua, Rogue River, and Winema National Forests. Glacial moraines and icefields are visible at Mount Hood where the trail passes the famous Timberline Lodge and ski area. Farther on, the trail leads through the Mount Jefferson Primitive Area, the Mount Washington Wilderness with its lava flows and basalt columns, the striking Three Sisters Wilderness, and the Diamond Peak Wilderness. A section of the trail crosses Crater Lake National Park, passing the uniquely beautiful lake. Enroute are the Pumice Desert, lodgepole and yellow pine forests, and numerous waters that afford superior trout fishing.

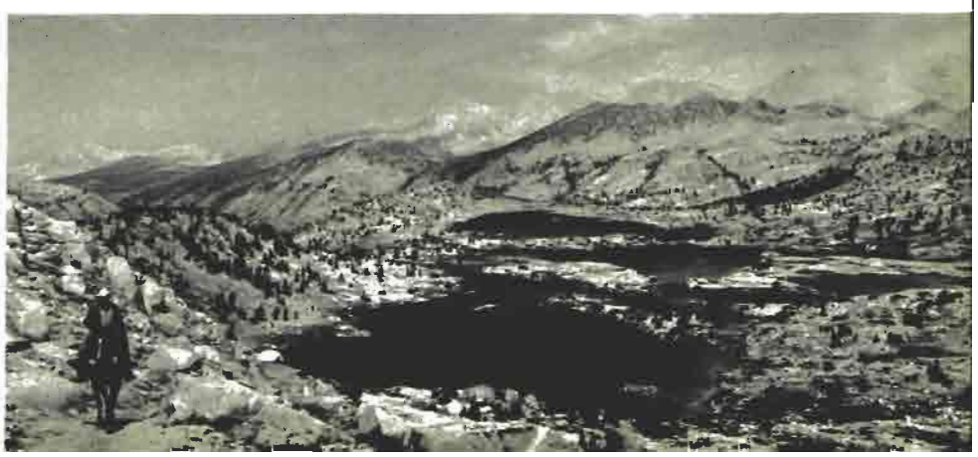
The California portion of the trail generally follows the highest ridges of the Sierra Nevada. Fourteen National Forests are crossed, beginning with the Klamath National Forest on the California-Oregon State line. An almost endless number of exhilarating experiences await travelers as the trail leads successively through the Marble Mountain Wilderness, Thousand Lakes Wilderness, Lassen Volcanic National Park, Donner Pass, Yosemite National Park, Minarets Wilderness, Devils Postpile National Monument, Kings Canyon National Park, Sequoia National Park, and Devils Canyon-Bear Canyon Primitive Area. The trail passes through several State parks, crosses the San Andreas Fault, and after leaving the Cleveland National Forest finally terminates at the Mexican border some 40 miles southeast of San Diego.

Land Ownership

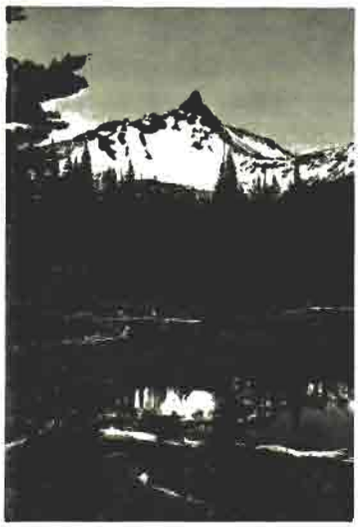
Eighty percent of the trail is on Federal lands, including 25 National Forests and six National Parks (see Table 3). The relatively small amount of private mileage consists largely of short stretches of private lands lying within or between authorized boundaries of the large National Forests and National Parks. Unavoidably, the trail runs through a number of areas in uses which don't conform with trail purposes. While posing problems, these areas do not now seriously impair development and use of the trail for recreation.

Table 3. Land ownership along the Pacific Crest Trail, by States, in miles

State	Federal	State	Private	Total
Washington	434	1	22	457
Oregon	386	0	20	406
California	1,022	26	402	1,450
Total	1,842	27	444	2,313

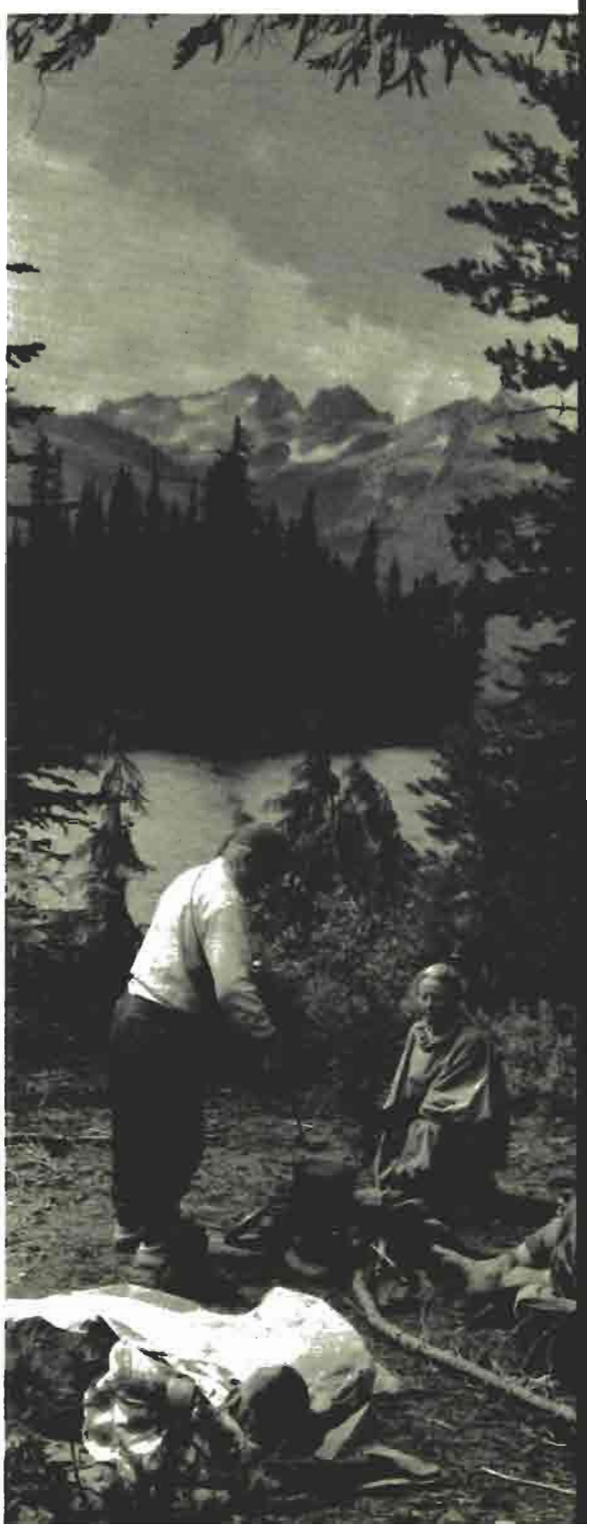


Riding the Pacific Crest Trail (John Muir Trail section) at Seldon Pass in the Sierra National Forest, Calif. (Photo: Forest Service, No. 485313)



Mount Washington from Cold Water Springs along the Oregon Skyline Trail section of the Pacific Crest Trail in Willamette National Forest. (Photo: Forest Service, No. 500713)

Mount Rainier, Wash., one of the many attractions along the Pacific Crest Trail. (Photo: John F. Warth, No. 1)



Hikers enjoy a welcomed break at Waptus Lake, Wash. on the Cascade Crest Trail portion of the Pacific Crest Trail. (Photo: John F. Warth, No. 2)

Girl Scout patrol back-packing in the Three Sisters Wilderness Area of Oregon. (Photo: Forest Service, No. 497277)

The Oregon Skyline Trail section of the Pacific Crest Trail passes near uniquely beautiful Crater Lake. (Photo: National Park Service, No. 1053)

Lassen Peak in Lassen Volcanic National Park, Calif. (Photo: National Park Service, No. PC-1)

Yosemite Valley, Yosemite National Park, Calif., another of the major attractions along the Pacific Crest Trail. (Photo: National Park Service, No. WA-1)

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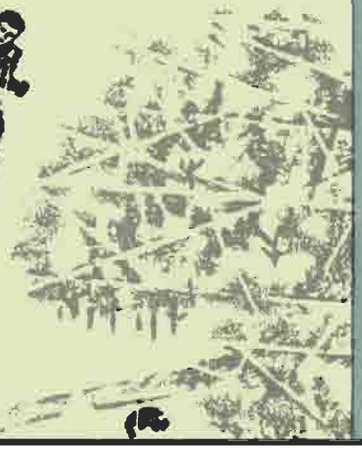
MAP 2

PACIFIC COAST TRAIL

- National Park or Monument
- National Forest
- Indian Reservation
- National Wildlife Refuge
- Public Lands
- Trail Route



CANADA

WASHINGTON

OREGON

IDAHO

PACIFIC OCEAN

MATIA ISLAND NWR
FLATTERY ROCKS NWR
OZETTE IND. RES.
OLYMPIC NAT. PARK
QUILEUTE I.R.
HOH IND. RES.
QUINAULT IND. RES.
COPALIS NWR
SHOALWATER I.R.
WILLAPA NWR
THREE ARCH ROCKS NWR
OREGON ISLANDS NWR
EUREKA
HOOPA VALLEY IND. RES.
SIX RIVERS NAT. FOREST
TRINITY NAT. FOREST
SHASTA NAT. FOREST
KLAMATH NAT. FOR.
MODOC NAT. FOR.
LASSEN VOLCANIC NAT. PARK
THOUSAND LAKES WILDERNESS
LASSEN NAT. FOREST
SIX RIVERS NAT. FOREST
SISKIYOU NAT. FOREST
UMPQUA NAT. FOREST
DIAMOND PEAK WILDERNESS
MT. WASHINGTON WILDERNESS
MT. JEFFERSON PRIMITIVE AREA
WILLAMETTE NAT. FOREST
DESCHUTES NAT. FOR.
THREE SISTERS WILDERNESS
MT. HOOD NATIONAL FOREST
MT. ADAMS WILDERNESS
GIFFORD PINCHOT NATIONAL FOREST
GOAT ROCKS WILDERNESS
MT. RAINIER NAT. PARK
SNOQUALMIE N.F.
OKANOGAN NATIONAL FOREST
COLVILLE NATIONAL FOREST
GLACIER PEAK WILDERNESS
WENATCHEE NATIONAL FOREST
OLYMPIC NATIONAL PARK
OLYMPIC NATIONAL FOREST
OLYMPIC NAT. FOR.
MOUNT BAKER NATIONAL FOREST
NORTH CASCADES PRIMITIVE AREA
MT. BAKER-SNOQUALMIE NAT. FOR.
SAN JUAN ISLANDS NAT. MON.
MATIA ISLAND NWR
JONES ISLAND NWR
SWINOMISH I.R.
LOWER ELWHA I.R.
SKAGIT ISLAND NWR
DUNGENESS NWR
TULALIP I.R.
PORT GAMBLE I.R.
PORT MADISON I.R.
SQUAXON ISLAND I.R.
SKOKOMISH I.R.
PUYALLUP I.R.
MUCKLESHOOT I.R.
NISQUALLY I.R.
CHEHALIS I.R.
SPOKANE IND. RES.
COLVILLE INDIAN RESERVATION
TURNBULL NWR
COLUMBIA NWR
YAKIMA INDIAN RESERVATION
McNARY NWR
WALLA WALLA
COLD SPRINGS NWR
MC KAY CREEK NWR
PENDLETON
UMATILLA IND. RES.
UMATILLA NATIONAL FOREST
WALLOWA WHITMAN NAT. FOREST
WARM SPRINGS INDIAN RESERVATION
THE DALLES UNIT I.R.
CELILO VILLAGE I.R.
OCHOCO NAT. FOR.
OCHOCO N.F.
MALHEUR N.F.
MALHEUR NATIONAL FOREST
MALHEUR NWR
KLAMATH FOREST NWR
KLAMATH FALLS
LOWER KLAMATH NWR
TULE LAKE NWR
CLEAR LAKE NWR
LAVA BEDS NAT. MON.
MODOC NATIONAL FOREST
MODOC NWR
SHELDON NAT. ANTELOPE REF.
HART MTN. NAT. ANTELOPE REFUGE
CHARLES SHELDON ANTELOPE RANGE
FORT BIDWELL IND. RES.
FT. McDERMITT IND. RES.
SUMMIT LAKE IND. RES.
DUCK VALLEY IND. RES.
HUMBOLDT NAT. FOREST
GRANTS PASS
OREGON CAVES NAT. MON.
ROGUE RIVER N.F.
UPPER KLAMATH NWR
FREMONT NAT. FOR.
EL RANCH I.R.
SEATTLE
TACOMA
OLYMPIA
BELLINGHAM
PORTLAND
SALEM
EUGENE
BEND
KLAMATH FALLS
MT. HOOD
THE DALLES
YAKIMA

NEVADA
CALIFORNIA
ARIZONA
PACIFIC OCEAN
SACRAMENTO
SAN FRANCISCO
STOCKTON
SANTA CRUZ
FRESNO
SAN LUIS OBISPO
BAKERSFIELD
LOS ANGELES
SAN DIEGO
CHANNEL ISLANDS N.M.
CARSON CITY
RENO
LAS VEGAS
YUMA
DEATH VALLEY NATIONAL MONUMENT
SEQUOIA NATIONAL FOREST
SEQUOIA NATIONAL PARK
KINGS CANYON NATIONAL PARK
YOSEMITE NATIONAL PARK
LOS PADRES NATIONAL FOREST
TOIYABE NATIONAL FOREST
STANISLAUS NATIONAL FOREST
ELDORADO NATIONAL FOREST
INYO NATIONAL FOREST
HUMBOLDT NATIONAL FOREST
SAN BERNARDINO NAT. FOREST
CLEVELAND N.F.
SALTON SEA NWR
COLORADO RIVER IND. RES.
FORT MOJAVE IND. RES.
HAVASU LAKE NWR
IMPERIAL NWR
KOFA GAME RANGE
PAHRANAGAT NWR
DESERT GAME RANGE
MOAPA RIVER IND. RES.
PYRAMID LAKE IND. RES.
WALKER RIVER IND. RES.
FALLON NWR
STILLWATER NWR
RUBY LAKE NWR
DUCKWATER IND. RES.
SACRAMENTO NWR
SUTTER NWR
COLUSA NWR
MERCED NWR
PIXLEY NWR
KERN NWR
FARALLON NWR
MUIR WOODS N.M.
CHANNEL IS. N.M.
CABRILLO N.M.
PINNACLES NATIONAL MONUMENT
DEVILS POSTPILE NAT. MON.
MINARETS WILDERNESS
TULE RIVER IND. RES.
LOVELOCK I.R.
FALLON IND. RES.
BATTLE MOUNTAIN IND. RES.
ELKO I.R.
SOUTH FORK IND. RES.

Administration

The National Park Service, the Forest Service, the Bureau of Land Management, and the States should continue to be responsible for the acquisition, trail construction, maintenance, and operation on lands under their jurisdiction and closely related lands in accordance with the general principles set forth under *"Administration"* in Chapter 1. The States may wish to take the responsibility for acquisition, trail construction, maintenance, and operation of sections that are on private lands and are not adjacent to lands under Federal jurisdiction. Three States—Washington, Oregon, and California will be involved.

The State of California should have responsibility for acquisition, construction, maintenance, and operation of all sections of the trail south of Weldone, California, that are outside the exterior boundaries of the National Forests. Those sections involve several State parks, and many miles of trail through privately owned lands. A relatively short mileage, less than 20 miles, in scattered segments, crosses lands administered by the Bureau of Land Management in this area.

In carrying out their individual assignments, the responsible agencies could enter into cooperative arrangements with other governmental agencies and commissions, and with private organizations.

A horse lessens a hiker's load. Cloudy Pass, Washington, along the Cascade Crest Trail section of the Pacific Crest Trail. (Photo: S-3)

Uses

The Pacific Crest Trail traditionally has served horseback and foot travelers. This use pattern, accepted by most visitors to the trail, should be continued.

Incompatible, competing uses can jeopardize important segments of the trail, especially in California where population pressures are greatest. Parts of the trail which coincide with the California Riding and Hiking Trail depend upon voluntary agreements from private landowners which can be cancelled upon 30 days' notice. In areas where private holdings are large and relocation of the trail to avoid them is not practical, incompatible activities such as logging or land development projects could threaten the trail's quality.

The Forest Service and National Park Service have adequate authority to prescribe public uses that will be permitted or restricted for most portions of the trail on the lands they administer. Incompatible uses can be eliminated or limited in several ways.

Federal or State governments could acquire full title, scenic easements, or public-use easements to preclude cancellation of trail passage privileges or construction of undesirable private developments. Private owners also could be encouraged to donate lands or easements to protect the trail. County governments could zone trail areas to exclude incompatible development and use.

On public lands, existing management practices on National Parks, National Forest Wilderness Areas, and State parks probably will suffice to protect trail quality. For lands managed primarily for other purposes, Federal and State agencies should modify their timber harvesting, livestock grazing, and special permit practices to protect trail quality. The Federal Government should prevent adverse mineral exploration and development by withdrawing public lands adjacent to the trail from mineral entry.

In areas where the trail will become the dominant influence, special trailside management zones should be established where the trail crosses public lands which are not managed primarily for wilderness values, or crosses private lands outside of public areas.

Side trail near Mount Jefferson Primitive Area in Oregon. (Photo: Edwin J. Dolan)

Image Lake near the Pacific Crest Trail in the Glacier Peak Wilderness, Washington. (Photo: John F. Warth, No. 3)

Feeder and Access Trails

Extensive networks of trails, thousands of miles, already lace the 25 National Forests and six National Parks along the length of the Pacific Crest Trail. Many join the trail and afford travelers opportunity to branch out into the side country and hike to or through points of special attraction.

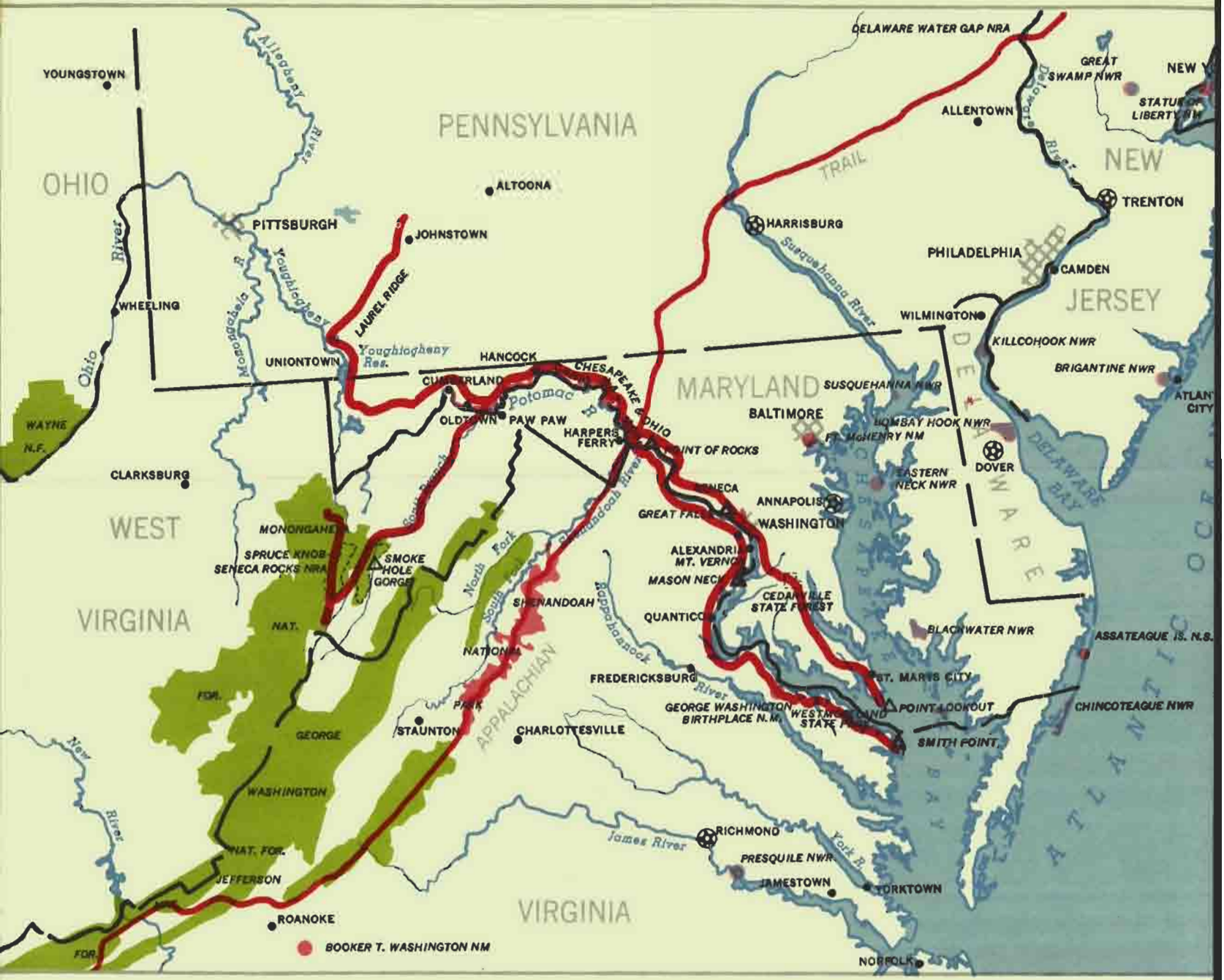
The Cascades and Sierra Nevada Mountains feature innumerable rare sights and opportunities for unusual experiences. Among those reached by side trips from the Pacific Crest Trail are many remote wilderness and primitive areas, high peaks, glaciers, lava fields, isolated fishing or camping locations, and other areas of high scenic and recreation value or historic significance. Many leisurely loop trips can be made within the time available to most trail travelers.

In addition to the access furnished by the feeder trails, the Pacific Crest Trail crosses many Federal, State, and local roads, including National Forest and National Park roads, all of which serve as entrance points to segments of the trail.

Effects on Present Uses

Improvement of existing sections of the trail and the construction of new feeder or side trails will stimulate interest in trail travel. Existing outdoor recreation service enterprises —resorts, stores, and campgrounds—should enjoy increased patronage. Some new developments will have to be provided to accommodate the expected flow of visitors.

Near timberline in the Glacier Peak Wilderness Area of Washington. (Photo: National Park Service, No. 4214-277)



National Park or Monument

National Forest

National Wildlife Refuge

Trails

N

MAP 3

POTOMAC HERITAGE TRAIL

Potomac Heritage Trail

Trails normally are associated with a single type of landscape—mountain, lake shore, or river course. Few traverse more than a single physiographic region. Practically all are connected with a single strong landscape feature such as a mountain range, river valley, or historic pathway. Thus, few trails offer diverse recreation, scenic, and cultural opportunity. Yet such an opportunity exists with the Potomac River as its backbone.

Perhaps no other river in the country is historically as rich as this stream. The national government grew up and reached its maturity in the Potomac Valley. Many famous Americans were born, reared, and lived on the banks of the Potomac.

The Potomac Heritage Trail would follow the course of the Potomac River from source to mouth, linking an astounding array of superlative historic, scenic, natural, and cultural features, and offering an outstanding recreation opportunity for the residents of the Potomac Valley and its annual millions of visitors. The Nation's Capital, potentially the greatest source of persons who would visit this trail, is the focal point of the system.

The Potomac River at Point of Rocks near Brunswick, Md. as viewed from the route of the proposed Potomac Heritage Trail. (Photo: National Park Service, No. 4592)

The Potomac estuary near the eastern terminus of the Potomac Heritage Trail (Photo: Nicholas Dean, No. 1)

Location

Beginning at the mouth of the Potomac on Chesapeake Bay, trails would extend up both sides of the river through the Nation's capital, to Harpers Ferry, West Virginia. See Map 31. There, they would join and follow the river up the Chesapeake and Ohio Canal towpath to Oldtown. At that point the trail would divide, with one leg swinging northwest along the C. and O. Canal towpath to its termination at Cumberland, Maryland, and thence to Johnstown in the scenic highlands of southwest Pennsylvania. The other leg would head southwesterly to the Spruce Knob-Seneca Rocks National Recreation Area in West Virginia.

On the Maryland shore, the trail would begin at Point Lookout, surrounded on three sides by the water of the Chesapeake Bay and the Potomac River. Once the site of a Civil War prisoner-of-war camp, Point Lookout is now a State park. Nearby are St. Marys City, Maryland's first capital, and St. Inigoes Neck, a potential recreation and fish and wildlife area. Farther up the estuary is the route of John Wilkes Booth's flight after his assassination of President Lincoln. Near Zekiah Swamp, a great natural area, is Cedarville State Forest. The trail would travel through the forest and move westward through the green valleys of Piscataway and Mattawoman Creeks to Fort Washington, designed to protect the District of Columbia from naval attack.

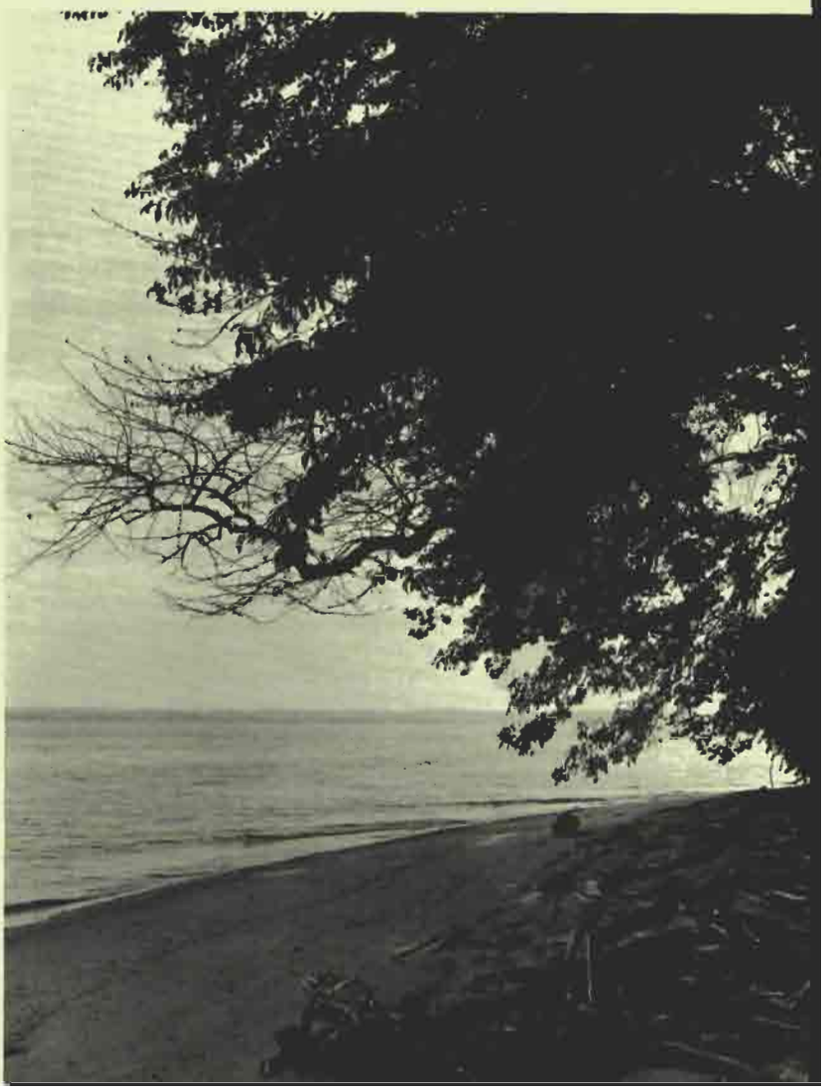
On the Virginia shore of the Potomac estuary, the trail would start at Smith Point, a noted bird conservation area, and move north to Nomini Creek and nearby Stratford Plantation, home of generations of the Lees of Virginia. To the west is Westmoreland State Park, one of only two major public recreation areas on the Potomac estuary. The trail would reach Fredericksburg, of Civil War fame, by way of the abandoned Dahlgren Railroad, and swing by Quantico, the giant Marine Corps installation, and Fort Belvoir, the U.S. Army Engineer Center. Above Fort Belvoir are Pohick Church, Woodlawn Plantation, Washington's grist mill, Mount Vernon, and historic Alexandria.

Approaching the Washington metropolitan area, the trail might pass through Mason Neck, a giant, undeveloped protuberance jutting into the Potomac estuary and long identified as one of the largest, most significant open land areas available for recreation remaining in the vicinity of the Capital.

The Maryland and Virginia legs of the trail would follow the George Washington Memorial Parkway routes that lead to the Nation's capital along both sides of the Potomac River. The Maryland leg would traverse the Mall in Washington and then join the C. and O. Canal towpath in Georgetown. The Virginia leg would swing through Alexandria and join a companion trail to the C. and O. Canal that would continue up the west side of the river.

The well known historic, cultural, and recreational opportunities of the Nation's capital would easily be accessible from the trail. The C. and O. Canal would be a popular feature of the trail in this area. One of several waterways designed originally to connect the Atlantic Seaboard with the Ohio River, the 185-mile canal functioned for over a century until its vitality was sapped by railroads. Unlike its counterparts, it is in a remarkable state of preservation, with locks, aqueducts, dams, and other features intact.

Hikers along the proposed Potomac Heritage Trail could visit the historic George Washington grist mill near Fort Belvoir, Va. (Photo: Nicholas Dean, No. 2)



Driftwood cast ashore by the Potomac River along the proposed Potomac Heritage Trail at Mason Neck, Va. (Photo: Nicholas Dean, No. 3)

On the leg of the Potomac Heritage Trail leading to Harpers Ferry, points of interest include Great Falls, Point of Rocks, and Balls Bluff Battlefield. At the confluence of the Potomac and the Shenandoah Rivers, the National Park Service is restoring much of the old town of Harpers Ferry to its pre-Civil War condition. The rivers at this point are known for their canoeing opportunities, particularly the Potomac with the famous "Staircase," a favorite natural slalom run for canoes. Here, too, is the crossing point of the Potomac Heritage Trail and Appalachian Trail.

From Oldtown, the northwest prong of the trail would continue westward along the C. and O. Canal to Cumberland, the Savage River Reservoir and State Forest, and on to Youghiogheny Reservoir, where it would follow a short section of the famous Mason-Dixon line. Continuing downstream through Youghiogheny Gorge and north along Laurel Ridge, the trail would link four Pennsylvania State parks before terminating at Johnstown.

The southwest leg would cross the Potomac at Oldtown and follow the South Branch River, one of the basin's finest free-flowing streams, through the Trough, traverse Smoke Hole Gorge, and reach Seneca Rocks before climbing the slopes to Spruce Knob.

Waterfowl at Roaches Run Waterfowl Sanctuary along George Washington Memorial Parkway. The Potomac Heritage Trail would run along both banks of the river near Washington, D.C. (Photo: National Park Service, No. 2309-A)

The 185-mile long towpath of the historic Chesapeake and Ohio Canal from Washington, D.C., to Cumberland, Md., would be a major segment of the proposed Potomac Heritage Trail. (Photo: National Park Service, No. 2447-16)

Spruce Knob, the western terminus of the porposed Potomac Heritage Trail, in the Spruce Knob-Seneca Rocks National Recreation Area of West Virginia. (Photo: Forest Service, No. PH-1)

Seneca Rocks in the Spruce Knob-Seneca Rocks National Recreation Area of West Virginia. (Photo: Forest Service, No. 478767)

Land Ownership

Maryland

The terminal feature at Chesapeake Bay, Point Lookout, is State owned. Between Point Lookout and the Navy Railroad, trail lands are privately owned. Most are wooded, but some are farmed. From the St. Marys River to Cedarville State Forest, the trail would follow the Federally owned right-of-way of the Navy Railroad. This section is characterized by forests and farmland, particularly tobacco farms, south of the railroad and a major highway to the north. Protection of additional lands would be desirable south of the railroad line. To the north, commercial and residential developments and high land value exist.

Between Cedarville State Forest and Fort Washington, along Mattawoman and Piscataway Creeks, the trail route is privately owned and almost entirely forested. A narrow right-of-way would probably suffice for trail purposes, although local and State officials have indicated interest in a much broader band along the creeks for general park, recreation, and open space purposes.

The projected trail corridor between Fort Washington and the District of Columbia is either Federally owned or authorized for acquisition for parkway purposes. These lands are wooded and some contain scattered residences. On the cross-city segment utilizing the Mall in Washington, no additional acquisition is required, as the route would follow existing streets, walkways, and public lands.

The entire C. and O. Canal is publicly owned, but significant additions of land are necessary to preserve the scenic and pastoral qualities of this famous route. While preserving the Canal environment itself, these additional lands would offer space for development of recreation facilities and would preserve the famous Potomac riverscape scene. West of Cumberland along the route are publicly owned Savage River State Forest and Federal lands around Youghiogheny Reservoir.

Table 4. Land ownership along the Potomac Heritage Trail, by States, in miles

State	Federal	State	Private	Total
Maryland	218	41	79	338
Virginia	47	10	196	253
West Virginia	26	7	101	134
Pennsylvania	0	72	2	74
District of Columbia	26	0	0	26
Total	317	130	378	825

Virginia

No public lands exist between Smith Point and Westmoreland State Park which might be uilized for the trail route.

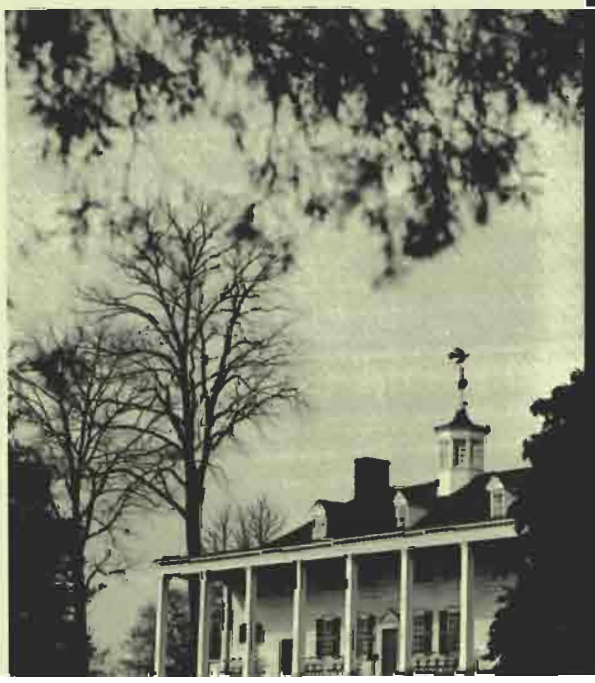
The once Federally owned Dahlgren Railroad recently was sold to the Richmond, Fredericksburg, and Potomac Railway Company. If it can be recovered by the Federal Government or arrangements made with the company, this route can provide an excellent spur trail into Fredericksburg.

Between the Fredericksburg spur and Mount Vernon, major public lands exist at the Quantico and Fort Belvoir military bases. Gunston Hall on Mason Neck is State owned. Between Mount Vernon and Cabin John Bridge, the trail corridor is Federally owned with the exception of the Alexandria segment, where the trail would utilize existing publicly owned roads and walks.

Between Cabin John Bridge and Great Falls the most desirable trail corridor along the river's bluffs and edge is privately owned but authorized for Federal purchase.

West of Great Falls the proposed route along the Virginia shore is privately owned. These lands are utilized largely for farming and offer a beautiful contrast to the largely wooded sections in other areas of the trail corridor.

Mount Vernon is one of the many nationally significant historic sites along the proposed Potomac Heritage Trail. (Photo: National Park Service, No. 380-A)



West Virginia

The West Virginia portion of the Potomac Heritage Trail contains extensive Forest Service holdings, particularly along the ridges. Private lands through the area are almost entirely forested.

Pennsylvania

Youghiogheny Reservoir offers a public lands corridor for the route into Pennsylvania and the scenic Youghiogheny Gorge. Along Laurel Ridge north of the Gorge are large State forest, game, and park lands. A proposed 18,000-acre Ohiopyle State Park will ultimately include the Youghiogheny Gorge and a proposed Laurel Ridge Connector Park between Youghiogheny Gorge and Johnstown would provide a continuous strip of public lands in which the trail could be located.

The falls of the Youghiogheny River through Pennsylvania's proposed Ohiopyle State Park. The area would connect with the proposed Potomac Heritage Trail. (Photo: Pennsylvania Department of Forests and Waters)

Administration

The Federal agencies should be responsible for the acquisition, trail construction, maintenance, and operation on lands under their respective jurisdictions and lands in close proximity thereto, in accordance with the general principles set forth under *"Administration"* in Chapter 1. The States may wish to assume responsibility for acquisition, trail construction, maintenance, and operation of the trail sections that are not or closely related to lands under Federal jurisdiction. Segments of the trail lie in Maryland, Virginia, West Virginia, and Pennsylvania.

Maryland and Virginia may wish to manage the segments of the Potomac Heritage Trail along most of the estuary in their respective States. Segments of the trail in the upper estuary in the vicinity of Metropolitan Washington, and upstream along the C. and O. Canal on the Maryland shore and the trail on the Virginia shore to Cumberland would logically be managed by the National Park Service in conjunction with national monuments, parks, and proposals. The Virginia section could well be a State or regional responsibility, however. West Virginia and Pennsylvania may wish to manage the segments above Cumberland in their respective States which are located predominately on private and State lands. The upper reaches of the trail which lie within the Monongahela National Forest would be managed by the Forest Service.

Bicycling is a popular use of the Chesapeake and Ohio Canal towpath. (Photo: National Park Service, No. 3065-6)

Private trail clubs may well be interested in location, construction, and maintenance of some segments of the trail, particularly on lands which are now privately owned. Such clubs already perform these services on both public and private lands.

Acquisition of private lands or interest in lands should be coordinated with acquisition for other purposes such as for parkways and, west of Washington, with the proposed enlargement of the C. and O. Canal properties. Upstream from Washington, acquisition on both sides of the river will preserve the view from the trail on either side.

West of Harpers Ferry, private lands between the canal and the river should be placed in public ownership. At a minimum, a sufficient width of land to provide adequate screening between the towpath and private development should be acquired.

Construction Standards

The C. and O. Canal towpath sets a standard that might be utilized for much of the Potomac Heritage Trail. Over portions of the towpath this is a double track, well-graded trailway with a gravel base and a stone chip surface. Except in the mountains, such a standard would be an excellent one to guide development of the remainder of the Potomac Heritage Trail. The trail would thus be unique in that hikers and riders could traverse the route "two-by-two" rather than single file as on most other well-known trails. At the same time, maintenance, construction, and protection vehicles could utilize the trailway. Surfacing, width, and gradients should be as similar as possible to the C. and O. Canal towpath. The gradient should not be steeper than five percent. This would facilitate cycling and allow continuity of travel.

In mountainous areas and in narrow stream valleys where the smooth gradients of the C. and O. Canal towpath are neither practical nor esthetically desirable, the trail might assume a normal single track. In the mountains, grades of over five percent may be necessary.

The trail's diversity of landscape type, historic setting, and adjacent land uses dictates that structure designs be made to fit the nature of the country through its particular segments. For example, trail structures in the Tidewater region could have a colonial motif, perhaps modeled after a shed outbuilding of a tidewater plantation. Along the C. and O. Canal, shelters might be provided at existing and proposed "hiker-biker overnighters." The old lock-tenders' residences might be rehabilitated or reconstructed for interpretive purposes. On the Virginia shore of the Potomac, the structure should be crisp, neat, and modern in line, using native materials to capture the spirit of the countryside. Along the trail to the southwest and northwest, the structures might be typical "Adirondack" shelters.

An unusually good opportunity exists along the Potomac Heritage Trail for use of hostels, particularly at Point Lookout, Washington, Fredericksburg, Seneca, and Harpers Ferry, where trail users might be expected to linger for a time. Several historic buildings and unused military installations along the trail corridor, could well be used as hostels. Examples are the old Point Lookout Hotel, the old Tea Room at George Washington Birthplace National Monument, Fort Washington, and several fine old homes adjacent to the C. and O. Canal. In the design of shelters and hostels, adequate space should be provided for large numbers of cyclists.

Because of abundant easy access, availability of nearby commercial overnight accommodations, and the existence of a number of public camping areas, the frequency of shelter location might be determined by characteristics of individual sections of the route. No regular spacing could be determined for the entire route, although 10- to 12-mile spacing is contemplated to accommodate hikers on the C. and O. Canal.

Uses

All sections of the Potomac Heritage Trail should be open for foot travel. From the Smith Point and Point Lookout terminals to Washington the trail should be designated for bicycling and hiking. The trail above Washington on the Maryland shore along the C. and O. Canal should also be restricted to foot and bicycle traffic. On the opposite shore, through Virginia's riding country, horses should be permitted. West of Harpers Ferry on the C. and

O. Canal, horseback travel should be prohibited to prevent "spading up" the smooth towpath surface. Through this area a parallel riding trail may be desirable. Although no restrictions would be necessary on those sections northwest and southwest of Cumberland, topography may preclude bicycling. Throughout the length of the Potomac Heritage Trail, motor vehicle traffic would be incompatible with the quieter trail uses suggested.

Agricultural uses, such as cropland and grazing, should be continued in selected areas adjacent to the trail corridor. Farm lands are a long-established part of the Potomac landscape and open many scenic vistas to travelers.

The Potomac Heritage Trail will offer access to many waterfowl and upland game hunting areas. Use of the Potomac trail as a route of access to these hunting areas would be compatible with the other recreation purposes of the trail.

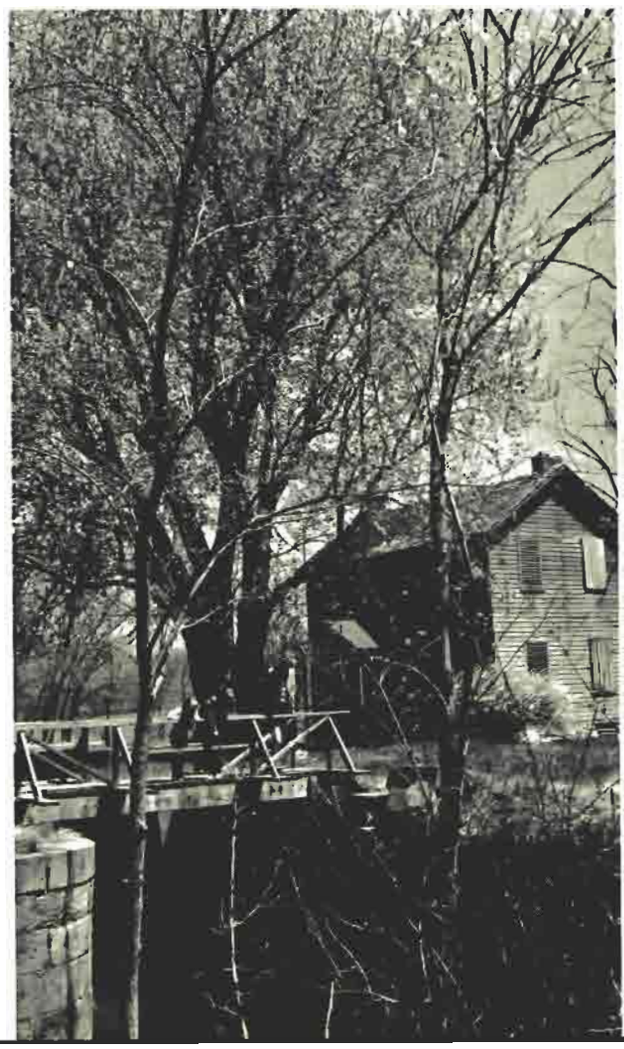
Forestry activities may continue in areas adjacent to the trail although a narrow band, possibly of 200 feet, might be preserved in a "modified management area." Timber stand improvement could enhance the appeal of the woodlands, and carefully controlled selective cutting and removal of slash should not interfere with trail enjoyment. Good forestry practices afford opportunities for educational and interpretive demonstrations. Vista and wildlife clearings might be seeded to attract wildlife to the trailside.

Strip mining should be prohibited. Improved and enforced reclamation practices could maintain scenic trailside areas while returning stripped land to productivity. At selected points, the trail could traverse mined areas to demonstrate mineral extraction methods and, where available, good land reclamation practices.

Most public use of the trail would come at points where vehicles would have access and where major visitor developments were installed. Where the trail passed through residential areas, local use should be encouraged by allowing complete freedom of access, developing the trail corridor to blend with adjacent land uses. In cooperation with the agencies administering the trail, local governments might assume responsibility for providing special facilities designed for local day-use visits.

Bird-watching along the Chesapeake and Ohio Canal towpath. (Photo: National Park Service, No. 1996-59)

Lock and lock-tender's residence, Chesapeake and Ohio Canal. (Photo: National Park Service, No. 4591)



Feeder and Access Trails

The route of the Potomac Heritage Trail passes near numerous points of special interest. Side trails would offer the traveler opportunities to reach and enjoy these points while helping to disperse trail use.

Among the more famous historic shrines are Jamestown, commemorating the earliest permanent English settlement in the United States and Yorktown, of Revolutionary War fame. The Civil War battlefields of Manassas or Bull Run, and Antietam lie close by, as do the homes of George Washington and other famous statesmen.

In addition to the Potomac River itself, many areas of natural and scenic value also could be reached by spurs. Among the more notable are Zekiah Swamp, Prince William Forest, Rock Creek Park, the historic-recreation complex around Harpers Ferry, and the many points of attraction in the Spruce Knob-Seneca Rocks National Recreation Area.

Feeder trails could connect the main trunk with the heavily suburbanized areas of Fredericksburg, Alexandria, and Arlington in Virginia; Washington, D.C.; and Uniontown and Jamestown in Pennsylvania. These and similar feeders from other towns would make the Potomac Heritage Trail easily available to a large share of the region's residents.

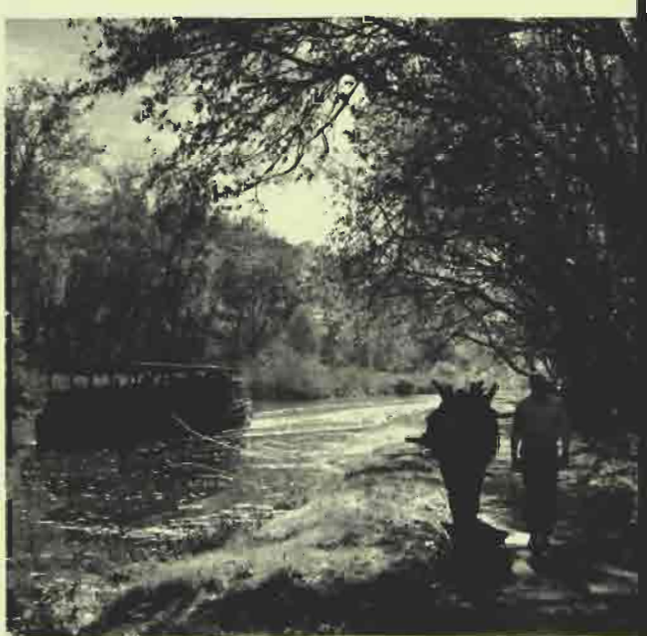
Colonial National Historic Park in Virginia, site of the earliest permanent English settlement in America, could be reached by feeder trail from the proposed Potomac Heritage Trail. (Photo: National Park Service, No. 58-JB-130)

Effects on Present Uses

The C. and O. Canal's stimulating recreational effect on nearby localities indicates the potential effect on other communities along an expanded system of trails. Thousands of residents of the Washington area enjoy the C. and O. Canal for cycling, hiking, and horseback riding. In addition, the canal itself provides major access to the Potomac River for canoeing, fishing, hunting, and other water uses. The towpath is ideal for bird-watching. West of Great Falls, the towpath is used less intensively except in areas where highway access is available and recreation developments exist. The more primitive character of the trail in this area is enjoyed immensely by ardent hikers.

A Potomac Heritage Trail would offer unequaled access opportunity to the waters of the Potomac Valley for fishing, hunting, sightseeing, camping, and other recreation activities. Certain small key towns along the route such as Point Lookout, Harpers Ferry, Hancock, Paw Paw, and Oldtown could well become trail targets for people throughout the country.

Critical to success of such a trail will be prompt protection of open space along the route. The Potomac Heritage Trail can become a strong device—a nucleus—for the preservation of open spaces, acquisition of recreation lands, and development of a green network to guide community development in the entire valley.



Boat excursions, one of many activities enjoyed by recreationists using the Chesapeake and Ohio Canal and towpath. (Photo: National Park Service, No. 2468-21A)

Pearl Basin from Continental Divide, Bob Marshall Wilderness, Mont. (Photo: Forest Service, No. 444802)

Continental Divide Trail

A Continental Divide Trail would provide a continuous route along the Continental Divide and Rocky Mountains from the Canadian border almost to the Mexican border. The concept was originated by a group of horsemen known as the Rocky Mountain Trails, Inc. Later the Colorado Mountain Club joined in the effort. The two groups, in cooperation with the Forest Service, already have established the first segment of the trail, extending between Empire, and Rocky Mountain National Park in Colorado.

Designed to accommodate riders and hikers, a Continental Divide Trail would pass through some of the most scenic areas in the country in its 3,082-mile route. The 763 miles in Montana, 147 miles in Idaho, 506 miles in Wyoming, 614 miles in Colorado, and 1,052 miles in New Mexico span spectacular, wild, mountain country, rich in the early history of the West. The route affords views of perpetual icefields and of awesome peaks, many over 14,000 feet. It passes hundreds of alpine lakes and streams teeming with trout. The high mountains are home to many species of game, including the bighorn sheep, mule deer, and bear.

The high rockies are home to many species of game, including the bighorn sheep, mule deer, and bear.

bighorn sheep—National Park Service, No. W1-8124
mule deer—National Park Service, No. WASO G. 466
bear—National Park Service, No. C-1

N

MAP 4

CONTINENTAL DIVIDE TRAIL

- National Park or Monument
- National Forest
- Indian Reservation
- National Wildlife Refuge
- Public Lands
- Trail Route

CANADA

MONTANA

IDAHO

WYOMING

KOOTENAI NATIONAL FOREST
FLATHEAD N.F.
GLACIER NATIONAL PARK
LOGAN PASS
BLACKFEET INDIAN RESERVATION
FLATHEAD N.F.
LEWIS
FLATHEAD
LOLO NAT. FOR.
FLATHEAD
PABLO NWR INDIAN
NATIONAL BOB MARSHALL WILDERNESS
NINE-PIPE NWR
NAT. BISON RANGE
RES.
FOREST
LOLO NAT. FOR.
ST. JOE NATIONAL FOREST
CLEARWATER NATIONAL FOREST
MISSOULA
LOLO NAT. FOR.
DEERLODGE NAT. FOR.
NEZPERCE NATIONAL FOREST
ANACONDA-PINTLAR WILDERNESS
BUTTE
DEER LODGE
PIPESTONE PASS
PAYETTE NATIONAL FOREST
SALMON NATIONAL FOREST
BEAVERHEAD NATIONAL FOREST
DEERLODGE NAT. FOR.
BEAVERHEAD N.F.
BANNACK
SALMON N.F.
CHALLIS NATIONAL FOREST
BEAVERHEAD NATIONAL FOREST
RED ROCK LAKES NWR
CHALLIS N.F.
TARGHEE N.F.
SAWTOOTH NATIONAL FOREST
CHALLIS NAT. FOR.
CAMAS NWR
CRATERS OF THE MOON NAT. MON.
SNAKE RIVER
FORT HALL INDIAN RES.
POCATELLO
CARIBOU NATIONAL FOREST
CARIBOU N.F.
MINIDOKA NWR
SAWTOOTH N.F.
CACHE NAT. FOREST
Great Salt Lake
OGDEN
SALT LAKE CITY
WASATCH N.F.
WASATCH NAT. FOR.
SKULL VALLEY IND. RES.
TIMPANOGOS CAVE N.M.
UINTA NAT.
ASHLEY NAT. FOR.
DINOSAUR MONUMENT
Flaming Gorge Reservoir
GREAT FALLS
BENTON LAKE NWR
WILLOW CREEK NWR
LEWIS AND CLARK N.F.
CREEDMAN-COULEE NWR
LAKE THIBADEAU NWR
BLACK COULEE NWR
ROCKY BOYS IND. RES.
FORT BELKNAP IND. RES.
HEWITT LAKE NWR
BOWDOIN NWR
FORT PECK IND. RES.
CHARLES M. RUSSELL NATIONAL WILDLIFE RANGE
Fort Peck Reservoir
MISSOURI RIVER
HELENA
LEWIS AND CLARK NATIONAL FOREST
LEWIS AND CLARK N.F.
WAR HORSE NWR
LEWIS AND CLARK NAT. FOR.
LAKE MASON NWR
GALLATIN NAT. FOR.
HAILSTONE NWR
HALFBREED LAKE NWR
YELLOWSTONE RIVER
BILLINGS
CROW INDIAN RESERVATION
CUSTER NATIONAL FOREST
CUSTER N.F.
YELLOWSTONE NATIONAL PARK
SHOSHONE NATIONAL FOREST
BIGHORN NATIONAL FOREST
SHERIDAN
GRAND TETON NATIONAL PARK
NAT. ELK REFUGE
WIND RIVER INDIAN RESERVATION
BRIDGER WILDERNESS
SHOSHONE N.F.
Sweetwater River
CASPER
PATHFINDER NWR
Pathfinder Reservoir
CONTINENTAL
MEDICINE BOW NAT. FOREST
BAMFORTH NWR
MEDICINE BOW NAT. FOR.
HUTTON LAKE NWR
CHEYENNE

UTAH
COLORADO
ARIZONA
NEW MEXICO
Lake Powell
NAVAJO N.M.
NAVAJO INDIAN RESERVATION
HOPI INDIAN RESERVATION
CANYON DE CHELLY NAT. MON.
CHACO CANYON NAT. MON.
MESA VERDE NAT. PARK
GRAND CANYON NATIONAL PARK
PETRIFIED FOREST NAT. PARK
GRAND JUNCTION
DENVER
EMPIRE
MONTEZUMA
LEADVILLE
ROLLINS PASS
TINCUP PASS
PUEBLO
ALBUQUERQUE
SANTA FE
PHOENIX
TUCSON
SILVER CITY
ROSWELL
CARLSBAD CAVERNS NATIONAL PARK
CONTINENTAL DIVIDE
RIO GRANDE
COLORADO RIVER
ARKANSAS RIVER

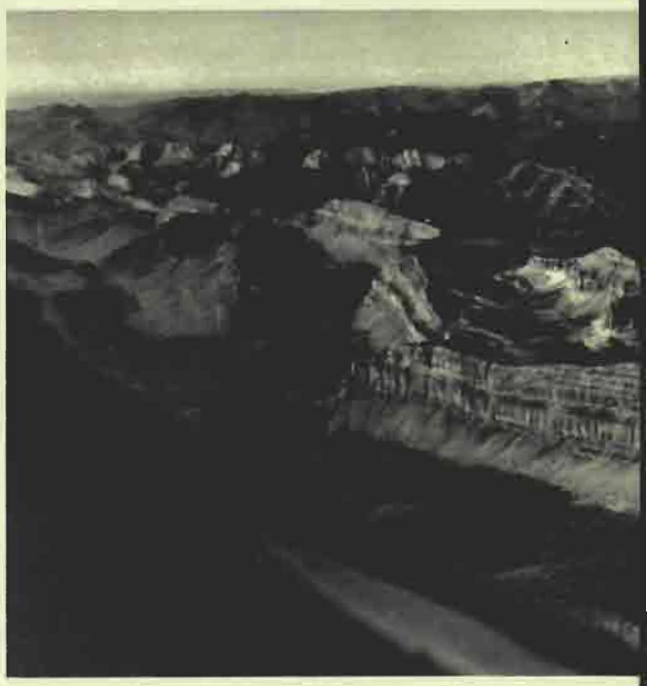
Location

One end of the trail would lie at the Canadian line on the west shore of Waterton Lake in Glacier National Park. From there the trail would follow the Continental Divide south through the park for about 100 miles. See Map 4. Many miles would be above timberline and offer unobstructed views of spectacular alpine wilderness. From Logan Pass the trail would swing over the Divide, leave the Park, and pass near a portion of the Blackfoot Indian Reservation. Astride the Divide, the trail would continue through portions of the Flathead and Lewis and Clark National Forests and passes for 100 miles in the Bob Marshall Wilderness, the largest wilderness area in the National Forest system.

After leaving the Bob Marshal Wilderness, the trail would wander southerly along the Divide for nearly 300 miles through the Lewis and Clark, Helena, and Deerlodge National Forests. It would cross Pipestone Pass and Deer Lodge Pass and stretch through the Anaconda-Pintlar Wilderness for 50 miles, crossing and recrossing the Divide.

Next, the trail would follow the Idaho-Montana State line for some 300 miles, jumping from one side to the other, before entering Yellowstone National Park. The 80 miles of trail in Yellowstone would lead successively to the Firehole River, Shoshone Lake, Lewis River, Lewis Lake, Yellowstone Lake, and along the Yellowstone River to the south park boundary.

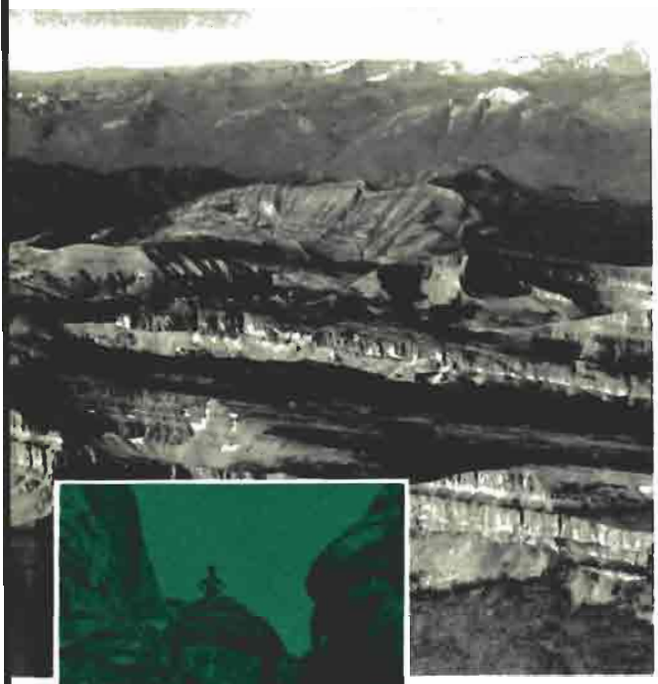
The trail would snake 200 miles across Wyoming from the Bridger Wilderness to the Sweetwater River, and thence along the historic Oregon Trail for a distance. After traversing the low, almost desert-like reaches of southern Wyoming, the trail would climb into the Medicine Bow National Forest and, crossing into Colorado, the Routt National Forest where alpine lakes offer excellent trout fishing. It would traverse Rocky Mountain National Park and part of Shadow Mountain National Recreation Area, cross historic Rollins Pass, and pass a number of peaks more than 13,000 feet in elevation. The trail would lead through the colorful old mining town of Montezuma, and come within a few miles of historic Leadville.



The Chinese Wall, one of the unique geologic features found in the Bob Marshall Wilderness, Mont. (Photo: Forest Service, No. 485868)

Grand Canyon of the Yellowstone near the Continental Divide in Yellowstone National Park. (Photo: National Park Service, No. 63-2063)

Continental Divide at Logan Pass in Glacier National Park, Mont. (Photo: National Park Service, No. 27-A)

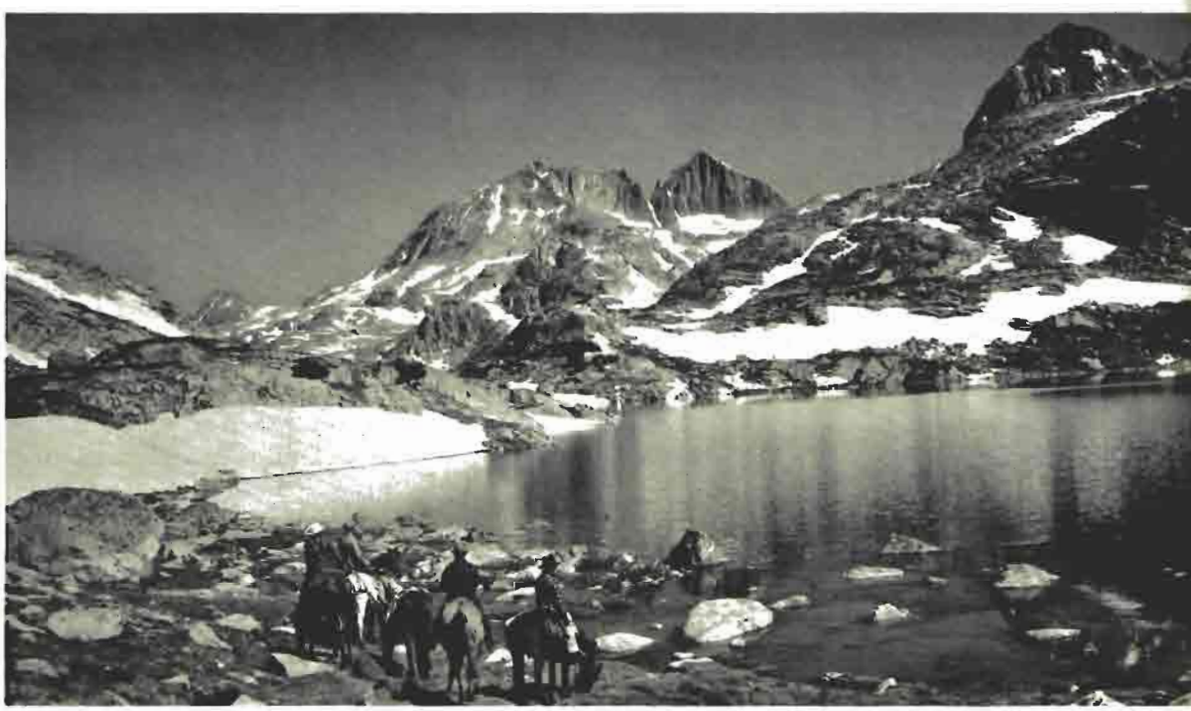


Continuing, the trail would skirt the timbered flanks of Mount Massive and Mount Elbert, the highest peak in Colorado, cross the head of the Taylor River drainage, climb Tincup Pass, flank the great San Luis Valley, and head into the LaGarita Wilderness.

Just south of the New Mexico-Colorado State line the Continental Divide Trail would split. One leg would continue to follow the Divide through portions of the Santa Fe and Cibola National Forests, rich in scenery and early southwest history, and the Jicarilla Apache Indian Reservation.

Trail riders in the Bridger Wilderness, Wyo. (Photo: Forest Service, No. 493834)

Hikers climbing the Chinese Wall. (Photo: Forest Service, No. 444819)



Mount Massive, with historic Leadville, Colo., at its base. (Photo: Forest Service, No. 387872)

The other leg would shift eastward to traverse Wheeler Peak and the Pecos Wilderness and the scenic crest of the Sangre de Cristo, Sandia, Manzano, Bear, Magdalena, and San Mateo mountains at elevations ranging from 8,000 to 13,000 feet. It would rejoin the other prong in the Black Range Mountains of the Gila National Forest, the stronghold of Geronimo and the Apaches and the home of ancient cliff-dwelling tribes.

The southern end of the Continental Divide Trail would lie at Silver City, New Mexico. From this point south to the Mexican border, the country is mostly desert.

Improved roads and existing developed trails would provide access to the Continental Divide Trail at many points and offer the rider or hiker unlimited opportunities to select the trail length, terrain, and scenery that will best provide the outdoor experience he is seeking. The wilderness qualities of the route would have special appeal to hardy individuals who want to exercise their pioneer spirit and get away from better known and more heavily used trails.

Land Ownership

Ninety percent of the proposed Continental Divide Trail crosses Federal land. Most is in National Forests, with considerable mileage also in National Parks and on the public domain. All of the balance, except for 28 miles on State lands, is in private ownership (see Table 5).

Fisherman cleans his catch of trout near the Continental Divide in Rocky Mountain National Park, Colo. (Photo: National Park Service, No. WA. 1032)

Table 5. Land ownership along the proposed Continental Divide Trail, by States, in miles

State	Federal	State	Private	Total
Montana	704	0	59	763
Idaho	133	0	14	147
Wyoming	457	1	48	506
Colorado	579	5	30	614
New Mexico	880	22	150	1,052
Total	2,753	28	301	3,082

Administration

The Federal agencies having jurisdiction of the land on which the trail is predominately located should be responsible for the acquisition, trail construction, maintenance, and operation, in accordance with the general principles set forth under *"Administration"* in Chapter 1. The States of Montana, Idaho, Wyoming, Colorado, and New Mexico through which the trail passes may wish to assume responsibility for acquisition, trail construction, maintenance, and management of the segments in their respective States which are not on or in close proximity to lands under Federal jurisdiction. Where the trail crosses Indian reservation lands, tribes should either administer the trail or give their consent for right-of-way.

Uses

The primary purpose of a Continental Divide Trail would be to provide a continuous, appealing travel route. Broad restrictions against any one type of trail use should be avoided. Along each section of the trail, only those uses should be permitted that do not conflict with other uses of the same section and with management objectives of adjacent lands.

Incompatible uses have not yet materially affected the esthetic character of the private lands the trail must cross. However, scenic or right-of-passage easements should be acquired or local zoning regulations enacted to protect the esthetic qualities of the trail and the public investment in the trail from incompatible uses in the future.

Certain sections of the trail would follow the routes of old, well-established, and still-used livestock driveways. Alternative driveways might be developed where practical to eliminate movement of livestock along the trail, except where such movement would be of special interest to trail users. In fragile high areas along the trail, use of forage by recreation pack and saddle stock needs to be carefully controlled.

Federal lands adjacent to the trail should be withdrawn from mineral entry when mineral exploration and development would necessitate relocation of the trail, or when mining activities may otherwise be incompatible with trail purposes and use.

Feeder and Access Trails

The proposed Continental Divide Trail passes through four National Parks and 23 National Forests, most of which have well-developed trail systems. Trails already extend to points of special interest in such well known areas as Glacier, Yellowstone, and Rocky Mountain National Parks and the Bob Marshall and Bridger Wildernesses. Numerous old mining towns, alpine areas, and stretches of desert exist within hiking distance of the proposed trail. The historic towns of Bannack, Montana's first capital city, and Leadville, Colorado, lie nearby. Other important locations are the Madison Earthquake site, the Moffat Tunnel, and the mountain stronghold of Geronimo and the Apaches.

Spurs and loops to such points could provide opportunity for interesting side trips or as portions of the traveler's planned journey. Throughout much of its length, the Continental Divide would be uncrossed by roads and is remote from population centers. Along these stretches there would be few opportunities for access or contact with settlements except by side trails leading to or from the main trail.

Effects on Present Uses

Development and operation of the trail and the resulting increase in trail travel should boost the economy of nearby areas. The construction of over 1,500 miles of new trail, the reconstruction of another 1,100 miles of existing but substandard trail, and continuing maintenance will provide employment for local labor. Service facilities and related outdoor recreation developments, such as resorts, packer enterprises, stores, and campgrounds, should enjoy increased patronage from trail users.

View from Sandia Crest in the Cibola National Forest, N.M. (Photo: Forest Service, No. 497701)

Pecos Wilderness, N.M. (Photo: Forest Service, No. 492880)

CHAPTER 4

Five additional national scenic trails appear from reconnaissance studies to be practicable in whole or in part. It is recommended that detailed studies be undertaken promptly of the Lewis and Clark Trail, the Oregon Trail, the Santa Fe Trail, the North Country Trail, and the Natchez Trace to determine their suitability for national scenic trail status. See Map 5.

POTENTIAL NATIONAL SCENIC TRAILS

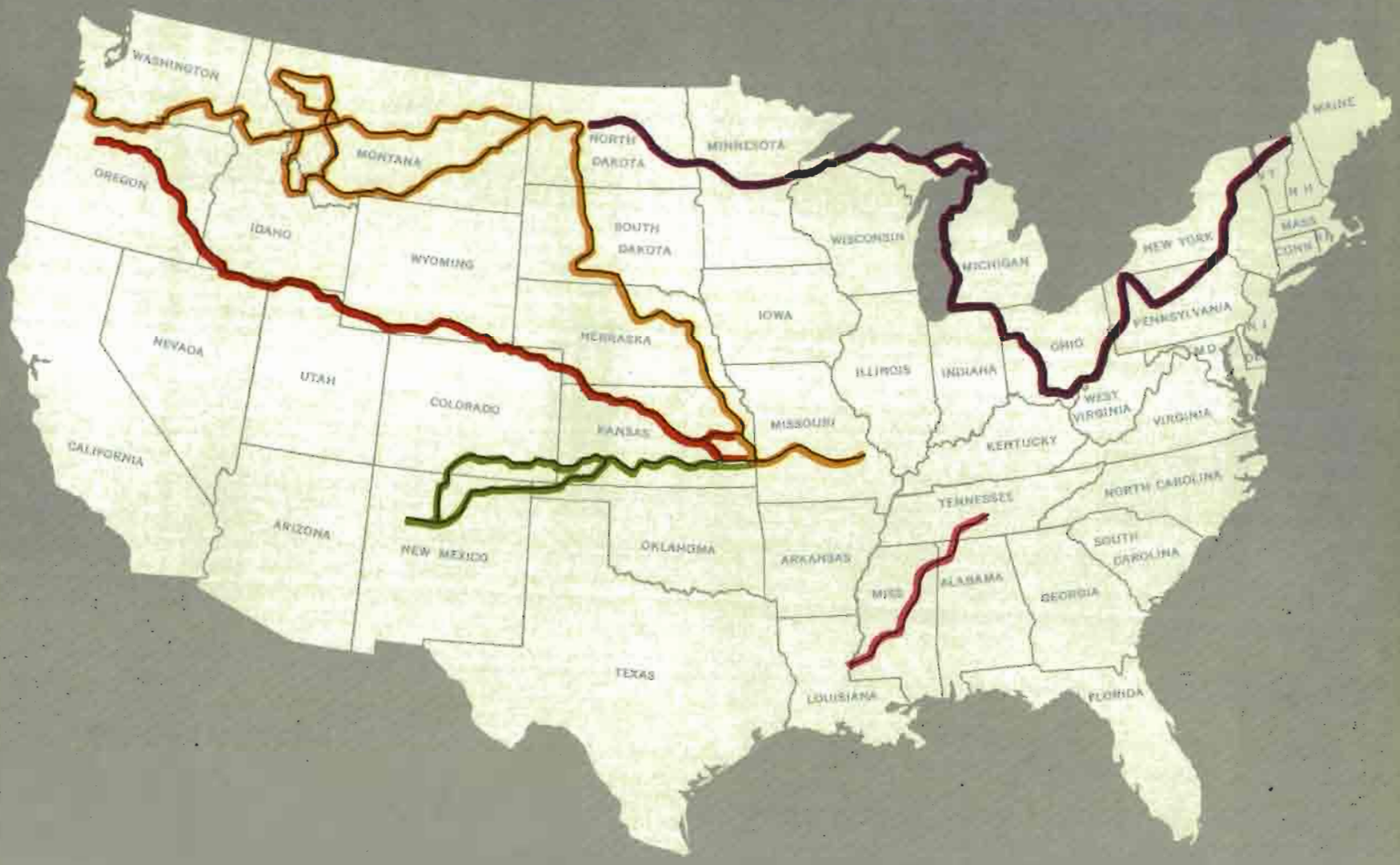
Lewis and Clark Trail

The Lewis and Clark Expedition of 1804-06 is considered by many historians as the single most important event in the development of the Western United States. Politically it secured the purchase of the Louisiana Territory by the United States and led to extension of American claims to the Pacific Northwest. Economically it provided the first knowledge of the resources which eventually led to the opening of the western lands for development and settlement.

The Lewis and Clark route, traversing more than half the continent between St. Louis, Missouri, and the Pacific Ocean, features an unusual array of natural, historic, and scientific resources. The variety and quality of the outdoor recreation opportunities along the route are outstanding.

In September 1965, a Federal, State, and local interagency study of the Lewis and Clark Trail led by the Bureau of Outdoor Recreation, culminated in a report entitled "The Lewis and Clark Trail—A Proposal for Development." Recommendation Number 4 in this report says: "A hiking and horseback trail should be constructed to follow as closely as possible the expedition's water and overland route."

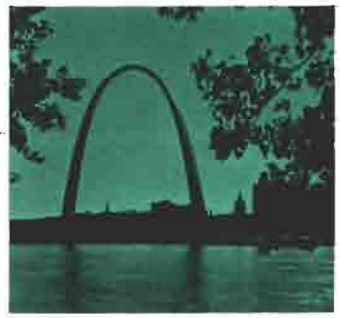
In this study, some 512 existing historic and recreational sites developed for public use were identified along the expedition route and another 384 proposed. Many of these sites could be connected by an extended foot or riding trail.



MAP 5

OTHER POTENTIAL NATIONAL SCENIC TRAILS

- Lewis and Clark
- Oregon
- Santa Fe
- North Country
- Natchez



On May 14, 1804, Lewis and Clark began their epic journey departing from Wood River, Ill., near St. Louis at the confluence of the Mississippi and Missouri Rivers. (Photo: Bureau of Outdoor Recreation, No. 167-17)

The Gateway Arch in the Jefferson National Expansion Memorial, St. Louis, built to memorialize the Nation's westward expansion. (Photo: National Park Service, No. 110-10-ON)

The Lewis and Clark Expedition, traveling more than 7,500 miles from St. Louis, Missouri, to the Pacific Ocean and back, passed through what are now 11 States—Illinois, Missouri, Kansas, Iowa, Nebraska, South Dakota, North Dakota, Montana, Idaho, Washington, and Oregon. From a campsite opposite the mouth of the Missouri River near present-day Wood River, Illinois, where it spent the winter of 1803-04, the expedition followed the Missouri River upstream for approximately 2,475 miles to Three Forks, Montana. There the main stem of the Missouri is formed by the Gallatin, Madison, and Jefferson Rivers. The expedition followed the Jefferson River to its head at the junction of the Beaverhead and Big Hole Rivers near present-day Twin Bridges, Montana. It then followed the Beaverhead River and its tributary, Horse Prairie Creek, to the Continental Divide at Lemhi Pass on the Montana-Idaho border. Descending the Pacific side of the Divide in Idaho, the explorers followed the Salmon River for a short distance before turning north to cross back into Montana at Lost Trail Pass. From Lost Trail Pass they dropped down into the Bitterroot Valley and continued northward to present-day Lolo, Montana. They traveled over the imposing Bitterroot Mountains via Lolo Pass and Lolo Trail and descended along the Clearwater River to the point where it joins the Snake River at present-day Lewiston, Idaho. From there they headed downstream along the Snake and Columbia Rivers to the Pacific Ocean, arriving late in 1805.

Three Forks, Mont., where the Madison and Jefferson Rivers join the Gallatin to form the Missouri River. The Expedition reached this point on July 27, 1805. (Photo: Bureau of Outdoor Recreation, No. 12-36)

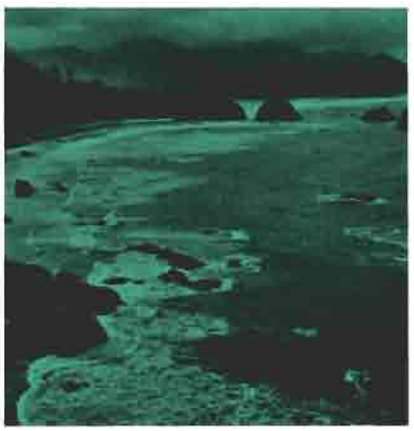
On the return trip the expedition followed the same general route as far as Lolo,Montana, although a deviation was made along the upper Columbia. There the expedition took a shortcut overland near Walla Walla, Washington, rejoining the outbound route again at Lewiston, Idaho.

At Lolo the expedition split into two groups. Lewis led a small party down the Bitterroot River to its confluence with the Clark Fork River. Turning upstream, he followed first the Clark Fork and then the Blackfoot River, crossing the Continental Divide at Lewis and Clark Pass. From there the route led north to the Sun River and down that river to the Great Falls of the Missouri. Turning north, Lewis explored the upper reaches of the Marias River nearly to present-day Browning, Montana, before returning to the Missouri near Fort Benton, Montana.

Clark, meanwhile, had gone south up the Bitterroot Valley along the same general route followed the year before. At Sula he turned off the outbound route to cross the Continental Divide at Gibbons Pass, follow the Big Hole and Beaverhead Rivers, proceed up Gallatin Valley, and cross to the Yellowstone River. The party then followed the Yellowstone downstream to meet Lewis and the remainder of the "Corps of Discovery" just south of the confluence of the Yellowstone and Missouri Rivers. The remainder of the trip down the Missouri to St. Louis followed the outbound route.

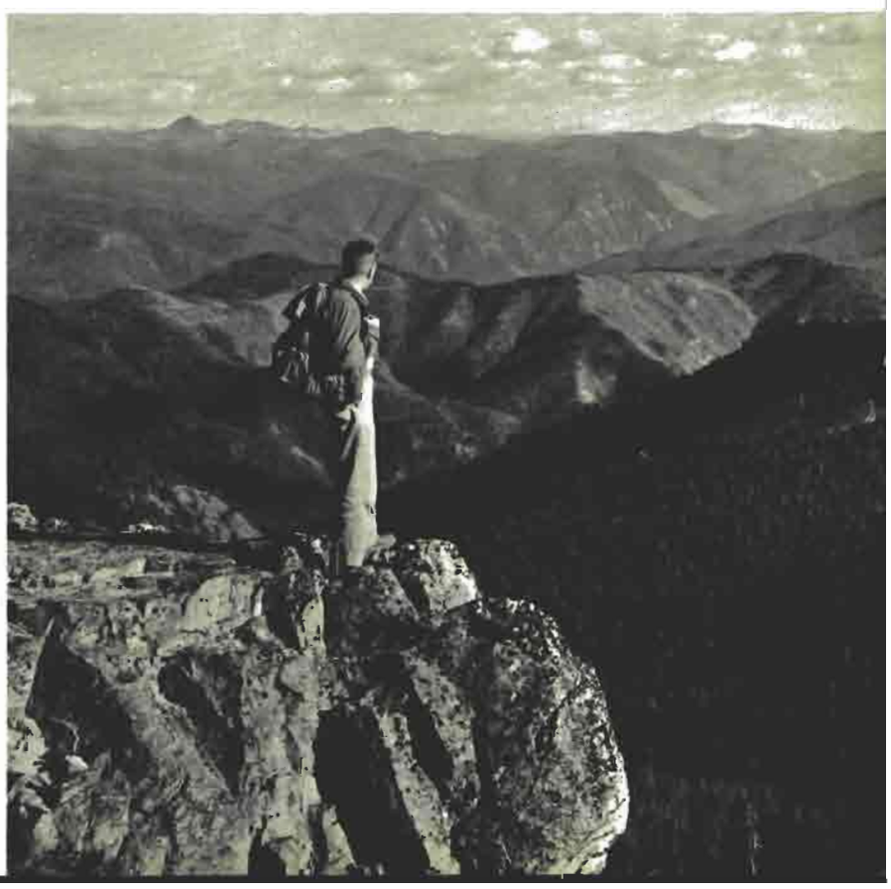
The Lewis and Clark route crosses Federal, State, and private lands. Without duplicating the mileage eastward and westward, the route covered about 4,600 miles. Well over half of the route is on public lands, including National Forests, National Wildlife Refuges, National Park Service lands, Bureau of Reclamation, and U.S. Army Corps of Engineer projects, and lands administered by the Bureau of Land Management. Much of the balance lies on privately owned lands and Indian reservations. Lands controlled by States and their political subdivisions are in small parks and historic sites scattered along the route.

Oregon seacoast near where Lewis and Clark first sighted the Pacific Ocean. (Photo: Bureau of Outdoor Recreation, No. 95-1)



The Lolo Trail, over which Lewis and Clark crossed the forbidding Bitterroot Mountains. This section of the historic route has been restored by the Forest Service. (Photo: Bureau of Outdoor Recreation, No. 113-4)

Lemhi Pass, Mont., where Lewis and Clark crossed the Continental Divide. (Photo: Bureau of Outdoor Recreation, No. 19-9)



Bicyclists study monument of the famous Indian woman, Sacajawea, who accompanied the Lewis and Clark Expedition. State Capitol grounds, Bismarck, N.D. (Photo: Bureau of Outdoor Recreation, No. 124-2)

Evaluation

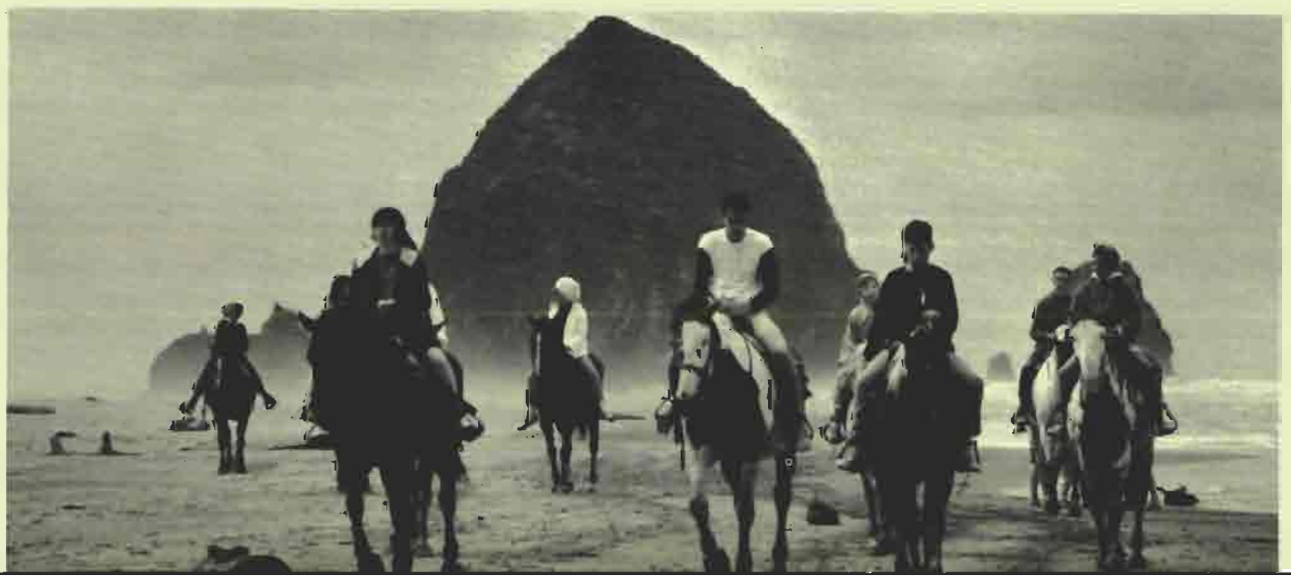
Portions of the route covered by Lewis and Clark appear to have recreation potential that merit national scenic trail status. These portions should be developed to accommodate a variety of uses including hiking, horseback riding, and cycling. Such a trail could serve as a desirable complement to the Lewis and Clark scenic highway. The trail extends across a wide cross-section of the physiographic and climatic regions of the western United States. The eastern portion passes from the central lowlands along the lower Missouri River to the Great Plains topography of the Dakotas and eastern Montana. This stretch of the route, because of the relatively flat nature of the landscape and its closeness to large centers of population, such as St. Louis, Kansas City, and Omaha, would be particularly adaptable and useful for bicycle, horseback, and trail scooter uses. Lands bordering the series of large reservoirs along the Missouri River in this section have significant potential for such recreational trail pursuits.

The 180-mile section of the Missouri River from Fort Peck Reservoir upstream to Fort Benton, often called the Missouri River Breaks, contains features of outstanding scenic, historical, and geological value which would be of great interest to trail users. This area is proposed for protection as the Lewis and Clark Wilderness Waterway. The trail here might be developed both for hiking and horseback riding. Other types of use would be incompatible with the rugged nature of the terrain and wilderness qualities.

Other sections suitable for development include the Lolo Trail, the area in the vicinity of Lemhi Pass, and the area in the vicinity of Lost Trail Pass, all of which are in Idaho and Montana. Two other areas are the trail from Fort Clatsop to the Pacific Ocean and the trail across Tillamook Head to the beach in Oregon. The expedition actually traveled by foot or horseback through all of these five areas.

Along some sections, freeways, highways, and railroads have preempted whatever suitable terrain was available, especially along the major rivers.

Youngsters ride horseback along Whale Creek, Cannon Beach, Ore., where Lewis and Clark in 1806 traded with the Indians for oil and blubber from a whale which had washed ashore. (Photo: Bureau of Outdoor Recreation, No. 96-17)



Oregon Trail

The Oregon Trail is a monument to the perseverance, stamina, and determination of the people who journeyed over 2,000 miles from Missouri to the Pacific Northwest. As a result of migration over this trail, the Nation extended its power and influence to the Pacific Ocean.

The trail stretched from Independence, Missouri, to near Portland, Oregon, crossing what are now six States. It started in the flat floodlands of the Missouri Valley, crossed the plains of Kansas and Nebraska, wound up the North Platte River into the prairie lands of Wyoming, followed the Sweetwater River to the Continental Divide at South Pass, thence across semidesert lands and the rivers and mountains of Wyoming, west down the drainage of the Bear River of Idaho, followed the Snake River to Oregon, crossed the Blue Mountains of that State, then down the south side of the Columbia River to The Dalles, Oregon. From there the emigrant either took a boat down the Columbia or continued his land journey across the Cascade Range to the valley of the Willamette.

The trail has major historic significance. The many preserved landmarks, historic sites, and remaining ruts provide opportunities to see and learn about the emigrants' crossing of half a continent of streams, rivers, valleys, mountains, plains, and semideserts.

Prominent natural features, such as Windlass Hill, Courthouse and Jail Rocks, Scotts Bluff, Register Cliff, Warm Springs, Avenue of Rocks, Willow Springs, Independence Rock, Devil's Gate, Split Rock, Three Crossings, Ice Slough, Rocky Ridge, Pacific Springs, Haystack Butte, Oregon Buttes, Soda Springs, and Massacre Rocks, all conjure up ideas of emigrant experiences.

Scotts Bluff, a major landmark along the Oregon Trail. Scotts Bluff National Monument, Neb. (Photo: National Park Service, No. 9-1938)

Devils' Gate, Wyo., one of the distinctive features along the Oregon Trail. (Photo: Olander Studio, No. 1)

"The Register of the Desert", Independence Rock, Wyo. Travelers along the Oregon Trail customarily engraved their names here. (Photo: National Park Service, No. Wa.5)

Many of the picturesque forts, such as Fort Laramie, Wyo., along the route of the Oregon Trail have been restored. (Photo: National Park Service, No. 59-JB-1422)

Portions of the Oregon Trail are preserved still near Guernsey, Wyo., where conspicuous ruts exist in soft stone. (Photo: Olander Studio, No. 2)

Oregon Trail near Red Buttes, Wyo., where trail left the North Platte River for the Sweetwater River. (Photo: Denver Public Library Western Collection, No. 1)

Portions of the trail are preserved still near Guernsey, Wyoming, where conspicuous ruts exist in soft stone. At other places, the old ruts can be followed for miles across the prairie. A continuous chain of pioneer names appear chiseled on cliff faces and rock outcroppings at various locations from one end of the trail to the other. Many forts built along the route, including Forts Laramie, Casper, and Bridger, have been restored.

The route crosses Federal, State, and private lands. Federal lands include several National Forests, a National Monument, a number of Indian reservations, and lands administered by the Bureau of Land Management. State and local lands include State parks and refuges, and highways. Private lands are estimated at 75 to 80 percent of the toal of 2,055 miles. Land use varies from cultivated fields to grazing land to forests. Highways, reservoirs, and cities occupy and effectively alter important portions of the trail.

Evaluation

The early trail followed the easiest route for passage of wagons, and avoided, wherever possible, steep or rough terrain. Kansas and Nebraska have typically a gentle terrain. In developing a recreational trail, this area appears best suited for bicycling and horseback riding, although the factors of a landscape which many find relativly monotonous and high summer heat through most of the use season must be considered. Through Wyoming, Idaho, and Oregon are long stretches of semidesert country which are not satisfactory for travel requiring physical exertion over a prolonged period, although scattered scenic areas there might be utilized if there were adequate ingress and egress. The remaining major portions of the route, following river valleys or leading through foothill areas in western Wyoming and Idaho and the Blue Mountains and Cascade Mountains in Oregon, appear better adapted for trail purposes.

Connections could be made with other proposed national scenic trails. The Lewis and Clark Trail down the Columbia River parallels the Oregon Trail for a considerable distance and the two might be combined. The Oregon Trail crosses the proposed Continental Divide Trail. Its western end could provide horseback or hiking access to the Pacific Crest Trail. Portions of the Oregon Trail should be considered for inclusion in a National System of Trails. Detailed study should be made of those sections which appear feasible.

North Country Trail

The North Country Trail would extend some 3,170 miles between the Appalachian Trail and Green Mountains in Vermont and the badlands of western North Dakota, where it would meet the Lewis and Clark Trail.

This new trail would lead across mountains, great rivers, dairy and farming country, the Great Lakes region, including the remote North Woods, and vast prairies. It would pass through the Green Mountains in Vermont, the Adirondack Mountains in New York, and the Allegheny Mountains in northwestern Pennsylvania, follow part of the Ohio River, and pass near the source of the Mississippi in the northern Minnesota lake country before joining the Missouri River and the Lewis and Clark Trail north of Bismarck in western North Dakota.

The route of the proposed North Country Trail leads through the Allegheny National Forest. Visitors to the Hearts Content Scenic Area in the Allegheny National Forest, Pa. (Photo: Forest Service, No. 488952)

The trail would provide magnificent views of Lake Michigan and Lake Huron at the Straits of Mackinac. It would wind through northern Michigan, skirting the south shore of Lake Superior, and through Wisconsin and Minnesota—the legendary home of Paul Bunyan and the lusty lumberjacks of 100 years ago. Portions would trace land routes and watercourses used by early French trappers and voyageurs. This vast forested North Country, a great vacationland for the Middle West, has more than 20,000 lakes, 2,000 miles of Great Lake shores, and 15,000 miles of streams—a vast magnet for campers, swimmers, fishermen, hunters, and boating enthusiasts.

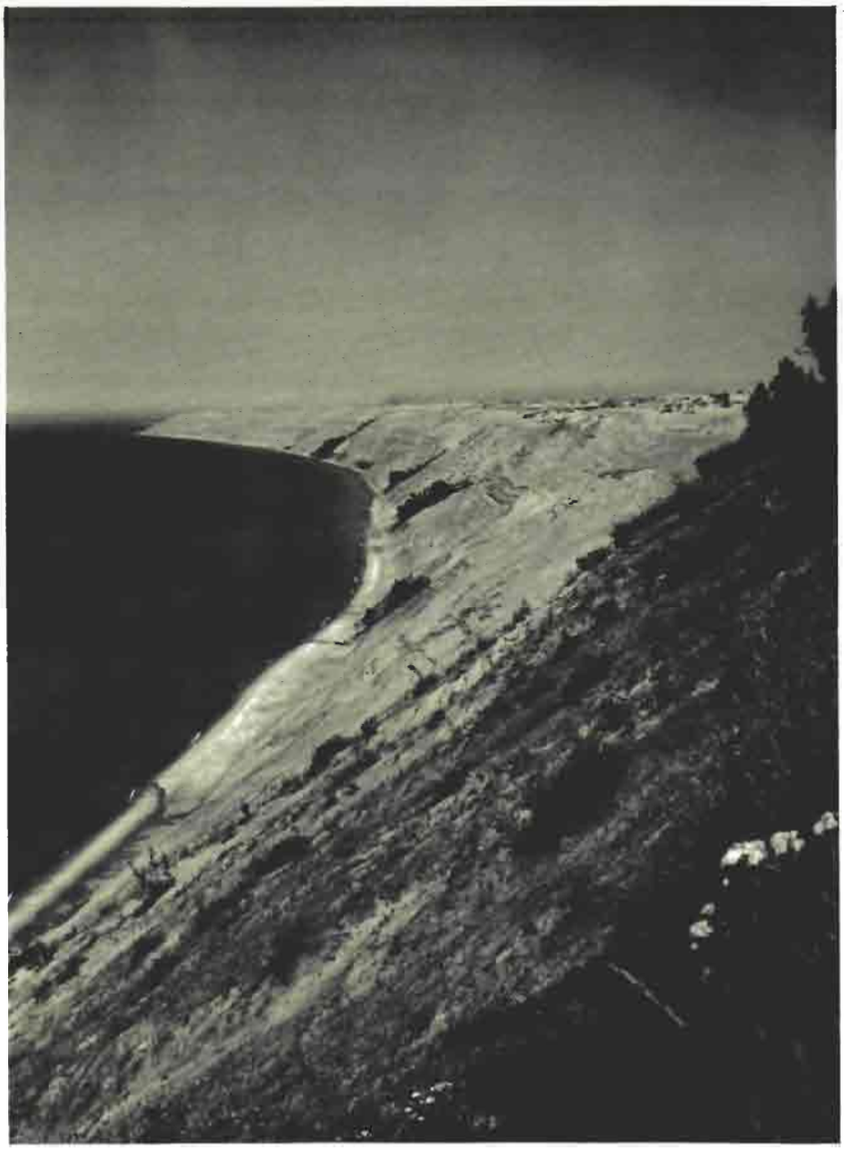
In Vermont and upper New York, the lands along the proposed North Country Trail route are predominantly forested, with some farms in the valleys. Western New York is a dairy region of rolling hills, with neat fields intermingled with farm woodlots. In Pennsylvania, the heavily timbered Allegheny Mountains are dotted with small farms. In Ohio the private lands are in rolling timbered hills along the Ohio River. The route would then follow agricultural and urbanized river valleys northward through Ohio into southern Michigan and along the east side of Lake Michigan. In northern Michigan, Wisconsin, and Minnesota, the land is generally covered with commercial forests and farm woodlots. The trail would leave Minnesota by way of the Red River Valley and in North Dakota follow rivers through prairies and grasslands.

The land ownership pattern along the proposed route includes approximately 1,290 miles that are administered by public agencies and 1,880 miles in private ownership. Much of the Federal and State land is forested and heavily used for recreation. Privately owned lands are characterized by forested hills, farms, and urbanized river valleys.

Evaluation

An east-west North Country Trail would provide millions of people with excellent opportunities for trail experiences—opportunities now available chiefly to those living in the West and in the mountainous areas of the East. More than one-half of the Nation's population lives within half a day's drive of the projected trail route.

Such a trail, routed through an amazing variety of land forms and offering many types of recreation experiences, would be a strong attraction to people living in the nearby metropolitan centers. Among city dwellers there is an almost insatiable demand for the many kinds of recreational opportunities a North Country Trail would provide. Although few would travel the trail from end to end, it would challenge many to travel more and more each year.



The trail also would make its contribution to tourism in the Green Mountains, Adirondack, Allegheny, Great Lakes, and North Woods regions. In addition, it could be a vital link with the Appalachian Trail and other existing and proposed major trails.

The long mileage across private lands and the frequency of road crossings in the heavily populated areas would raise problems whose solution would require intensive planning and study. Possible difficulties, however, appear to be far outweighed by the advantages of the trail. A North Country Trail appears practical and desirable. Detailed study is recommended.

A North Country Trail would provide magnificent views of the Great Lakes. Grand Sable Dunes on Lake Superior, Mich. (Photo: National Park Service, No. 5-RRP-3509)

A North Country Trail would pass through a portion of the northern Minnesota lake country. (Photo: Forest Service, No. 502786)

Natchez Trace

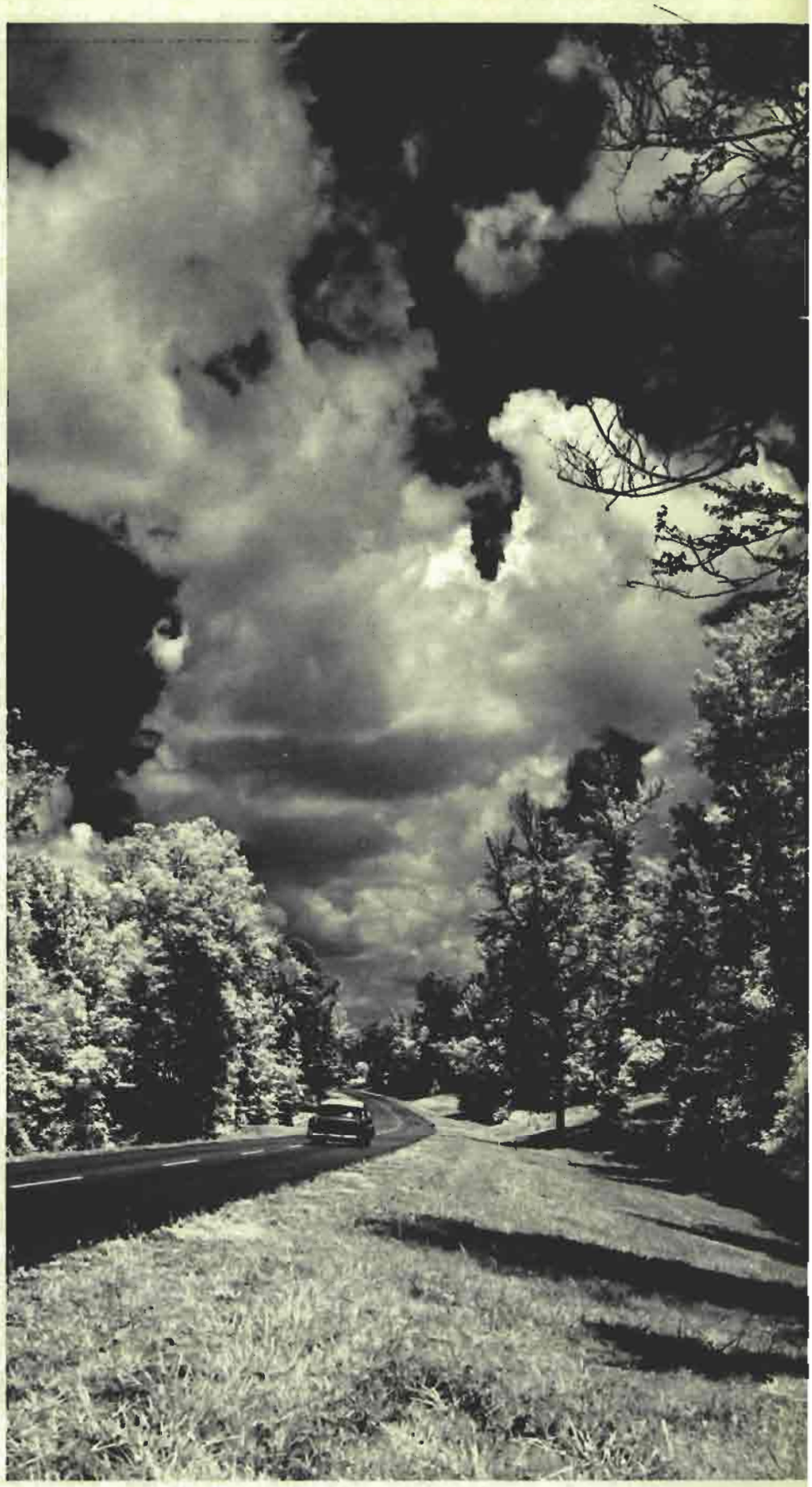
The Old Natchez Trace, or trail, was in turn an Indian path, a frontier road, and finally a route linking the early Mid-South with the more settled East.

Frenchmen arrived on the Mississippi Gulf Coast in 1699 and settled in Natchez in 1716. British traders from the seaboard colonies had reached the area about 1700. Gradually exploring the interior, they discovered an Indian trail running from Natchez to Choctaw villages in eastern Mississippi and thence to Chickasaw villages farther north. The early traders, missionaries, and soldiers made frequent use of the trail.

Beginning about 1785, men from Kentucky and other regions of the western frontier, floating their farm products down river to Natchez and New Orleans, either walked or rode the Natchez Trace back to their homes. By 1800, a thousand each year were making the trip.

Congress in 1800 extended mail service from Nashville to Natchez, and in 1801 U.S. Army troops were used "in clearing out a wagon road and bridging the creeks and causewaying the swamps between Nashville and Natchez." From 1800 to 1820 the Trace was the most heavily traveled road in the old Mid-South. It was also important militarily.

Several factors caused the decline in importance of the old road. As settlement moved west, it was no longer needed for frontier defense. The newly developed steamboat robbed it of traffic, as did newer and more direct roads. As the region became more populous, use of the road faded.



The old Trace lies in close proximity to the Natchez Trace Parkway administered by the National Park Service. (Photo: National Park Service, No. 61-JB-426)

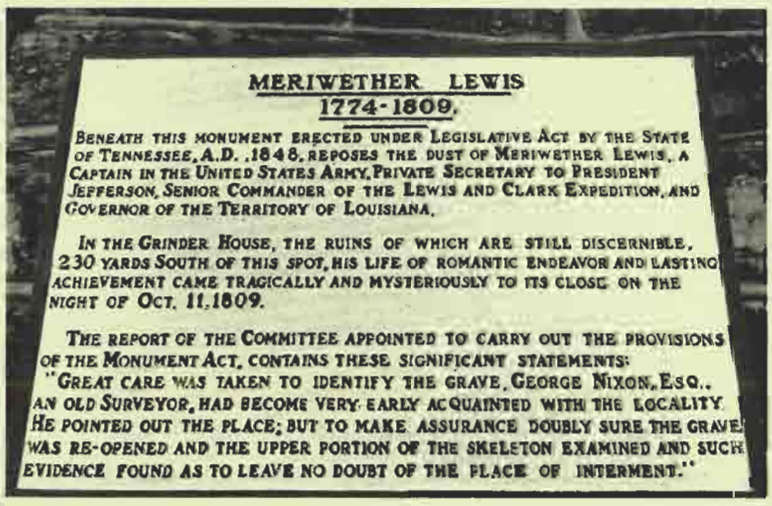
Park Ranger explains the historic significance of the Natchez Trace to a group of scouts. (Photo: National Park Service, No. WASO-D-462)

In 1934 the Congress authorized construction of the Natchez Trace Parkway, following generally the route of the venerable trail. Administered by the National Park Service, the parkway had almost five million visitors in 1965.

From Nashville, the old trail leads in a southwesterly direction through Hohenwald and south-central Tennessee. It crosses the northwest corner of Alabama north of Florence and enters the State of Mississippi near Iuka. The trail continues in a southwesterly direction past the cities of Tupelo, Kosciusko, Jackson, and Port Gibson, to Natchez.

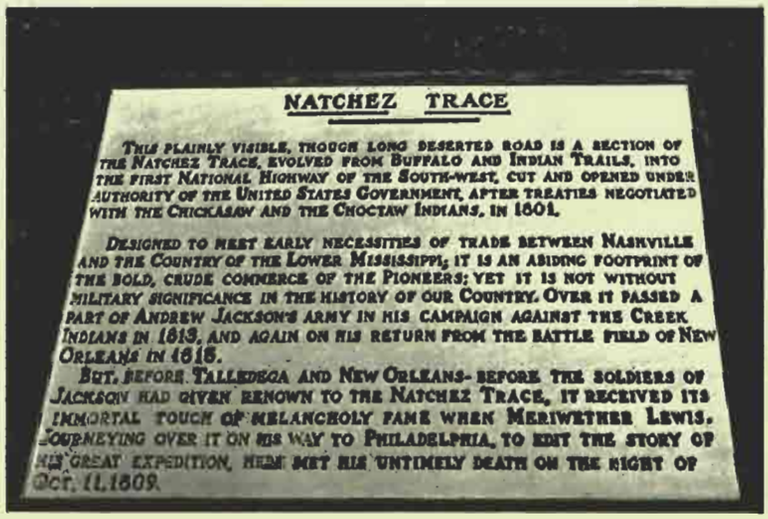
Near Natchez are restored Mount Locust, with its frontier furniture and utensils, and Emerald Mount, one of the largest Indian ceremonial structures in the United States. Near Tupelo, Mississippi, are Chickasaw Village and Bynum Mounds, reminders that this was the land of Choctaw, Chickasaw, and prehistoric Indians. Metal Ford and Napier Mine, near Hohenwald, Tennessee, provide examples of frontier iron mining and smelting. Nearby is the grave of Meriwether Lewis. This section of the trail crosses deep valleys and sharp ridges through a region of great natural beauty.

Monument to Meriwether Lewis along the old Natchez Trace in Tennessee. The double line of stones mark the route of the original Trace. (Photo: National Park Service, No. W. 6)



Inscription on the plaque of the Meriwether Lewis Monument. (Photo: National Park Service, No. W. 4)

This section of the old Natchez Trace has changed little since the days of the overland mail riders (Photo: National Park Service, No. 61-JB-440)



Interpretive marker (Photo: National Park Service, No Wa. 38)

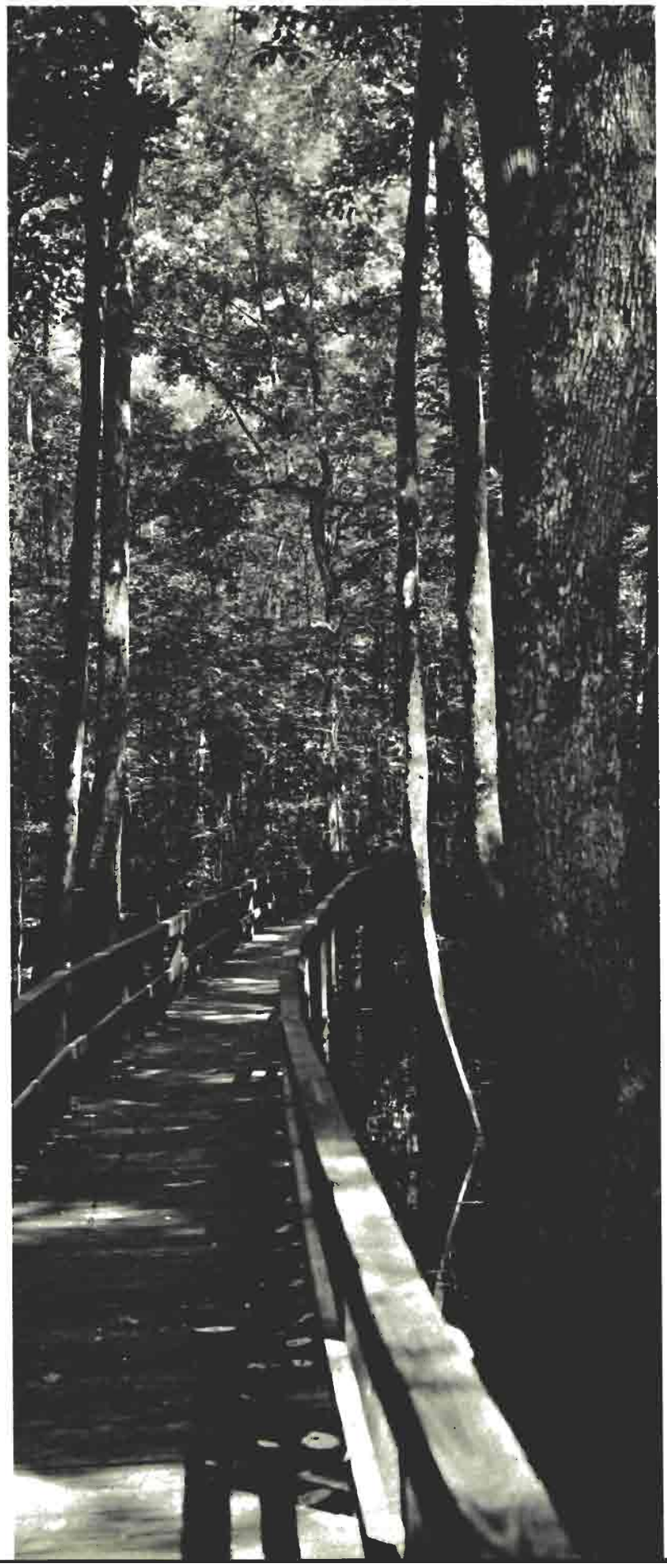
A major portion of the trail is located on lands administered by the National Park Service as part of the Natchez Trace Parkway. Portions also cross the Tombigbee National Forest, Tishomingo State Park, other State and local lands, and private holdings. The general land use pattern includes a combination of crop, pasture, and forested lands in a well-settled countryside.

Evaluation

The Natchez Trace Parkway includes in its land corridor the potential for a national scenic trail. This opportunity was recognized in the 1930's when as a result of a National Park Service study, the suggestion was made that the historic route of the Trace should be preserved and developed at some future time as a pathway for hikers, equestrians, and cyclists if those forms of outdoor recreation should ever become popular there.

The Parkway is 450 miles in length, extending between Natchez, Mississippi, and Nashville, Tennessee. The historic Trace, however, first an Indian path, then a frontier trail, and finally a road linking the East and Mid-South, led for some 600 miles along a more irregular route.

A trail developed in close proximity to the parkway would offer the ardent hiker, horseback rider, and cyclist, either in separate sections or in compatible combination, opportunity to follow the Natchez Trace and enjoy many recreational opportunities unavailable to motorists. The recreationist could hike or ride on representative sections of the old Trace and see what a frontier road looked like. At short intervals he would find other landmarks—a building, an abandoned mine, or a stream crossing, all associated with the people who lived on or traveled over the historic thoroughfare. Such a trail would further enhance public enjoyment of the historical and esthetic qualities of the Natchez Trace Parkway.

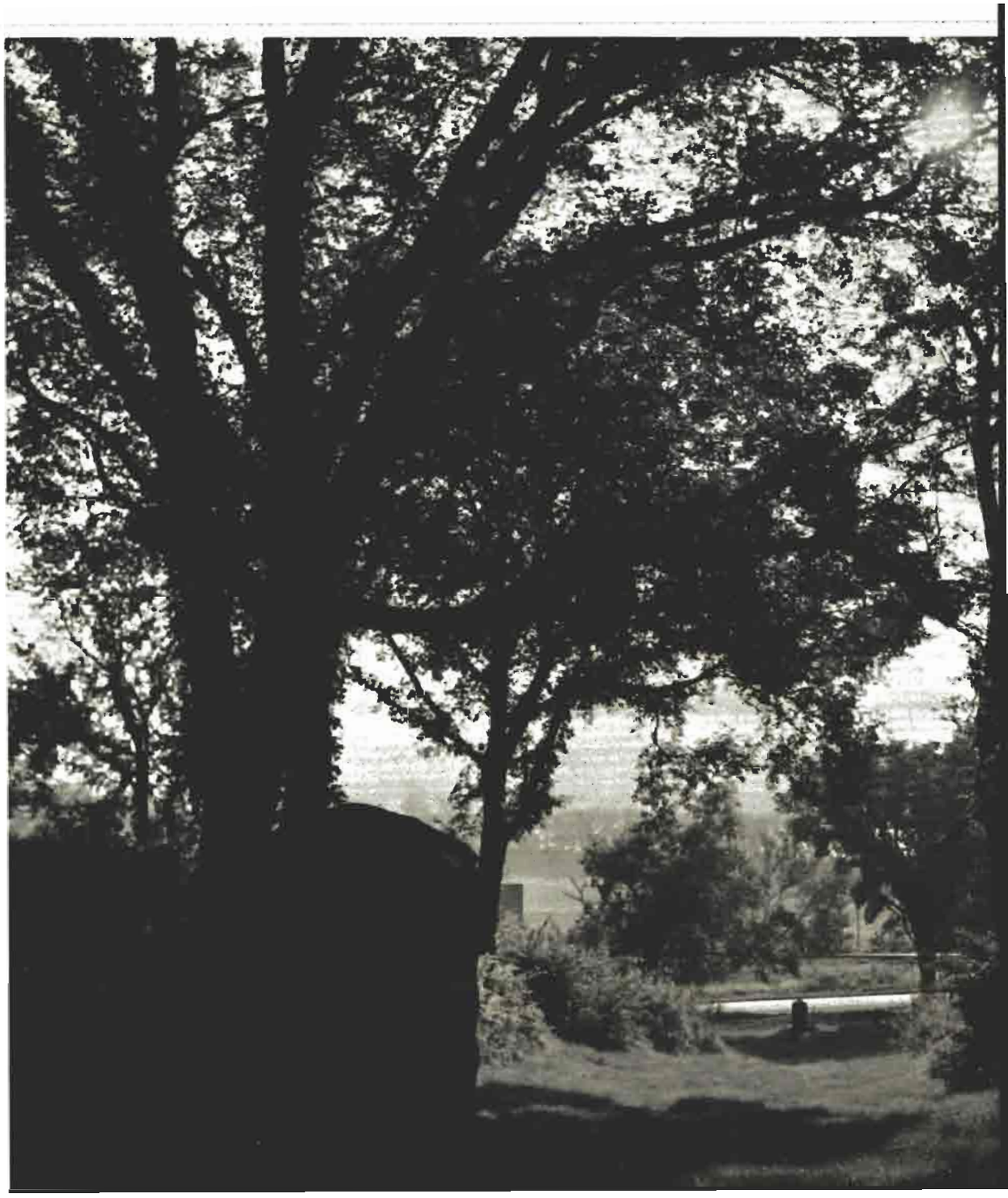


An interpretive walk developed by the National Park Service through a bald cypress swamp near the Natchez Trace. (Photo: National Park Service, No. 61-JB-444)

Santa Fe Trail

In 1822, Captain William Becknell and three companions rode into Franklin, Missouri, loaded down with silver pesos. Forty-eight days before they had departed from the vicinity of Santa Fe, New Mexico. News of the first successful trading expedition from the Missouri River to Santa Fe and return spurred a throng of enterprising traders who chose to gamble their lives and their investments against distance, terrain, weather, hostile Indians, and the caprice of Mexican customs officials.

Road at Fort Leavenworth, Kan., which led to the Santa Fe Trail. (Photo: Bureau of Outdoor Recreation, No. 155-7)



Serving at first as a commercial and cultural link between adjacent borders of the United States and Mexico, the trail soon became a military highway clogged with materials for the Mexican War. Following the end of the war in 1848, the territory had to be administered, protected, and provisioned. The men and the material for this task came over the Santa Fe Trail.

For the next two decades, the Santa Fe Trail held undisputed position as the trunk line to the Southwest. It was the road by which the United States filtered into much of the Southwest, tamed it, and fused it to the Nation. Inevitably, however, the railroad came and, by 1880, use of the trail had ceased.

Today the historic sites and landmarks along the Santa Fe Trail hint at its turbulent history. The Palace of the Governors still stands in Santa Fe. The plaza where the wagons congregated is now a city park. Over great distances, grass-grown ruts lead from landmark to landmark. One can visit the springs and the wild places where ruins of old forts still stand. The trail continues to mark a course across the plains, deserts, mesas, mountains, canyons, and rivers of the Southwest.

The Santa Fe Trail was one of the longest commercial routes in the United States in the pre-railroad era. Once finally established, its terminals lay at Independence, Missouri, and Santa Fe, New Mexico, 780 miles apart. The early travelers transported their goods by pack horse. Later traders took wagons loaded with manufactured goods to Santa Fe to exchange for mules, furs, gold, and silver. The caravans of traders traveled westward to Council Grove, Kansas, and on to the Cimarron crossing of the Arkansas River near Cimarron, Kansas. There the route divided. One branch led up the Arkansas River to Bent's Fort near LaJunta, Colorado, and then turned southwest across Raton Pass to the upper Canadian River in New Mexico. The other route extended from the Arkansas River across the Cimarron Desert. This one was shorter but more dangerous because of Indians.

Over great distances grass grown ruts still mark the route of the Santa Fe Trail (Photo: Denver Public Library Western Collection, No. 2)

The original starting point of the trail was from the steamboat landing at Franklin, Missouri. Later it was shifted to Independence, Missouri, then to Westport, Missouri, and eventually to Fort Leavenworth, Kansas.

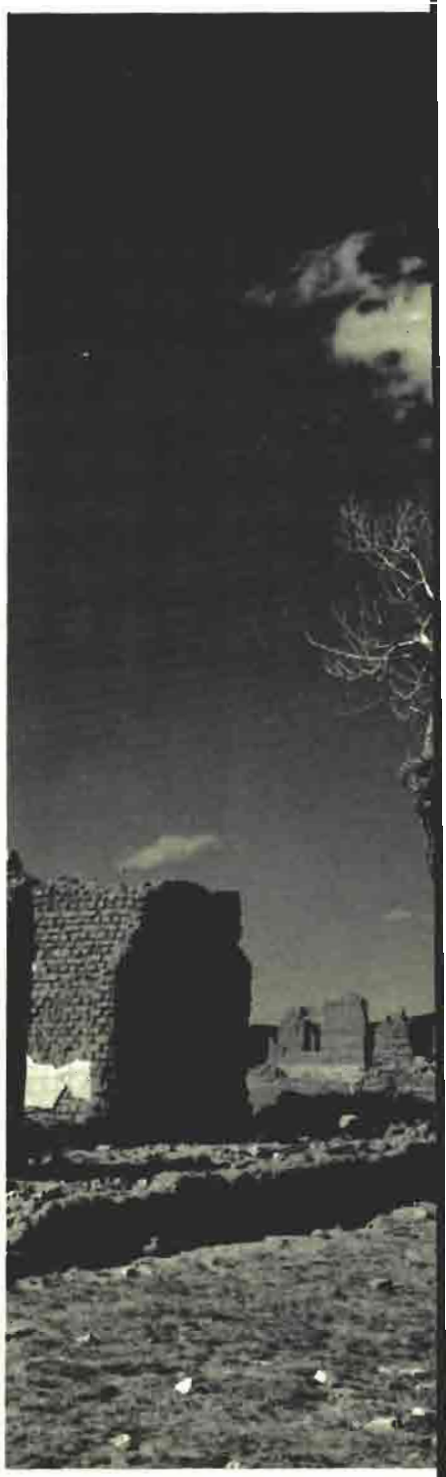
Although the western terminus remained at Santa Fe, another route, the Old Spanish Trail, provided access between Santa Fe and Los Angeles. It followed a semicircular route by way of Durango, Colorado, the Green and Virgin Rivers in Utah, the Colorado River, and on across the Mojave Desert in California.

Practically all of the Santa Fe Trail extends through private lands. The route passes through farm and ranch country adjacent to small communities with low density population. The last hundred miles of the loop to Bent's Fort lies adjacent to two National Forests.

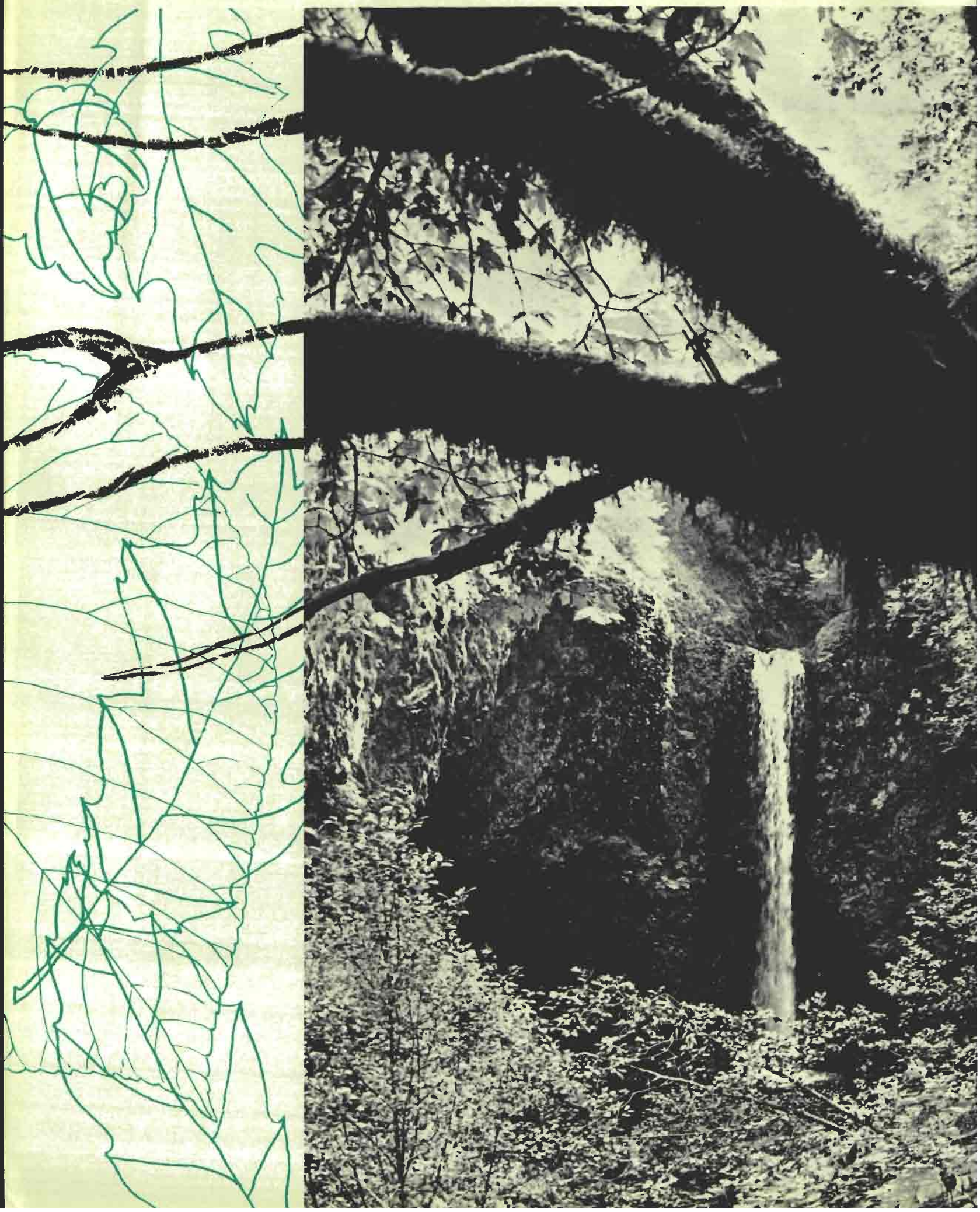
Evaluation

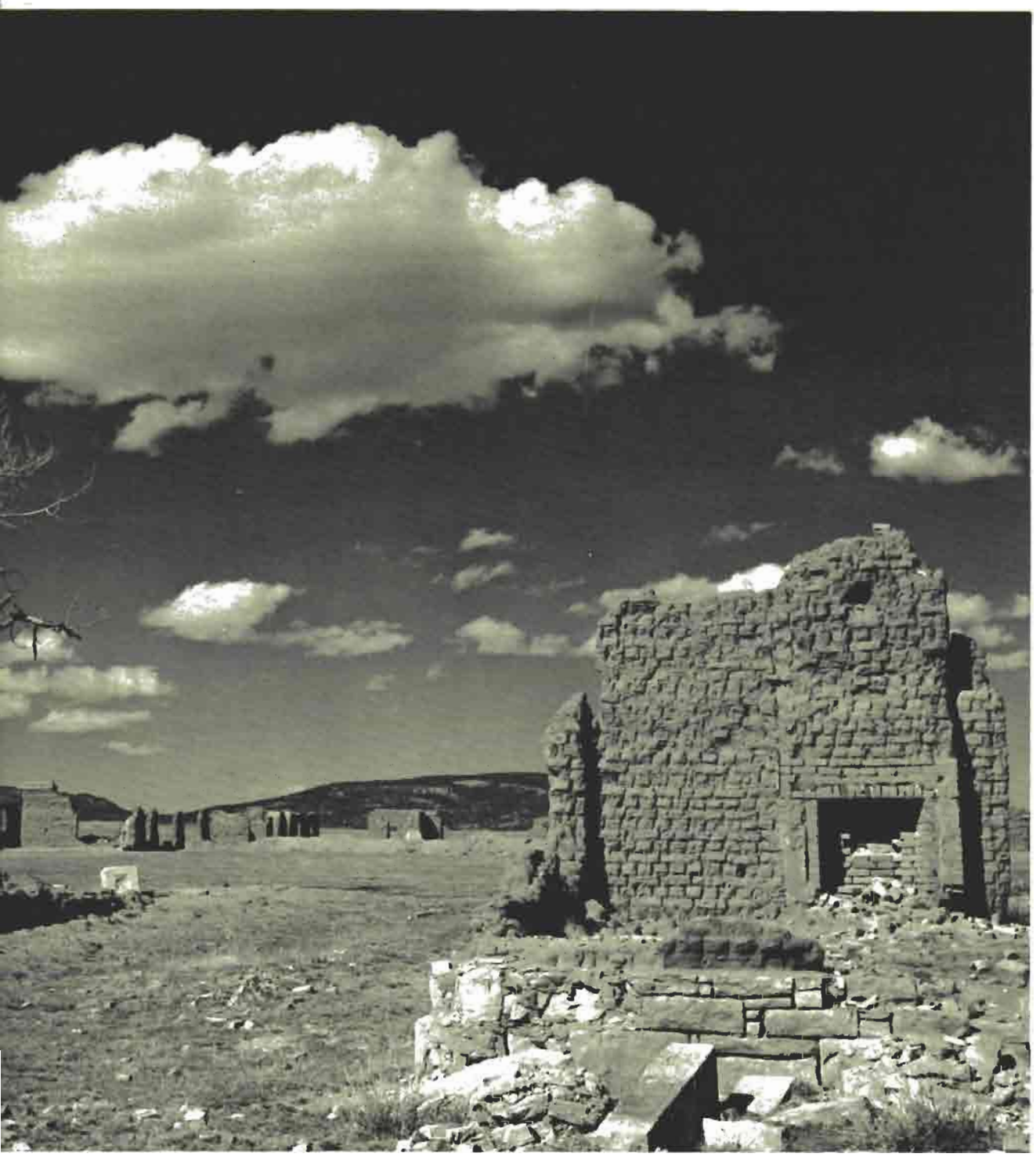
The recreation values along the Santa Fe Trail are limited because of the lack of water-based activities and the fact that much of the trail passes through plains country or desert. Historically, the trail has great significance and many of the historical sites along the route have been marked by the National Park Service.

The level topography along the trail and the long distances between the historic sites weigh against development of the trail for the more conventional types of trail use. Portions however, might be adapted to bicycles and trail scooters, and possibly horseback use, with spur routes leading to points of particular interest. This kind of development would allow travelers to cover the less spectacular sections of the trail rapidly, leaving them more time to spend at the points of principal interest.

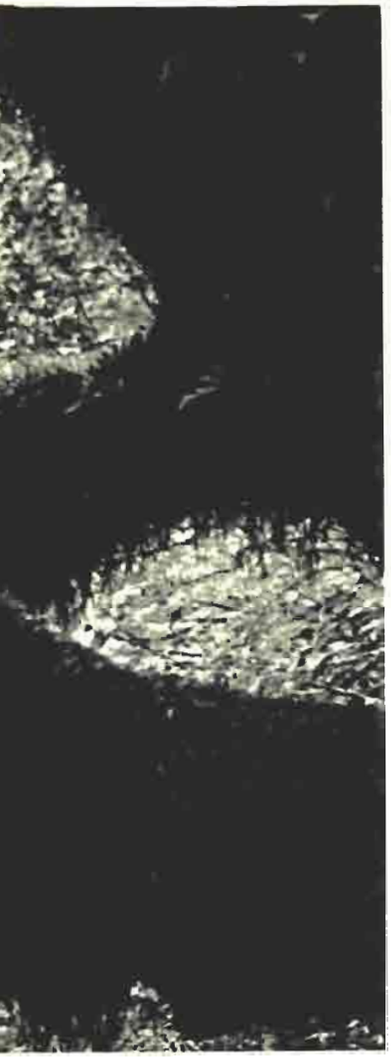


Historic photograph of actual travelers along the rugged Santa Fe Trail. (Photo: Denver Public Library Western Collection, No. 3)





One can visit springs and wild places where ruins of old forts still stand, such as Fort Union, N.M. (Photo: National Park Service, No. WASO B. 778)



PART 2

PARK AND FOREST TRAILS

Park and forest trails open up scenic, historic, and recreation resources on public lands for public enjoyment. They lead the visitor from his car or from a roadway to a waterfall, a scenic overlook, a geologic phenomenon, or perhaps a point of historic interest. They are inviting because there is something interesting at the end to see and do. They are located irrespective of their proximity to centers of population, and vary in length as the conditions require. Graded and finished, they serve as many persons as care to use them. The value of the recreation resources made available is the measure of the utility of park and forest trails.

Park and forest trails serve a wide range of outdoor recreation activities. Family campers and picnickers find pleasures varying from use of campsites or picnic tables to viewing or visiting glaciers, mountaintops, or waterfalls. Trips along different trails to famous areas such as Shenandoah National Park and George Washington National Forest in Virginia, and Glacier National Park and Flathead National Forest in Montana provide ever-new experiences, even for those who return many times.

Trails open public wilderness areas to the visitor on foot or horseback. Hunters seek their quarry along trails. Fishermen who enjoy the thrill of trying a remote lake or stream find their way by trail.

The back country of our undeveloped West is opened by trails on public lands. Increasing numbers of "rock hounds," prospectors, and sightseers come on light trail scooters. Many still use horses to ride or for packing their gear.

Trails on public lands open wilderness to the visitor on foot or horseback. Larch Mountain Trail east of Portland, Ore. (Photo: The Oregonian)

CHAPTER 5

FEDERAL TRAILS

Present Status

The Federal Government maintains some 88,000 miles of recreation trails. Practically all are located on lands administered by the Forest Service and National Park Service, and most are in the West. Both the Forest Service and National Park Service have long-established trail programs. Trail construction is an integral part of the overall development plans for the National Forests and of the master plans for developing National Parks and Monuments. Other Federal land management agencies have only rudimentary programs.

Trail development on Indian reservations and on lands of the Bureau of Land Management, Bureau of Sport Fisheries and Wildlife, and Bureau of Reclamation has progressed slowly. Construction of trails usually has been given low priority so that greater emphasis could be placed on projects to accomplish those agencies' primary objectives. All three bureaus and the Bureau of Indian Affairs are aware, however, of the increasing demand for recreation use of their lands and have expressed interest in expanding trail mileage as rapidly as possible, consistent with other program aims.

Of the total Federal recreational trail mileage, 73,270 miles or 83 percent cross Forest Service lands; 9,216 miles or 10 percent are in National Park Service areas; 3,602 miles or 4 percent are on lands administered by the Bureau of Land Management; 1,636 miles or 2 percent are on Indian lands; and the remaining 1 percent is on lands managed by the Bureau of Sport Fisheries and Wildlife and the Bureau of Reclamation. The Forest Service has an additional 33,000 miles of trail not classified primarily for recreation use, but available to recreationists and in most instances lightly used. Table 6 provides a State-by-State breakdown of the total existing Federal recreational trail mileage and of the estimated miles presently available for use by foot, horseback, bicycle, and trail scooter.

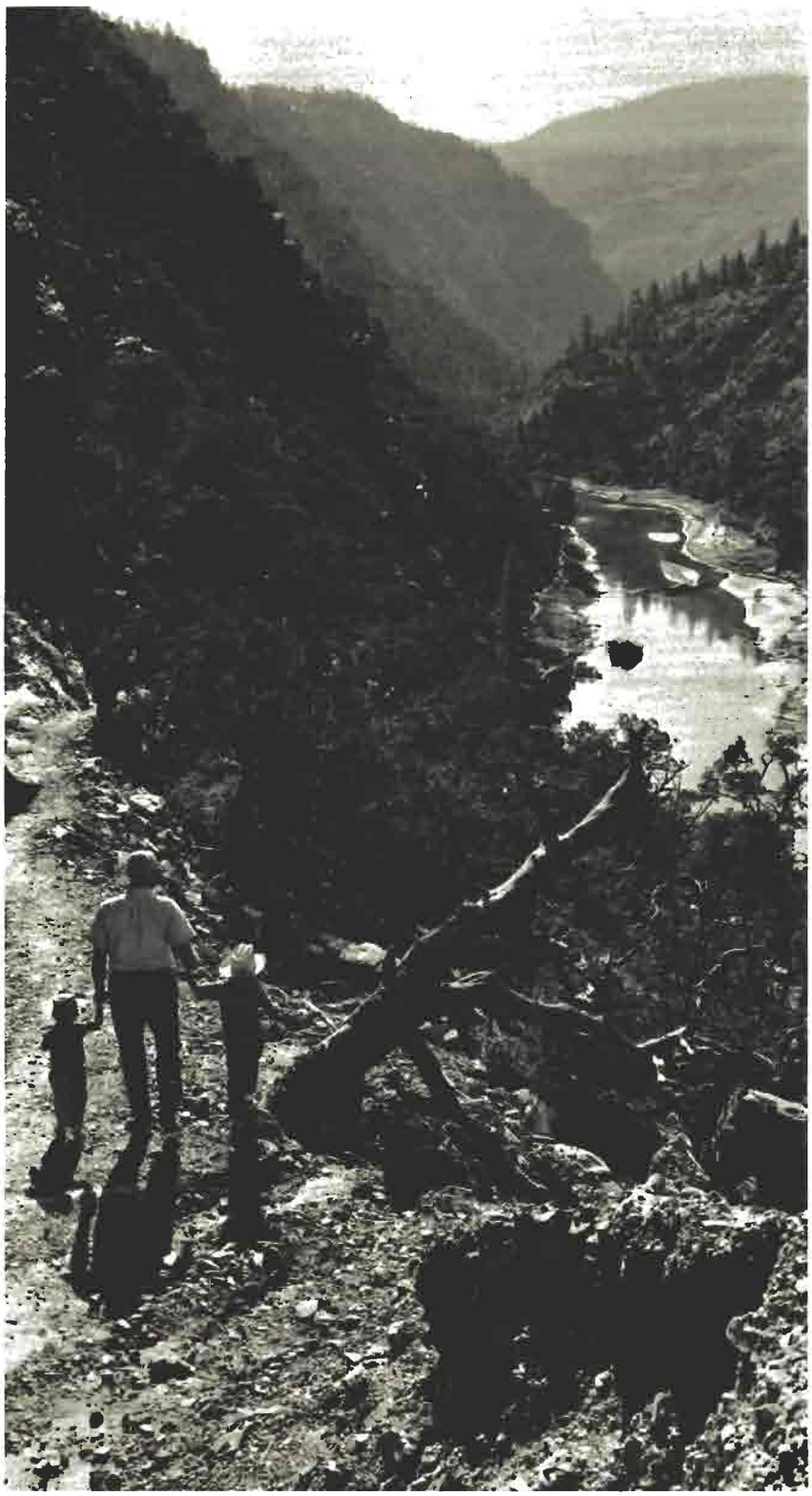
Only a small share of the total trail mileage was developed expressly for recreation. Most trails were constructed to permit resource surveys, fire protection, law enforcement, livestock access, and other related management functions.

Trail bikes are a popular means of enjoying trails. (Photo: Bureau of Outdoor Recreation, No. T-1)

Table 6. Existing trail mileage on Federal lands, by States and Territories

State or Territory	Total [1]	Presently available, by estimated type of use [2]			
		Foot	Horseback	Bicycle	Trail Scooter
Alabama	2	2	0	0	0
Alaska	989	989	586	2	2
Arizona	5,268	4,689	5,078	5	1,331
Arkansas	19	11	8	0	0
California	15,891	15,605	14,177	454	5,247
Colorado	11,065	10,997	11,032	305	1,820
Connecticut	0	0	0	0	0
Delaware	0	0	0	0	0
Florida	98	98	91	0	35
Georgia	54	46	9	0	0
Hawaii	191	32	186	0	0
Idaho	10,556	10,556	8,685	1,006	4,403
Illinois	80	80	56	0	0
Indiana	6	6	0	1	0
Iowa	4	4	0	0	0
Kansas	0	0	0	0	0
Kentucky	164	164	0	0	0
Louisiana	1	1	0	0	0
Maine	285	226	60	0	0
Maryland	213	213	166	181	0
Massachusetts	19	15	4	0	0
Michigan	219	219	82	0	0
Minnesota	132	132	30	20	15
Mississippi	20	17	3	0	0
Missouri	59	59	49	0	0
Montana	9,274	9,274	7,299	630	820
Nebraska	5	5	1	1	1
Nevada	2,086	1,654	1,522	110	953
New Hampshire	943	943	200	25	50
New Jersey	12	12	8	8	0
New Mexico	4,065	3,982	3,970	4	1.000
New York	21	21	0	6	0
North Carolina	1,377	1,377	523	0	0
North Dakota	17	7	10	0	0
Ohio	19	19	0	1	0
Oklahoma	11	11	0	0	0
Oregon	5,179	5,138	4,765	506	1,888
Pennsylvania	188	175	15	0	0
Rhode Island	0	0	0	0	0
South Carolina	20	20	13	0	0
South Dakota	34	22	22	0	0
Tennessee	639	630	156	0	0
Texas	251	88	163	0	0
Utah	4,434	3,791	4,187	355	2,944
Vermont	145	145	89	0	0
Virginia	1,058	1,044	314	100	200
Washington	6,814	6,814	6,299	530	2,731
West Virginia	589	589	230	125	175
Wisconsin	35	35	0	0	0
Wyoming	5,146	5,146	5,098	149	644
District of Columbia	82	65	19	5	0
Puerto Rico	40	40	20	0	0
Virgin Islands	15	15	0	0	0
Total	87,834	85,223	75,225	4,529	24,259

[1] Totals are not the sum of individual uses because some trails sustain more than one means of travel.
[2] The uses shown here are not necessarily those for which the trails were built.



Federal land-managing agencies need to undertake farsighted recreation trail development programs to meet the growing public demand. Trail under construction by the Forest Service in the Ashley National Forest, Utah. (Photo: Bureau of Reclamation, No. P591-421-4969)

The trails today often are inadequate to meet the heavy recreation use to which they are being subjected. Heavy visitor use of trails which were neither designed nor constructed for recreation is causing trail deterioration in some areas. Trails frequently fail to follow the most scenic or interesting routes, are too steep or too narrow, or are unsafe. Many are inadequate for the use of bicyclists and, in some regions, trail scooter riders.

There is an imbalance of trail development between the various sections of the country. At present, 93 percent of total Federal trail mileage is located in States west of the Mississippi River, a section containing only 34 percent of the population.

Federal and State agencies should give more attention to coordinating trail development on a regional basis, particularly where the lands of two or more Federal or State agencies are contiguous. More attention needs to be given to the use of recreation trails during the off season. Where the demand exists and use is feasible, trails should be made available to the skier and snowshoer.

Recommended Program

Federal land-managing agencies need to undertake farsighted recreation trail development if they are to meet adequately the growing public demand. Hiking, bicycling, horseback riding, and trail scooter riding have increased substantially on many trails and are certain to accelerate in rate of growth in coming years. Abundant opportunities to build proper trails or rebuild old ones for recreation exist on most Federal lands.

To meet foreseeable public recreation trail needs, the Federal land management agencies of the Department of the Interior and Department of Agriculture—Forest Service, National Park Service, Bureau of Land Management, Bureau of Sport Fisheries and Wildlife, Bureau of Indian Affairs, and Bureau of Reclamation—propose a long-range Federal park and forest trail program that will include eventual construction of 36,563 miles of new trail and reconstruction of 41,863 miles of existing trails, as summarized in Table 7. Upon completion, there would be a combined total of more than 125,000 miles of high standard public recreation trails available in Federal areas.

Table 7. Proposed trail construction or reconstruction on Federal lands, by States and Territories, in miles [1]

State or Territory	New construction	Re-construction	Newly constructed or reconstructed trails that would be available, by estimated type of use			
			Foot	Horseback	Bicycle	Trail Scooter
Alabama	66	0	62	28	11	8
Alaska	1,551	1,123	2,674	2,172	1,664	1,672
Arizona	3,197	3,727	6,576	6,453	1,509	2,560
Arkansas	440	0	440	234	20	0
California	5,291	7,477	11,125	11,165	1,365	4,926
Colorado	2,525	4,248	6,446	6,422	245	1,641
Connecticut	0	0	0	0	0	0
Delaware	5	0	5	5	5	0
Florida	107	35	106	117	30	76
Georgia	82	7	89	53	10	33
Hawaii	36	39	70	66	8	0
Idaho	2,720	4,438	7,129	6,953	625	3,078
Illinois	491	23	456	372	20	35
Indiana	101	2	81	70	21	20
Iowa	17	0	17	12	10	0
Kansas	166	0	84	84	14	0
Kentucky	370	10	380	0	0	0
Louisiana	55	0	55	25	5	0
Maine	23	118	141	16	8	8
Maryland	75	14	86	14	32	0
Massachusetts	38	3	39	24	40	0
Michigan	1,306	13	908	620	232	495
Minnesota	609	112	709	223	207	170
Mississippi	137	0	137	110	15	0
Missouri	534	31	565	408	25	50
Montana	2,774	3,386	6,160	2,981	297	271
Nebraska	257	2	158	162	27	27
Nevada	1,440	1,794	3,228	3,171	140	736
New Hampshire	50	89	139	60	10	20
New Jersey	60	8	58	18	5	0
New Mexico	1,350	3,310	4,652	4,570	124	808
New York	44	8	37	17	25	0
North Carolina	437	258	645	163	5	0
North Dakota	219	0	185	179	75	65
Ohio	81	2	61	50	21	20
Oklahoma	111	0	92	47	63	0
Oregon	2,327	2,517	4,580	4,167	430	2,037
Pennsylvania	323	103	399	267	102	150
Rhode Island	0	0	0	0	0	0
South Carolina	112	18	130	94	10	0
South Dakota	393	22	306	354	80	105
Tennessee	364	300	660	273	10	0
Texas	198	1	117	114	21	0
Utah	944	2,970	3,293	3,632	270	1,848
Vermont	89	10	99	67	0	0
Virginia	585	210	751	603	345	400
Washington	1,880	2,666	4,440	3,857	394	1,969
West Virginia	301	149	450	201	125	150
Wisconsin	486	22	486	425	50	48
Wyoming	1,706	2,576	3,942	3,794	292	2,280
District of Columbia	61	12	61	0	45	0
Puerto Rico	15	10	25	15	10	15
Virgin Islands	14	0	14	0	0	0
Total	36,563	41,863	73,548	64,927	9,097	25,721

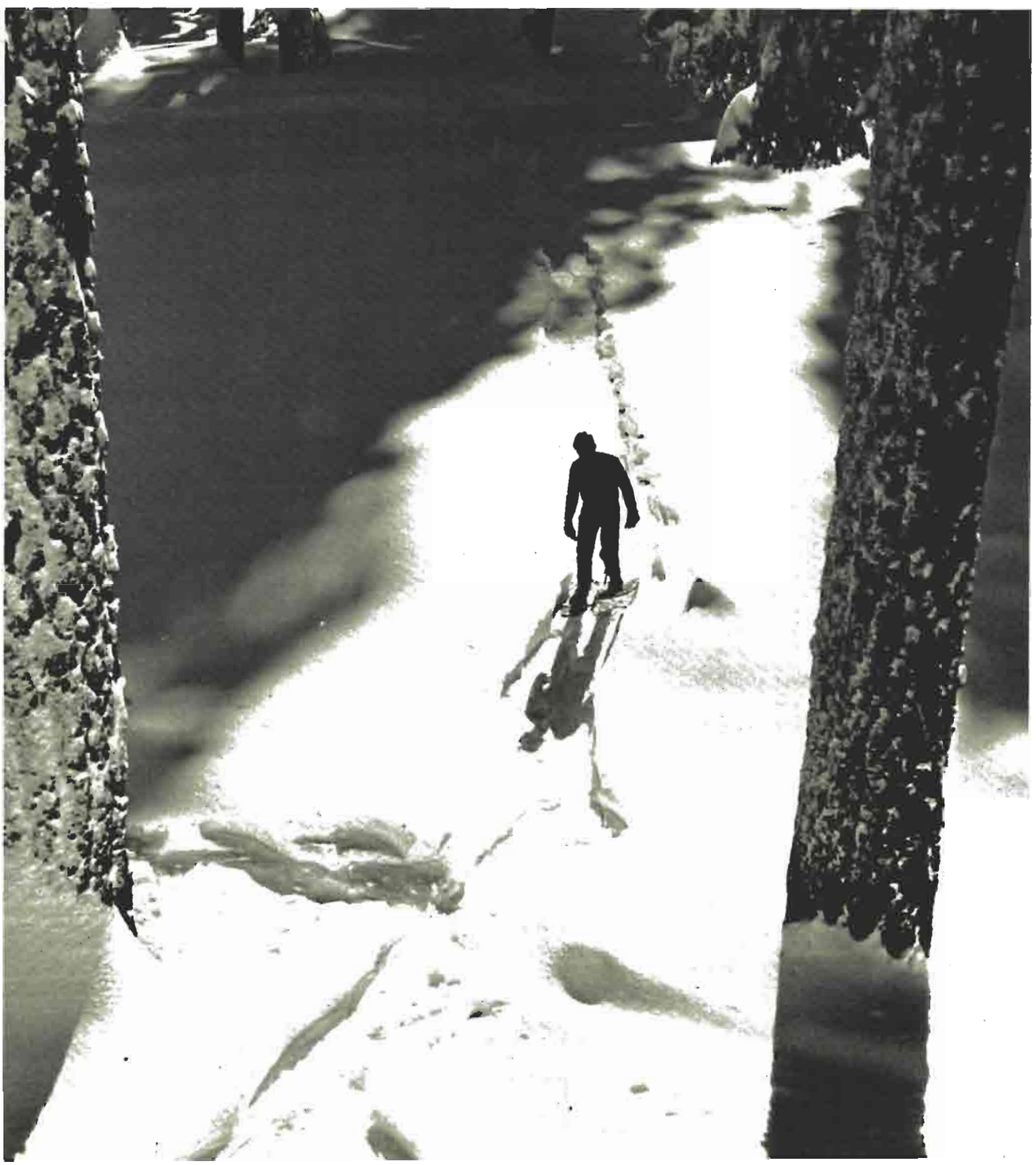
[1] Not included is mileage for national scenic trails.

The primary objectives of the federal park and forest trail Program would be:

1. To achieve better geographical balance nationally and regionally in locating trails where population pressures are greatest.
2. To coordinate trail development between Federal and State agencies so that their efforts will be complementary.
3. To locate and design trails that will have maximum appeal, and in which the safety of the recreationist is paramount.
4. To provide adequately for each of several kinds of users—foot, horseback, bicycle, and trail scooter.
5. To encourage and provide use of some special trails during all seasons of the year.

Each of the Federal land management agencies except the Bureau of Reclamation has sufficient authority to construct and operate recreation trails. Necessary authority should be sought for the Bureau of Reclamation.

Federal trail programs should encourage and provide use of some special trails during all seasons of the year. (Photo: S-4)



Funds for trail development are included in the regular appropriation requests of the agencies. Their future requests should reflect the proposed expanded trail program.

Priority for the construction of new recreation trails and the reconstruction of existing trails should be given to Federal park and forest lands near major urban areas. Such opportunities are relatively limited, however, because the preponderance of Federal lands is west of the Mississippi River in States with low population densities. Trail construction and reconstruction opportunities listed in Table 7, therefore, include much low priority mileage, especially in the mountain States.

No Federal trail construction is proposed in Connecticut and Rhode Island because there are no Federal recreation lands in those States. Establishment of a proposed Connecticut River National Recreation Area would alter that situation significantly.

A number of other States which have only small Federal holdings similarly would receive less than 150 miles of new or reconstructed Federal park and forest trails. Among them are Alabama, Delaware, Florida, Georgia, Hawaii, Iowa, Louisiana, Maine, Maryland, Massachusetts, Mississippi, New Hampshire, New Jersey, New York, Ohio, Oklahoma, South Carolina, and Vermont. However, several of these States would benefit from the preservation or construction of one or more national scenic trails through their lands, an important part of which may be Federally administered. National scenic trail mileage is not included in the figures in Table 7.

Agency Programs

All Federal land management agencies have trail programs and have developed plans for expanding their recreation trail services.

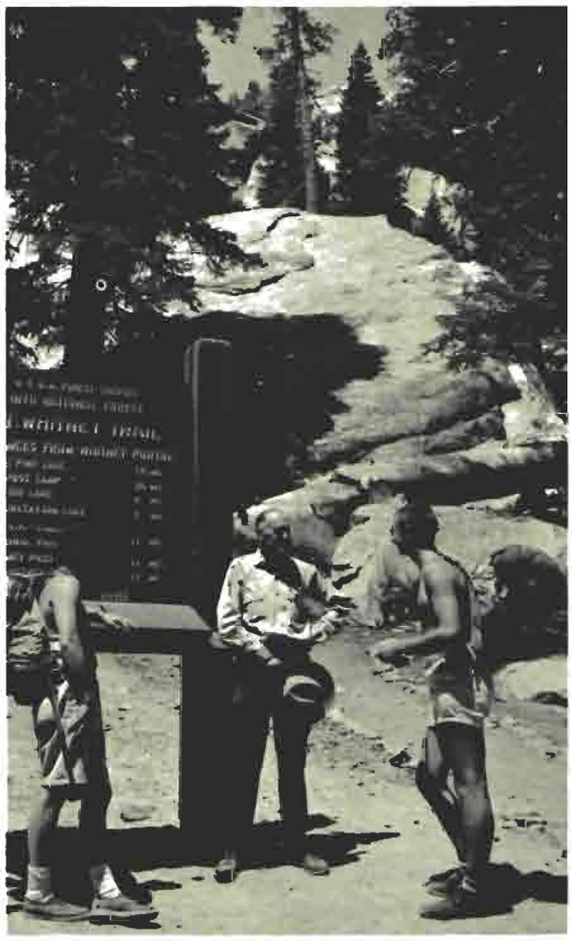
Forest Service

The earliest forest rangers found many trail routes made by wild animals, Indians, frontiersmen, prospectors, hunters, ranchers, sheepherders, and loggers. This primitive patchwork of trails was inadequate, however. Vast areas had no trails at all, and the rangers needed routes through all parts of the National Forests to protect, develop, and manage the timber and other resources.

As early as 1910, the Forest Service was building 2,000 miles of trails a year. By 1925 the trail network had expanded to over 61,000 miles. It reached its peak of over 150,000 miles in 1944. Most were built to move work crews and forest personnel from point to point and to provide the most efficient route of access to an area. Much of this original mileage was later replaced by roads.

Following the Second World War, increasing numbers of Americans began to take advanage of the outdoor recreation opportunities available in the National Forests. However, they found few trails constructed to serve recreation needs and adequate to meet the demands placed upon them. Only those in the White Mountains of New Hampshire could be said to meet recreation standards.

Today most of the existing trail mileage is maintained to meet standards suitable for recreation. The Forest Service presently maintains approximately 73,000 miles of recreation trails for public use. A State-by-State breakdown of this mileage is shown in Table 8.



The Forest Service currently maintains some 73,000 miles of recreational trails for public use. Hikers in the Inyo National Forest, Calif. prepared to hike to the summit of Mount Whitney. (Photo: Forest Service, No. 487509)

Increasing public use of trails has been accompanied by conflicting demands. Outdoor clubs are seeking to continue their traditional use of riding and hiking trails. Bicyclists are finding relatively few trails adequate for their use. Trail scooter riders are using trails near population centers in direct competition with hikers and horseback riders. To meet the public need for recreation trails in the National Forests, the Forest Service proposes a significant expansion of its trail construction program.

Under existing programs, the Forest Service had planned to construct 8,000 miles of trail during the period 1963-72. In conjunction with the Nationwide System of Trails, the Forest Service would construct or reconstruct more than 56,000 miles over a somewhat longer period, giving first priority to trails in and near the more heavily populated regions. (Table 9). An expanded program in the National Forests would increase recreation forest trails to a total of nearly 94,000 miles.

Table 8. Existing trail mileage in National Forests, by States and Territories

State or Territory	Total [1]	Presently available, by estimated type of use [2]			
		Foot	Horseback	Bicycle	Trail Scooter
Alaska	465	465	75	0	0
Arizona	3,573	3,573	3,500	0	1,200
California	13,575	13,456	12,027	429	5,247
Colorado	9,451	9,451	9,451	160	1,394
Georgia	40	40	0	0	0
Idaho	10,424	10,424	8,567	1,006	4,403
Illinois	80	80	56	0	0
Indiana	4	4	0	0	0
Kentucky	123	123	0	0	0
Maine	96	86	10	0	0
Michigan	93	93	82	0	0
Minnesota	122	122	30	20	15
Mississippi	5	5	0	0	0
Missouri	58	58	49	0	0
Montana	8,079	8,079	6,120	630	820
Nebraska	1	1	1	1	1
Nevada	1,108	1,108	1,102	110	941
New Hampshire	943	943	200	25	50
New Mexico	3,773	3,773	3,700	0	1,000
New York	12	12	0	0	0
North Carolina	967	967	347	0	0
Ohio	17	17	0	0	0
Oregon	5,063	5,063	4,697	505	1,884
Pennsylvania	159	159	0	0	0
South Carolina	18	18	13	0	0
South Dakota	10	10	10	0	0
Tennessee	306	306	0	0	0
Utah	3,546	3,546	3,500	355	2,944
Vermont	145	145	89	0	0
Virginia	696	696	300	100	200
Washington	5,898	5,898	5,469	530	2,731
West Virginia	585	585	230	125	175
Wisconsin	35	35	0	0	0
Wyoming	3,760	3,760	3,758	149	644
Puerto Rico	40	40	20	0	0
Total	73,270	73,151	63,408	4,145	23,649

[1] Totals are not the sum of individual uses because some trails sustain more than one means of travel.
[2] The uses shown here are not necessarily those for which the trails were built.

Most new or rebuilt trails will serve people who use them for many recreation purposes, ranging from brief family walks to extended backpacking trips. Regulation of trail uses, as well as separate special trail construction, will minimize conflicts between hikers and riders.

Trail crew at work on the Silver Creek Trail in the John Muir Wilderness Area, Calif. Photo: Forest Service, No. 505172)

Table 9. Proposed trail construction or reconstruction in National Forests, by States and including Puerto Rico, in miles[1]

State or Territory	New construction	Re-construction	Newly constructed or reconstructed trails that would be available, by estimated type of use			
			Foot	Horseback	Bicycle	Trail Scooter
Alabama	29	0	25	8	11	8
Alaska	170	220	390	40	0	0
Arizona	487	3,015	3,502	3,450	10	900
Arkansas	418	0	418	214	0	0
California	3,421	6,484	9,886	9,086	988	4,619
Colorado	1,500	4,006	5,506	5,506	150	1,506
Florida	61	0	25	44	0	33
Georgia	72	7	79	43	0	33
Idaho	1,341	4,369	5,710	5,710	412	2,740
Illinois	471	23	436	362	10	35
Indiana	100	2	80	70	20	20
Kentucky	364	10	374	0	0	0
Louisiana	50	0	50	20	0	0
Maine	5	3	8	8	0	8
Michigan	1,266	11	866	609	222	495
Minnesota	560	112	660	180	192	170
Mississippi	118	0	118	95	0	0
Missouri	518	31	549	398	25	50
Montana	1,798	3,028	4,826	1,826	0	0
Nebraska	11	1	12	12	12	12
Nevada	189	858	1,047	1,029	100	696
New Hampshire	50	89	139	60	10	20
New Mexico	918	3,113	4,031	4,000	10	800
North Carolina	386	258	594	155	0	0
Ohio	80	2	60	50	20	20
Oklahoma	23	0	23	13	0	0
Oregon	1,490	2,436	3,926	3,534	390	1,954
Pennsylvania	259	97	356	252	100	150
South Carolina	100	18	118	84	0	0
South Dakota	90	10	92	92	0	30
Tennessee	310	297	607	260	0	0
Texas	14	0	12	12	0	0
Utah	243	2,529	2,772	2,750	270	1,848
Vermont	89	10	99	67	0	0
Virginia	452	210	662	545	325	400
Washington	1,109	2,520	3,629	3,379	365	1,949
West Virginia	301	149	450	201	125	150
Wisconsin	456	22	456	395	40	48
Wyoming	712	2,141	2,853	2,853	0	2,000
Puerto Rico	15	10	25	15	10	15
Total	20,046	36,091	55,471	47,427	3,817	20,709

[1] Not included is mileage for national scenic trails.

Table 10. Existing trail mileage in National Parks, by States and Territories

State or Territory	Total [1]	Presently available, by estimated type of use [2]			
		Foot	Horseback	Bicycle	Trail Scooter
Alabama	2	2	0	0	0
Alaska	44	44	31	0	0
Arizona	553	56	492	5	0
Arkansas	19	11	8	0	0
California	2,041	2,036	1,935	25	0
Colorado	417	349	384	0	0
Connecticut	0	0	0	0	0
Delaware	0	0	0	0	0
Florida	7	7	0	0	0
Georgia	14	6	9	0	0
Hawaii	191	32	186	0	0
Idaho	53	53	43	0	0
Illinois	0	0	0	0	0
Indiana	2	2	0	1	0
Iowa	4	4	0	0	0
Kansas	0	0	0	0	0
Kentucky	41	41	0	0	0
Louisiana	1	1	0	0	0
Maine	189	140	50	0	0
Maryland	213	213	166	181	0
Massachusetts	19	15	4	0	0
Michigan	126	126	0	0	0
Minnesota	10	10	0	0	0
Mississippi	15	12	3	0	0
Missouri	1	1	0	0	0
Montana	1,074	1,074	1,064	0	0
Nebraska	4	4	0	0	0
Nevada	13	13	0	0	0
New Hampshire	0	0	0	0	0
New Jersey	12	12	8	8	0
New Mexico	104	21	82	0	0
New York	9	9	0	6	0
North Carolina	410	410	176	0	0
North Dakota	17	7	10	0	0
Ohio	2	2	0	1	0
Oklahoma	11	11	0	0	0
Oregon	12	12	0	0	0
Pennsylvania	29	16	15	0	0
Rhode Island	0	0	0	0	0
South Carolina	2	2	0	0	0
South Dakota	12	12	0	0	0
Tennessee	333	324	156	0	0
Texas	251	88	163	0	0
Utah	392	100	239	0	0
Vermont	0	0	0	0	0
Virginia	362	348	14	0	0
Washington	908	908	822	0	0
West Virginia	4	4	0	0	0
Wisconsin	0	0	0	0	0
Wyoming	1,196	1,196	1,150	0	0
District of Columbia	82	65	19	5	0
Puerto Rico	0	0	0	0	0
Virgin Islands	15	15	0	0	0
Total	9,216	7,814	7,229	232	0

[1] Totals are not the sum of individual uses because some trails sustain more than one means of travel.
[2] The uses shown here are not necessarily those for which the trails were built.

National Park Service

Recreation trails are an important part of the National Parks in this country. Today the National Park system contains some 215 areas, of which more than 170 have trails. Park trails range in length from less than a mile in many of the smaller historical parks to 1,138 miles in Yellowstone National Park. Seven national parks each have 600 or more miles of trails. In 1965, there were about 9,216 miles of trail in the National Park System (Table 10).

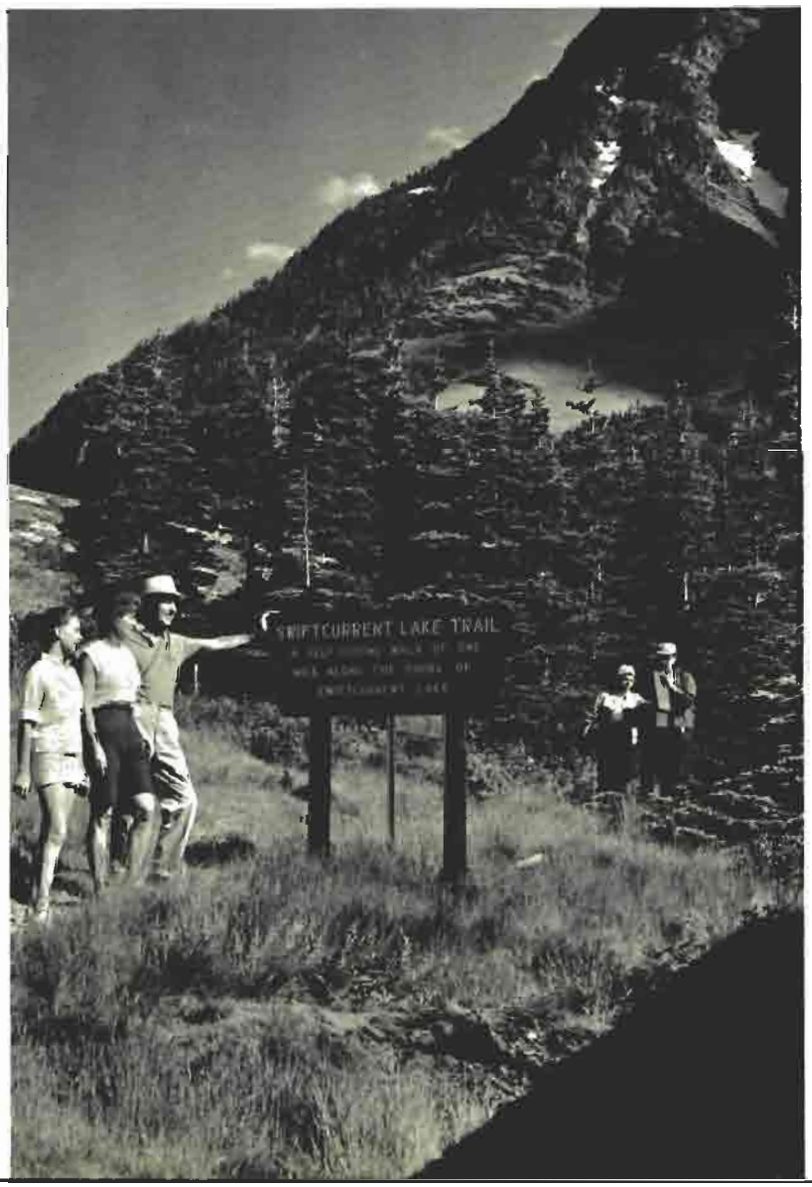
Park trails have a long history. Some were originally built by Indians and pioneers before the parks were established. The first trails into the mountains of Sequoia and Kings Canyon National Parks were Indian trails which grew through use. Trails built by cattlemen and sheepmen are now part of the trail system in several western parks. Many paths in Joshua Tree National Monument and Isle Royale National Park were formerly old mining trails used for prospecting or carrying out ore in the late nineteenth century.

Some trails were developed by private groups to reach areas of scenic, historic, or scientific interest. Acadia National Park in Maine and Craters of the Moon National Monument in Idaho contain examples. In the eastern National Parks, private groups and the States sometimes built trails to sites having Revolutionary War, Civil War, or other historical association. Portions of the Appalachian Trail are now part of the trail systems in Shenandoah and Great Smoky Mountains National Parks and in the Blue Ridge Parkway.

Other Federal agencies also contributed to trail development in the Parks. Yosemite National Park was administered by the Army from its establishment in 1890 until 1914. Army troops planned and built much of the present trail system there, as well as in Sequoia and Yellowstone National Parks. The Forest Service formerly administered a number of areas before they became National Parks, and built some of the original trails in King's Canyon and Olympic National Parks, for example.

Probably the most productive period of trail development in the National Park system occurred in the depression years of the 1930's. During that time the Civilian Conservation Corps built trails as well as other facilities in many parks.

The National Park Service has retained and improved many of the trails that were developed by others and has added considerable mileage. As new areas have been established, the National Park Service has incorporated trails into its master plans for development and use.



Swiftcurrent Lake Trail in Glacier National Park, Mont., one of many self-guiding nature trails developed and maintained by the National Park Service. (Photo: National Park Service, No. 60-JB-355)

The trails built by the National Park Service are varied. They include self-guiding nature trails, short trails to scenic overlooks, trails to scientific, historic, or natural features, and major back-country trails. The back-country trails in most of the older National Parks were built prior to the Second World War.

Construction of more connecting trails and other new trails could relieve the pressures of intensive use on many trail areas. In areas of concentrated use, trails may need to be surfaced. Many of those in the higher elevations of some parks pass through damp meadows and other low spots which are difficult to cross. Some trails should be relocated through more interesting and varied topography, or through areas where wildlife might be seen. Longer seasons of use should be provided.

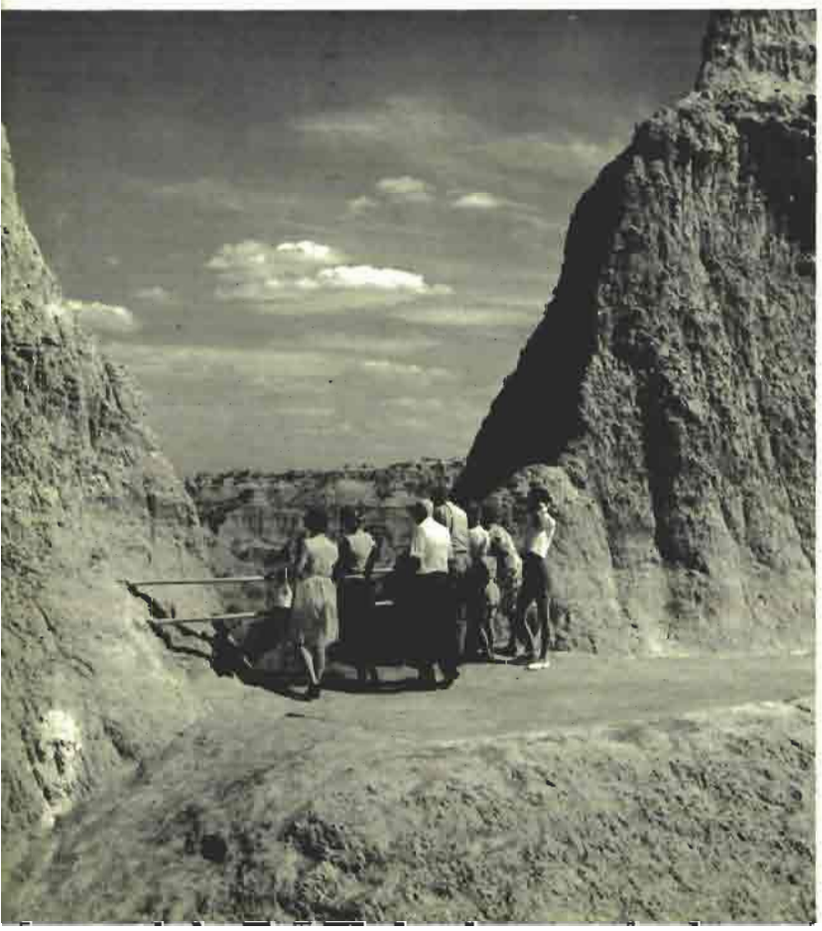
To keep pace with future demands, present National Park trails should be expanded. Bicycle trails are a special need. Regulations presently prohibit the use of bicycles on park trails, except in National Recreation Areas and in a few other locations. This policy now is undergoing review. Plans call for bicycle facilities at Cape Cod National Seashore, Fire Island National Seashore, Delaware Water Gap National Recreation Area, Rock Creek Park and related points in the Washington, D.C., area, and certain proposed areas such as Sleeping Bear Dunes and Indiana Dunes National Lakeshores. Bicycle trails already are under construction at Cape Cod and budgeted for Fire Island. Trail scooters, like automobiles, are forbidden on trails in the National Parks.

In some instances the National Park Service has found that use of trails by both hikers and horseback riders is incompatible. Where heavy travel occurs and trail deterioration caused by horseback travel results in problems for the foot traveler, it may be necessary to develop and maintain separate trails.

In extending park trails, attention should be focused on and near urban areas. Here opportunities exist to integrate park trail programs with those of other recreation agencies, thereby providing increased opportunity for legitimate and varied use of the park.

The National Park Service proposes approximately 4,500 miles of new or rebuilt trails (Table 11). Completion of that program would provide over 11,500 miles of recreation trails in the National Parks and Monuments.

Sightseers pause along trail to view scene at overlook in the Badlands National Monument, S.D. (Photo: National Park Service, No. 63-3094)



Old logging roads offer excellent opportunities for adaptation to trail use. (Photo: National Park Service, No. 4757-2-21)

Table 11. Proposed trail construction or reconstruction in National Parks, by States and Territories, in miles [1]

State or Territory	New construction	Re-construction	Newly constructed or reconstructed trails that would be available, by estimated type of use			
			Foot	Horseback	Bicycle	Trail Scooter
Alabama	17	0	17	0	0	0
Alaska	43	63	106	106	0	0
Arizona	134	114	125	123	20	0
Arkansas	2	0	2	0	0	0
California	196	857	205	800	25	0
Colorado	159	72	152	133	0	0
Connecticut	0	0	0	0	0	0
Delaware	0	0	0	0	0	0
Florida	8	0	8	0	0	0
Georgia	0	0	0	0	0	0
Hawaii	36	39	70	66	8	0
Idaho	6	5	11	9	0	0
Illinois	0	0	0	0	0	0
Indiana	1	0	1	0	1	0
Iowa	5	0	5	0	0	0
Kansas	0	0	0	0	0	0
Kentucky	6	0	6	0	0	0
Louisiana	0	0	0	0	0	0
Maine	10	115	125	0	0	0
Maryland	70	14	81	9	27	0
Massachusetts	36	3	37	24	38	0
Michigan	29	2	31	0	0	0
Minnesota	1	0	1	0	0	0
Mississippi	4	0	4	0	0	0
Missouri	11	0	11	10	0	0
Montana	66	350	416	379	3	0
Nebraska	1	1	1	0	0	0
Nevada	31	0	25	6	0	0
New Hampshire	0	0	0	0	0	0
New Jersey	55	8	53	18	0	0
New Mexico	29	82	103	92	9	0
New York	34	8	27	7	15	0
North Carolina	46	0	46	3	0	0
North Dakota	24	0	9	15	0	0
Ohio	1	0	1	0	1	0
Oklahoma	29	0	10	15	4	0
Oregon	0	0	0	0	0	0
Pennsylvania	64	6	43	15	2	0
Rhode Island	0	0	0	0	0	0
South Carolina	2	0	2	0	0	0
South Dakota	10	0	9	7	0	0
Tennessee	44	3	43	3	0	0
Texas	148	1	69	81	0	0
Utah	150	112	142	125	0	0
Vermont	0	0	0	0	0	0
Virginia	128	0	84	58	20	0
Washington	218	146	358	275	0	0
West Virginia	0	0	0	0	0	0
Wisconsin	0	0	0	0	0	0
Wyoming	94	435	529	471	12	0
District of Columbia	61	12	61	0	45	0
Puerto Rico	0	0	0	0	0	0
Virgin Islands	14	0	14	0	0	0
Total	2,023	2,448	3,043	2,850	230	0

[1] Not included is mileage for national scenic trails.

Bureau of Land Management

Most recreation trails on public domain lands have come into existence through use by stockmen, hunters, and fishermen. While a complete trail inventory is not available, at lease 3,602 miles of trails exist on these lands. (Table 12).

Many miles of trail have been built on public lands in recent years by special projects instigated under the Accelerated Public Works Program. Rogue River Trail in Oregon. (Photos: Bureau of Land Management Nos. 2494 and 2511)

Much of the small amount of recreation trail development to date on the public domain was achieved by special projects set up under the Accelerated Public Works Program between 1962 and 1964. Under these projects several short trails were developed. Probably the best known is the hiking trail along the scenic Rogue River in western Oregon.

The Bureau of Land Management, administering 464 million acres of land, proposes approximately 8,280 miles of new or rebuilt trails (Table 13), an increase of almost 5,000 over the present mileage. New construction is recommended for three general types of trails: "belt" or "loop" trails to or through areas of important recreation value, trails that lead to special scenic spots, and trails that connect with other Federal or State trails, such as those leading through foothill areas to National Forests. Most of these trails would be less than 25 miles long. A notable exception is a proposed Alaska Range Trail which would cover more than 200 miles.

The checkerboard pattern of land ownership, which is characteristic of the Bureau of Land Management lands, poses a different problem from that faced by many Federal agencies with responsibilities for trails. It means that most trails unavoidably cross tracts of private land. Studies are needed to determine the best opportunities for trail construction and the order of priority for development based on need. Provision should be made for trails adapted to bicycles and trail scooters, as well as foot and horseback use.

Bureau of Sport Fisheries and Wildlife

Virtually no recreation trails exist within areas administered by the Bureau of Sport Fisheries and Wildlife. At present there are but 23 miles of trails in the 28 million acres of the system (Table 14). While most fish hatchery holdings are not large enough to accommodate recreation trails, excellent opportunities for compatible trail construction exist on many of the wildlife refuges.

Table 12. Existing trail mileage on public domain lands, by States

State	Total [1]	Presently available, by estimated type of use [2]			
		Foot	Horseback	Bicycle	Trail Scooter
Alaska	461	461	461	0	0
Arizona	229	147	189	0	123
California	173	36	137	0	0
Colorado	1,097	1,097	1,097	145	416
Idaho	79	79	75	0	0
Montana	30	30	30	0	0
Nevada	964	532	420	0	12
New Mexico	70	70	70	4	0
Oregon	65	24	29	1	4
Utah	374	23	326	0	0
Wyoming	60	60	60	0	0
Total	3,602	2,559	2,894	150	555

[1] Totals are not the sum of individual uses because some trails sustain more than one means of travel.

[2] The uses shown here are not necessarily those for which the trails were built.

Table 13. Proposed trail construction or reconstruction on public domain lands, by States, in miles [1]

State	New construction	Re-construction	Newly constructed or reconstructed trails that would be available, by estimated type of use			
			Foot	Horseback	Bicycle	Trail Scooter
Alaska	1,078	840	1,918	1,918	1,664	1,664
Arizona	399	0	174	305	50	100
California	1,077	136	528	897	0	0
Colorado	385	70	455	455	35	115
Idaho	367	64	402	399	8	138
Montana	120	8	128	86	86	86
Nevada	1,070	936	2,006	2,006	0	0
New Mexico	149	0	149	134	89	8
Oregon	480	56	272	338	0	43
Utah	286	226	11	394	0	0
Washington	13	0	13	13	9	0
Wyoming	520	0	330	180	220	220
Total	5,944	2,336	6,386	7,125	2,161	2,374

[1] Not included is mileage for national scenic trails.

Table 14. Existing trail mileage on National Wildlife Refuges, by States

State	Total [1]	Presently available, by estimated type of use [2]			
		Foot	Horseback	Bicycle	Trail Scooter
Alaska	17	17	17	0	0
Montana	6	6	0	0	
					0
Total	23	23	17	0	0

[1] Totals are not the sum of individual uses because some trails sustain more than one means of travel.

[2] The uses shown here are not necessarily those for which the trails were built.

Expansion of trails in National Wildlife Refuges will provide many new opportunities for fishing, hunting, and nature study. Chincoteague National Wildlife Refuge, Va. (Photo: Bureau of Sport Fisheries and Wildlife, No. 4-2225D)

Public Law 87--714 contains authority for recreation trail development on Bureau of Sport Fisheries and Wildlife lands, but establishment of a system of recreation trails will depend upon funds being made available. Most progress to date has been achieved as a result of the Accelerated Public Works Program.

The Bureau proposes 1,500 miles of new trail construction and of related facilities (See Table 15).

Bureau of Indian Affairs [1]

Trails on lands administered by the Bureau of Indian Affairs have been established under several programs. Many of the trails were built by the Civilian Conservation Corps in the 1930's. Others have been constructed with tribal funds, or with fire suppression funds. Recently the Accelerated Public Works Program permitted limited work on recreation trails. Additional trails have come into being through use alone.

[1] The discussion of trails on Indian reservations is included in the chapter *Federal Trails* because the Bureau of Indian Affairs is a Federal agency. In fact, however, reservation lands are owned by Indians and only held in trust by the United States.

Table 15. Proposed trail construction or reconstruction on National Wildlife Refuges, by States, in miles [1]

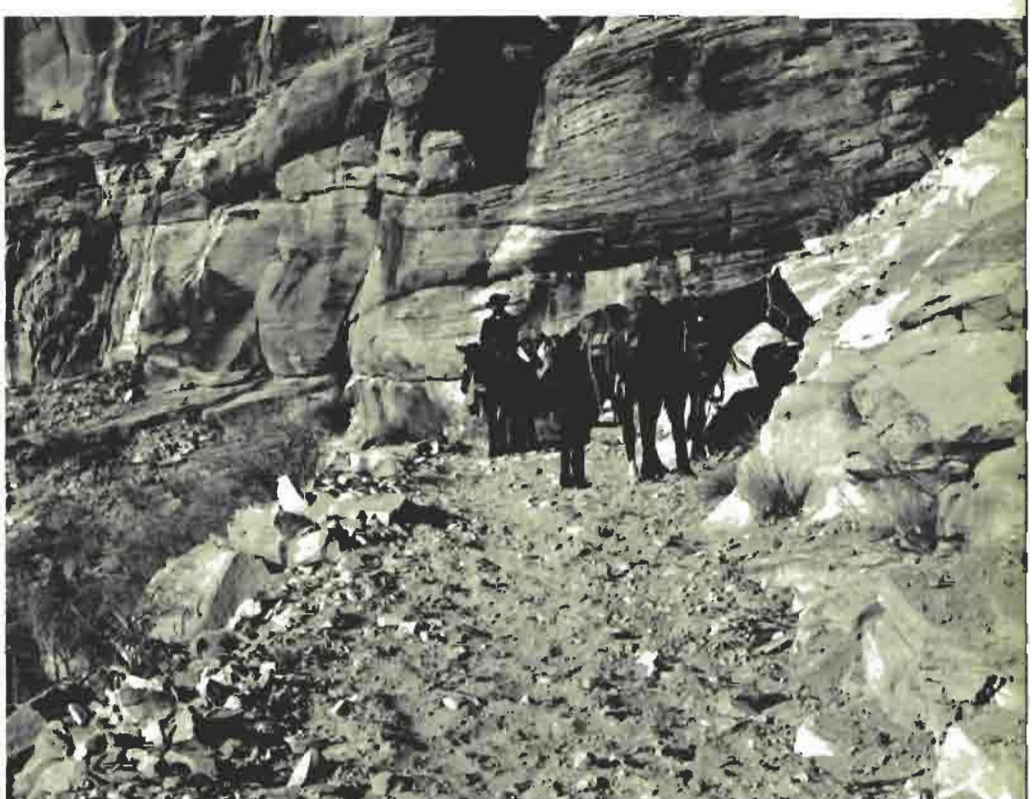
State	New construction	Re-construction	Newly constructed or reconstructed trails that would be available, by estimated type of use			
			Foot	Horseback	Bicycle	Trail Scooter
Alabama	20	0	20	20	0	0
Alasaka	250	0	250	100	0	0
Arizona	250	0	250	50	0	0
Arkansas	20	0	20	20	20	0
California	15	0	15	15	15	0
Colorado	10	0	10	10	0	0
Delaware	5	0	5	5	5	0
Florida	20	0	20	20	20	0
Georgia	10	0	10	10	10	0
Idaho	5	0	5	5	5	0
Illinois	20	0	20	10	10	0
Iowa	10	0	10	10	10	0
Kansas	5	0	5	5	5	0
Louisiana	5	0	5	5	5	0
Maine	8	0	8	8	8	0
Maryland	5	0	5	5	5	0
Massachusetts	2	0	2	0	2	0
Michigan	10	0	10	10	10	0
Minnesota	20	0	20	15	15	0
Mississippi	15	0	15	15	15	0
Missouri	5	0	5	0	0	0
Montana	250	0	250	150	20	0
Nebraska	30	0	30	30	0	0
Nevada	110	0	110	90	0	0
New Jersey	5	0	4	0	5	0
New Mexico	50	0	50	25	0	0
New York	10	0	10	10	10	0
North Carolina	5	0	5	5	5	0
North Dakota	15	0	15	15	10	0
Oklahoma	40	0	40	0	40	0
Oregon	155	0	155	90	0	0
South Carolina	10	0	10	10	10	0
South Dakota	5	0	5	5	5	0
Tennessee	10	0	10	10	10	0
Texas	25	0	25	10	10	0
Utah	5	0	5	5	0	0
Virginia	5	0	5	0	0	0
Washington	30	0	30	10	0	0
Wisconsin	10	0	10	10	10	0
Wyoming	20	0	20	20	0	0
Total	1,500	0	1,500	833	295	0

[1] Not included is mileage for national scenic trails.

Trail uses are varied and utilitarian. Many trails on Indian lands are still used for fire presuppression and suppression. Others serve as livestock access trails. Many of these trails now also are used by fishermen, hunters, and trail-riders. A few, like the trail to the world-famous Rainbow Bridge in Utah, have been publicized and receive considerable use by the general public.

Although there has been little public demand for improvement or construction of recreation trails on Indian lands, recent Area Redevelopment Administration surveys indicate abundant trail development possibilities which offer a potential source of additional income for the tribes. Good trail systems undoubtedly will be an important part of the total attraction for visitors as the outdoor recreation potential of reservations is utilized more fully in the future.

There are now 1,636 miles of trails on the more than 50 million acres in Indian reservations (Table 16). Although reservation lands belong to the Indians, most trails were constructed with Federal funds, with the Indians retaining the right to authorize public use. Certain reservations do not allow use of their trails during the fire season. These trails are not included in the mileage figures, since the fire season coincides with the period of heaviest recreation use.



Supai Trail on the Supai Indian Reservation, Ariz., constructed under the Accelerated Public Works Program. (Bureau of Indian Affairs, No. 101-63-631)

Table 16. Existing trail mileage on Indian Reservations, by States

State	Total [1]	Presently available, by estimated type of use [2]			
		Foot	Horseback	Bicycle	Trail Scooter
Arizona	913	913	897	0	8
California	40	15	25	0	0
Colorado	100	100	100	0	10
Florida	91	91	91	0	35
Montana	85	85	85	0	0
New Mexico	118	118	118	0	0
Oregon	39	39	39	0	0
South Dakota	12	0	12	0	0
Utah	108	108	108	0	0
Wyoming	130	130	130	0	0
Total	1,636	1,599	1,605	0	53

[1] Totals are not the sum of individual uses because some trails sustain more than one means of travel.
[2] The uses shown here are not necessarily those for which the trails were built.

Table 17. Proposed trail construction or reconstruction on Indian Reservations, by States, in miles [1]

State	New construction	Re-construction	Newly constructed or reconstructed trails that would be available, by estimated type of use			
			Foot	Horseback	Bicycle	Trail Scooter
Arizona	588	598	1,186	1,186	90	221
California	0	0	0	0	0	0
Colorado	50	100	150	150	0	0
Florida	18	35	53	53	10	43
Iowa	2	0	2	2	0	0
Michigan	1	0	1	1	0	0
Minnesota	28	0	28	28	0	0
Montana	0	0	0	0	0	0
Nebraska	20	0	20	20	15	15
New Mexico	188	115	303	303	0	0
North Dakota	50	0	31	19	0	0
Oregon	20	25	45	45	0	0
South Dakota	138	12	50	100	0	0
Utah	255	103	358	358	0	0
Wisconsin	20	0	20	20	0	0
Wyoming	0	0	0	0	0	0
Total	1,378	988	2,247	2,285	115	279

[1] Not included is mileage for national scenic trails.

Table 18. Existing trail mileage at Reclamation projects, by States

State	Total [1]	Presently available, by estimated type of use [2]			
		Foot	Horseback	Bicycle	Trail Scooter
Alaska	2	2	2	2	2
California	62	62	53	0	0
Nevada	1	1	0	0	0
Utah	14	14	14	0	0
Washington	8	8	8	0	0
Total	87	87	77	2	2

[1] Totals are not the sum of individual uses because some trails sustain more than one means of travel.
[2] The uses shown here are not necessarily those for which the trails were built.

Table 19. Proposed trail construction or reconstruction at Reclamation projects, by States, in miles [1]

State	New construction	Re-construction	Newly constructed or reconstructed trails that would be available, by estimated type of use			
			Foot	Horseback	Bicycle	Trail Scooter
Alaska	10	0	10	8	0	8
Arizona	1,339	0	1,339	1,339	1,339	1,339
California	582	0	491	367	337	307
Colorado	421	0	173	168	60	20
Idaho	1,001	0	1,001	830	200	200
Kansas	161	0	79	79	9	0
Montana	540	0	540	540	185	185
Nebraska	195	0	95	100	0	0
Nevada	40	0	40	40	40	40
New Mexico	16	0	16	16	16	0
North Dakota	130	0	130	130	65	65
Oklahoma	19	0	19	19	19	0
Oregon	182	0	182	160	40	40
South Dakota	150	0	150	150	75	75
Texas	11	0	11	11	11	0
Utah	5	0	5	0	0	0
Washington	510	0	410	180	20	20
Wyoming	360	0	210	270	60	60
Total	5,672	0	4,901	4,407	2,476	2,359

[1] Not included is mileage for national scenic trails.

To provide an adequate basis for a sound recreation trail program, the Bureau of Indian Affairs believes that some 2,350 miles of trails should be constructed or reconstructed on reservations where the tribes have shown an interest in such development (Table 17). More mileage may be added if other tribes express willingness to participate in the program.

Obtaining the consent of tribes for the use of their lands will be necessary in planning trails on Indian reservations. Many tribes believe that present trail systems are adequate because most trails are seldom used. However, lack of public knowledge about reservation trails seems to be a major cause of underuse. Some tribes might be willing to cooperate with a trail program if they could retain the right to regulate access to reservation trails and connected facilities. Others would support trail development if they could receive convincing evidence of benefit to the tribe or its members from public use of reservation trails.

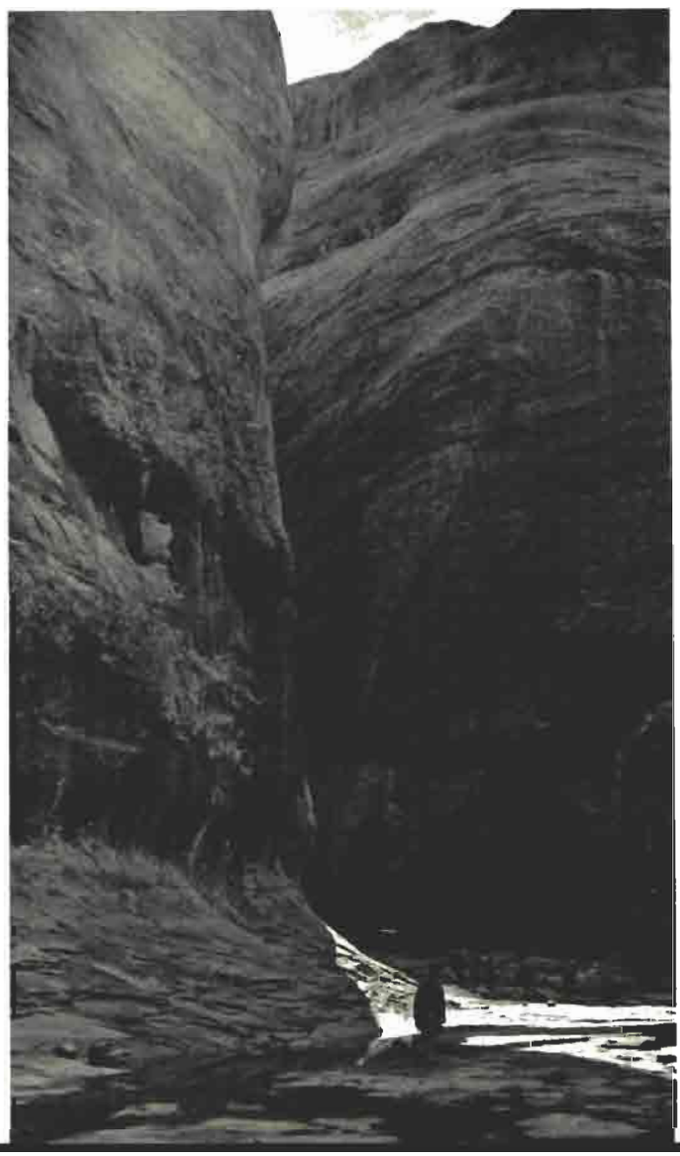
In most instances, construction, maintenance, and rehabilitation of trails on Indian lands will require Federal funds. Planning and development of these trails on some reservations is complicated by the many tracts of individually owned Indian lands which are interspersed with tribal lands.

Many trail opportunities exist on Indian Reservations to attract visitors to points of special interest, such as these petrographs in the Zuni Reservation, N.M. (Photo: Bureau of Indian Affairs, No. 303-64-595)

Bureau of Reclamation

The Bureau of Reclamation presently does not regularly maintain a system of recreation trails, although 87 miles of trail exist for public use on areas in which the agency holds responsibility. (Table 18). To meet the need for recreation trail opportunities at both existing and future Bureau of Reclamation projects, the Bureau organization suggests construction of 5,672 miles of new trails (Table 19). Development of such recreation trails would require authority which the Bureau of Reclamation now lacks.

The Bureau of Reclamation proposes a trail development program. Party of hikers on way to Rainbow Bridge from Lake Powell, Utah. (Photo: Bureau of Reclamation, No. P-557-420-7541)



CHAPTER 6

STATE TRAILS

Much of the potential for recreation trail development by States has yet to be instituted. Only a relatively few States report major existing or planned trail programs. Nine States have no State-administered trails at all or report totals of less than 10 miles; 26 States claim less than 100 miles apiece.

Of the reported 14,865 miles of State-operated trails, summarized in Table 20, 28 percent are in Pennsylvania. Almost exclusively devoted to hiking, the Pennsylvania trail system stands out as the most extensive in the Nation.

Among the States, California has made the most substantial provision for horseback trails. Of its 1,532 miles of State trails, 1,316 are open to horses. These provide almost one-third of all State horseback trails. Arkansas, with a total system of 1,428 miles, has the most extensive provision for trail scooters, 407 miles—more than one-third of the national total. In addition, it provides 542 miles of trail for horseback use. Only 11 States have provided bicycle trails. Michigan reports 193 miles, New York 41 miles, and Alaska 39 miles of the grand total of 354 miles of State trails available to bicyclists.

State trail systems received their initial impetus during the days of the Civilian Conservation Corps in the 1930's. Subsequent construction has been slow, and in many cases inadequate maintenance has allowed trails to deteriorate.

Recent State trail development has been confined largely to providing foot access to recreational areas for fishing and hunting or historical and scientific study.

Present Efforts

New England

Private or quasi-public trail organizations, rather than State governments, have created the relatively extensive trail mileage in New England. Prominent among these is the Appalachian Mountain Club. Pleased with the creative contributions of the trail organizations, the States have maintained close working relationships with them and from time to time have provided financial support.

Table 20. Existing mileage of State-administered trails, by States and including Puerto Rico

State or Territory	Total [1]	Presently available, by estimated type of use [2]			
		Foot	Horseback	Bicycle	Trail Scooter
Alabama	40	32	8	0	0
Alaska	153	153	116	39	86
Arizona	1	1	0	0	0
Arkansas	1,428	1,356	542	0	407
California	1,532	1,441	1,316	0	0
Colorado	49	27	22	0	0
Connecticut	7	0	7	0	0
Delaware	0	0	0	0	0
Florida	90	71	7	12	0
Georgia	25	14	3	0	0
Hawaii	264	144	146	0	0
Idaho	261	261	174	0	95
Illinois	343	172	171	0	0
Indiana	292	141	151	0	0
Iowa	105	62	43	0	0
Kansas	2	0	2	0	0
Kentucky	93	54	39	0	0
Louisiana	13	13	0	0	0
Maine	291	291	0	0	0
Maryland	155	118	35	3	0
Massachusetts	195	70	125	0	0
Michigan	650	271	186	193	0
Minnesota	204	195	8	2	0
Mississippi	51	51	0	34	34
Missouri	187	117	70	0	0
Montana	54	54	53	0	24
Nebraska	11	3	8	0	0
Nevada	2	2	1	0	0
New Hampshire	65	65	0	0	0
New Jersey	367	317	50	0	0
New Mexico	59	5	54	0	0
New York	980	885	54	41	0
North Carolina	54	39	15	0	0
North Dakota	24	21	3	0	0
Ohio	419	219	200	0	0
Oklahoma	137	68	59	10	0
Oregon	367	67	0	0	300
Pennsylvania	4,238	4,197	41	0	0
Rhode Island	7	0	7	0	0
South Carolina	25	25	0	0	0
South Dakota	1	0	0	1	0
Tennessee	84	72	12	0	0
Texas	128	65	46	17	0
Utah	17	5	10	2	0
Vermont	0	0	0	0	0
Virginia	226	173	53	0	0
Washington	674	674	256	0	185
West Virginia	197	147	50	0	0
Wisconsin	243	207	36	0	0
Wyoming	0	0	0	0	0
Puerto Rico	55	55	55	0	0
Total	14,865	12,420	4,234	354	1,131

[1] Totals are not the sum of individual uses because some trails sustain more than one means of travel.
[2] The uses shown here are not necessarily those for which the trails were built.

Vermont typifies New England's reliance on private effort. The State administers none of the recreation trails within its borders, even though some of the trails are on State-owned lands. Except for the trails within National Forests, most of Vermont's important trails, including the famous Long Trail, are maintained by the Green Mountain Club, a private organization. During the 1930's when the Civilian Conservation Corps was active, the State maintained portions of the trails. After the Second World War, the State turned its responsibility over to the Forest Service and the Green Mountain Club.

Maine, with 291 miles of trails, has the longest State-administered system in New England. Massachusetts' system, with 195 miles, is second in length. Here private and quasi-public groups exert a strong influence.

In New England, private groups develop and maintain much trail mileage. For over 50 years, the Green Mountain Club has assumed primary responsibility for the Long Trail. (Photo: Hawkins and Boyd Photographers, No. 3)

Rhode Island, which at present has only seven miles of State-administered trails, now shows interest in additional trail development, especially in a trail extending across the State similar to the Long Trail in Vermont.

Middle Atlantic

Some of the Middle Atlantic States, principally Pennsylvania and New York, have developed rather extensive State-administered trail systems. Both have placed primary emphasis on providing trails within State park and forest areas.

Pennsylvania, with 4,238 miles of trails, has plans to acquire 60 miles of private land over which the Appalachian Trail passes.

Maryland is striving to expand its 155-mile trail system. At Patapsco State Park, the first bicycle path in Maryland opened in 1964. The Maryland Physical Fitness Commission is seeking to mark additional secondary and little-used roads in the State as bicycle routes.

West Virginia recently initiated use of both interpretive and self-guided trails in the State park system. The former type is keyed primarily to walks directed by a trained interpreter; the latter depends upon signs and booklets to provide the interpretation.

South

All of the southern States have trail systems built upon the initial impetus provided by the Civilian Conservation Corps. Arkansas and Virginia have shown continuing interest. The former maintains 1,428 miles of trails and the latter 226 miles.

In Florida, a trail association has proposed a 500-mile hiking trail through the State from the Everglades National Park in the south to Fort Pickens State Park near Pensacola in the north. The association is seeking to include the hiking trail as part of the Florida Park System.

Self-guiding trail developed by the Missouri Conservation Commission. (Photo: Missouri Conservation Commission)

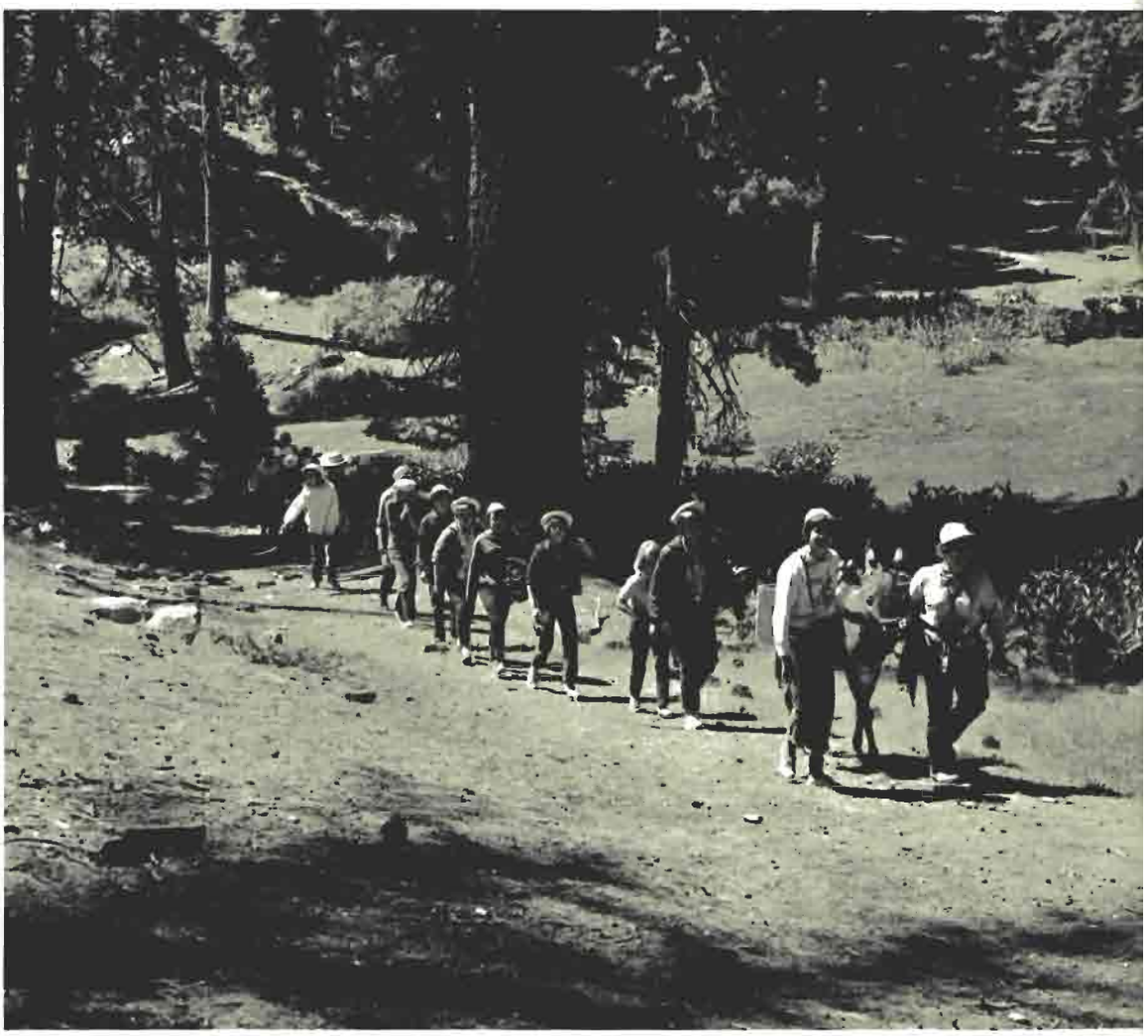
Consideration is being given in Illinois to establishing bicycle paths along the Illinois-Mississippi Canal and along an abandoned railroad right-of-way near Peoria.

In Missouri, an Ozark Saddle Trail for horsemen has been proposed through the southern part of the State. Also in Missouri, 100,000 acres of private land have been offered for trail purposes if there is assurance of proper maintenance and sanitation as well as release from liability for accidents to recreationists on the trails.

West

State recreation trail programs in the West have varied widely, reflecting the enormous differences in population density and the much greater number and length of trails on Federal lands as compared to other sections of the country. Accordingly, many State-developed trails in the West are access trails used mainly by fishermen and hunters.

Girl Scouts on outing along a portion of the California Hiking and Riding Trail. (Photo: Forest Service, No. 504952)



Puerto Rico is currently working on an ambitious 137-mile trail development project called "La Ruta" that will cross the length of the island.

Midwest

Trail development in the Midwest also owes its beginning to the Civilian Conservation Corps. Post-war trail construction has been limited largely to State park and forest areas. Neighborhood Youth Corps enrollees have constructed and rehabilitated trails in several States, among them Ohio and Missouri.

Michigan, with 650 miles of trail, maintains one of the most ambitious trail programs in the Midwest. A new shore-to-shore riding and hiking trail extends for 200 miles from the towns of Elberta and Empire on Lake Michigan to Tawas City on Lake Huron. Part of the Michigan Riding and Hiking Trails system, this new trail is essentially completed except for markers.

In Wisconsin, Senator Gaylord Nelson has proposed a five-year plan to establish a 3,000-mile Statewide system of hiking and camping trails. This would incorporate a wide variety of trails. Long hiking trails like the trail from the mouth of the Brule River to the Great Portage at Solon Springs and on down the St. Croix River would appeal to outdoorsmen and to Boy Scouting groups. Trails of four or five miles within easy reach of urban areas would offer family and church groups weekend opportunity to enjoy the outdoors. Short trails in or near urban areas would be designed especially for use by school children. Nature study trails, such as one through the Ice Age National Scientific Reserve, would appeal to students, scholars, and other interested laymen. Wisconsin also is considering construction of a 30-mile bicycle trail along the abandoned Sparta-Elroy Railroad right-of-way.

Minnesota, in addition to adding to the trails in its State parks, plans to construct 120 miles of foot trails on State land in connection with the 735-mile Height of Land Trail; and 19 miles of foot trails on State lands along the 190-mile North Shore Parkway that extends from Duluth to the Canadian border. In addition there are plans for hiking, horseback riding, and bicycling trails as part of the proposed 332 mile Minnesota River Valley scenic roadway.

In Indiana a long-distance hiking trail has been proposed in the southern Indiana foothills between Brown County and the Ohio River.

The State of Ohio and the Buckeye Trail Association have begun joint development of a Buckeye Trail. Starting near Cincinnati, the trail extends through Ohio to Cleveland, following the old Ohio Canal part of the distance. More than 100 miles of the trail already are cleared, marked, and in a hikable condition.

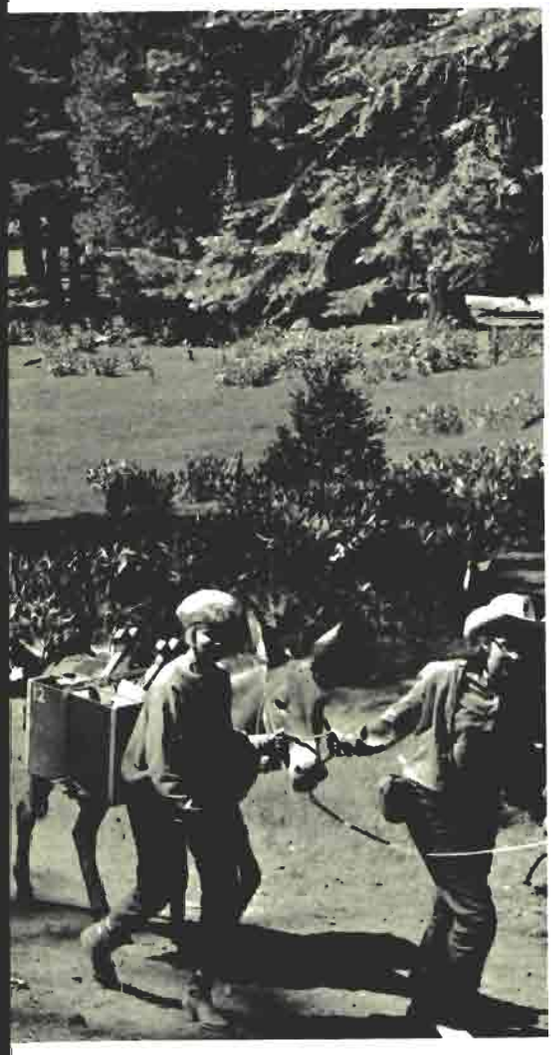
Michigan's shore-to-shore trail extends for 200 miles from Lake Michigan to Lake Huron. (Photo: Michigan Department of Conservation, No. 2)

Companions along a trail in Shades State Park, Ind. (Photo: Indiana Department of Natural Resources)

California, with nearly twice the population of the other 12 western States combined, has by far the most active riding and hiking trail development program. Statewide riding and hiking trails were first proposed in 1944 by the California State Horsemen's Association. In 1947 the California Division of Beaches and Parks began surveying a 3,000-mile loop trail to put into effect the Riding and Hiking Trails Law, enacted in 1945. At present, 1,125 miles have been completed. The State also maintains 407 miles of trails in its park system and is considering a 482-mile hiking and horseback trail extending along the California Aqueduct right-of-way between Hood and Los Angeles.

Of the remaining western States, Washington has the greatest amount of trail mileage under State administration. Most of its 674 miles provide access for fishermen and hunters.

In Oregon there is a proposal to establish a 320-mile Oregon Coast Hiking Trail which would extend the entire length of the Oregon seacoast.



Only Idaho among the sparsely settled mountain States has a substantial trail program. Like the more densely populated Pacific Coast States, Idaho maintains a vigorous trail program. Its 261 miles place it thirteenth among the States, despite its limited area and relatively small population. The rest of the mountain States, with large blocks of Federal lands, depend upon Federal recreation trails and local efforts.

The Rubicon Trail skirts Lake Tahoe in D.L. Bliss State Park, Calif. (Photo: California Division of Beaches and Parks)

Adequacy

Most States acknowledge that their systems of State-administered trails are inadequate to meet existing needs. The inadequacy is particularly acute around urban areas, where only limited emphasis has been given to trail development. Fortunately, recent efforts are emphasizing service to population centers.

Trail development by State agencies has been oriented primarily to construction of foot trails and, to a lesser degree, horseback trails. Only limited trail mileage is available for bicycle and trail scooter use. In most States, opportunities for bicycle and trail scooter activities have been restricted to existing road systems. Only 354 miles of bicycle and 1,131 miles of trail scooter routes are reported on State-administered lands.

Most States have yet to develop paths for trail scooters. Some have prohibited the use of trail scooters on existing trails because of the noise and concern for the safety of other trail users or for esthetic reasons. Oregon, however, recently provided for the rapidly growing scooter fraternity by making available approximately 100 miles of fire-break roads and 200 miles of access roads in the Tillamook Burn area, subject to satisfactory fire-control conditions. Many other States have similar areas that could prove satisfactory for this type of trail activity.

Recommended Program

Every State is encouraged to give early and serious attention to development of balanced and adequate recreation trail programs as part of their park and forest system. Plans for such recreation trail systems should be incorporated in their Statewide Outdoor Recreation Plans and put into effect as appropriate by project grants from the Land and Water Conservation Fund.

Urban areas should receive particular attention in State trail programs. Special efforts should be made to coordinate State trail development with systems of metropolitan area trails.

Four States—Alaska, California, Illinois, and New Jersey—report major trail construction plans during the period 1966-75. Several others plan lesser programs. Some proposed State programs would multiply present mileage.

Illinois, with a trail system of 343 miles, plans 1,875 miles of new trails and the reconstruction of present trails. New Jersey, with 367 existing miles, will add 1,200 more. California will more than double its system by adding 2,365 miles, all open to both hikers and horseback travelers.

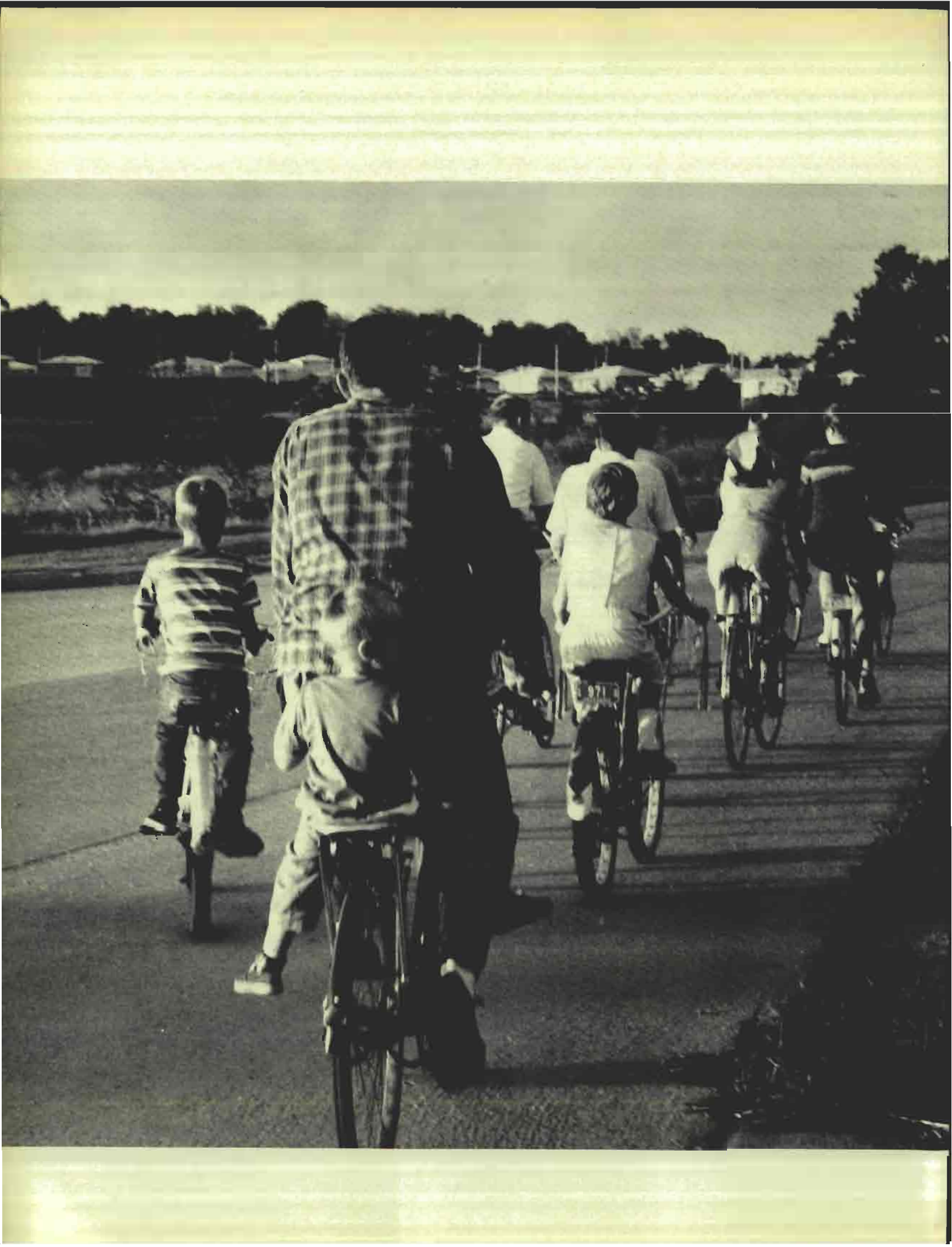
Mississippi, with 51 miles, will build 725 miles of new trails and reconstruct its present system. Mississippi plans to include 570 miles of bicycle trails, thus providing more miles of this type trail than any other State. Missouri will increase its 187 miles by adding 201, half of which will be open to horseback use. Wisconsin, with 243 miles now, has plans for another 400 miles.

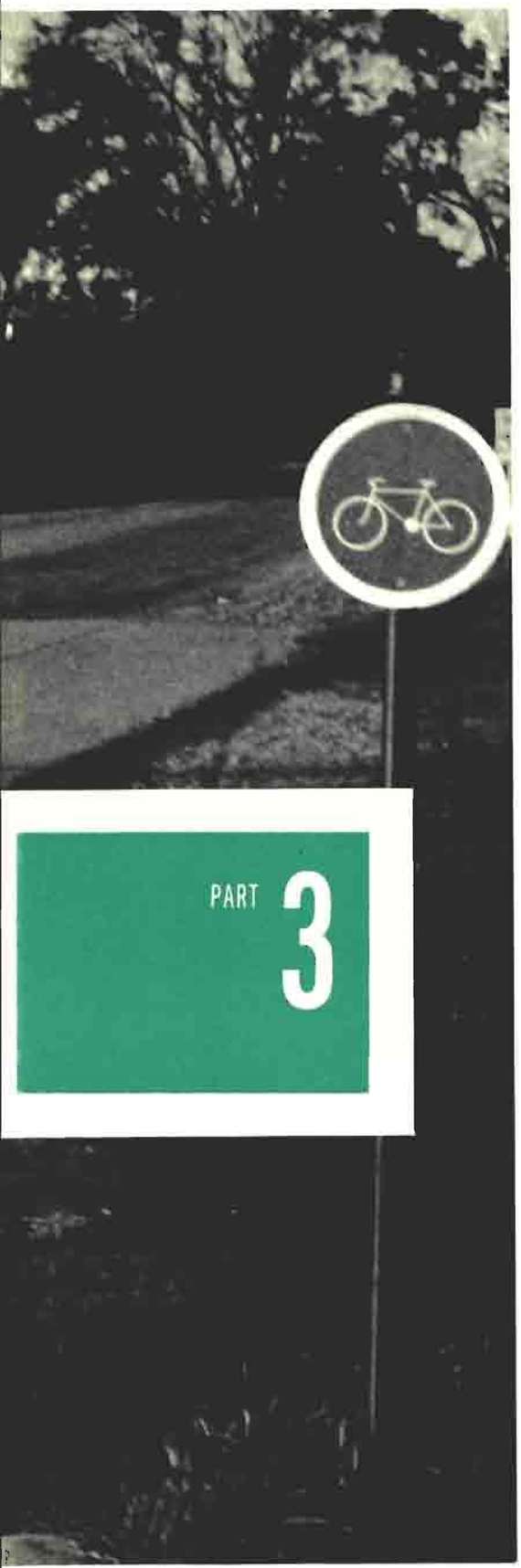
Trail construction and reconstruction plans for the next 10 years, totaling 12,278 miles, are shown by States in Table 21. States for which figures are not available because their trail planning is not yet firm have been omitted.

Table 21. Proposed construction or reconstruction of State-administered trails during 1966-75, by States and including Puerto Rico, in miles

State or Territory [1]	New construction	Re-construction	Newly constructed or reconstructed trails that would be available, by estimated type of use			
			Foot	Horseback	Bicycle	Trail Scooter
Alabama	0	0	0	0	0	0
Alaska	1,332	0	1,332	94	63	68
Arizona	0	0	0	0	0	0
Arkansas	150	0	150	0	0	0
California	2,365	0	2,365	2,365	0	0
Connecticut	0	0	0	0	0	0
Delaware	0	0	0	0	0	0
Florida	66	20	78	17	15	0
Georgia	93	11	72	77	0	0
Hawaii	36	15	50	6	4	4
Idaho	30	0	30	0	0	0
Illinois	1,875	343	1,421	797	0	0
Indiana	300	0	100	200	0	0
Iowa	380	50	155	175	50	50
Kentucky	0	0	0	0	0	0
Louisiana	7	0	7	0	0	0
Maine	0	0	0	0	0	0
Maryland	280	25	118	77	85	0
Massachusetts	0	0	0	0	0	0
Minnesota	511	0	471	332	332	0
Mississippi	725	35	135	20	570	350
Missouri	201	0	103	98	0	0
Montana	46	30	39	37	0	50
Nevada	0	0	0	0	0	0
New Hampshire	272	0	12	200	60	0
New Jersey	1,200	0	1,000	200	0	0
North Carolina	15	0	15	0	0	0
Ohio	519	0	262	257	0	0
Oregon	92	4	91	5	0	0
Pennsylvania	77	0	77	0	0	0
South Carolina	0	0	0	0	0	0
Tennessee	451	0	451	0	0	0
Vermont	0	0	0	0	0	0
Virginia	0	0	0	0	0	0
West Virginia	180	60	100	40	40	0
Wisconsin	400	0	362	38	0	0
Puerto Rico	82	0	82	82	0	0
Total	11,685	593	9,078	5,117	1,219	522

[1] Future trail plans in the following States had not progressed sufficiently at the time of the study to be reported above: Colorado, Kansas, Michigan, Nebraska, New Mexico, New York, North Dakota, Oklahoma, Rhode Island, South Dakota, Texas, Utah, Washington, Wyoming.





Milwaukee has established 130 miles of bicycle trails on park roads and little-used secondary roads. (Photo: Bicycle Institute of America, No. 1)

PART 3

METROPOLITAN AREA TRAILS

CHAPTER 7

CITY AND COUNTY PROGRAMS

A recurring theme in the 1962 report and studies of the Outdoor Recreation Resources Review Commission is the need to provide outdoor recreation opportunities near the homes of people who live in heavily populated areas. The need is urgent and growing. An estimated three-quarters of the Nation's population will live in a packed urban environment by the turn of the century. Most will be wage earners, significantly affected by automation. Almost all will have increasing amounts of leisure time.

Trails located in or near metropolitan areas and adapted to the use of walkers, hikers, horseback riders, and cyclists are among the best means of accommodating urban recreationists. This was recognized by Secretary Udall who in July 1966 announced grants totaling $367,436 from the Land and Water Conservation Fund to twelve urban areas across the country to develop a variety of trails. The trails differ in length and purpose, but all are planned for areas where large numbers of people live. In announcing the grants, Secretary Udall hoped that they would stir the imagination of urban planners in every part of the country.

Population size, density, and distribution are key determinants of metropolitan trail programs. Where population pressures are greatest, efforts to provide the types of outdoor recreation that trails afford should be intensified.

Trails should be included as part of comprehesive metropolitan plans. Trail routes in metropolitan areas need to be created deliberately, other than be developed merely because opportunities may exist. Trail location should utilize any suitable routes which can be devised. Urban trails should be built primarily for day use. They should be made attractive by careful planning and construction.

Status of Programs

Public Trail Efforts

Metropolitan areas are awakening to the value of trails in meeting their outdoor recreation needs. Although trail building is not yet general, increased interest and activity point to a trend for the future.

In recent years local governments, spurred on by their own planners and trail enthusiasts, have given trail development greater emphasis.

In New York City there are many miles of waterfront greens and walking ways. Central Park and other city parks have extensive trail systems, including nature trails. Trails have been constructed along the great expressways and the extended Kissena Corridor. The city now has some 50 miles of bicycle paths in 28 parks. Additional bicycle mileage may be provided through conversion of bridle paths. A network of hiking, bicycling, and riding trails is proposed in the development of The Olmsted Trailway, a linear park proposal in the greenbelt of Staten Island. Trail systems have likewise been proposed along the east and west banks of the Hudson River and in the new park planned in Flushing Meadows on the site of the World's Fair. Another suggestion is for a trail along the Groton Aqueduct, which extends 25 miles out from the city. The location and length of the various trails are included in a booklet issued by the New York City Department of Parks and Recreation entitled *Recreational Facilities for New Yorkers.*

New York City parks have extensive trail systems, including nature trails. Alley Park, Queens, New York City. (Photo: New York City Department of Parks)

Philadelphia possesses Fairmount, the largest city park in the nation. This offers 200 miles of hiking paths and 100 miles of bridle paths. Expansion and labeling of bicycle paths within the park are planned, as well as development of self-guided nature trails. Several trails that had fallen into disrepair were rehabilitated recently by Job Corps enrollees. Trails also are planned in other sections of Philadelphia such as along the proposed greenways in West Philadelphia, the stream valley projects in the northeast, and the walkways in the rebuilt Society Hill area. The emphasis in Philadelphia is on quality use of the land by providing the urban equivalent of rural or wilderness trail experience.

Philadelphia's Fairmount Park offers 200 miles of hiking paths and 100 miles of bridle paths. (Photo: Fairmount Park Commission)

New Haven, Connecticut, has a forward-looking program aimed at educating its younger citizens to an awareness, appreciation, and understanding of their natural environment. Part of this program involves the use of walking trails that radiate from a nature center. The city also plans bicycling trails near the nature center, as well as a bike lane set off by a street divider through the city itself. In the city's two major park areas, hiking and bridle trails are currently in use. Thought is being given to converting some of the bridle trails to bicycle trails.

The Washington Metropolitan Area is presently the focus of ambitious plans to beautify the Capital City and provide for its long-term recreation needs. As part of these plans, a system of trails in and near the city is proposed, as discussed in Appendix A.

Richmond, Virginia, has established a number of short hiking trails, each approximately one mile in length, leading to places of special natural or historic interest. A leaflet containing maps of these trails and identifying the points of interest has been prepared. There are no bridle or bicycle trails within the city, although a need exists.

Miami Beach, Florida, presently is constructing a bicycle path that follows the perimeter of one of its golf courses for three miles.

Cleveland, Ohio, has about 100 miles of horseback trails and some 10 miles of bicycle trails that have been constructed to follow the Emerald Necklace, a green belt surrounding the metropolitan area.

Columbus, Ohio, now is building a trail along the Scioto River for hiking and cycling.

The City Parks Departments of Detroit, Michigan, in cooperation with one of the major newspapers there, has developed 3.5 miles of hiking trails in Belle Isle Park.

Clark County, Nevada, which includes Las Vegas, is undertaking a land-use study which may lead eventually to a countywide trail system. The city of Reno has few designated trails at present. Surrounding Washoe County plans to develop an extensive system of 260 miles of trails for riding and hiking, 80 miles for bicycles, and 120 miles for trail scooters, including trails along the Truckee River through the city.

New Haven, Conn., plans to develop additional walking and bicycling trails. Scene in Beaver Pond Park. (Photo: New Haven Commission of Public Parks)

Maricopa County, Arizona is proceeding with plans for 720 miles of trails for riding, hiking, bicycling, and trail scooters. Basic to the program is a series of canal parks in and near Phoenix, with facilities for parking bicycles and for the care of horses. An important feature of these trails is provision for horses and hikers to cross busy intersections safely. Manually operated traffic lights at dangerous street crossings have been provided, as well as bridle paths paved with soft asphalt at the intersections to afford sound footing for horses. In addition to the network of canal parks, Maricopa County also plans a Sun Circle Trail which will skirt the perimeter of the city. Branches will radiate outward to nearby regional parks and reservoirs.

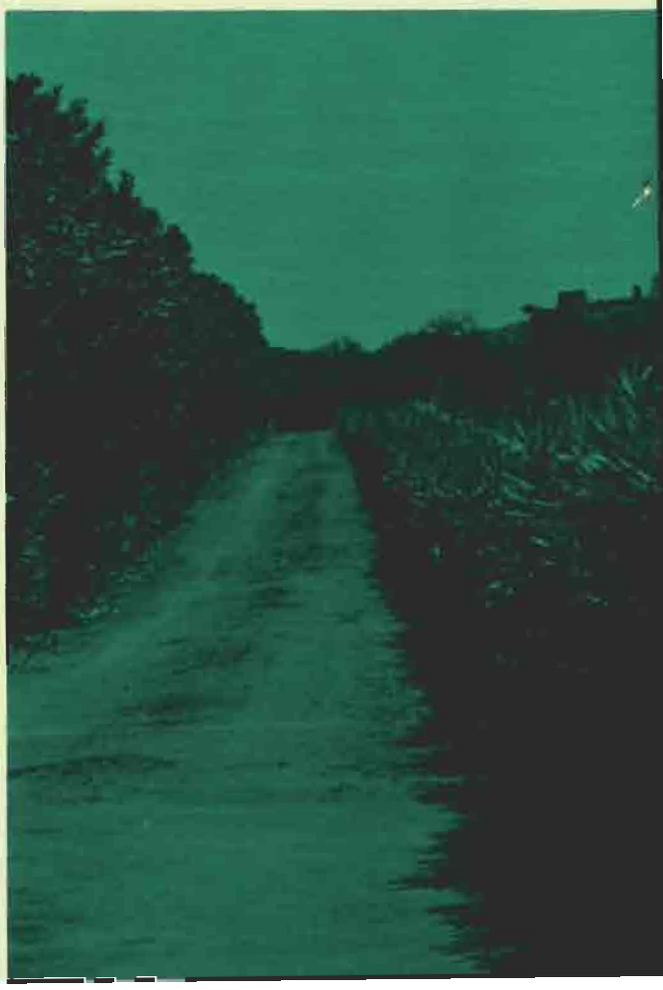
Phoenix and Maricopa County have taken an initial step in providing for the motorcycle rider. In recognition of this activity, Maricopa County representatives have met with motorcycle clubs and inventoried their needs. The clubs' preference for a large area of land where they could compete and ride has led the county to obtain a parcel of land from the Bureau of Land Management. It has drawn plans for scramble courses, hill climb areas, bleachers, official timing areas, and varied ovals for endurance racing. The clubs agreed to contribute labor and materials and to maintain the courses. These will be open to all persons whether affiliated with the clubs or not.

Albuquerque, New Mexico, recently acquired extensive acreages of Federal lands in its metropolitan area for regional parks under the Recreation and Public Purposes Act. Each of these parks has been provided with foot trails. About 40 miles of new trails are scheduled for construction in the next 10 years.

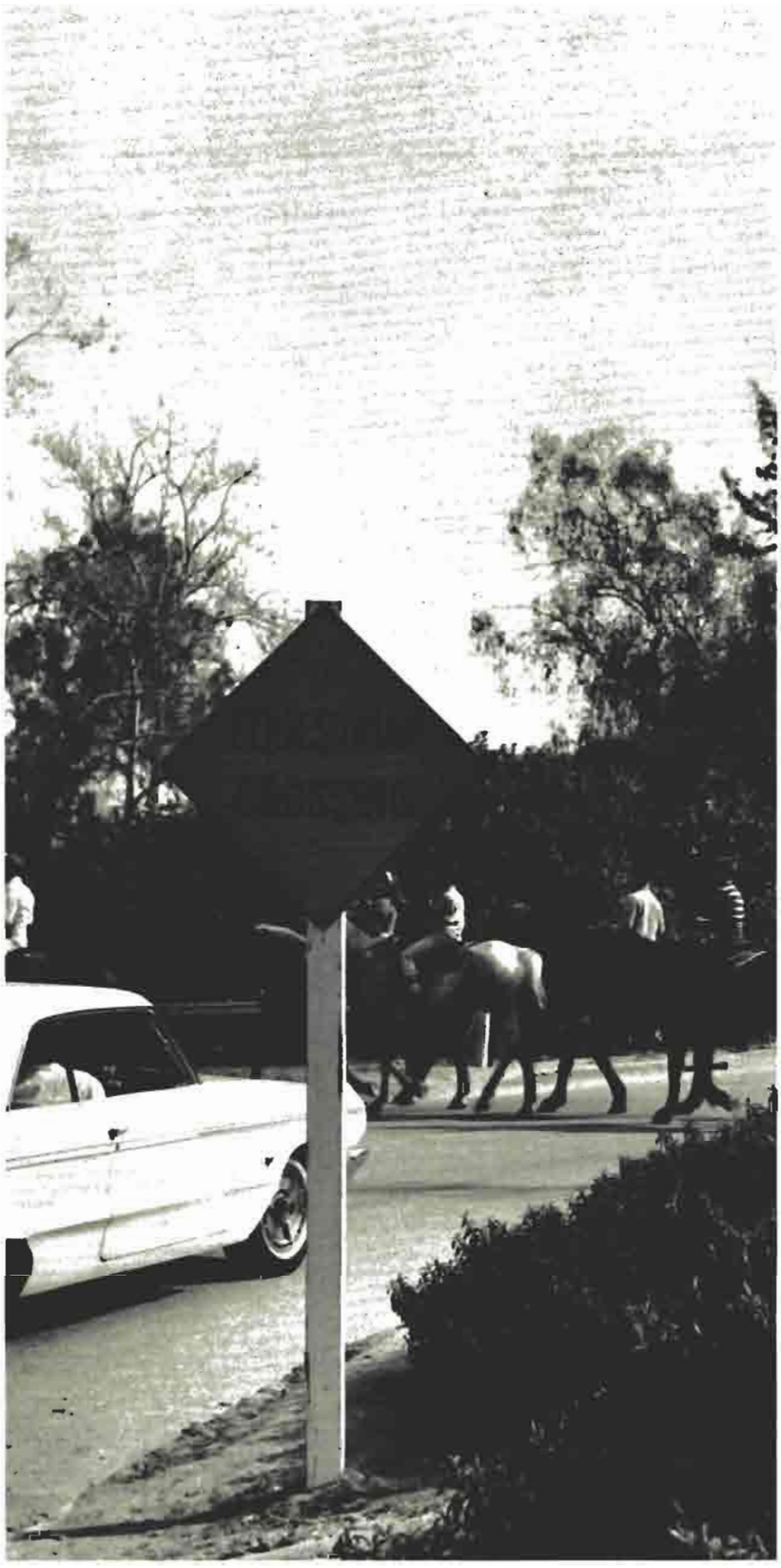
Orange County, California, plans a trail network along the Santa Ana River which would extend from the Pacific Ocean through urban areas into the mountains of the Cleveland National Forest. The network will enable the urban residents to hike west to the ocean or east to the mountains.

Bicycle trails are receiving special attention in Santa Clara County, California, near San Francisco, where 30 miles of trail are planned. The East Bay Park District in Alameda and Costra counties also has an active trail development program that will benefit residents of San Francisco.

Chicago has provided about 50 miles of bicycle paths including 17 miles along the shore of Lake Michigan. As many as 10,000 cyclists use these in a single day. Recently a bicycle path was constructed along the North Shore channel on land leased from the sanitary district. One excellent trail possibility exists along the abandoned right-of-way of the Chicago, Aurora, and Elgin Electric Railway. There is strong support to have the counties acquire this right-of-way and establish a "Prairie Path" for hiking, cycling, and riding.



The Sun Circle Trail around Phoenix, Ariz., is part of a broad trail development program proposed by Maricopa County. (Photo: Maricopa County Parks and Recreation Department, No. 1)



Griffith Park in Los Angeles provides for the safety of horseback riders. (Photo: Bureau of Outdoor Recreation, No. E01201)

Metropolitan Milwaukee has established 130 miles of bicycle trails on park roads and little-used secondary roads through Milwaukee and Waukesha counties. Two units stand out: A 64-mile bicycle route that circles the city, and an equivalent mileage in the Kettle Morain area west of the city. In addition, hiking and nature trails are provided within the city. Recently, through the efforts of local public, and private interests, a nature trail was built along the Little Menomonee River Parkway.

Near Kansas City, Missouri, hiking, cycling and horseback riding trails are to be major features of a new 2,600-acre Blue River Park.

The City of Denver has dedicated a 10-mile bicycle trail system along streets that connect three parks.

The city of San Francisco has 30 miles of trails and 15 miles proposed.

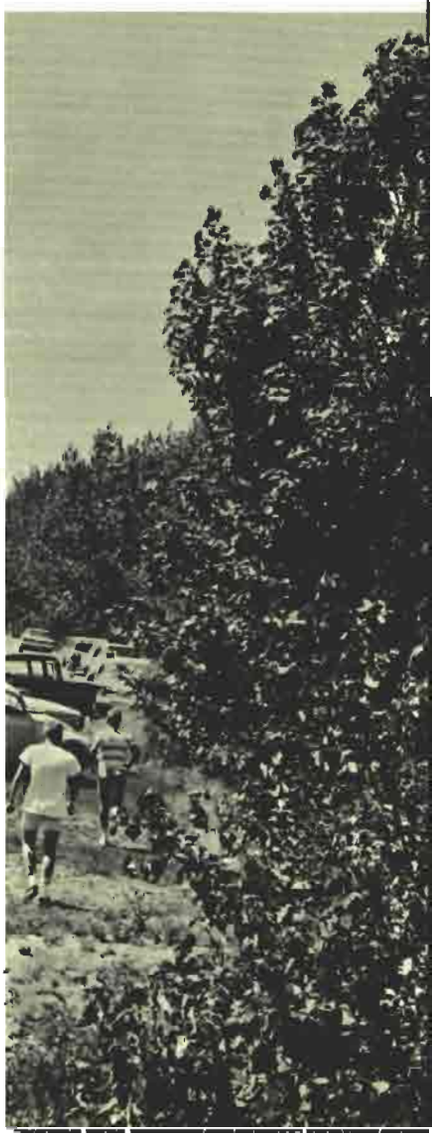
The City of Freemont, California expects ultimately to develop into a metropolis of some 500,000 population. Subdivisions there will be developed in a cul-de-sac pattern, featuring a network of bicycle paths. The network will enable cyclists to move throughout the entire system without having to intersect streets or highways and their motor traffic. The entire development will cover some 90 square miles. A similar arrangement is included in plans for the new city of Columbia, Maryland, between the Washington and Baltimore metropolitan areas.

Trail interests in Seattle are developing plans for a proposed system of bikeways that will help to accommodate the estimated 120,000 cyclists within the city. In this program, attempts will be made to link residential areas to schools, playfields, parks, beaches, and colleges, with the University of Washington as the hub. To avoid crossing motor vehicular traffic, bikeways would be located along landscaped shoulder areas on frontage roads next to freeways and expressways, along shorelines, and on abandoned railroad rights-of-way. Where use of these facilities is impractical, separate bike routes would be established along quiet back streets and alleys. Cost of the program would be moderate. Plans are advanced also for a trail running from Lake Sammamish to Lake Washington.

Private Trail Efforts

Private groups play a major part in metropolitan trail planning and development. Valuable service is being rendered by many volunteer organizations, such as trail conferences, horsemen's associations, and conservation clubs. In cooperation with various Government agencies, these groups help construct and maintain trails that benefit urban populations, seek out new trail possibilities, and organize trail cleanup outings.

Members of the New York-New Jersey Trail Conference, a non-profit federation of hiking clubs organized in 1920, have built and maintain 500 miles of trails and trail shelters in the New York metropolitan area. They seek a balanced trails program and uniformity in marking, maintenance, and shelter construction. The Conference assigns maintenance of various trails and sections, including sections of the Appalachian Trail and the trail network in the Palisades Interstate Park, to particular member clubs or individuals. High maintenance standards have been achieved throughout the trails system.

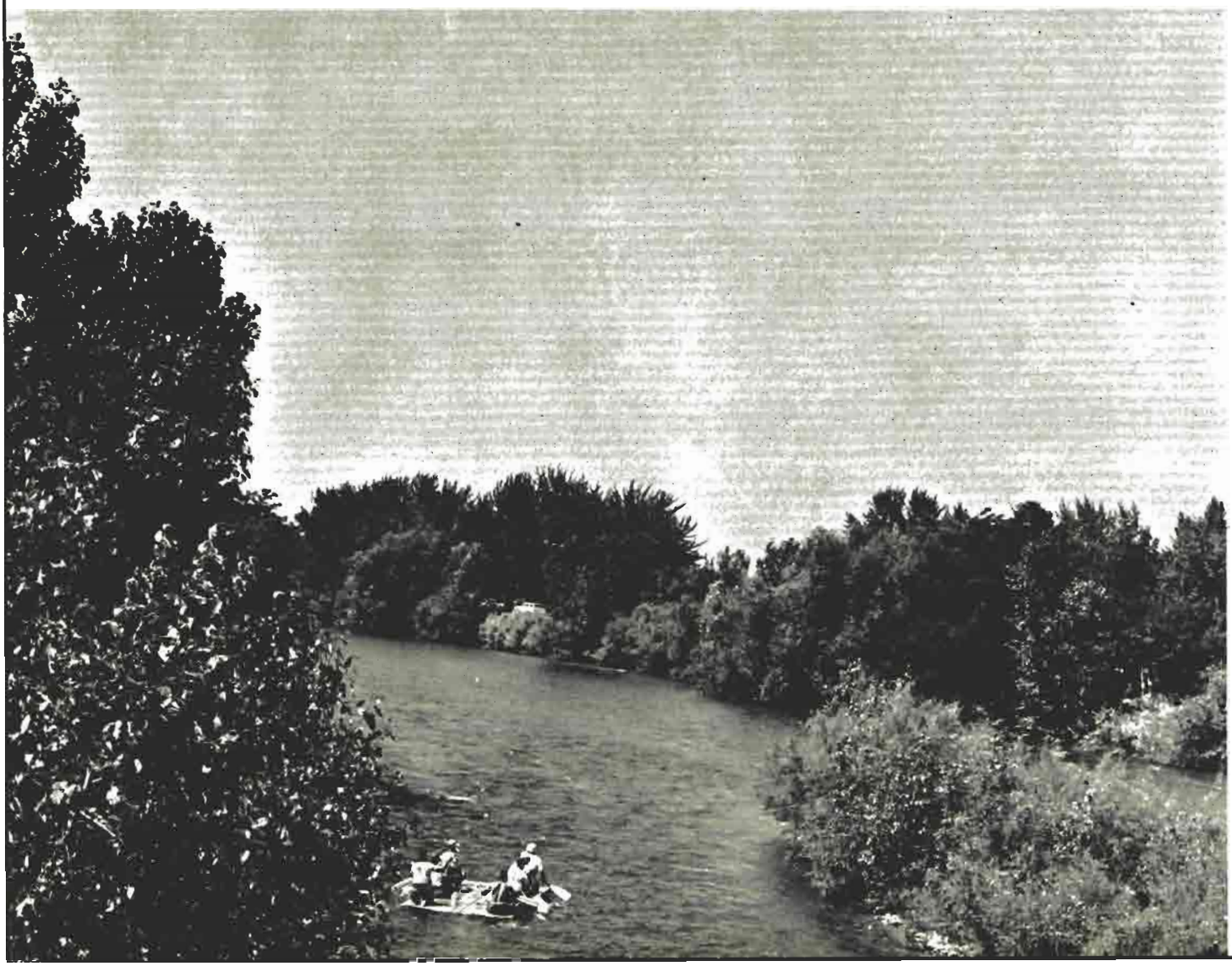


The Arizona State Horsemen's Association has played a leading role in the State's trails development. The Hiking and Riding Trails Committee of the Association, in cooperation with the YMCA Hiking Committee, the Arizona Council of the American Youth Hostels, and other private interests, has worked with the county parks and recreation departments in planning and construction efforts. Recently when these groups protested plans for a narrow overpass in an area used predominantly by horsemen, the overpass was widened to afford a protected pathway for horses.

In California, nongovernment organizations such as the Sierra Club are constantly seeking to obtain additional trails and maintain existing ones. Although primarily interested in wilderness hiking through scenically pleasing areas, they also have become deeply involved in local trail development.

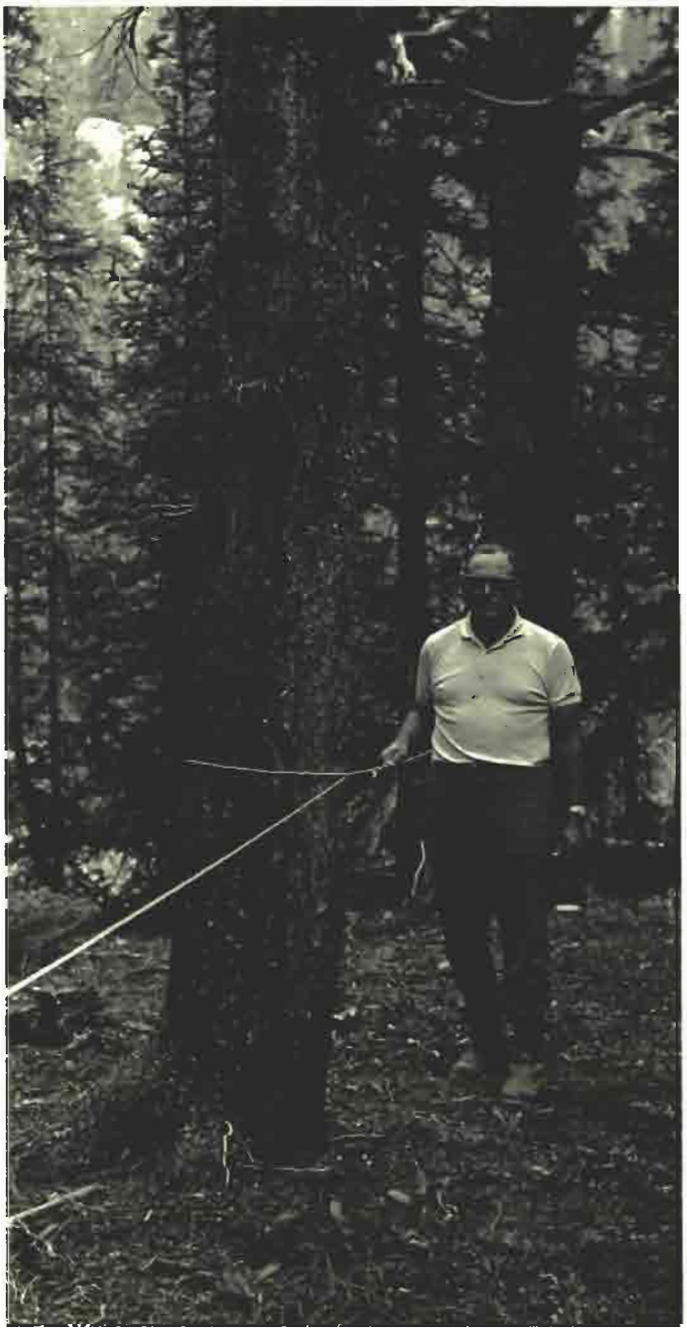
A Boise River Trail Committee, composed of interested citizens in the Idaho State capital, has proposed dedication of a 20-mile public right-of-way along the banks of the Boise River through the center of the city. The trail would link existing parks and provide access for water-based activities. Enthusiasts of the trail envision opening the river bank to bicyclers, hikers, and horseback riders, who then could enjoy these activities away from dangerous city streets. Horseback riders would have a challenge and a goal not to be found in a horse ring or on a cinder trac' ecause a 20-mile hike or ride would sometimes require overnight stops, the Committee is proposing that campgrounds be established along the route with facilities for families or groups.

Boise, Ida., plans a 20-mile trail network along the Boise River which flows through that city. (Photo: Idaho Statesman)



Local trail clubs in and around Eugene, Oregon, have found a good way to aid their trails program. The city government obtains rights-of-way, and local trail groups take over trail construction and maintenance. Thus the clubs provide opportunity for recreation activities and at the same time contribute substantially to their community.

The self-guiding "Braille Trail," near Aspen, Colo., enables the blind to enjoy and understand nature. (Photo: Robert B. Lewis)



In Seattle, local bicycle enthusiasts have submitted a plan to the city council for inclusion of bicycle routes along freeways now under construction. In addition, private groups have helped in the city's plans for a system of bikeways connecting the schools and parks as discussed earlier.

Outside Aspen, Colorado, in a mountain wilderness setting, local citizenry in groups, working with the Forest Service, recently developed a unique self-guiding nature trail for the blind. The sightless are led by a cord attached to posts past 22 stations where braille descriptions portray what can be smelled, touched, walked over, and heard in the area.

Near Anchorage, Alaska, a local ski club is building a six-mile trail for ski touring. Members hope to install flood lamps along one-and-a-half miles that will permit night skiing. Examples of private initiative in other sections of the country could be cited.

Meeting the Need

This trails study has sought to develop criteria for the number of miles of trail that need to be provided in metropolitan areas. Knowledgeable groups and individuals were asked to suggest mileage figures. Comments ranged from the opinion that such criteria would be meaningless to definite ideas on the need for each of the different kinds of use.

Matthew Rockwell, Executive Director of the Northeastern Illinois Metropolitan Area Planning Commission, gathered opinions from a number of midwestern cities. From Detroit, Michigan, came the suggestion that for each 50,000 metropolitan residents, 25 miles of foot trail should be provided, 10 miles of bicycle trail, and a half mile for horseback trail. From Davenport, Iowa, a total of 25 miles of all types of trails was suggested. The respondent in Decatur, Illinois, suggested a total of 10 miles of all types of trails.

Another source based views on data contained in the Outdoor Recreation Resources Review Commission Study Report No. 19, *National Recreation Survey*. For each 50,000 population, 12½ miles of hiking trail were suggested which would result in average spacing of one person every 254 feet; 25 miles of bicycle trail with a spacing of one rider every 134 feet; and 12½ miles of horseback trail with one person every 254 feet. Motorcycle needs were thought to be satisfied best by setting aside a block of land, rather than providing a linear facility. A ratio of 10 acres for each 50,000 residents was recommended.

West Palm Beach, Florida, reported the need for one mile of bicycle trail for each 3,000 residents. Florence, Alabama, plans two miles of walking and bicycling trails for its 10,000 residents. Durham, North Carolina, suggests 15-20 miles of combined foot, horseback, and bicycle trails for a population of 100,000.

Some believed that all mileage possible should be obtained, and that this still would be insufficient. This position is supported by the results of the National Recreation Survey contained in the Outdoor Recreation Resources Review Commission Study Report 19, which stated that walking for pleasure is a predominant recreation activity in metropolitan areas. The Survey reports that Americans take walks for pleasure on an average of 17.9 times per person a year and bicycling 5.15 times a year. Multiplying these figure by an area's population provides an idea of the extent of participation.

Maricopa County, Arizona, an area of rapid population growth, reported 238,864 activity days spent hiking and 907,683 activity days spent horseback riding in 1960. Such use is expected to increase to 731,250 activity days hiking and 2,250,000 activity days horseback riding by 1980.

Work group clearing hiking and riding path along the Arizona Canal. Maricopa County, Ariz. (Photo: Maricopa County Parks and Recreation Department, No. 2)

The reservoir of latent demand that exists for outdoor recreation opportunities in most urban areas is so large that, as soon as a facility such as a trail is provided, almost inevitably it is overused. Nevertheless, criteria for a minimum trail mileage may help metropolitan planners judge the adequacy of their efforts. Based on the results of this trails study, the following criteria are suggested for each 50,000 persons living in a metropolitan area:

Foot	25 miles
Horseback	5 miles
Bicycle	25 miles

Because many trails can serve multiple uses, the recommended standard can mean as little as 25 miles of trail per 50,000 people, but could require 55 miles per 50,000 people if intensive uses make separate paths for walkers, cyclists, and horseback riders a necessity.

For motorcycle riders in metropolitan areas, various groups suggested that the need in and near cities can be met best by reserving and developing a block of land for the specialized types of activities these users prefer. A rather arbitrary figure of 15 acres per 50,000 population is suggested, although further study is needed to determine an optimum standard.

Opportunities for Trail Location

Contrary to common belief, there are abundant opportunities in and near metropolitan areas to meet trail needs. Probably more possibilities for trail development exist here than for other kinds of outdoor recreation facilities. The real problem is in identifying and developing the prospects to the best advantage.

Trails can become integral parts of urban open spaces of all kinds. Stream valleys and their flood plains, in particular, offer possibilities for extensive trail networks, linking homes and subdivisions to stream valley parks, to downtown centers, and to the distant countryside.

Prime possibilities lie in the use of utility rights-of-way. Natural gas lines, power lines, abandoned railroad or street car rights-of-way, and easements for underground cables all have potential value. Often, these rights-of-way and easements pass through or around cities and are ideally located to provide a network of trails.

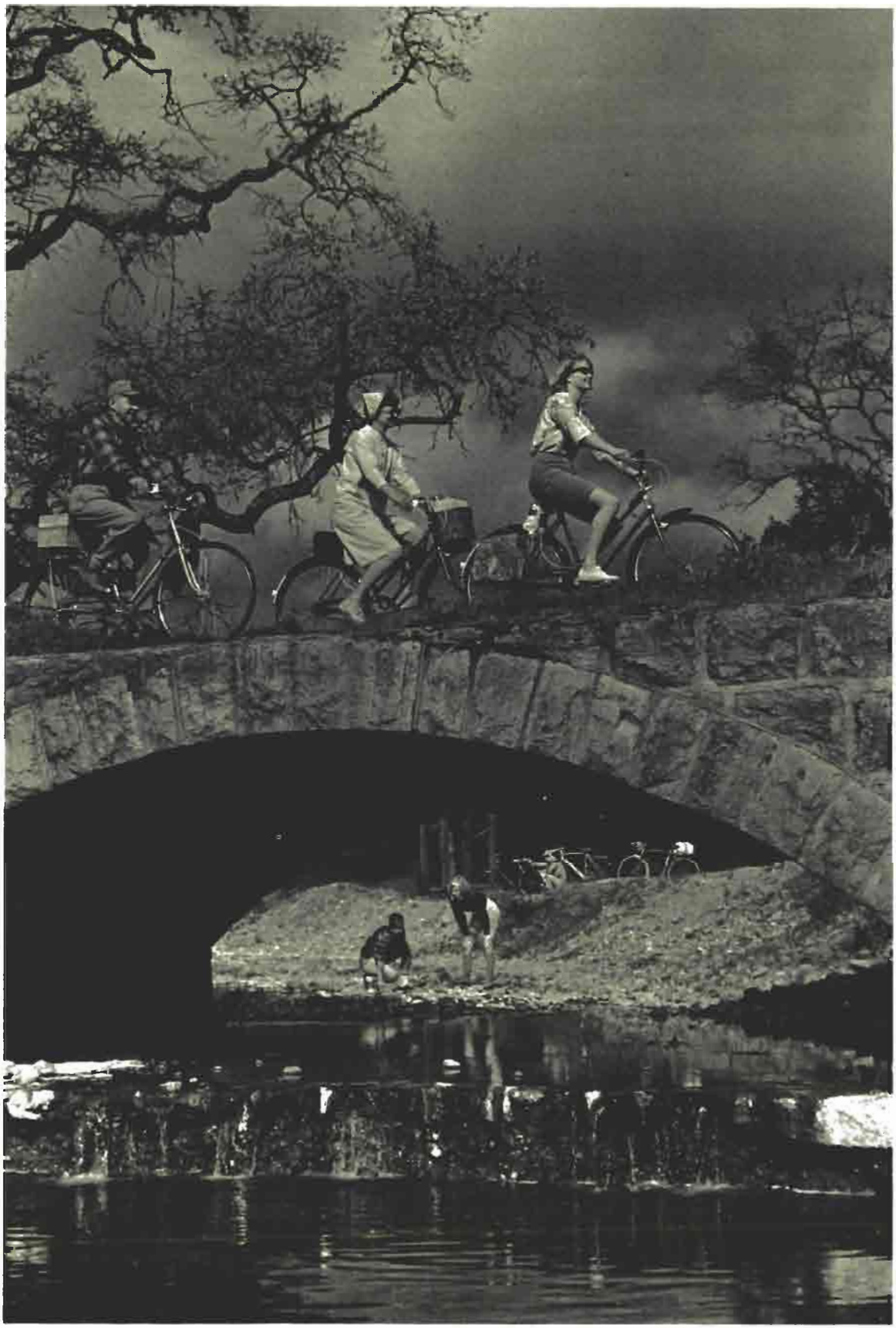
Many public utility companies and other similar land holding agencies have indicated that they would permit trail use of their lands. Some companies already are helping provide for public outdoor recreation needs with riding and hiking trail programs. Others might make land avilable for public use if local recreation agencies would agree to develop and maintain the trails and provide law enforcement.

Utility rights-of-way through and near cities afford trail development opportunities. (Photos: Bureau of Outdoor Recreation, Nos. T-3 and T-4)

Opportunities for trails exist next to the ocean. There, it is often possible to use the area between the high and low tide water-markers for trail purposes. Trails that circle islands are appealing. Reservoirs, where trails can be constructed conveniently on the surrounding easements or public lands, afford many possibilities.

Trail opportunities can develop in conjunction with other public projects, such as irrigation or transportation canals and laterals. Levees, flood dikes, jetties, and breakwaters often are adaptable for trail use. These make ideal bicycle paths because of their gentle grade.

Shorelines provide ready-made trail corridors. (Photo: S-5)



The appeal of cycling is increasingly being rediscovered by urban dwellers. (Photo: S-6)

Interstate beltways around cities offer trail opportunities, especially for cyclists and horseback riders. Similarly, the main interstate and arterial highways leading from cities through the suburban fringes into open country have potential. Rights-of-way along these roads frequently are wide enough for trail development.

Perhaps the greatest need in metropolitan areas is for cycling trails. One solution is to reserve existing side streets for bicycle use. Citywide systems of bikeways can be created by a simple delineation of interesting routes and by restricting use by motor vehicles. Such a bikeway might lead through a park, over a bridge, through the zoo, past a museum, around a historical monument, and along the waterfront.

Opportunities for motorcycling within metropolitan areas are possibly the easiest need to satisfy. Because of the sport's inherent characteristics, it may be possible to meet the need without an extended linear trail network. Indications are that operation of the vehicle in an urban environment is an end in itself and that repetition of a maneuver within a restricted area is not objectionable to most riders. Thus, urban motorcycling needs can largely be satisfied on a relatively small block of land. A few acres with a variety of obstacles and terrain can sustain intensive use. Abandoned dry gravel pits, sanitary fills, mine dumps, or marginal lands unsuited for other purposes are adaptable to this use.

Many cities still have extensive areas of timberland requiring firebreaks. Since firebreaks usually wind in and around the residential areas and countryside alike, often following designated roads or ridgetops, they afford excellent trail opportunities. Of course, consideration of private land owners, fire suppression agencies, and the fire season regulate use.

The major obstacle in developing metropolitan trails is not in finding opportunities, but in planning and implementing the necessary trail program. Pointing out trail potentials is not enough, especially in urban areas. What is needed is an aggressive and coordinated program of planning, development, and maintenance in cooperation with the many public and private interests able to give assistance.

Responsibility for Action

The task of providing adequately for metropolitan trail needs can be handled best through the cooperation and integrated efforts of the various public and private interests involved. A large number of programs exist that might provide needed assistance. Prominent among the Federal financial assistance programs are the Land and Water Conservation Fund Program and the Open Space Program. Many of the States have sizable programs aimed at acquiring and developing lands and facilities for outdoor recreation purposes. Most of these are potential sources of assistance in furthering metropolitan trail efforts. Major responsibility for the planning, acquisition, development, and maintenance of metropolitan trail systems, however, properly devolves upon the municipal and county parks departments.

The roles of the various public (Federal, State, and local) and private interests in helping to meet urban trail needs are listed as follows:

The Federal Government should:

1. Develop vigorously additional trails on Federal lands in or near urban centers.

2. Permit and encourage the States and their political subdivisions to construct and maintain trail facilities on Federal lands when it is in the public interest to do so, taking into account the long-range comprehensive recreation plans of the States.

3. Work with States and their political subdivisions to plan sound, long-range trail programs and services for local areas to the end that the total recreation provisions by all levels of government shall be planned cooperatively.

4. Encourage local leadership, both public and private, to develop trail facilities adequate to meet the needs and desires of the hiker, horseman, and cyclist.

5. Provide technical guidance and assistance in the planning and development of trail facilities, including the collection and dissemination of necessary and desirable data pertinent to such planning and development through the Federal agencies concerned with recreation. Authority for such assistance exists in the Bureau of Outdoor Recreation Organic Act of 1963, the Urban Planning Assistance Program of the Urban Renewal Administration, and various Department of Agriculture programs.

6. Encourage and assist local agencies in obtaining financial assistance in acquiring the necessary land and in developing trails. Such assistance is available through programs such as: the Land and Water Conservation Fund Program of the Bureau of Outdoor Recreation; the Open Space Land Program, Urban Beautification and Improvement Program, and Urban Planning Assistance Program of the Urban Renewal Administration; and the Highway Beautification Act of 1965 administered by the Bureau of Public Roads. In addition, a number of other Federal programs provide possible assistance or special incentives for trail development.

Additional information about the various Federal assistance programs is included in the booklet *Federal Assistance in Outdoor Recreation,* available from the Bureau of Outdoor Recreation, Washington, D.C. 20240.

The States should:

1. Give consideration in their comprehensive statewide outdoor recreation plans to opportunities for trail development that will help to meet urban needs.

2. Vigorously develop trails on State-managed lands in and near urban areas.

3. Encourage cooperative planning and development of trails by local units of government.

4. Jointly develop clear-cut lines of authority and responsibility for trails among the various units of governments and private interests.

5. Work actively with local public and private groups to provide necessary professional help in trail planning, development, and operation.

6. Provide uniform guidelines for trail development.

7. Assist in acquisition and development of lands for trails when local governments are restricted from prompt action by financial limitations. After acquisition of such lands, development and operation can be assumed by local agencies.

8. Distribute, through a system of priorities, Federal and State grant money for trail acquisition, development, and maintenance by local governments.

9. Transmit technical recreation data to local governments for their use in determining needs, construction standards, and operating procedures for trails.

10. Enact legislation where necessary to protect land owners from liability claims arising out of the use of trails on their lands for recreational purposes.

Local agencies should:

1. Assume the major responsibility within metropolitan areas for acquisition, planning, development, and maintenance of trail systems.

2. Pursue an aggressive program of trail development on city and county lands.

3. Mobilize youth groups and hiking, riding, and cycling clubs to develop public support for trails.

4. Coordinate voluntary trail work by organized hiking and riding groups and other interested service organizations.

5. Seek technical and financial assistance in trail needs from State and Federal agencies.

6. Mark, maintain, and police trails and regulate their use.

7. Publicize the opportunities readily available for trail use and enjoyment by using the news media and trail guide maps.

Private groups should:

1. Stimulate State and local legislative action to authorize trail development and maintenance.

2. Advise public agencies of the needs for trail facilities, and participate in joint planning.

3. Assume responsibility for construction and maintenance of designated trails or segments.

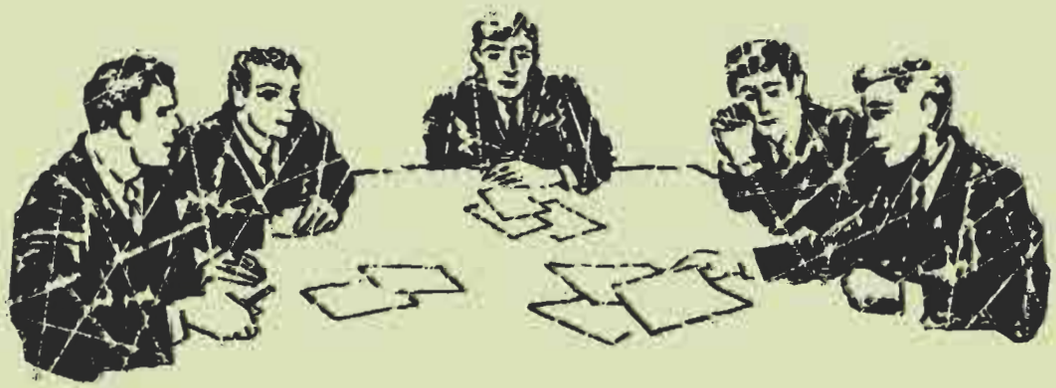
4. Provide as much financial assistance for trails as possible to help realize joint aims.

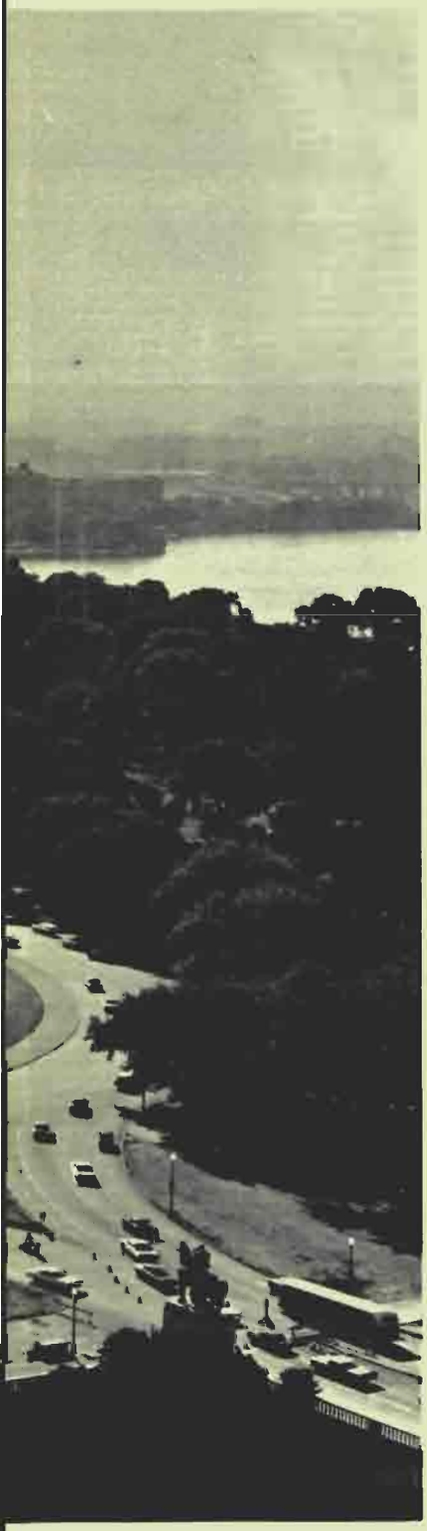
5. Provide trail promotion necessary to realize joint aims.

6. Publicize and encourage activities along the trails and use of exising trail facilities.

7. Cooperate with community agencies to provide trail facilities and programs that meet the needs of Scouting groups and other worthy interests.

8. Encourage respect for the rights of others along trails, and teach trail manners.





The Capital City—trails to link people to the National shrines and to the countryside. (Photo: National Park Service, No. WMT-2)

APPENDIX A

Proposals showing planning in one metropolitan area, Washington, D. C., to meet local trail requirements, including limited details on techniques followed in developing recommendations.

Trails for Metropolitan Area Needs

President Johnson's Natural Beauty Message directed that the Potomac be made to "serve as a model of scenic and recreational values for the entire country." This challenged trail organizations and government officials alike to develop a cooperative trail program which would bring the message's spirit to life on the Potomac landscape. The Washington, D.C., efforts which followed provide plans which capitalize on urban area trail opportunities and meet trails needs.

The Area and Its People

The Washington metropolitan area includes the District of Columbia and adjacent Virginia and Maryland suburbs. Tidewater reaches the District up the Potomac's broad estuary. Upstream for 15 miles nearest Washington, the Potomac has carved a gorge little spoiled by civilization. Beyond lie rolling farm and hunt country.

More than 2.5 million people live in the metropolitan zone. The number will double by the year 2,000 according to projections. Housing and other developments are rapidly consuming the surrounding countryside.

Per capita income ranks among the highest in the Nation, yet all do not prosper. A high-income area extends from northwest Washington into the adjoining suburbs. A low income area encompasses much of northeast and southeast Washington, where many underprivileged families are concentrated.

Existing Trails

Best-known of the area's trails is the towpath of the Chesapeake and Ohio Canal, extending 185 miles between the Georgetown section of downtown Washington upstream along the Potomac River and Cumberland, Maryland. This and many other area trails are heavily used by individuals walking, hiking, or bicycling. Within the District of Columbia, foot and bridle paths run the length of Rock Creek Park.

The National Park Service maintains a total of 82 miles of trails in the District's various parks. Adjacent Arlington County in Virginia has been developing trails along the Potomac and connecting tributaries.

Fifteen miles up the Potomac at Great Falls Park, heavily used hiking trails skirt the Potomac gorge on both sides. Informal trails exist in stretches of the stream valley parks of the Maryland-National Capital Park and Planning Commission and the Northern Virginia Regional Park Authority. Maryland's nearby Wheaton Regional Park features a nature center and bicycle trail.

Gulf Branch Nature Trail, one of several Arlington County urban stream valley trails linking neighborhoods to the Potomac River. (Photo: Bureau of Outdoor Recreation, No. T-5)

Popular hiking trails skirt the Potomac River gorge below Great Falls. Some lead over rocks while others follow more gentle terrain. (Photos: Bureau of Outdoor Recreation, Nos. T-6 and T-7)

Within a day's outing of the city are the trails of Prince William and Catoctin Mountain Parks, Sugarloaf Mountain, and the extensive Shenandoah National Park and George Washington National Forest. The Appalachian Trail follows the crest of the Blue Ridge Mountains 50 miles west of Metropolitan Washington, D.C.

Trail Needs

Existing trails are inadequate to meet the needs of the area's people. They fail to take advantage of the many opportunities still available. Rapid development of highways and subdivisions, and fencing threaten to foreclose remaining opportunities, especially in the new suburbs.

A new factor is the high intensity of jet airplane noise at National Airport. This adversely affects trail use and other outdoor recreation activities in and near the area. This is especially true along the C. and O. Canal and the Potomac River, which the jets follow in their approach to and departure from the airport. The Federal Aviation Commission should be required to solicit and consider views of the Secretary of the Interior on effects of proposed changes in use of National Airport involving possible increases in frequency of air traffic, increases in noise level and duration, and related developments which might adversely affect use and enjoyment of Washington metropolitan area recreation facilities.

Many climb Sugarloaf Mountain to view the Potomac Valley. (Photo: Bureau of Outdoor Recreation, No. T-8)

Fences and "No trespassing" signs block public access. (Photo: Bureau of Outdoor Recreation, No. T-9)

People in the low-income areas of Washington, especially, lack trails and open spaces. They are the least mobile part of the area's population and the most in need of convenient access from their homes to playgrounds, small recreation areas, and larger parks.

A wider variety of trails is needed. Cycling opportunities are limited. Numerous people lack opportunity for an evening's stroll through a bit of greenery. Access, marking, and information about trails are inadequate. Many fascinating streams and bluffs remain unknown or inaccessible to most residents.

City dwellers need trails adjacent to their homes and apartments. (Photo: Bureau of Outdoor Recreation, No. T-10)

Genesis of Program

Planning for an area-wide trail system began in 1965. At that time, government planners invited representatives of voluntary agencies to help develop concepts, suggest opportunities, outline study methods, and make recommendations. The organizations included the Potomac Appalachian Trail Club, Wanderbirds Hiking Club, Boy Scouts of America, American Youth Hostels, the National Audubon Society, and others. Participation at that stage was necessary to assure full consideration for their ideas from local, State, and Federal agencies engaged in over-all park, recreation and open space planning for the Potomac Region.

As an initial step, the public and voluntary agencies noted potential trail corridors on a map. The volunteer agency representatives then visited each possible project and recorded the physiographic features, land uses, mileages, trail uses, and associated activities on a check list.

These observations were incorporated in a program of trails.

The Proposed Program

The accompanying map shows the existing and proposed system of trails for the metropolitan area. The trails criss-cross the area's features and its places of residence, work, and recreation. They are convenient to residents in all sections of the city, irrespective of economic level or age.

More than 130 miles of proposed trails lie within the built-up city, 500 miles within reach on an afternoon outing, and 1,200 miles available for one-day excursions.

Trails would extend from the White House and Capitol along the Potomac's shores and the region's stream valleys and ridges to Bull Run Battlefield, Harpers Ferry, and the Blue Ridge Mountains. Trails would give residents opportunity for an evening's stroll. They would enable many persons to walk or cycle to work. Trails would provide access between the city into more open country for afternoon or all-day outings on foot, horseback, or bicycle. Scenic, conservation, and urban development benefits would derive from each trail corridor.

Proposed trunk trails would follow the rivers and ridges, forming a network affording trails for either brief or extended excursions. Loop trails would return the traveler to his car, a transit stop, or his community. Spurs would lead to overlooks or historic sites. Many trails would tie in with the proposed Potomac Heritage Trail and some with the Appalachian Trail.

Bicyclist on secondary road winding beneath the Catoctin Mountains near Gettysburg, Md. (Photo: Bureau of Outdoor Recreation, No. T-11)

Bull Run Mountains frame the Virginia hunt country. (Photo: Bureau of Outdoor Recreation, No. T-12)

Secondary scenic roads designated as scenic bicycling routes would supplement the trails. Scenic corridors along the roadsides would be protected; the roads would be designed to low speed standards. Portions of certain city streets would be reserved for cyclists and pedestrians. The National Capital Planning Commission proposes to designate "special streets" in the District of Columbia for pedestrian use, linking squares and parks, and preserving vistas.

The proposed trails seldom conflict with present land uses. Most of the desirable trail locations exist on rough lands which have escaped development.

The proposed system would take advantage of trail opportunities in existing and proposed public parks, and in water courses, flood plains, open spaces preserved as part of cluster developments and new towns, abandoned railroads and streetcar rights-of-way, utility rights-of-way, highway rights-of-way where width and other factors permit, and unrestricted portions of the area's military reservations. Design standards would vary widely, depending upon the intensity of use and the type of terrain. Some trails would be simple paths, others graded trails having a four-foot-wide tread for bicycle and heavy use by pedestrians.

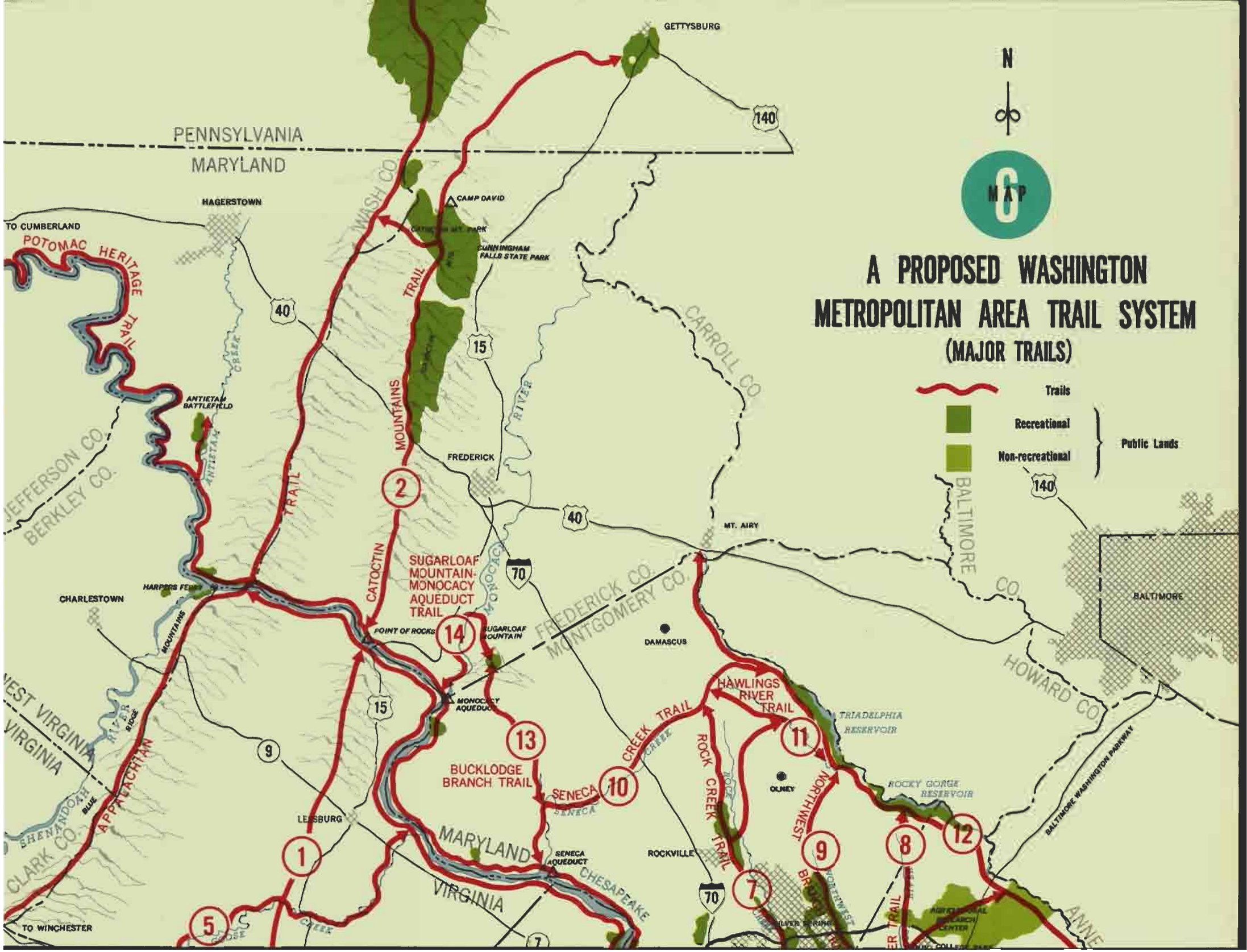
Examples of Specific Trails

The proposed primary trail network includes 20 major trails totaling more than 400 miles in length. Each is shown on the accompanying map and described briefly below. Secondary trails, totaling many hundreds of miles, are not shown.

Northern Virginia and Western Maryland (Trails 1–6)

Trails 1, 2, and 3 would describe an arc around the northern Virginia and adjacent Maryland side of the metropolitan Washington area. Trails 4, 5, and 6 would connect the Potomac River and the city with the first three trails.

1. *BULL RUN MOUNTAINS TRAIL.* The Bull Run Mountains Trail, rising to an elevation of 1,300 feet, would extend for 45 miles between Warrenton, Virginia, and the Potomac River at Point of Rocks, 50 miles upstream from Washington. The route passes granite craigs, farm valleys, and wooded hills. A hiking trail would follow the mountain crest. Nearby woods roads would afford horseback riding, and light duty roads along the base of the mountains would provide opportunities for bicycling.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MAP 6
A PROPOSED WASHINGTON METROPOLITAN AREA TRAIL SYSTEM
(MAJOR TRAILS)
Trails
Recreational
Non-recreational
Public Lands
GETTYSBURG
PENNSYLVANIA
MARYLAND
HAGERSTOWN
TO CUMBERLAND
CAMP DAVID
CUNNINGHAM FALLS STATE PARK
POTOMAC HERITAGE TRAIL
ANTIETAM BATTLEFIELD
FREDERICK
CARROLL CO.
JEFFERSON CO.
BERKLEY CO.
CHARLESTOWN
HARPERS FERRY
MT. AIRY
BALTIMORE
BALTIMORE CO.
HOWARD CO.
FREDERICK CO.
MONTGOMERY CO.
SUGARLOAF MOUNTAIN-MONOCACY AQUEDUCT TRAIL
POINT OF ROCKS
SUGARLOAF MOUNTAIN
MONOCACY AQUEDUCT
DAMASCUS
HAWLINGS RIVER TRAIL
TRIADELPHIA RESERVOIR
BUCKLODGE BRANCH TRAIL
SENECA CREEK TRAIL
ROCK CREEK TRAIL
NORTHWEST BRANCH TRAIL
OLNEY
ROCKY GORGE RESERVOIR
BALTIMORE WASHINGTON PARKWAY
LEESBURG
ROCKVILLE
SENECA AQUEDUCT
CHESAPEAKE & OHIO CANAL
APPALACHIAN TRAIL
WEST VIRGINIA
VIRGINIA
MARYLAND
SHENANDOAH RIVER
BLUE RIDGE MOUNTAINS
CLARK CO.
TO WINCHESTER
AGRICULTURAL RESEARCH CENTER
ANNE
1
2
5
7
8
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10
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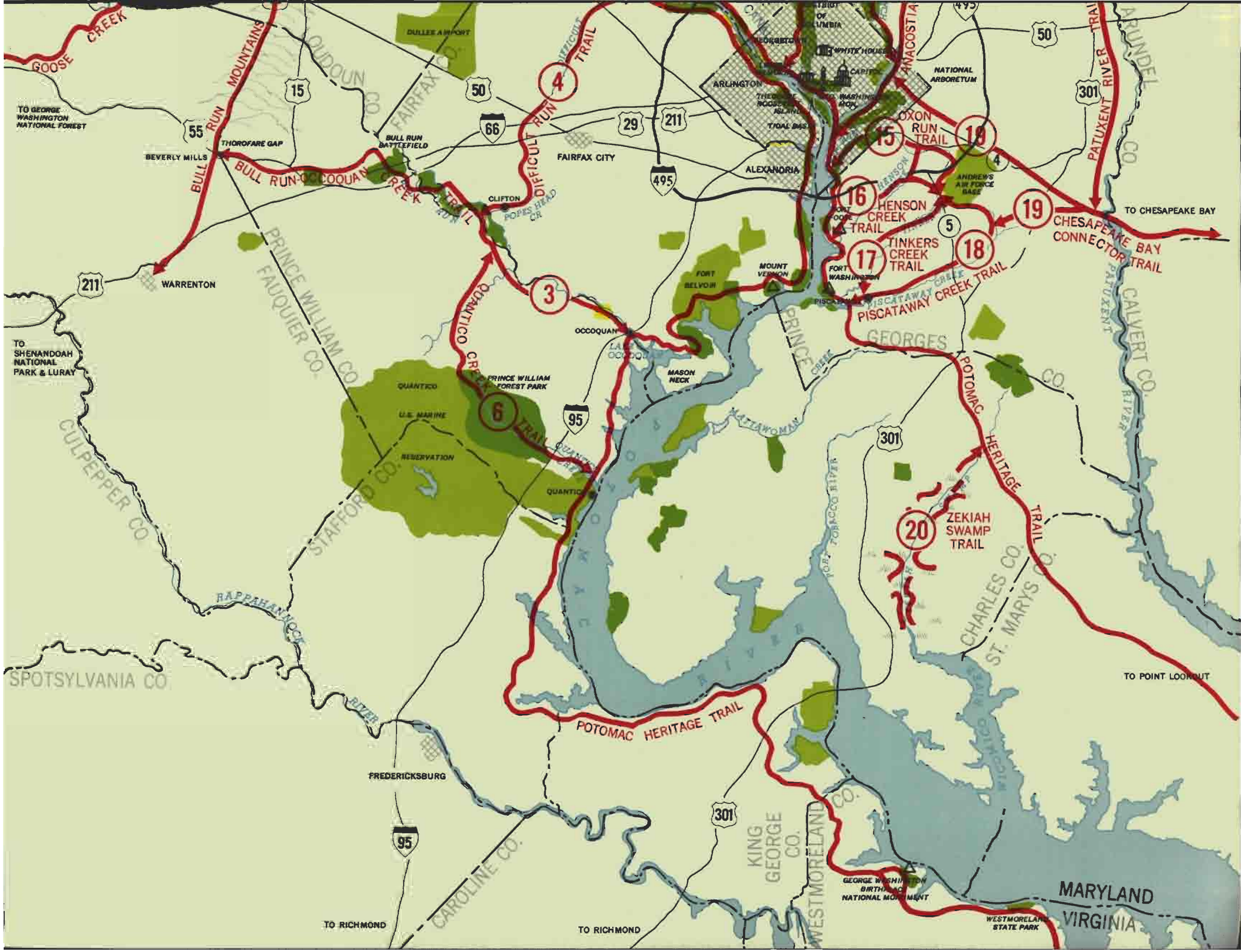
14
15
40
70
140
9



GOOSE CREEK
BULL RUN MOUNTAINS
TO GEORGE WASHINGTON NATIONAL FOREST
55
15
50
66
29
211
495
301
4
5
THOROFARE GAP
BEVERLY MILLS
BULL RUN BATTLEFIELD
BULL RUN-OCCOQUAN CREEK TRAIL
LOUDOUN CO.
FAIRFAX CO.
DULLES AIRPORT
4 DIFFICULT RUN TRAIL
FAIRFAX CITY
CLIFTON
POPES HEAD CR
ARLINGTON
ALEXANDRIA
GEORGETOWN
DISTRICT OF COLUMBIA
WHITE HOUSE
CAPITOL
WASHINGTON MON.
TIDAL BASIN
ANACOSTIA
NATIONAL ARBORETUM
15 OXON RUN TRAIL
16 HENSON CREEK TRAIL
17 TINKERS CREEK TRAIL
18 PISCATAWAY CREEK TRAIL
19 CHESAPEAKE BAY CONNECTOR TRAIL
ANDREWS AIR FORCE BASE
PATUXENT RIVER TRAIL
ARUNDEL CO.
CALVERT CO.
PATUXENT RIVER
TO CHESAPEAKE BAY
WARRENTON
TO SHENANDOAH NATIONAL PARK & LURAY
PRINCE WILLIAM CO.
FAUQUIER CO.
3
OCCOQUAN
LAKE OCCOQUAN
6 QUANTICO CREEK TRAIL
PRINCE WILLIAM FOREST PARK
QUANTICO
U.S. MARINE
RESERVATION
95
FORT BELVOIR
MOUNT VERNON
FORT WASHINGTON
FORT FOOTE
PISCATAWAY
MASON NECK
PRINCE GEORGES CO.
MATTAWOMAN CREEK
POTOMAC RIVER
POTOMAC HERITAGE TRAIL
20 ZEKIAH SWAMP TRAIL
PORT TOBACCO RIVER
WICOMICO RIVER
CHARLES CO.
ST. MARYS CO.
TO POINT LOOKOUT
CULPEPPER CO.
STAFFORD CO.
RAPPAHANNOCK RIVER
SPOTSYLVANIA CO.
FREDERICKSBURG
CAROLINE CO.
KING GEORGE CO.
WESTMORELAND CO.
GEORGE WASHINGTON BIRTHPLACE NATIONAL MONUMENT
WESTMORELAND STATE PARK
MARYLAND
VIRGINIA
TO RICHMOND
TO RICHMOND

2. *CATOCTIN MOUNTAINS TRAIL.* This trail would tie into Trail 1 at the Potomac River and extend 40 miles between Point of Rocks and the Appalachian Trail. It would span the Catoctin Mountains in Maryland and Cunningham Falls State Park near Camp David. An extension would lead to Gettsyburg.

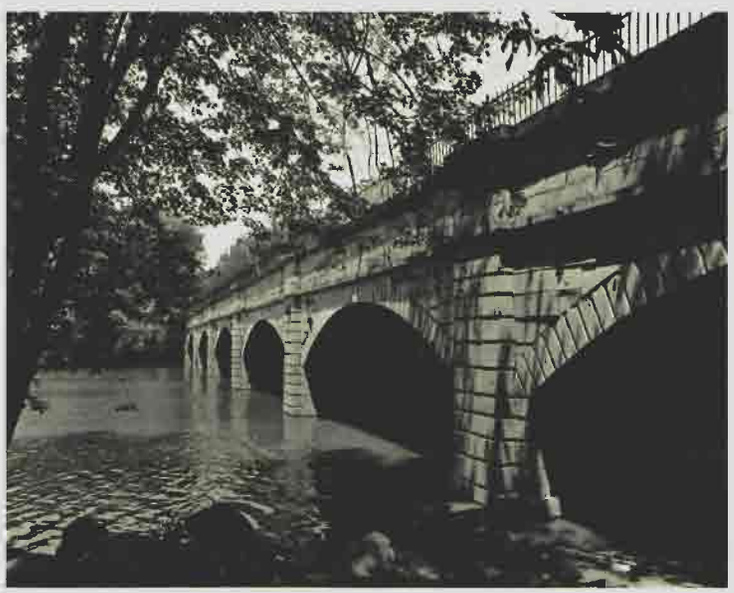
3. *BULL RUN-OCCOQUAN CREEK TRAIL.* This would connect Trail 1 at Beverly Mills in Thorofare Gap and the proposed Potomac Heritage Trail near Mason Neck, Virginia. The 45-mile-long trail would pass the historic town of Occoquan, 20 miles southwest of Washington, follow the ridges overlooking Lake Occoquan, and lead through the Bull Run valley and battlefield in the Virginia hunt country.

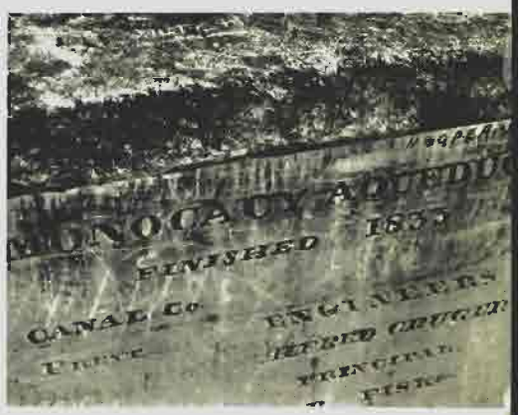
4. *DIFFICULT RUN TRAIL.* This trail would extend 23 miles between Difficult Run's mouth at the Potomac River near Great Falls, and a point near Fairfax City and Interstate Highway 66 in Virginia, where it would connect with Trail 3 via Pope's Head Creek and the historic town of Clifton. Loop trails would branch through the Virginia suburbs of Arlington, Alexandria, and Fairfax to the Potomac River.

5. *GOOSE CREEK TRAIL.* This trailwould extend 50 miles along Goose Creek from its juncture with the Potomac 25 miles northwest of Washington to its headwaters. There it would intercept Trail 1 and eventually meet the Appalachian Trail in the Blue Ridge Mountains.

A Catoctin Mountains Trail would extend 40 miles between Point of Rocks on the Potomac River and the Appalachian Trail, spanning the Catoctin Mountains in Maryland. Big Hunting Creek in the Catoctin Mountains. (Photo: National Park Service, No. WMT-1)

Monocacy River flowing beneath historic Monocacy Aqueduct of the Chesapeake and Ohio Canal. (Photo: National Park Service, No. 4591); Plaque inscription (Photo: National Park Service, No. 1970-2)





6. *QUANTICO CREEK TRAIL.* This 15-mile-long trail would connect the Potomac estuarine marshes near Quantico, Virginia, 30 miles southwest of Washington, and Trail 3, passing through Prince William Forest Park.

Central Maryland
and District of Columbia
(Trails 7–14)

Trails 7–14 would extend between the heart of Washington, D.C. along the Potomac River, Rock Creek, Northwest Branch, and the Anacostia River and the trails in Maryland which form an arc northeast of the District along Seneca Creek and the Patuxent River.

7. *ROCK CREEK TRAIL.* This 20-mile-long trail would connect historic Georgetown, Rock Creek Park and nature center, Dumbarton Oaks, the Mosque, and the Zoo in the District of Columbia. It would include separate paths for hikers, horseback riders, and cyclists and would connect the city with the Maryland countryside beyond.

8. *ANACOSTIA RIVER TRAIL.* This trail would extend some 25 miles along the Anacostia River, between its mouth at the Potomac and a point on the Patuxent River in Maryland. It would connect the National Arboretum, the University of Maryland, the Beltsville Agricultural Research Center and Greenbelt Park. This trail and an extensive series of connecting trails would serve the densely-populated areas in southeast and northeast Washington where trails are most lacking. The proposed system would provide badly needed access to and along the Anacostia River, to neighborhood parks and to play areas.

9. *NORTHWEST BRANCH TRAIL.* This proposed trail would follow boulder-strewn Northwest Branch between its confluence with the Anacostia River northeast of the District and the Patuxent River 20 miles away.

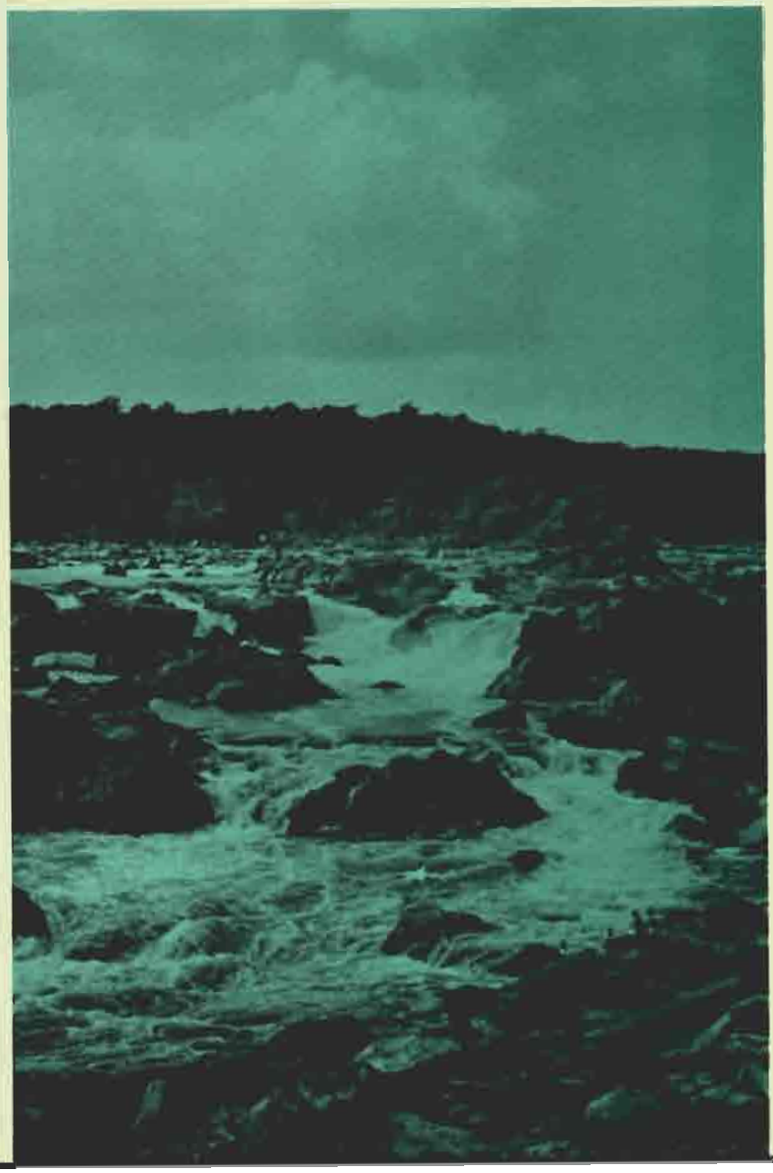
10. *SENECA CREEK TRAIL.* This trail would extend for 27 miles between Seneca Aqueduct at the Potomac, 25 miles northwest of Washington, and Triadelphia Reservoir on the Patuxent River, following Seneca Creek to its headwaters near the town of Damascus, Maryland.

11. *HAWLINGS RIVER TRAIL.* This 13-mile trail would extend along the Hawlings River between Trail 10 and the Patuxent River, serving Olney, Maryland, and other developing areas northeast of Washington.

12. *PATUXENT RIVER TRAIL.* The trail would follow the Patuxent River for 60 miles between Mount Airy, Maryland, and the river's estuary. It would connect with Trail 8, 9, 10, and 11 and would join Trail 19 leading to Chesapeake Bay.

13. *BUCKLODGE BRANCH TRAIL.* This trail would extend for 12 miles between the Seneca Creek Trail and Sugarloaf Mountain in Maryland. It and Trail 14 would form the sides of a 46-mile triangle, with the C. and O. Canal the base.

14. *SUGARLOAF MOUNTAIN - MONOCACY AQUEDUCT TRAIL.* This trail would connect Trail 13 at Sugarloaf Mountain and the historic Monocacy Aqueduct of the C. and O. Canal Towpath.



Great Falls in the Potomac River gorge. (Photo: National Park Service, No. WMT-2)

Southern Maryland
and the District of Columbia
(Trails 15–20)

Trails 15–20 would extend along the major drainages between the Andrews Air Force Base area southeast of Washington in Maryland, and points along the Potomac River downstream from the Capital.

15. *OXON RUN TRAIL.* This trail would follow the wooded Suitland Parkway right-of-way in Maryland between Andrews Air Force Base and the Potomac, 10 miles distant, passing along Oxon Run.

16. *HENSON CREEK TRAIL.* From the headwaters of Henson Creek at Andrews Air Force Base in Maryland, the Henson Creek Trail would extend 15 miles between the headwaters of the creek and Broad Creek Bay along the Potomac near Fort Foote.

17. *TINKERS CREEK TRAIL.* This trail would extend 10 miles between the headwaters of Tinkers Creek in Maryland and Trail 18 at the former port of Piscataway.

18. *PISCATAWAY CREEK TRAIL.* This trail would extend 12 miles between the headwaters of Pascataway Creek in Maryland and Piscataway Bay on the Potomac.

19. *CHESAPEAKE BAY CONNECTOR TRAIL.* This 25-mile-long bicycle trail would connect Trail 18 at the upper part of Piscataway Creek and the Chesapeake Bay, crossing the Patuxent marshes on an abandoned railroad right-of-way.

20. *ZEKIAH SWAMP TRAIL.* Located forty-five miles southeast of Washington in Maryland, this trail would include a series of spurs and loops into the Zekiah Swamp, an area of unique hardwoods and many varieties of wildlife.

Responsibilities

The National Park Service, Northern Virginia Regional Park Authority, Maryland-National Capital Park and Planning Commission, Maryland Department of Forests and Parks, and Virginia Department of Conservation and Economic Development have trail responsibilities in the area. These agencies would generally be responsible for acquiring lands and easements and for developing and operating proposed trails. They would cooperate with voluntary trail clubs and Scout troops which might maintain sections of the trails. Youth Corps enrollees also would assist.

The more important trail corridors areas should be purchased outright, particularly in areas where conflicting developments threaten to foreclose opportunities to establish trails. Along much of the connecting trail mileage, acquisition of conservation easements would protect the scenic values and permit public use. Flood plain zoning should be sought in some areas.

An Action Program

The following actions should be taken promptly to establish a Washington metropolitan area trail system:

1. Provide authority as needed to the Secretary of the Interior, in consultation with concerned public and private interests, to designate a Potomac River Basin trail system to which the Washington metropolitan trail system could be linked.
2. Establish a Washington Trails Advisory Council, appointed by the Secretary of the Interior and composed of representatives of the various public and private trail interests.
3. Appoint a full-time coordinator to guide the program to completion, working through the Metropolitan Washington Council of Governments.
4. Provide authorization needed by Federal agencies to acquire, develop and operate trail lands.
5. Allocate increased Land and Water Conservation Fund, Urban Open Space grants, and assistance from other Federal programs for trail purposes.
6. Encourage State and local governments to plan, acquire, develop, and operate non-Federal portions of the proposed trail system.

7. Stimulate assistance from private and voluntary groups and individuals in the planning, development, and maintenance of the trail system, and encourage property owners to donate lands or interest in lands for trail purposes.
8. Promote local subdivision and zoning regulations that will protect trail values on private lands.
9. Publicize available trail opportunities, prepare map guides to public use, and develop a uniform method of marking the trails.

Status of Program

The Governors of the Potomac Basin States and the Commissioners of the District of Columbia, as well as the Metropolitan Washington Council of Governments, have approved the concept of a Potomac region trail system, of which the Washington metropolitan area trail system would form a part. The basinwide trail system is outlined, along with preliminary plans for other uses of the Basin's natural resources, in the Potomac Interim Report to the President, submitted by Secretary of the Interior Stewart L. Udall January 6, 1966, and "Potomac Valley . . . a Model of Scenic and recreational values . . .," a preliminary report of the joint Federal-State planning team on landscape and recreation for the Potomac, May 1966.

Volunteers and government planners join forces to plan trail development in metropolitan Washington. (Photo: Arlington County, Photo No. 1)

APPENDIX B

Letter of March 31, 1966 from Secretary Udall transmitting the Nationwide System of Trails Bill to the Congress

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

March 31, 1966

Dear Mr. President:

The President, in his February 23 message on preserving our natural heritage, said "I am submitting legislation to foster the development by Federal, State, and local agencies of a nationwide system of trails and give special emphasis to the location of trails near metropolitan areas." The proposed legislation is enclosed.

A nationwide system of trails will open to all the opportunity to develop an intimacy with the wealth and splendor of America's outdoor world for a few hours at a time, or on one-day jaunts, overnight treks, or expeditions lasting a week or more. A system of trails carved through areas both near to, and far from, man and his works will provide many varied and memorable experiences for all who utilize the trails.

During the past six months, the Secretary of the Interior and the Secretary of Agriculture, in cooperation with other public and private trail interests, jointly conducted a nationwide trail study which is nearing completion. The enclosed bill provides for the establishment of a Nationwide System of Trails composed of the following four general classes of trails to serve the needs of the American people:

NATIONAL SCENIC TRAILS—A relatively small number of lengthy trails which have natural, scenic, or historic qualities that give them recreation use potential of national significance. Such trails will be several hundred miles long, may have overnight shelters at appropriate intervals, and may interconnect with other major trails to permit the enjoyment of such activities as hiking or horseback riding. The enclosed bill designates the Appalachian Trail as a national scenic trail for inclusion in the Nationwide System, and provides that other trails may be so designated by subsequent legislation. Monies appropriated from the Land and Water Conservation Fund would be available to Federal agencies to acquire lands for the national scenic trails and would be available to States and their political subdivisions for land acquisition and development for trail purposes. The development of national scenic trails by Federal agencies would be financed by appropriations from the general fund of the Treasury.

FEDERAL PARK, FOREST, AND OTHER RECREATION TRAILS—There will be an improvement and expansion of existing trails and the development of additional trails within areas administered by the Secretaries of the Interior and Agriculture in order to enable the public to make use of the distinctive natural, scenic, and historic resources of the areas administered by the two Secretaries. Among such areas are the national parks, national forests, national wildlife refuges, Indian Reservations and public domain lands. However, appropriate arrangements would need to be made with the Indian Tribes and individual Indians involved for rights-of-way or easements across Indian lands. No new legislation is required to authorize the construction of this class of trails. The two Secretaries will request funds for the trails as part of their regular requests for appropriations as they have in the past. The enclosed bill authorizes each Secretary to designate and mark the trails of this class under his administrative jurisdiction as part of the Nationwide System of Trails.

STATE PARK, FOREST, AND OTHER RECREATION TRAILS—An expansion of trails on lands owned or administered by the States will be encouraged. Only a few States now have major trail development programs underway or planned. Almost half of the States report that they have less than 100 miles of such trails. The enclosed bill directs the Secretary of the Interior to

encourage the States to consider needs and opportunities for such trails in the comprehensive statewide outdoor recreation plans and project proposals submitted to the Secretary under the Land and Water Conservation Fund Act of 1965 (70 Stat. 897). Upon the approval by the Secretary of the Interior of trail projects proposed by the States for financial assistance under the Fund Act, funds would be available for the acquisition and development of the trails from the moneys allocated to the States out of the Fund. The bill also directs the Secretary of the Interior, under the authority of the Bureau of Outdoor Recreation Organic Act (77 Stat. 49), and the Secretary of Agriculture, under authority vested in him, to encourage the establishment of such trails. The States may designate and mark this class of trails as part of the Nationwide System with the approval of the Secretary of the Interior.

METROPOLITAN AREA TRAILS—To serve people near their homes, local governments will be encouraged to develop trails designed primarily for day use in and near urban areas. These trails will satisfy the needs of large numbers of people for limited hiking and riding experiences. Whenever possible, the trails will lead directly from urban residential areas. Where appropriate, river and canal banks, utility rights-of-way, abandoned railroad or streetcar beds, and even city streets and sidewalks will be utilized. The enclosed bill directs the Secretary of the Interior to encourage the establishment of metropolitan area trails under the existing authority and procedures of the Land and Water Conservation Fund Act. It also directs the Secretary of Housing and Urban Development to encourage the planning and provision of trails in metropolitan and other urban areas through the existing urban planning assistance program and the urban open-space land program. In addition, the bill directs the Secretary of the Interior, under the authority of the Bureau of Outdoor Recreation Organic Act (77 Stat. 49), and the Secretary of Agriculture, under the authority vested in him, to encourage States, political subdivisions and private interests, including nonprofit organizations, to establish metropolitan area trails. This class of trails may be designated and marked as part of the System by the States or other administering agencies with the approval of the Secretary of the Interior.

As the initial unit of the Nationwide System of Trails, the enclosed bill designates the Appalachian Trail, extending 2,000 miles along the Appalachian Mountains from Maine to Georgia, as a national scenic trail.

The Secretary of the Interior is authorized to select a right-of-way for, and to provide appropriate marking of, the Appalachian Trail. The right-of-way for the trail will be of sufficient width to protect natural, scenic, and historic features along the trail, and to provide needed public use facilities. The right-of-way will be located to avoid established uses that are incompatible with the protection of the trail in its natural condition and its use for outdoor recreation. The location, relocation, and marking of the Appalachian Trail will be coordinated with the various Federal agencies, States, local governments, private organizations, and individuals concerned. Notice of the selection of the trail right-of-way, and changes therein will be published in the *Federal Register*.

The Secretary is also authorized to establish an advisory council for the Appalachian Trail. The council will assist in the selection of the right-of-way, and the marking and administration of the trail. The advisory council will include representatives of the Federal agencies that administer lands through which the trail passes, of the States involved, and of private organizations having an established and recognized interest in the trail.

The enclosed bill authorizes Federal agencies to acquire lands or interests in lands within the boundaries of areas they administer within the right-of-way for the Appalachian Trail by donations, purchase with donated or appropriated funds, or exchange. State and local governments will be encouraged to acquire the lands or interests in lands needed for the trail that are outside of federally administered areas, or to enter into cooperative agreements with the private owners of such lands to carry out the purposes of the bill, but to the extent the State and local governments fail to do so, the bill grants the Secretary of the Interior appropriate authority.

The Secretary of the Interior in cooperation with the other agencies and organizations concerned will administer, protect, develop, and maintain the Appalachian Trail in a manner that will protect its natural, scenic, and historic features and provide for appropriate public uses.

We estimate the land acquisition cost for the Appalachian Trail at approximately $4,665,000 and the development costs at approximately $2,000,000. These costs are programmed over the first five years. Annual operation and maintenance costs for the Appalachian Trail are expected to be about $250,000 after the fifth year.

The $4,665,000 land acquisition cost figure would provide for the acquisition of lands or interests therein along the 866 miles of the Appalachian Trail not now in public ownership. This assumes acquisition in fee of an average of 25 acres per mile, as well as the acquisition of scenic easements, as needed, to protect trail values on adjoining lands. The 25 acre per mile acquisition in fee would permit a right-of-way averaging about 200 feet in width.

In keeping with the bill's objective of encouraging cooperation between the Federal agencies, States, local governments, and private interests concerned, we anticipate that non-Federal interests will participate actively in the acquisition, development, operation, and maintenance of the Appalachian Trail. To the extent of such participation, the need for Federal funds will be reduced.

The man-years and cost data statement (based on current assumptions and estimates) required by the Act of July 25, 1956 (70 Stat. 652; 5 U.S.C. 642a), when annual expenditures of appropriated funds exceed $1 million, is enclosed.

The Bureau of the Budget has advised that the presentation of this proposed legislation would be in accord with the program of the President.

Sincerely yours,

Secretary of the Interior

Hon. Hubert H. Humphrey
President of the Senate
Washington, D. C.

Enclosures

Identical letter to the Speaker, House of Representatives

A BILL

To establish a Nationwide System of Trails, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

STATEMENT OF POLICY

SEC. 1. (a) The Congress finds that in order to provide for the ever-increasing outdoor recreation needs of an expanding population and to promote public access to, travel within, and enjoyment of, the national and State parks, forests, recreation areas, historic sites, and other areas, existing trails should be improved and maintained and additional trails should be established both in the remaining highly scenic and unspoiled areas and in the metropolitan areas of the Nation.

152

NATIONWIDE SYSTEM OF TRAILS

(b) To carry out the policy set forth in subsection (a) of this section, there is hereby established a Nationwide System of Trails composed of (1) trails designated as "national scenic trails" in this Act or subsequent Acts of Congress; (2) park, forest, and other recreation trails on lands within areas administered by the Secretary of the Interior or the Secretary of Agriculture when designated by the appropriate Secretary; (3) park, forest, and other recreation trails on lands administered by the States when designated by the States and approved by the Secretary of the Interior; and (4) recreation trails on lands in and near metropolitan areas when designated by the administering agency and approved by the Secretary of the Interior. The Secretary of the Interior and the Secretary of Agriculture, in consultation with the appropriate Federal agencies, States, local governments, private organizations, and advisory councils, shall select a uniform marker for the Nationwide System of Trails, and shall provide for the placement upon the uniform marker of a distinctive symbol for each national scenic trail.

DEFINITION OF NATIONAL SCENIC TRAILS

SEC. 2. (a) A national scenic trail eligible to be included in the System is an extended trail which has natural, scenic, or historic qualities that give the trail recreation use potential of national significance.

(b) The following trail is hereby designated as a "national scenic trail":

Appalachian Trail, a recreation trail of some 2000 miles, extending generally along the Appalachian Mountains from Mount Katahdin, Maine, to Springer Mountain, Georgia.

FEDERAL, STATE, AND LOCAL PLANNING
FOR ADDITIONAL NATIONAL SCENIC TRAILS

(c) The Secretary of the Interior, and the Secretary of Agriculture where lands administered by him are involved, shall make studies of the feasibility and desirability (including costs and benefits) of designating other trails as national scenic trails, Such studies shall be made in consultation with the heads of other Federal agencies administering lands through which the trails would pass and in cooperation with interested interstate, State, local governmental and private agencies and organizations concerned. The two Secretaries shall submit the studies to the President, together with their recommendations resulting therefrom for the inclusion of any or all such trails in the System, and the President shall submit to the Congress such recommendations, including legislation, as he deems appropriate. The study may include, among others, all or appropriate portions of:

(1) Chisholm Trail, from San Antonio, Texas, approximately 700 miles north through Oklahoma to Abilene, Kansas.

(2) Continental Divide Trail, a 3100-mile trail extending generally from the Mexican border in southwestern New Mexico northward along the Continental Divide to the Canadian border in Glacier National Park.

(3) Lewis and Clark Trail, from St. Louis, Missouri, approximately 4600 miles to the Pacific Ocean in Oregon, following both the outbound and inbound routes of the Lewis and Clark Expedition.

(4) Natchez Trace, from Nashville, Tennessee, approximately 600 miles to Natchez, Mississippi.

(5) North Country Trail, from the Appalachian Trail in Vermont, approximately 3200 miles through the States of New York, Pennsylvania, Ohio, Michigan, Wisconsin, and Minnesota, to the Lewis and Clark Trail in North Dakota.

(6) Oregon Trail, from Independence, Missouri, approximately 2000 miles to near Fort Vancouver, Washington.

(7) Pacific Crest Trail, a 2350-mile trail extending generally from the Mexican-California border northward along the mountain ranges of the West Coast States to the Canadian-Washington border near Lake Ross.

(8) Potomac Heritage Trail, an 825-mile trail extending generally from the mouth of the Potomac River to its sources in Pennsylvania and West Virginia, including the 170-mile Chesapeake and Ohio Canal Towpath.

(9) Santa Fe Trail, from Independence, Missouri, approximately 800 miles to Santa Fe, New Mexico.

SELECTION OF ROUTE FOR THE APPALACHIAN TRAIL

(d) The Secretary of the Interior shall select the right-of-way for the Appalachian Trail designated as a national scenic trail by subsection (b) of this section. Such right-of-way shall be (1) of sufficient width to protect adequately the natural conditions and scenic and historic features along the trail, and to provide campsites, shelters, and related public-use facilities on adjoining lands; and (2) located to avoid, insofar as practicable, established highways, motor roads, mining areas, power transmission lines, private recreational developments, public recreational developments not related to the trail, existing commercial and industrial developments, range fences and improvements, private operations, and any other activities that would be incompatible with the protection of the trail in its natural condition and its use for outdoor recreation. The location and width of such right-of-way across Federal lands under the jurisdiction of another Federal agency shall be by agreement between the head of that agency and the Secretary. In selecting the right-of-way, the Secretary shall consult with the States, local governments, private organizations, landowners, and land users concerned and with the Advisory Council established under subsection (f) of this section. The Secretary may revise the location and width of the right-of-way from time to time with the consent of the head of any other Federal agency involved, and after consultation with the aforesaid States, local governments, private organizations, landowners, land users, and the Advisory Council.

The Secretary shall publish notice of the selection of the right-of-way in the *Federal Register*, together with appropriate maps and descriptions. If in his judgment changes in the right-of-way become desirable, he shall make the changes in the same manner.

MARKING ROUTE OF APPALACHIAN TRAIL

(e) The Secretary of the Interior, in consultation with the Federal agencies, States, local governments, private organizations concerned and the Appalachian Trail Advisory Council, shall erect and maintain the uniform marker for the Nationwide System of Trails at appropriate points along the Appalachian Trail route, and shall select a symbol for the Appalachian Trail for placement upon the uniform marker. Where the trail route passes through Federal lands, such marker shall be erected and maintained by the Federal agency administering the lands. Where the trail route passes through non-Federal lands and is administered under cooperative agreements, the Secretary shall require the cooperating agencies to erect and maintain such marker.

ADVISORY COUNCIL FOR THE APPALACHIAN TRAIL

(f) The Secretary of the Interior shall establish an Advisory Council for the Appalachian Trail. The Secretary may consult with the Council from time to time with respect to any matter relating to the trail, including the selection of the right-of-way, the selection, erection, and maintenance of the markers along the trail route, and the administration of the trail. The members of the Advisory Council shall be appointed for a term not to exceed five years by the Secretary as follows:

(1) a member appointed to represent each Federal department or independent agency administering lands through which the trail route passes and each appointee shall be the person designated by the head of such department or agency;

(2) a member appointed to represent each State through which the trail passes and such appointments shall be made from recommendations of the Governors of such States; and

(3) one or more members appointed to represent each private organization that, in the opinion of the Secretary, has an established and recognized interest in the trail and such appointments shall be made from recommendations of the heads of such organizations.

The Secretary shall designate one member to be Chairman. Any vacancy in the Council shall be filled in the same manner as the original appointment.

Members of the Advisory Council shall serve without compensation, but the Secretary may pay the expenses reasonably incurred by the Council in the performance of its functions upon presentation of vouchers signed by the Chairman.

(g) Within the exterior boundaries of areas under their administration that are included in the right-of-way selected for the Appalachian Trail as provided in subsection (d) of this section, the heads of Federal agencies may (1) acquire lands or interests in lands by donation, purchase with donated or appropriated funds, or exchange; and (2) enter into cooperative agreements with the States, local governments, and private organizations concerned in order to carry out the purposes of this section.

(h) The Secretary of the Interior, in the exercise of his exchange authority, may accept title to any non-Federal property within the Appalachian Trail right-of-way, and in exchange therefor he may convey to the grantor of such property any federally owned property under his jurisdiction which is located in the States through which the trail passes and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal, or if they are not approximately equal the values shall be equalized by the payment of cash to the grantor or to the Secretary as the circumstances require. The Secretary of Agriculture, in the exercise of his exchange authority, may utilize authorities and procedures available to him in connection with exchanges of national forest lands.

(i) The State or local governments involved shall be encouraged (1) to acquire, develop, and administer the lands or interests in lands within the right-of-way selected for the Appalachian Trail under subsection (d) of this section that are outside the exterior boundaries of federally administered areas, or (2) to enter into cooperative agreements with the private owners of such lands or private organizations in order to carry out the purposes of this section: *Provided,* That, if the State or local governments fail to acquire such lands and interests or fail to enter into such agreements within a reasonable time after the selection of the right-of-way, the Secretary of the Interior may acquire the private lands or interests therein outside the exterior boundaries of federally administered areas by donation, purchase with donated or appropriated funds, or exchange, and may develop and administer such lands or interests therein, or may enter into cooperative agreements with States, local governments, private owners, and private organizations in order to carry out the purposes of this section: *Provided further,* That the Secretary shall utilize condemnation proceedings without the consent of the owner to acquire private lands or interests therein pursuant to this subsection only in cases where, in his judgment, all reasonable efforts to acquire such land by negotiation have failed, and in such cases the Secretary shall acquire the fee title only where, in his judgment, lesser interests in land (including scenic easements) are not adequate for the purposes of this section.

(j) The Secretary of the Interior shall develop and administer the Appalachian Trail designated as a national scenic trail by subsection (b) of this section, consistent with appropriate use of the authorities contained in subsections (g) and (i) of this section, except that any portions of such trail that are within areas administered by another Federal agency shall be administered in such manner as may be agreed upon by the Secretary and the head of that agency, or as directed by the President.

The Appalachian Trail shall be administered, protected, developed, and maintained to retain its natural, scenic, and historic features; and provision may be made for campsites, shelters, and related public facilities, and appropriate public outdoor recreation activities; and other uses that will not substantially interfere with the nature and purposes of the Appalachian Trail may be permitted or authorized, as appropriate: *Provided,* That the public use of motorized vehicles shall be prohibited: *Provided further,* That the Federal laws and regulations applicable to Federal lands or areas included in the trail shall continue to apply to the extent agreed upon by the Secretary and the head of the agency having jurisdiction over the Federal lands involved, or as directed by the President.

The Secretary of the Interior, with the concurrence of the heads of any other Federal agencies administering lands through which the Appalachian Trail passes, and after consultation with the States, local governments, and private organizations concerned, and the Appalachian Trail Advisory Council established under subsection (f) of this section, may issue regulations, which may be revised from time to time, governing protection, management, use, development and administration of the trail.

(k) There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this section.

FEDERAL PARK, FOREST, AND OTHER RECREATION TRAILS

SEC. 3. The Secretary of the Interior and the Secretary of Agriculture are directed to improve, expand, and develop park, forest, and other recreation trails for hiking, horseback riding, cycling, and other

related uses on lands within areas administered by them: *Provided,* That the public use of motorized vehicles shall be prohibited on such trails within (a) the natural and historical areas of the National Park System, (b) the National Wildlife Refuge System, (c) the National Wilderness Preservation System, and (d) other Federal lands where trails are designated as being closed to such use by the appropriate Secretary. Such trails may be designated and suitably marked as part of the Nationwide System of Trails by the appropriate Secretary.

STATE AND METROPOLITAN AREA TRAILS

SEC. 4. (a) The Secretary of the Interior is directed to encourage States to consider, in their comprehensive statewide outdoor recreation plans and proposals for financial assistance for State and local projects submitted pursuant to the Land and Water Conservation Fund Act, needs and opportunities for establishing park, forest, and other recreation trails on lands owned or administered by States, and recreation trails on lands in or near urban areas. He is further directed, in accordance with the authority contained in the Bureau of Outdoor Recreation Organic Act (77 Stat. 49), to encourage States, political subdivisions, and private interests, including non-profit organizations, to establish such trails.

(b) The Secretary of Housing and Urban Development is directed, in administering the program of comprehensive urban planning and assistance under section 701 of the Housing Act of 1954, to encourage the planning of recreation trails in connection with the recreation and transportation planning for metropolitan and other urban areas. He is further directed, in administering the urban open-space program under title VII of the Housing Act of 1961, to encourage the provision and development of such recreation trails.

(c) The Secretary of Agriculture is directed, in accordance with authority vested in him, to encourage States and local agencies and private interests to establish such trails.

(d) Such trails may be designated and suitably marked as parts of the Nationwide System of Trails by the States, their political subdivisions, or other appropriate administering agencies with the approval of the Secretary of the Interior.

UTILITY RIGHTS-OF-WAY

SEC. 5. The Secretary of the Interior and the Secretary of Agriculture are authorized, with the cooperation of the Interstate Commerce Commission, the Federal Communications Commission, the Federal Power Commission, and other Federal agencies having jurisdiction, control over, or information concerning the use, abandonment, or disposition of rights-of-way and similar properties that may be suitable for trail route purposes, to develop effective procedures to assure that, wherever practicable, utility rights-of-way or similar properties having value for trail route purposes may be made available for such use.

DEPARTMENT OF THE INTERIOR

Subject Matter: To provide for the establishment of the Appalachian National Scenic Trail

	Estimated Additional Man-Years of Civilian Employment and Expenditures for the First Five Years of Proposed New or Expanded Programs				
Estimated Additional Man-Years of Civilian Employment	19CY	19CY+1	19CY+2	19CY+3	19CY+4
Substantive					
Trail Supervisor	2	2	2	2	2
Foremen and Laborers	18	18	18	18	18
Total, Substantive	20	20	20	20	20
Total, Estimated Additional Man-Years of Civilian Employment	20	20	20	20	20
Estimated Additional Expenditures					
Land Acquisition	$500,000	$2,000,000	$1,000,000	$750,000	$415,000
Capital Investment	260,000	430,000	440,000	450,000	420,000
Operation and Maintenance	115,000	250,000	250,000	250,000	250,000
Total, Estimated Additional Expenditures	$875,000	$2,680,000	$1,690,000	$1,450,000	$1,085,000

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