

Hiking Trails Management Plan



ACADIA
National Park • Maine

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Cover: Historical view of the stepping stones at the Tarn, Mount Desert Island, near four memorial paths; the Jesup Path, Kane Path, Kurt Diedrich's Climb, and the Beachcroft Path (Acadia NP Archives).

HIKING TRAILS MANAGEMENT PLAN

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An implementing document of the 1992 Acadia National Park *General Management Plan*.

SUMMARY

The purposes of this Hiking Trails Management Plan are to determine which trails within Acadia National Park will be rehabilitated¹ and maintained in the park's trail system, set general standards for trail rehabilitation, and define the basic management philosophy that will guide park management of hiking trails and trail use.

This plan was developed based on several public workshops and following public review and comments on the *Draft Hiking Trails Management Plan and Environmental Assessment* (NPS 2001a) that was published in February 2001. Four alternatives for rehabilitating trails and managing trail use were described in the draft plan.

This Hiking Trails Management Plan directs current and future National Park Service (NPS) managers to preserve the outstanding design and craftsmanship of park trails while protecting park natural resources. It also prescribes working with neighboring towns, communities, state government, and other organizations to perpetuate the original intents of the historic hiking trail system on Mount Desert Island. These original intentions were to provide an opportunity for recreation and to connect local villages with features of interest that are now within Acadia National Park.

This plan applies to hiking trails throughout Acadia National Park. It focuses on managing trails administered by the NPS on Mount Desert Island (MDI) because

historical information is available about MDI trails based on recent research. The goals and general philosophy outlined in the plan for managing trails and trail use will apply to managing trails on the Schoodic Peninsula, Isle au Haut and other park islands.

Trail use will be managed for natural and cultural resource preservation and to provide a diversity of safe, high quality visitor experiences.

A modestly expanded network of trails will be rehabilitated and maintained on Mount Desert Island. The future MDI trail system will include several trails or trail sections that are currently abandoned, some of which have high cultural value. A few new trails or trail sections will be added, and a few trail sections that are currently maintained will be abandoned. Each trail included in the system will be rehabilitated, maintained, and managed on a case by case basis with consideration given to protecting both natural and cultural resource values.

Trails on Isle au Haut and Schoodic will be evaluated to determine their historic significance, rehabilitated to protect natural and cultural resources, and managed to meet the goals prescribed in this plan.

Before rehabilitation, each trail will be evaluated to determine if it is feasible and appropriate to rehabilitate it to meet standards established under the Americans with Disability Act (ADA).

¹Unfamiliar terms used in this document are included in a glossary on page 32.

SUMMARY

If so, the trail will be rehabilitated in such a way as to provide access to those with disabilities.

Education and protection efforts relative to trail rehabilitation and use will be enhanced. This will include efforts to increase compliance with dog leash regulations, to reduce hiker impacts through education, and to enhance understanding of the history and importance of the trail system. In addition, the NPS will continue to work to improve the accuracy of information related to park trails.

The implementation of this plan is expected to take 10 years or more. Implementing the plan will require funding to support actions related to education, natural and cultural resource protection, administration, and enforcement of park regulations, as well as trail rehabilitation and maintenance. One-time costs, most of which are associated with trail rehabilitation, are estimated to exceed \$12.2 million. In addition, annual recurring costs are estimated at \$520,000 per year (2002 dollars, not adjusted for inflation.)

Acadia Trails Forever, a joint program of the NPS and Friends of Acadia (FOA), was a fundraising effort to support trail rehabilitation, management, and maintenance. Friends of Acadia raised \$9 million, which will be matched by \$4 million of federal funding. Half of the Acadia Trails Forever funding will be committed to trail rehabilitation; the remaining \$6.5 million will establish endowments to fund trails maintenance and FOA sponsored Acadia Youth Conservation Corps and Ridgerunner programs. However, funding will be insufficient to implement this plan.

In general, the following guidelines will be used to implement actions within this plan.

- Actions will be divided among building new trails, rehabilitating and maintaining existing trails, and reopening abandoned historic trails. Because existing trails comprise most of the system, emphasis will be placed on rehabilitating, managing, and maintaining existing trails.
- Of existing trails, those with safety concerns and those with the most severe natural and/or cultural resource impacts or threats will be given the highest priority for management.
- Accessibility will be considered in all trail rehabilitation and construction.
- Additional funding and partnerships will be sought to support complete implementation of this plan.



Kane Path (Acadia NP Archives).

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Precipice Trail on Champlain Mountain, Mount Desert Island, Maine, circa 1920, with iron railings and cut granite steps (Acadia NP Archives).

INTRODUCTION

A management plan for Acadia National Park's hiking trails has long been needed to protect natural resources adjacent to hiking trails, preserve and protect cultural resources associated with the trail system, and assure high quality visitor experiences under increasing levels of visitor use.

This *Hiking Trails Management Plan* (hereafter referred to as the plan) is the result of a planning process initiated in 1999. This plan describes how the NPS will rehabilitate,² maintain, and manage hiking trails throughout Acadia National Park.

In February 2001, following five public workshops as well as meetings with advisors and NPS staff, the *Draft Hiking Trails Management Plan and Environmental Assessment* (Draft Plan/EA) (NPS 2001a) was released by the NPS for public review and comment. The Draft Plan/EA provided four alternatives for rehabilitating and managing trails throughout the park, and addressed a number of issues that had been identified in the planning process. By the end of the 30-day public comment period, the NPS had received 107 written comments from 103 individuals, businesses, and organizations. Thirty-eight comments indicated a preferred alternative; however, most respondents limited their remarks to one or several issues of concern. Comments are summarized in *Analysis of Public Responses to the Draft Hiking Trails Management Plan and Environmental Assessment* (NPS 2001b). Public com-

ments were considered carefully in the formulation of this final *Hiking Trails Management Plan*.

The plan applies to hiking trails throughout Acadia National Park. It focuses on managing trails administered by the NPS on Mount Desert Island (MDI) because information is available about MDI trails based on recent historical research. This research is documented in a draft report entitled *Historic Hiking Trails System of Mount Desert Island. Cultural Landscape Report for Acadia National Park, Maine. Volume 1: History, Existing Conditions, and Preliminary Analysis* (NPS in prep. a). The goals and general philosophy outlined in the plan for managing trails and trail use apply to managing trails on the Schoodic Peninsula, Isle au Haut, and other park islands.

The plan also addresses trails on private MDI lands that were originally constructed to connect local communities with the park. It will be essential for the NPS to work cooperatively with landowners, communities, and individuals that use and maintain trails outside the park boundary.

Only traditional pedestrian use of hiking trails is addressed in this plan. However, because the motor road, carriage road, and hiking trails systems are interconnected, management decisions concerning these adjoining resources may influence decisions about the trail system, and vice versa.

²Cultural resource professionals define terms like rehabilitation very specifically. A glossary of unfamiliar terms is on page 32.

INTRODUCTION

The plan addresses the trails that will be included in the park's mapped, marked, and maintained trail system. Trail selection was based on established goals and criteria and a systematic review of each trail. This plan also addresses public education and the dissemination of information related to the trail system and its use. Enforcement of federal regulations related to resource protection and visitor behavior while on trails will also be addressed.

Acadia Trails Forever, a joint program of the NPS and Friends of Acadia³ (FOA), provides the opportunity to develop and implement this plan, which describes

rehabilitating, maintaining, and managing use on park trails in a comprehensive manner. By the fall of 2000, Friends of Acadia had raised \$9 million from private sources, to be matched by at least \$4 million of federal funding. At least \$6.5 million of Acadia Trails Forever funding will be committed to trail rehabilitation; the remaining \$6.5 million will establish endowments to fund trails maintenance and FOA sponsored Acadia Youth Conservation Corps and Ridgerunner programs.

Actions prescribed within this plan will be implemented as funding and staff are available.



Hikers on the Precipice Trail (Acadia NP Archives).



Jordan Pond Trail (Bar Harbor Historical Society).

³Friends of Acadia is the park's formally recognized friends group, an independent non-governmental organization whose mission is to "preserve and protect the outstanding natural beauty, ecological vitality, and cultural distinctiveness of Acadia National Park and surrounding communities, and thereby to ensure a high quality experience for visitors and residents."

PARK SETTING

Acadia National Park is on the Maine coast in the northeastern United States (see Figure 1: Vicinity Map). The National Park Service manages approximately 36,000 acres; most of these are on Mount Desert Island (approximately 50% of the island's landmass). The National Park Service also manages portions of Schoodic Peninsula, on the mainland to the east of Mount Desert Island, and Isle au Haut, an island 15 miles southwest of Mount Desert Island. Acadia National Park also includes part or all of 14 outlying coastal islands and several small freshwater islands. The National Park Service also holds 171 conservation easements protecting over 11,000 acres in the Penobscot and Frenchman Bay areas.

Information affecting the management of hiking trails and hiking at Acadia National Park is presented below. Most of the information relates to laws, regulations, policies, or planning direction that must be followed when rehabilitating hiking trails and managing hiking.

PARK MISSION, PURPOSE, AND SIGNIFICANCE

The Acadia National Park mission statement is based on park legislation and the *General Management Plan* (NPS 1992). It was formally adopted in the park's *Strategic Management Plans* (NPS 1997).

The National Park Service at Acadia National Park protects and conserves outstanding scenic, natural, and cultural resources for present and future generations. These resources include a glaciated coastal and island landscape, biological diversity, clean air and water, and a rich cultural

heritage. Acadia National Park also offers opportunities for high-quality nonconsumptive recreation, education, and scientific research.

Acadia National Park has three main purposes. One is to protect and conserve the land and water resources, the scenery, the natural and historic objects, the wildlife, and the undeveloped character of the lands within the legislated park boundary. Another is to promote and regulate the use of the park for the benefit and enjoyment of the public in such manner and by such means as will leave the park resources unimpaired for the enjoyment of future generations. Finally, the National Park Service is directed to protect and preserve the



Beech Cliff Trail overlooking Echo Lake (Bar Harbor Historical Society).

scenic, ecological, historic, archeological, and cultural resources of the Acadian archipelago and to limit development of the islands and preserve their natural qualities and traditional resource-based land uses. A rich combination of cultural and natural features and exceptional scientific, educational, and recreational opportunities contribute to the character and significance of Acadia National Park, the first national park east of the Mississippi and the only national park in New England.

When President Woodrow Wilson set this area aside as a national monument, he cited the historic interest associated with Samuel de Champlain's 1604 landing on Mount Desert Island. He also cited the great scientific interest of the island's topography, geology, wildlife, and vegetation. Acadia National Park has a variety of significant resources, including its landscape, air and water quality, biological diversity, cultural heritage, historic properties, and collections of artifacts.

Acadia's coastal and island landscape is unequaled along the Atlantic shore of the United States. Mountains, lakes, and wooded valleys add character to the land. Somes Sound, the inlet bisecting Mount Desert Island, is the only fjord on the East Coast of the United States. The park's islands provide nesting sites and critical habitat for a great diversity of animals and plants, including species of global, national, state, and local significance.

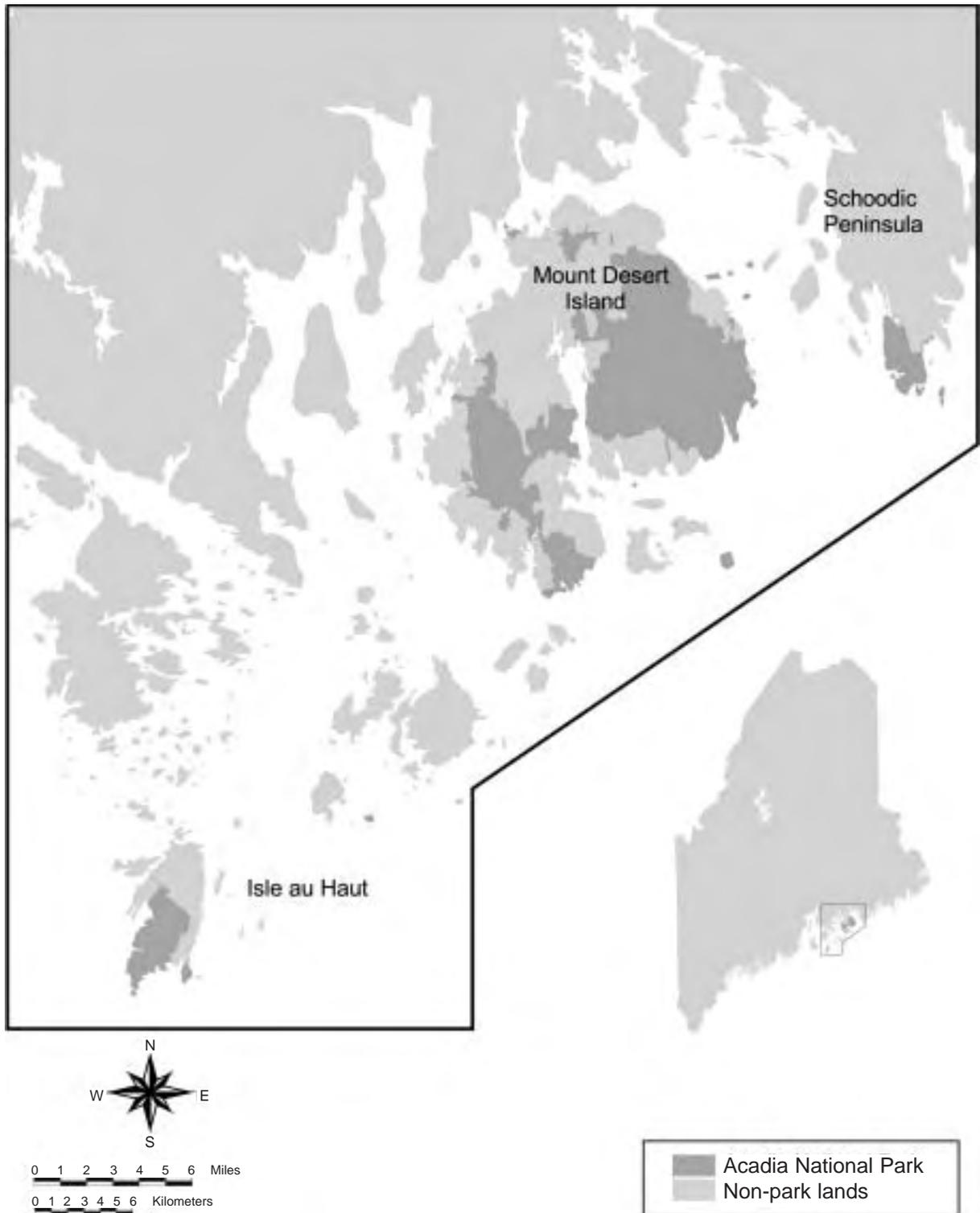
The cultural heritage of the park is equally important and includes resources related to Native Americans, French and British settlers, and the wealthy Americans of the late 1800s and early 1900s who established summer colonies,

founded the park, and contributed to the creation and development of the conservation movement. Over the years, island residents have left a distinctive cultural patina on the landscape. The surviving historic structures and designed landscapes, such as those of the park's carriage road system, the trail system, and the Park Loop Road, are important because of their history, durability, and uniqueness. They commemorate those who designed and built them.

Acadia National Park also offers scientific research value; the park provides a variety of opportunities to conduct research and monitor resources. There is a multidisciplinary database at the park that serves as the scientific foundation for ecosystem research and monitoring programs. An extensive scientific bibliography dates back to the late 19th century. Today, an expanding geographic information system, ongoing air, water, wildlife and vegetation monitoring programs demonstrate the park's continuing and important role in scientific endeavors.

Acadia offers excellent opportunities for educating three million annual visitors about the park's significant and varied resources. Access to an array of sites with scenic, scientific, natural, and historic interest is provided by a network of carefully designed hiking trails, carriage roads, and scenic drives. Visitors participate in numerous recreational activities such as camping, hiking, bicycling, cross-country skiing, horseback and carriage riding, kayaking, canoeing, and sightseeing. People of all ages are attracted to a broad spectrum of interpretive activities, including guided walks, amphitheater presentations, environmental education programs, and outreach activities.

Figure 1. Acadia National Park and Vicinity



HISTORY OF HIKING TRAILS AT ACADIA NATIONAL PARK

The following history of trails on MDI is summarized from the *Historic Hiking Trails System of Mount Desert Island. Cultural Landscape Report for Acadia National Park, Maine. Volume 1: History, Existing Conditions, & Preliminary Analysis* (NPS in prep. a).

The MDI hiking trail system enjoyed today by thousands of visitors is the legacy of three broad but very different eras of trail building. The first era was that of early trails, extending from Native American occupation to the rise of tourism in the 1880s. A few park trails may follow the routes of Native American canoe carry paths between lakes and the ocean. Their exact age is unknown, but they predate the arrival of Europeans in the early 1600s. A few park trails are also historic roads dating from the late 1700s as European settlement of MDI necessitated land links between communities.

When artists and rusticators, along with early surveyors, began to travel to MDI between the 1830s and 1860s, most hik-

ing still consisted of scrambling and bushwacking. Only a very few primitive paths began to develop to accommodate their tramps to areas of interest. A surveyor's path led up the North Ridge of Green (now Cadillac) Mountain by 1855 and another path led to Great Head from Bar Harbor. A summit cairn on Sargent Mountain is mentioned as early as 1855 as well, but there was no designated route up the mountain.

Wealthy visitors began flocking to MDI between 1860 and 1890 because they had more leisure time, better transportation and communications, and an interest in the wilderness. Big hotels and cottages sprang up, especially in Bar Harbor, and many visitors took to the hills for their health and to enjoy the scenery. Well-worn but primitive footpaths developed to summits and other places, along with guidebooks to help hikers reach their destinations. The framework of today's trail system was established during these years.

A second trails era covers the years 1890-1932, when summer residents formed four village improvement associ-



Ocean Path at Otter Cliffs, 1937 (Acadia NP Archives).

ations (VIAs): Bar Harbor, Seal Harbor, Northeast Harbor, and Southwest Harbor. The VIAs helped create the national park, beginning with its designation as a national monument in 1916. The VIAs mapped, marked, and maintained the trail system that had been established over the previous thirty years. They also constructed many more trails, and continued to develop an extensive, carefully crafted, island-wide trail system that connected the villages to natural areas that would soon become the core of the national park.

VIA path committees planned, built, and maintained trails through private funding, using hired local labor. They developed trails to take hikers not only to summits and other areas with broad ocean and mountain vistas, but also along streams and lakes, and through natural rock crevices and gorges. The level of craftsmanship of some trails is remarkable, with their cut granite steps, stone paving, and retaining walls. However, some trails are poorly designed; they make direct ascents up steep slopes with unstable soils or are located in streambeds where ice and water damage are recurring. A variety of construction styles associated with leaders in the VIA trail movement are still evident on these trails today.

The VIAs retained the responsibility for building and maintaining trails after the formation of the park because federal funding was scant. Through the 1920s, donors continued to fund memorial paths to recognize loved ones or honor early trail builders. The VIAs were undisputedly the primary architects of the trail system we know today—its layout and construction styles, and the

character of the experiences it provides. The third era reflects the transition of trail planning, construction, and maintenance to the National Park Service, beginning with the Civilian Conservation Corps (CCC) between 1933 and 1942, and extending to the present. The federally-sponsored CCC put its stamp on park trails with several highly crafted stone trails. CCC construction was characterized by a standard style developed by NPS landscape architects. Whereas the VIAs emphasized connecting the villages with the natural attractions of the island for pedestrians, the CCC worked only on NPS administered lands, developing trails in conjunction with other new facilities such as parking lots, picnic areas, and campgrounds.

Hiking trail use in Acadia declined throughout the late 1940s and 1950s. During World War II there was little use or maintenance of trails. Post World War II prosperity led to the development and popularity of auto touring and camping. Although park visitation continued to increase during this time, interest in hiking did not. At the same time, VIA trail enthusiasts were aging and less able to play an active role in maintenance. With added road, campground, and picnic area maintenance responsibilities, labor shortages during the war, and low budgets, the NPS was not able to adequately maintain trails. A large fire in 1947 affected the character of many trails, and although work crews funded by the VIAs and John D. Rockefeller, Jr. reopened most trails in the burned areas, few people hiked them because of the ashes and soot. Rapid growth of shrubs quickly obscured trails in the burned area, posing a continuing maintenance challenge. In 1956, the park

formally evaluated the system with the intent to reduce the number of trails because of low use and low budgets. Trails leading onto private land were closed, as were trails considered redundant, trails difficult to maintain, and trails with low use, such as those west of Eagle Lake. The abandonment of many trails made formal what had been developing for some time—two systems of trails, one system officially mapped, marked, and maintained and another abandoned. This abandoned system is sometimes confusing to hikers, and is used mostly by local residents. Unknown persons informally maintain some of these abandoned trails today.

The National Park Service Mission 66 program was a 10-year effort (1956-1966) to upgrade NPS facilities and celebrate the 50th anniversary of the NPS. The program added a few trails to Acadia and rehabilitated some trails, but was not considered a major trail building or rehabilitation effort. In the late 1960s and 1970s a resurgent interest in hiking and outdoor recreation coupled with limited budgets and staff challenged park trail crews to keep up with maintenance. In fact, both literally and figuratively, ground was being lost from then until the present day.

Without a major funding initiative, such as the Acadia Trails Forever partnership, erosion and trail degradation would surely continue. Through the 1990s, the trail maintenance program in the park increased from one to five permanent staff. During this same time, the park stepped up its use of volunteers and expanded cooperative trail rehabilitation and maintenance programs with Friends of Acadia and other groups and organizations.

HISTORICAL CHARACTER OF THE HIKING TRAIL SYSTEM

The trail system on Mount Desert Island is a significant park resource and the State Historic Preservation Office has concurred that the system is eligible for listing in the National Register of Historic Places.

Fine workmanship, including the use of stone and iron to create an array of steps, retaining walls, rock paving, culverts, iron rungs, and ladders define the character of these trails. Remarkably, most of this work remains in good condition more than 70 years after construction.

The community origins of the trail system in village improvement associations (VIAs) also define the historical character of the system in an important way. The VIAs were part of a civic movement on MDI that eventually led to land protection and the creation of the national park. Cottage owners and local businesses were invested financially and emotionally in the tourist-attracting scenery of Mount Desert Island. At the turn of the century, threats of development and logging spurred the formation of the Hancock County Trustees of Public Reservations. These residents were united by a common interest to preserve and protect lands for public use. The Hancock County Trustees of Public Reservations worked with the VIAs to preserve the wilderness values of the island. The VIAs played a small part in the nationwide conservation movement of the late 1800s, and had a more prominent role in the creation of Acadia National Park.

RECREATIONAL SIGNIFICANCE OF THE HIKING TRAIL SYSTEM

Acadia's trail system is also important from a recreational standpoint because it is easily accessible. The park is small and trail mileage is high, making large portions of the park available to hikers of modest physical ability. Though many trails are rugged and steep, they are short. The trail system also offers many opportunities for hikers to make loop hikes. In the summer, the Island Explorer bus system now offers point to point hiking options.

Few natural areas of similar size offer as many trails with such a diversity of

experiences as Acadia. Spectacular views of a landscape of mountains, islands, lakes, and the sea are common and often easily reached. Quiet, seldom-trodden woodland paths contrast with popular, strenuous, precipitous, cliffside trails. Iron rungs and ladders on cliffside trails offer thrills, risks, and challenges like those of technical rock climbing. Many trails also take hikers to or through more intimate landscapes of small, rocky gorges, pocket wetlands, abandoned beaver ponds, and a variety of forests and communities. Highly crafted stonework adds a unique cultural layer to the diversity of hiking experiences in Acadia.



Hikers enjoying the Precipice Trail on Champlain Mountain, Mount Desert Island, in the 1950s (Acadia NP Archives).

CURRENT USE OF THE HIKING TRAIL SYSTEM

In 1999, prior to this planning effort, the NPS hiking trail system included 111 miles on MDI, 3 miles on the Schoodic Peninsula, and 18 miles on Isle au Haut.

Use of the hiking trail system follows the seasonal and daily use patterns exhibited throughout the park. During summer months, trails receive high use concentrated in the middle of the day. The most popular trails are those near water or ascending mountains. In the summer, these trails may have hundreds of hikers per day. Woodland paths are used much less. Even during the summer, few hikers are seen on these trails.

While some local trail enthusiasts and a few visitors explore abandoned trails, use is very low. Some of those who use abandoned trails do so to escape from the summer crowds. Even fewer hikers travel off trail in the park.

Recent research shows that 72% of park visitors go hiking (Littlejohn 1999). To a limited extent, the NPS has monitored hiking trail use. Hiker counts over the past few years on several summits show that the Beehive, Gorham, Acadia, and Beech Mountains are very popular. Dorr, Pemetic and Sargent Mountains are less used (Jacobi 1999). Ten censuses on Sargent Mountain for six hours each during the summer of 1998 showed that between 40 and 80 hikers reached the summit each day between 10:00 a.m. and 4:00 p.m. (Jacobi 1999).

In August of 1999, the park conducted the first comprehensive hiking trail census (Chase and Jacobi 2000). This effort was repeated in August 2000 and 2001 (Jacobi 2000, Jacobi 2001). Based on these censuses, on a typical July or August day, there may be as many as 5,000 hikers in the park.

The NPS has long used the hiking trail system to provide programs for the visiting public. However, low budgets have reduced the number of park programs in recent years. In 2000, the park presented over 300 interpretive hikes on trails, serving approximately 7,000 visitors. The NPS does not publish any hiking guidebooks or maps, although several privately produced guidebooks and maps are available.

GUIDING LAWS AND POLICIES

National Park Service Organic Act

All activities at Acadia National Park are governed by the 1916 Organic Act that created the National Park Service and established its mission:

“to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” (16 USC 1)

Also in 1916, a presidential proclamation established Sieur de Monts National Monument, which would later become Acadia National Park.

Other laws specific to Acadia National Park can be found in the park’s *General Management Plan* (NPS 1992).

The Secretary of the Interior's Standards for the Treatment of Historic Properties

The *Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995) provides professional standards on the preservation and protection of all cultural resources listed in or eligible for listing in the National Register of Historic Places. These standards are codified in 36 Code of Federal Regulations, Part 68, and apply to the treatment of the park's trail system on Mount Desert Island, and perhaps also on Isle au Haut and the Schoodic Peninsula. The standards describe four distinct, but interrelated, approaches to the treatment of historic properties—preservation, rehabilitation, restoration, and reconstruction (see Glossary).

Acadia's future trail work will focus primarily on rehabilitation, with limited preservation of important features on abandoned trails. Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's (in this case, the trail system's) historic character. Preservation is the process of sustaining the existing form, integrity and materials of an historic property.

NPS Management Policies

Once laws are enacted, authority for interpreting and implementing them is delegated to appropriate levels of government. In carrying out this function, the National Park Service, like other federal agencies, develops policy to interpret the ambiguities of the law and to fill in the details left unaddressed by Congress in statutes. *National Park Service Management Policies 2001* (NPS 2001c) pro-

vides guidance on managing units within the National Park Service, including Acadia National Park.

PLANNING DIRECTION

General Management Plan

The Acadia National Park *General Management Plan* (GMP) (NPS 1992) defines the basic management philosophy guiding park management decisions and identifies actions required to support that philosophy. Rehabilitating and maintaining the hiking trail system is a major goal of the GMP and hiking trails are mentioned in several recommended actions. In general, the GMP recommends the careful consideration of limited additions to the trail system; proposed new trails must meet the criteria of connecting to park campgrounds, towns, and villages and creating loops in heavily used areas. The GMP restricts the development of new parking lots or the expansion of parking lot capacities. Appendix 1 contains excerpts from the GMP pertinent to managing trails and trail use.

Village Connector Trails Plan

There is an ongoing project to develop additional trails connecting local communities with the park for pedestrians, bicyclists, skiers, and horseback riders. The connector trails project, derived from a GMP recommendation, was an earlier and less comprehensive planning effort. Since early 1997, the park, Friends of Acadia, and interested community members from Bar Harbor and Southwest Harbor have worked to develop connector trails. In April 1999, the public commented on an environ-

PARK SETTING

mental assessment describing six proposed connector trails (NPS 1999a). The park released a decision document for these connector trails in July 1999 (NPS 1999b). Three of the six trails were recommended for development: the Great Meadow Loop (hikers only, completed in 2001), the Duck Brook Road connector (hikers only), and the Western Mountain Road connector (shared use). Decisions regarding two other trails were deferred to this plan (the Gurnee Path and the Old Beech Hill Road), largely because of their cultural significance. The connector between the Jackson Laboratory and Sieur de Mont was rejected because it was considered too long and redundant, considering the development of the Great Meadow Loop Trail. See page 16 for specific recommendations related to management and construction of connector trails.

MANAGING THE TRAIL SYSTEM AS A CULTURAL RESOURCE

In consultation with the Maine Historic Preservation Commission, several studies of the trail system are underway. These studies support objectives in the park’s GMP.

1. Historic Hiking Trail System of Mount Desert Island. Cultural Landscape Report for Acadia National Park, Maine. Volume 1: History, Existing Conditions, and Preliminary Analysis. (NPS in prep. a)

The purpose of the Cultural Landscape Report, Volume 1, is to document the history and current condition of the trail system on MDI and to guide the future treatment of the trails.

2. Historic Hiking Trail System of Mount Desert Island. Cultural Landscape Report for Acadia National Park, Maine. Volume 2: Treatment and Maintenance Guidelines. (NPS in prep. b).

The focus of the Cultural Landscape Report Volume 2 will be to provide detailed treatment and maintenance guidelines that allow for the rehabilitation of individual trails while ensuring the historic importance and integrity of the system is not lost over time. This *Hiking Trails Management Plan* will set the overall direction for managing trails and hiking, working hand-in-hand with the treatment guidelines.



Dorr Mountain Ladder Trail (Acadia NP Archives).

MANAGEMENT GOALS

The following management goals set the overall direction for managing trail rehabilitation and use. These goals provide the vision for the action statements that will follow.

PROTECT NATURAL AND CULTURAL RESOURCES

- Minimize soil erosion, vegetation loss, wildlife disturbance and other impacts of trail development and use on natural resources.
- Preserve large natural areas without maintained trails as undisturbed wildlife habitat.
- Protect rare species and sensitive habitats.
- Protect water quality, including public water supplies.
- Preserve the elements and features that contribute to the historical character of the trail system as a cultural resource.
- Identify and protect trails and associated features of cultural value to Native Americans.
- Maintain historic trail routes and names where appropriate.
- Maintain constructed features such as steps, bridges, walls, ladders, rungs, drainage, tread, marking, and memorial plaques.
- Protect scenic features including rock formations, vegetation, water bodies, and views.
- Protect associated buildings, structures, and developed areas.
- Protect associated archeological resources.

PROVIDE HIGH QUALITY VISITOR EXPERIENCES

- Provide safe, high quality trail experiences that access a variety of natural and cultural resources, and vary in difficulty, accessibility, length, risk, and use levels.
- Preserve opportunities for low-impact travel off trail, and opportunities to discover and use abandoned trails.
- Provide pedestrian access to park facilities and destinations; provide loops in heavily used areas; and provide connectors to local communities, bus routes, and other trails, encouraging people to enjoy the park without a car.

EDUCATE THE PUBLIC

- Offer opportunities to interpret the natural, cultural, and scenic resources of the park and to educate visitors about low impact use of the park.

MAKE THE TRAIL SYSTEM SUSTAINABLE

- Manage and maintain the trail system in a sustainable manner with respect to the size of the system, the type and level of maintenance, the source and amount of materials used, the number of hikers accommodated, and the amount of funding available. Sustainability extends to materials obtained from outside the park. Management and maintenance should also be flexible enough to meet future needs.

MANAGEMENT ACTIONS

The following management actions are recommended to protect natural and cultural resources, provide quality visitor experiences, educate the public, and sustain the trail system.

ACTIONS RELATED TO PROTECTING NATURAL AND CULTURAL RESOURCES

Determine the Historical Significance of Hiking Trails within Acadia National Park

The National Park Service has determined that the hiking trails on Mount Desert Island are historically significant. The trails on Isle au Haut, the Schoodic Peninsula, and other park islands will also be studied to determine their historical significance (NPS in prep. c). These determinations will guide the development of appropriate treatment methods in these areas.

Preserve the Historic Integrity of the Mount Desert Island Trail System

All decisions about which trails to rehabilitate, preserve, and maintain on Mount Desert Island will consider the historic character of the individual trail, the effects on the trail system as a whole, and the contributions of the trail to the original intentions of the system. The original intentions were to provide an opportunity for recreation and to connect local villages with features of interest that are now within Acadia National Park.

Many historic trails designated by this plan for treatment will be rehabilitated

and maintained in a manner that preserves their character-defining features. These features include construction styles, materials, trail routes, trail names, signs, monuments, plaques, and trail markings such as cairns and blazes. However, in some cases simply preserving character-defining features will not be adequate to address issues such as erosion, trail widening, vandalism, or hiker confusion. To address these and other issues, it may be necessary to modify character-defining features or add newly constructed features to trails. Examples might include increasing the number of stone steps, the length of retaining walls, or the number of drainage features. Adding non-historic features such as boardwalks, bog walks, fences, scree walls, cedar log signs, and other structures may also be necessary. In some extreme cases, trail closures or reroutes may be necessary. Newly constructed features will be compatible with, but distinguishable from, historic features on each specific trail section.

Cedar log signs, trailhead exhibits, and regulatory and warning signs will remain near trailheads to minimize their visual impact within the system. Traditional style directional signs with trail names will be placed at interior intersections.

Careful consideration will be given to any proposals to add commemorative names, plaques and/or monuments to the trail system. Any additions of this nature must follow the directives provided in *NPS Management Policies* (NPS 2001c). All trail rehabilitation and maintenance will be in compliance with the National

Historic Preservation Act and *NPS Management Policies* (NPS 2001c). Before any ground-disturbing rehabilitation or maintenance in previously undisturbed areas, archeologists will be consulted to assure protection of cultural resources. In addition, whenever trail routes or significant character-defining features may be potentially modified or impacted, NPS staff will consult the State Historic Preservation Office and park cultural resource specialist before proceeding. Specific decisions about treatment of each trail will be documented in the *Cultural Landscape Report, Volume 2: Treatment and Maintenance Guidelines* (NPS in prep. c). The park will continue to work closely with cultural resource professionals and the State Historic Preservation Office to ensure that the historic integrity of the trail system is preserved while natural resources and visitor safety are protected.

Preserve the Configuration of the Mount Desert Island Trail System

Each trail included in the system will be rehabilitated, maintained, and managed on a case by case basis with consideration given to protecting both natural and cultural resource values, including preserving the configuration of the trail system on Mount Desert Island.

A modestly expanded network of trails will be rehabilitated and maintained on Mount Desert Island. There will be approximately 123 miles of maintained trails.⁴ The future trail system will include about eight miles of trails or trail

sections that are currently abandoned, some of which have historic value. There will be about five miles of newly constructed trails. About one mile of currently maintained trails will be abandoned. Seven connector trails on MDI totaling about seven miles, including the three approved in 1999 will be constructed. A list of changes to the MDI trail system is provided in Table 1 on page 18. A map of the planned trail system on Mount Desert Island is provided in Figures 2 and 3.

Trails have been selected for rehabilitation and continued maintenance based on a systematic review of individual trails and their contributions to the trail system, as described in Appendix 2.

Retain the Configuration of Trails on Isle au Haut, Schoodic Peninsula, and Other Park Islands

Trails on park lands other than MDI will be maintained; however, their character-defining features will not be modified until historical significance and appropriate treatment methods are determined. Trail treatment will be guided by the goals within this plan, the GMP, and legislation.

Cooperatively Protect Trail Connections on Private Lands

NPS staff will work cooperatively with private landowners and local organizations to encourage and protect trails and trail right-of-ways on private lands that connect to park trails and features. If trail right-of-ways on private lands are

⁴Mileages from the Draft Plan/EA should not be compared to mileages in this plan because different methods were used to calculate total figures.

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rescinded, NPS connecting trails may be closed.

The NPS will pursue formal agreements with interested neighboring groups and individuals to assure the continued care of trails inside the park and the protection of trails on private lands outside the park.

Maintain All Trails on Park Lands

In the past, local individuals and groups have maintained trails on park lands though informal agreements. The NPS will now assume maintenance responsibility for all trails on park lands, and cooperate with local trail maintenance partners on trails continuing outside the park.

Evaluate New Connector Trail Proposals

Proposals for new trail connections will be evaluated using the same methods applied to existing trails (see Appendix 2). In addition, the NPS will also consider the availability of park staff to manage use on these proposed trails.

Protect Large, Unfragmented Portions of NPS Administered Lands on MDI

The trail system on MDI will not compromise existing large undeveloped habitat areas. Future trail system changes, including possible connector trails, will include an assessment of effects on large, contiguous, undeveloped areas.



The Seal Harbor Village Improvement Society maintained this section of the Ocean Path (in Seal Harbor), now abandoned (Bar Harbor Historical Society).



Historic Asticou Trail (Bar Harbor Historical Society).

Table 1. List of Changes to the Mount Desert Island Trail System

	Miles of Trail		
	In ANP	Out of ANP	Total
<i>New Trail Additions</i>			
Blackwoods Campground to Gorham Mountain Parking Lot	0.95	0	0.95
Cadillac North Ridge Trail to rehabilitated Gorge Path extension	0.43	0	0.43
Duck Brook Connector Trail (partial)	0	0.22	0.22
Echo Lake connector (partial; section alongside Echo Lake Beach Road)	0.32	0	0.32
Giant Slide Trail--reroute access from Rt. 198 away from Giant Slide Road	0.10	0.40	0.50
Lurvey Spring Rd (near Smugglers Den CG to south end of Valley Trail)	0.27	0	0.27
Schooner Head Road Path extension to Sand Beach	0.70	0	0.70
Seawall Campground Trail connecting with Seawall Picnic Area, Wonderland, and Ship Harbor Trail	1.75	0	1.75
Western Mountain Connector Trail	0.10	0.26	0.36
Total New Trail Additions	4.62	0.88	5.50
<i>Abandoned Trails to be Rehabilitated</i>			
Amphitheatre Trail (Asticou/Jordan Pond Trail to Little Harbor Brook Bridge)	0.29	0	0.29
Bubble and Jordan Ponds Path	0.24	0	0.24
Canon Brook Trail (new access from State Route 3 near Otter Cliffs Road)	0.31	0	0.31
Duck Brook Connector Trail (partial)	0.19	0	0.19
Echo Lake connectors (Canada Cliffs Trail to Echo Lake to Ledge Trail)	0.41	0	0.41
Great Meadow Loop connectors (historic path connecting Stratheden Path, Kebo Mountain Trail, and the Gorge Path with Bar Harbor)	0.84	0	0.84
Green and Black Trail connecting Canon Brook Trail (as listed above) and Dorr/Cadillac systems with The Bowl and Champlain Mountain Trails	0.50	0	0.50
Homans Path	0.36	0	0.36
Jordan South End Path (Asticou/Jordan Pond Tr. to Penobscot Mtn. Tr.)	0.66	0	0.66
Maple Spring Trail (old routes, connects to Grandgent Trail)	0.24	0	0.24
Schooner Head Road Path with connections to Bear Brook, East Face, Precipice, and Great Head Trails	2.04	0.44	2.48
Seaside Path (historic route; new section to Seal Hbr. beach parking area)	1.42	0.48	1.90
Total Abandoned Trails to be Rehabilitated	7.50	0.92	8.42
<i>Trail Deletions</i>			
Canon Brook Trail from Route 3 over beaver dam to Kane Path junction	0.28	0	0.28
Ledge Trail (from Ledge Trail South to St. Sauveur Trail)	0.26	0	0.26
Maple Spring Trail (short, steep, eroded middle section)	0.10	0	0.10
Unnamed section between the west portion of Beehive Trail and Bowl Trail	0.13	0	0.13
Western end of Giant Slide Trail (to be replaced by new reroute)	0.05	0.40	0.45
Total Trail Deletions	0.82	0.40	1.22
<i>New Trail Connections to Villages (included in above mileage)</i>			
Duck Brook Connector	0.19	0.22	0.41
Great Meadow Loop Trail	1.04	1.07	2.11
Great Meadow Loop Trail to Cadillac North Ridge Trail	1.27	0	1.27
Schooner Head Road Path, connections, and extension	2.74	0.44	3.18
Seaside Path	1.42	0.48	1.90
Valley Trail to Lurvey Spring Road	0.27	0	0.27
Western Mountain Connector	0.10	0.26	0.36
Total New Trail Connections to Villages	7.03	2.47	9.50

Figure 2. Planned Trail System, East Side of Mount Desert Island, Acadia National Park



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Acadia National Park GIS -- February 2002

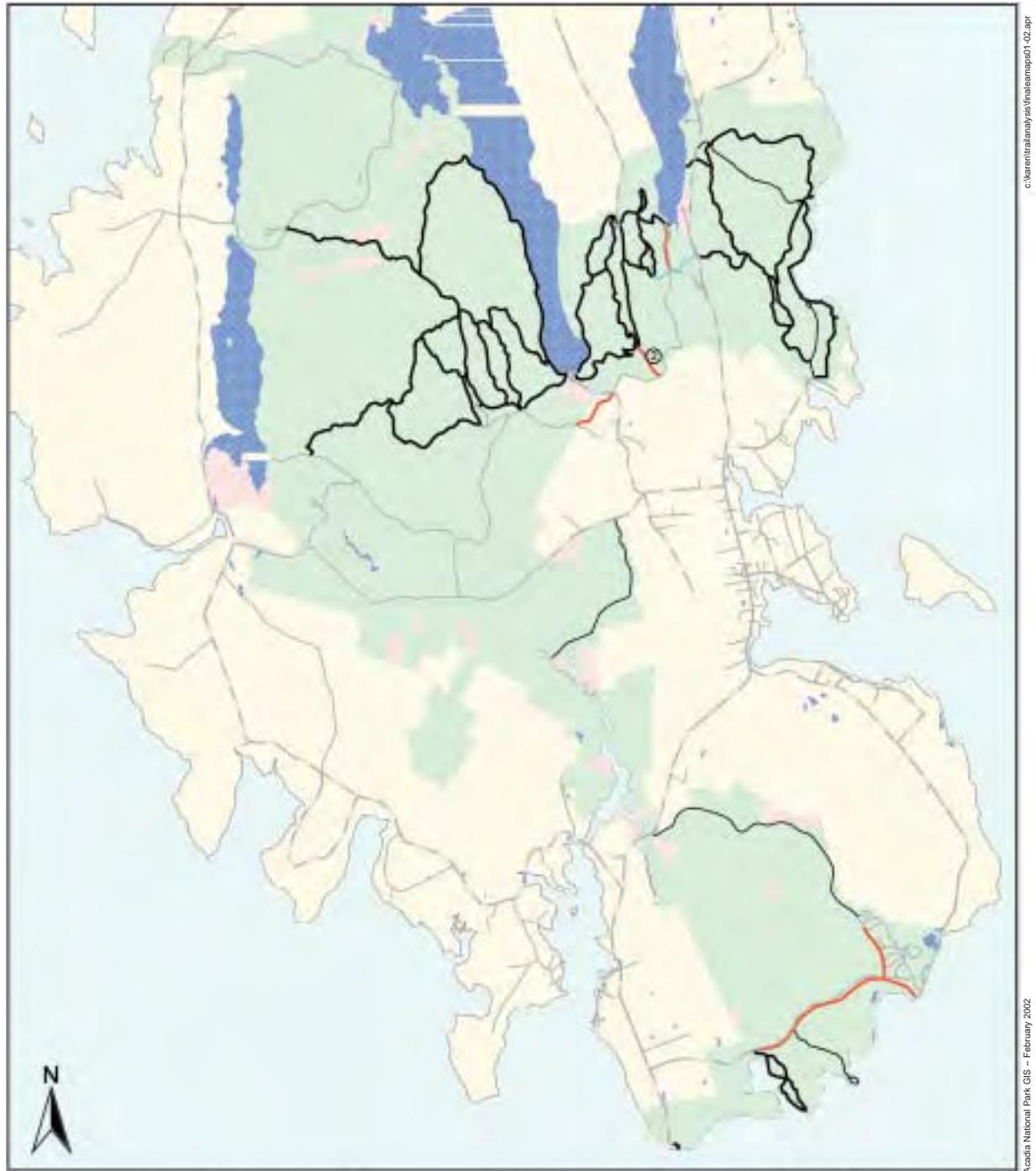


- Park Hiking Trail System (MDI)**
- Existing Trail to be Retained
 - New Trail to be Constructed
 - Abandoned Trail to be Rehabilitated/Reopened
 - Fire Roads Used as Trails
 - Carriage Roads
 - Existing Trails Outside Acadia NP
 - Major Roads
 - Minor Roads
 - Lakes & Ponds
 - NPS Administered Lands (Acadia NP)
 - NPS Acquisition Parcel (Acadia NP)
 - Privately Owned Lands

FOOTNOTE:

- ① Giant Slide Trail: existing trail to be deleted and new trail to be built over adjacent private land (easement for trail).

Figure 3. Planned Trail System, West Side of Mount Desert Island, Acadia National Park



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Acadia National Park GIS - February 2002

1 0 1 2 3 Miles

Park Hiking Trail System (MDI)

-  Existing Trail to be Retained
-  New Trail to be Constructed
-  Abandoned Trail to be Rehabilitated/Reopened
-  Fire Roads Used as Trails
-  Carriage Roads
-  Major Roads
-  Minor Roads
-  Lakes & Ponds
-  NPS Administered Lands (Acadia NP)
-  NPS Acquisition Parcel (Acadia NP)
-  Privately Owned Lands

FOOTNOTE:

- ② Valley Trail to Lurvey Spring Road: trail only to be built if part of a future connector to Southwest Harbor.

Figure 4. Trail System, Isle au Haut, Acadia National Park

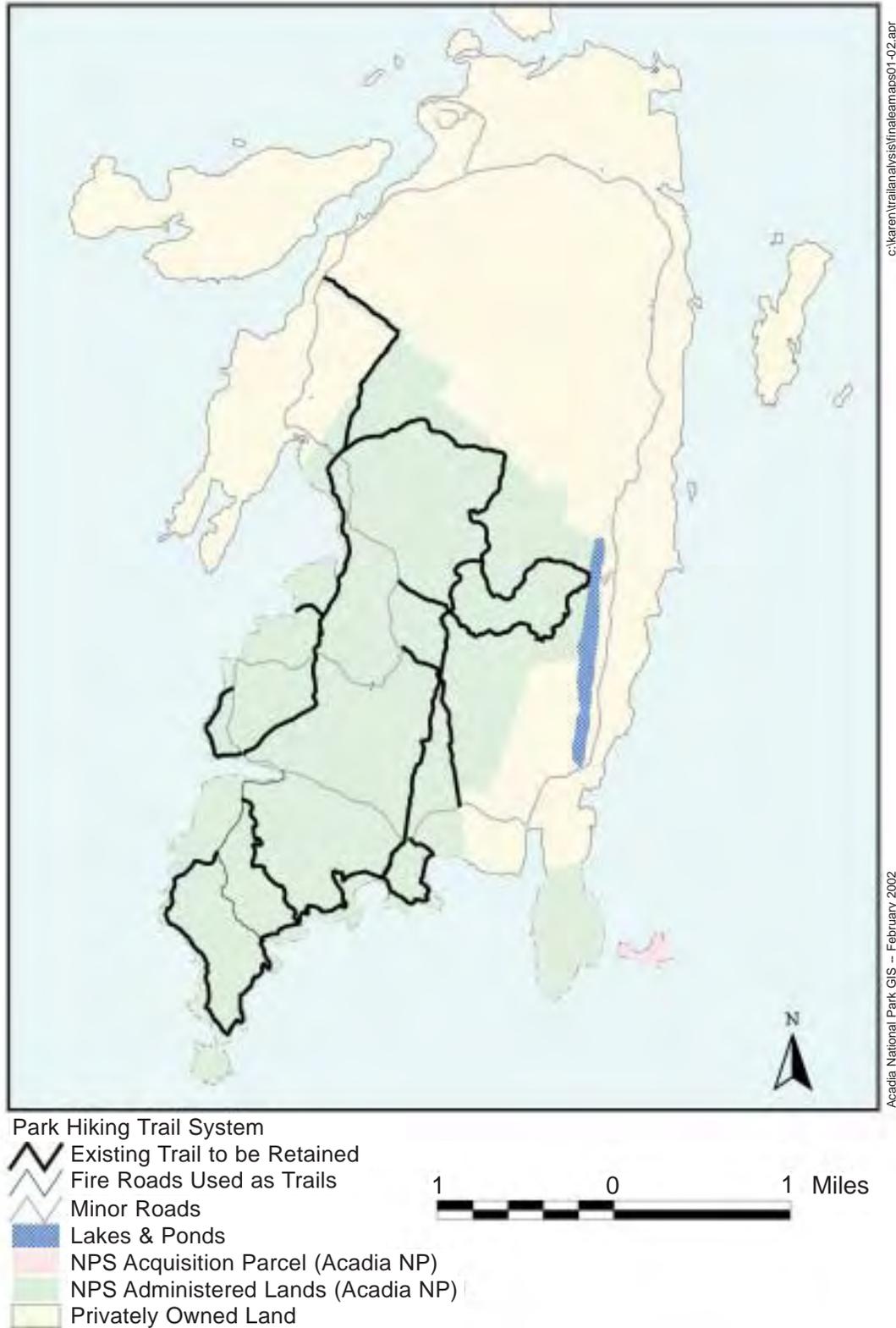


Figure 5. Trail System, Schoodic Peninsula, Acadia National Park



ACTIONS RELATED TO PROTECTING NATURAL AND CULTURAL RESOURCES (continued)

Use Appropriate Construction Materials

Construction materials will be similar to and compatible with those used historically as indicated in the *Cultural Landscape Report, Volume 2: Treatment and Maintenance Guidelines* (NPS in prep. b). Specifications for all materials will be submitted for approval to the Maine state historic preservation officer.

All logs will be obtained from outside the park. Up to four cubic yards of soil, gravel, or stone per 50 linear feet of trail may be removed from natural areas near work sites for trail rehabilitation. After construction is completed, these sites will be rehabilitated to prevent erosion and promote revegetation. When more than four cubic yards of materials are needed, they will be purchased from sources outside park boundaries and transported to work sites, using the most safe, efficient, and resource-protective methods available. Materials will be compatible in color, texture, and aggregate size with historic or existing materials. It is estimated that more than 11,000 cubic yards of materials will be removed and relocated within the park and 5,400 cubic yards imported.

Construction materials will be transported using a variety of methods including wheelbarrows, trucks, all terrain vehicles (ATVs) with trailers, tractors, helicopters, or pack stock. When large amounts of materials are required at inaccessible work sites, the availability and impacts of removing materials on site will be weighed against the costs (financial,

environmental, and social) of purchase and transport. Under these circumstances, trail closure or rerouting will also be considered.

Balance Protecting Trails with Protecting Beavers

When beavers impound water and threaten trails, the NPS will first attempt to manage water levels by installing fences around culverts and pipes through beaver dams. This work will be prescribed and supervised by the park wildlife biologist. If those efforts are not successful, further management actions such as rerouting the trail and adding structures such as boardwalks will be considered on a case by case basis; actions will also include an assessment of the cultural significance of the trail. Beavers will be moved to other areas if open habitat is available. Beavers will be euthanized only when other attempts have failed or are impractical and when the trail segment affected is a highly significant cultural resource. Before developing new trails or opening abandoned trails, the NPS will consider potential effects on beavers so that negative effects can be reduced or eliminated.

Protect Plants and Animals, Especially Rare Species and Habitats

Preventing disturbance to park plants and animals, especially rare species and habitats, will be a major consideration in trail rehabilitation, maintenance, and use. The park botanist and wildlife biologist will survey trails before rehabilitation or maintenance and recommend actions to prevent long-term adverse effects on plants and animals. If rare

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species are threatened by trail rehabilitation, maintenance, or use, management actions will include postponing or eliminating work, educating hikers, rerouting trails, or closing trails to public use.

Protect Water Quality and Wetlands

Trail work will comply with the Maine Natural Resource Protection Act, the Clean Water Act, the Coastal Zone Management Act, and NPS guidelines protecting water quality and wetlands. When trail route is an important character-defining feature contributing to a trail's cultural resource significance, it will be retained as long as water quality can be preserved through appropriate rehabilitation and maintenance techniques. If water quality cannot be preserved, trail closures and reroutes will be considered.

Prevent Soil Erosion

All trail rehabilitation, maintenance, and new construction will incorporate standard erosion control practices to prevent soil erosion and protect water quality. Rehabilitation and maintenance on all trails will prevent the erosion of surface materials and stone features such as steps, walls, culverts, and water bars.

Manage Vegetation along Trails

Vegetation along trail corridors will be cut according to standards established in the *Cultural Landscape Report Volume 2: Treatment and Maintenance Guidelines* (NPS in prep. b). Cutting will be limited in extent to prevent trail widening and subsequent erosion. All cutting will be timed to minimize effects on wildlife.

Summit vegetation will be managed very carefully because of its sensitivity and the presence of rare species on some of Acadia's mountaintops. On summits, areas of shrubs may be cut along trail corridors to clearly define the trail and help prevent hikers from inadvertently wandering off trail, thereby damaging fragile vegetation.

Trail work sites and areas trampled and eroded will be revegetated with native plant species. Sources of soil and gravel will be inspected for the presence of invasive non-native species prior to transport to work sites. If invasive non-native species are present, alternative sources will be found. All work sites will be monitored for exotic species for three years and treated using an integrated pest management approach if necessary.

Rehabilitate Historic Trail Vistas

A limited number of the most important historic vistas from trails that are documented through research may be cleared and maintained. Before this action, the cumulative effects of clearing and maintaining vistas throughout the park will be considered.

Stabilize the Most Important Features on Abandoned Trails

Important character-defining features on abandoned trails will be stabilized to prevent their deterioration. This may include stabilizing features that are not found elsewhere in the trail system, or are the best example of a specific trail construction technique. Sections with severe erosion or other natural resource

impacts may also be corrected. However, most sections of abandoned trails not being reopened will not be treated or maintained.

Inventory Trails

All trails, including abandoned trails, will be inventoried to document important features and trail condition.

Obscure Ends of Trails Not Rehabilitated

Trails deemed unsuitable for rehabilitation and maintenance will be obscured by placing brush or vegetation, or blocked by fencing at the beginning of the trail and wherever the trail intersects with other trails. Signs indicating the presence of the trail will be removed, as will references to the trail in wayside exhibits and NPS publications. The NPS will encourage publishers of written materials on the trail system to remove references to the locations of specific abandoned trails in an effort to reduce public use of these resources. Stone steps, cairns, and other constructed features on abandoned trails will not be removed from the landscape.

Manage Social Trails

Social trails, including those on islands, will be inventoried and inspected regularly for resource condition. Treatment strategies will be developed as needed to protect resources and, where appropriate, provide access to highly sought features. Treatment strategies may include closing the trail, rerouting the trail to minimize effects on resources, hardening the trail surface, adding features to keep users on one designated

trail, or other measures as appropriate. To prevent use and minimize resource damage, these trails will not usually be included on park maps.

Discourage Unauthorized Trail Development and Maintenance

Construction of unauthorized new trails and maintenance of abandoned trails will be actively discouraged. Unauthorized trails will be closed and resource damage will be mitigated. Builders of unauthorized trails will be subject to criminal charges.

Monitor Trail Conditions

Natural and cultural resource conditions on and near trails will be monitored on a regular basis; this is vital to detect changes over time. The NPS will develop science-based monitoring methods and strategies.



Ocean Path (Acadia NP Archives).

ACTIONS RELATED TO PROVIDING HIGH QUALITY VISITOR EXPERIENCES

Ensure Public Safety

All trails will be maintained to ensure public safety while retaining wide levels of challenge.

Provide a Diversity of Experiences on Hiking Trails

The National Park Service will provide a diversity of experiences on the park's hiking trail system. These will include a range of experiences related to difficulty, risk, solitude, access to diverse natural and cultural resources, access to highly crafted and maintained trails, and access to primitive trails such as those found on Isle au Haut.

Provide Trails Meeting the Americans with Disabilities Act (ADA) Standards

Before rehabilitation, each trail or trail segment will be evaluated for its ADA accessibility potential. This evaluation will consider the effect of ADA accessibility on the historic character of the trail. The goal will be to make some trails ADA accessible using the guidelines established by the Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas (U.S. Architectural and Transportation Barriers Compliance Board 1999). To the extent possible, the NPS will attempt to provide these trails and appropriate signs in a variety of habitats,

such as shorelines, mountain summits, and forests.

Protect Viewsheds

The NPS will actively protect views from trails. Park facilities visible from trails will be camouflaged whenever possible. Where trail vistas provide views outside park boundaries, the NPS will work with local land protection organizations, municipalities, and private landowners to protect the scene. If necessary, the NPS will plant vegetation or install other buffers to conceal unsightly development.

Allow Hiking on Fire Roads

Fire roads will be managed to allow continued hiking use.

Manage Hiking with Dogs

Hikers with leashed dogs will continue to be allowed to use most park trails. Dogs will continue to be prohibited on trails with ladders and in other areas of the park, such as on beaches, where dogs present a health, resource, or safety issue. Leash laws will be enforced on park trails to protect visitors and wildlife. Additional efforts will be made to educate dog owners about leash regulations and encourage common courtesies when hiking with dogs such as removing dog feces from trails. If enhanced education and enforcement efforts fail to increase compliance with leash regulations, the NPS will consider banning dogs from park trails.

Monitor Visitor Experiences

Hikers will be surveyed periodically to determine if park trails provide a diversity of high quality visitor experiences, and to determine if trails on Isle au Haut, Schoodic, and the western side of MDI provide opportunities for solitude.

Monitor Trail Use Levels

The numbers of hikers using trails throughout the park will be measured to provide information to park managers related to levels of use, parking, resource protection, and visitor experiences.



Hikers with leashed dog on the stepping stones of the Beachcroft Path, at the Tarn (Acadia NP Archives).

ACTIONS RELATED TO PUBLIC EDUCATION

Enhance Public Education

Education to reduce hiking-related impacts, enhance understanding of the history and importance of the trail system, and orient visitors to Acadia's trails will be provided. The park will continue to provide information to help visitors choose appropriate trails for their interests and abilities, and to know and understand park regulations while hiking. Education will continue to take many forms, including printed materials, wayside and museum exhibits, personal services such as guided hikes, and web sites. In addition, park staff will continue to work cooperatively with guides, concessioners, businesses operating in and near the park, publishers, and others to promote visitor safety and resource stewardship related to trails and hiking.

Standardize Trail Signs

Cedar log signs will continue to be used at trailheads, carriage road crossings, and locations with high rates of vandalism or theft. Routed directional signs of a traditional style will be placed at interior intersections and summits. This style standard will be developed in coordination with the Maine State Historic Preservation Office and the Olmsted Center for Historic Preservation. It will be described in the *Cultural Landscape Report Volume 2: Treatment and Maintenance Guidelines* (NPS in prep. b). Trail names will appear on all cedar log signs and at the top of each intersection signpost, with a few selected destinations provided below as space allows. All signs will be placed carefully to be as aesthetically

pleasing as possible, while being obvious enough to be observed. Informational exhibits will be placed at high-use trailheads. Other new signs may include those for resource protection, accessibility, interpreting historic trails, and posts with regulatory symbols (e.g. dogs on leash, no bikes).

Promote Outdoor Ethics to Reduce Visitor Impacts

Leave No Trace is a nationally recognized program of outdoor ethics whose aim is to reduce visitor impacts in natural areas. The FOA/Acadia National Park Ridgerunners (supported by part of the Acadia Trails Forever program) and other staff and volunteers will continue Leave No Trace education, minor trail maintenance, and resource protection. The NPS will continue to provide Leave No Trace outreach education for interested groups.



Beachcroft Path (Acadia NP Archives).

Improve the Accuracy of Information about Acadia National Park Trails

NPS staff will continue to review literature related to hiking in Acadia National Park and cooperatively work with publishers to improve the accuracy of information available to the public. Because there are a number of good hiking maps and guides currently available from the private sector, the NPS will not publish a hiking map.

Standardize Trail Names

When practical, the NPS may revert to historic trail names. Trail names will be determined on a trail by trail basis, considering the historic importance of the name, whether the historic name would confuse visitors, and other considerations. An official list of park trail names will be developed, and publishers of hiking-related information will be encouraged to use official trail names to reduce confusion. Changing trail names will be carefully planned and coordinated with publishers of information about the trail system to minimize visitor confusion, costs associated with new signs, and effects on local communities.

New trails will generally be named based on natural or historic features associated with the trail, or may continue historic traditions for naming trails as long as such names will conform to NPS policies.

Encourage Efficient Parking and Travel

To reduce air pollution and parking congestion at trailheads, hikers will be encouraged to use public transportation, hike directly into the park from neighboring towns, or carpool to trailheads. In accordance with the park's *General*

Management Plan, (NPS 1992) there will be no new parking areas on the Park Loop Road, or any increase in the capacity of existing parking areas throughout the park to accommodate hikers. The NPS, in cooperation with the State, Town of Bar Harbor, and local residents, will consider moving the current parking along Route 3 for the Canon Brook Trail (near the Tarn) south to a new trailhead at the Green and Black Trail near the Otter Cliffs Road.

ACTIONS RELATED TO TRAIL SYSTEM SUSTAINABILITY

Provide Adequate Staffing Levels and Ongoing Training

The park will hire sufficient staff to accomplish trail rehabilitation and maintenance, resource protection, law enforcement, and public education related to trail management.

For approximately ten years, trail rehabilitation will require significant increases in maintenance staff and other support services staff. NPS resource management staff will be needed to guide revegetation of disturbed areas, develop trail treatment guidelines, provide environmental and cultural resource compliance, develop monitoring methods, and advise staff on erosion control, protection of rare species and habitats, and beaver management. Administrative staff will be needed to support additional hiring, purchasing, budgeting, and personnel management directly related to trail rehabilitation. Additional interpreters and enforcement staff will be needed to alert visitors of ongoing trail rehabilitation and safety issues, provide up-to-date information regarding hiking in the park, and review trails-related publications.

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After the rehabilitation effort is complete (and to some degree, during trail rehabilitation) park staff will be needed to maintain trails and manage trail use on a recurring basis. Maintenance staffing levels will be expected to drop after rehabilitation, but will remain high relative to 1999. Resource management staff will be needed to monitor long-term effects of maintenance and hiker use, restore work sites, consult on resource protection issues, and continue environmental and cultural compliance. Park staff will be needed to enforce regulations, and to provide education and develop educational materials related to trail history and hiker ethics. Detailed

lists of activities are provided in Appendix 3.

Employees will be provided ongoing training to develop and maintain professional trail-related skills, knowledge, and abilities.

Enhance Work Efficiency

Workspace will be increased to improve trail maintenance efficiency and accommodate increased staff levels related to trail management and education. Additional vehicles and tools will be purchased to support trail rehabilitation and maintenance.



Beachcroft Path on Huguenot Head with highly crafted cut-granite steps (Acadia NP Archives).

IMPLEMENTATION STRATEGIES

The implementation of this plan is expected to take ten years or more. One-time non-recurring costs, most of which are associated with trail rehabilitation, are estimated to exceed \$12.2 million. In addition, annual recurring costs are estimated at \$520,000 per year (not adjusted for inflation). Details of the estimated costs of implementing this plan are provided in Appendix 4.

Implementing the plan will require funding to support actions related to education, natural and cultural resource protection, administration, and enforcement of park regulations, as well as trail rehabilitation and maintenance.

Acadia Trails Forever, a joint program of the NPS and Friends of Acadia, was a fundraising effort to support trail rehabilitation, management, and maintenance. Friends of Acadia raised \$9 million from private sources, which will be matched by at least \$4 million of federal funding. Half of the \$13 million of Acadia Trails Forever funding will be committed to trail rehabilitation; the remaining \$6.5 million will establish endowments to fund trails maintenance and FOA sponsored Acadia Youth Conservation Corps and Ridgerunner programs. These rehabilitation funds became available beginning in 2000.

Acadia Trails Forever funding will be insufficient to implement this plan. Additional funding will be required or some actions will not be accomplished.

In general, the following guidelines will be used to implement actions within this plan.

- Trail work will include building new trails, rehabilitating and maintaining existing trails, and reopening abandoned historic trails. Because existing trails comprise most of the system, emphasis will be placed on rehabilitating, managing, and maintaining existing trails.
- Of existing trails, those with safety concerns and those with the most severe natural and/or cultural resource impacts or threats will be given the highest priority for rehabilitation and management.
- Accessibility for physically disabled persons will be considered in all trail rehabilitation and construction.
- Trail rehabilitation and new construction will increase the potential for use of the park by a wide variety of visitors, and may enhance access for unauthorized uses that damage park resources. Prior to rehabilitating or constructing each trail the NPS will consider possible effects on resources, visitor use, and park operations and will proceed with rehabilitation or construction only if it has the staff to manage use and mitigate negative effects.
- Additional funding and partnerships will be sought to support complete implementation of this plan.

This *Hiking Trails Management Plan* will be reviewed annually and updated as necessary.

GLOSSARY

Abandoned trails: Trails that the NPS no longer maps, marks, maintains, or advertises for public use. Some abandoned trails are still easily found and followed and others have disappeared from the landscape.

Character-defining features: Exemplary characteristics of a historic structure or object or landscape that contribute to its historic character and aid in the understanding of its cultural value. Character-defining features of trails, for example, may include route (The Gorge Path), construction (Beachcroft Path), geological features (Bubble Rock on the South Bubble Trail), biological resources or habitats (Great Meadow on the Jesup Path), or views (Gorham Mountain Trail).

Closed trail: A temporary or long-term regulatory prohibition of visitor use of a trail to protect public safety or resources.

Guidance: Refers to trail names, signs, marking, and maintenance techniques used to keep hikers on trails.

Habitat fragmentation: The processes by which habitats are subdivided into increasingly smaller units, resulting in their increased insularity as well as an overall loss of habitat area.

Hardening: The manual, mechanical, or chemical compaction of the trail tread resulting in a hard, flat surface that sheets water effectively and resists the indentations that are created by use.

Historic: A term used to describe a person, place, or object that is significant to a culture.

Historical: A term that refers to periods or themes in history.



Beachcroft Path (Acadia NP Archives).

Historical significance: Meaning or value based on evaluation criteria for inclusion on the National Register of Historic Places given to a district, site, building, structure, or object. These criteria are based on associations with important persons or events in U.S. history, design/architectural characteristics, or information. Also considered is the degree of integrity remaining to the structure, etc.

Preserve: To sustain a trail or other property exactly as it is at the present time. To prevent further deterioration using proper maintenance practices that do not negatively affect the property and do not promote further loss or decay of historic materials.

Rare species: Any species that is considered restricted and limited throughout all or a significant portion of its range. This designation does not necessarily imply that populations of the species are significantly reduced or threatened with reduction. No legally required federal protection is associated with this designation.

Reconstruct: The act of rebuilding a missing historic feature. For example, a missing gazebo might be reconstructed in a historic garden. Usually, this is only done if there is extensive documentation to accurately show what the historic condition of the feature was like, and the missing feature is necessary to adequately interpret the property. Reconstruction is rarely the main choice of treatment for cultural landscapes.

Rehabilitate: To preserve the historic character of a property, while making allowances for new uses. Measures are taken to preserve those historic features and characteristics that remain. Compatible additions may be made for modern needs.

Restore: To replace portions of a property to a very specific time period. The period chosen is usually the period that gives the property its most significance. All additions that do not date to this period are removed. No new uses can be incorporated. In a restoration, historic materials are used, where applicable, to replicate what would have been done in the historic period.

Rock paving: The use of flat sided rocks to form the surface or tread of a trail.

Scree walls: Lines of rock that define one or both sides of the trail tread.

Social trail: A trail that develops by continuous human use rather than by design and construction and is not officially designated or maintained.

Stabilize: To prevent further deterioration of a landscape or structure, using the least amount of intervention necessary. Stabilization may also be referred to as Preservation Maintenance. The tasks performed should not take away from the remaining historic integrity of the landscape. The focus is to preserve what is currently present so that no historic features are lost through negligence or damaging maintenance practices. For archaeological sites, stabilization work often focuses on moderating or preventing erosion.

Trail: A footpath across a wild area or region, usually cleared of vegetation, and sometimes graded or otherwise constructed for ease of access and durability.

REFERENCES

- Chase, Geneva and Charles Jacobi
2000 A census of hiking trail use in Acadia National Park, August 3-4, 1999. Acadia National Park Natural Resources Report 2000-2. February. 8pp.
- Jacobi, Charles
2001 A census of hiking trail use in Acadia National Park, August 7-8, 2001. Acadia National Park, Bar Harbor, ME.

2000 A census of hiking trail use in Acadia National Park, August 1 and 3, 2000. Acadia National Park, Bar Harbor, ME.

1999 Hiker use of mountain summits in Acadia National Park, 1997-1998. Acadia National Park Natural Resources Report 99-2. April. 32pp.
- Littlejohn, Margaret
1999 Acadia National Park, visitor study, summer 1998. Report 108 Visitor Services Project, Cooperative Park Studies Unit, University of Idaho. May. 108pp.
- National Park Service, U.S. Department of the Interior
In prep. a Historic hiking trail system of Mount Desert Island. Cultural landscape report for Acadia National Park, Maine. Volume 1: History, existing conditions and preliminary analysis. Olmsted Center for Landscape Preservation, Brookline, Massachusetts.

In prep. b Historic hiking trail system of Mount Desert Island. Cultural landscape report for Acadia National Park, Maine. Volume 2: Treatment and maintenance guidelines. Olmsted Center for Landscape Preservation, Brookline, Massachusetts.

In prep. c National Register Nomination for Schoodic Peninsula, Hancock County, Maine. Historic Resources of Acadia National Park, Multiple Property Listing. Olmsted Center for Landscape Preservation, Brookline, Massachusetts.

2001a Draft Hiking Trails Management Plan and Environmental Assessment. Acadia National Park, Maine. February. 93pp.

2001b Analysis of Public Responses to the Draft Hiking Trails Management Plan and Environmental Assessment. Acadia National Park, Maine. May. 11pp.

2001c Management policies. National Park Service, Washington, D.C. 137pp.

1999a Environmental assessment: build connector trails. Acadia National Park, Maine. March. 18pp.

1999b Finding of no significant impact, build connector trails, Acadia National Park. Memorandum from Superintendent of Acadia National Park to the Regional Director, Northeast Region, National Park Service. July 21, 1999. 7pp.

1997 Strategic management plans. Acadia National Park, Saint Croix Island International Historic Site, Maine Acadian Culture Project, Maine. Acadia National Park, Maine. September. 74pp.

- National Park Service, U.S. Department of the Interior
1995 The Secretary of the Interior's standards for the treatment of historic properties. Cultural Resources Office of Preservation Assistance. Pamphlet.
- 1992 General management plan. Acadia National Park, Maine. October. 99pp.
- U.S. Architectural and Transportation Barriers Compliance Board
1999 Recommendations for accessibility guidelines: Outdoor developed areas. Final Report.



Historical view from the Beehive Trail (Bar Harbor Historical Society).

PREPARERS

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Emery Path, near Sieur de Monts Spring, circa 1916 (Acadia NP Archives).

APPENDIX 1: RELEVANT EXCERPTS FROM THE GENERAL MANAGEMENT PLAN

UPGRADE TRAIL SYSTEM

A comprehensive trail management plan will be developed and implemented that provides a systematic approach to maintaining trails, restoring abandoned trails, and constructing new trails. Upgrading routine and cyclical trail maintenance will alleviate erosion and safety problems. Understanding the trail system at Acadia is critical to understanding the history of the park and its significance as a scenic reservation. The historic significance of trails on Mount Desert Island will be evaluated. To avoid adverse effects on currently undisturbed species and habitats, developing new or abandoned trails will be limited to alignments that create loops in heavily used areas or routes that offer access from park campgrounds, towns, and villages. Development will be limited to existing trailhead parking. (NPS 1992:33)

EVALUATE, TREAT, AND MAINTAIN CULTURAL LANDSCAPES

In addition to the carriage road and Park Loop Road landscapes, the environs of other key historic properties in the park will be evaluated for management as cultural landscapes in conjunction with their nomination to the National Register of Historic Places. (NPS 1992:34)

IMPROVE NON-MOTORIZED ACCESS TO THE PARK

Park access for bicyclists, joggers, walkers, cross-country skiers, and visitors using wheelchairs will be improved on Mount Desert Island. Other new connectors will be studied and constructed if feasible. (NPS 1992:39)

DEVELOP COOPERATIVE TRAIL MANAGEMENT

The National Park Service will pursue cooperative relationships with local governments, village improvement societies and other organizations, and private landowners to develop comprehensive trail plans for Mount Desert Island. The Park Service will support existing connector trails and the development of new ones to provide public access the park's hiking trail and carriage road systems from towns and villages on Mount Desert Island. (NPS 1992:4)

APPENDIX 2: TRAILS EVALUATION PROCESS

As part of this planning effort, the NPS developed a two-step method to lend objectivity to a review of all trails on MDI for inclusion into the park trail system. Results of this evaluation were used to help craft Alternatives 2, 3, and 4 in the *Draft Hiking Trails Plan and Environmental Assessment* (NPS 2001a). (Alternative 1 was the No Action Alternative.)

ASSUMPTIONS

This evaluation was based on the following assumptions:

1. Properly maintained trails are safe for the vast majority of visitors. Safety concerns for trails were addressed in the Visitor Experience evaluation criteria (see below). The Visitor Experience criteria rating was lowered due to safety concerns only for trails that affected the safety of other visitors (for example, hazards to auto traffic) or when trails crossed roads or required roadside walking access.
2. Trails can be properly maintained with expected staffing and funding from the Acadia Trails Forever Program.
3. Many natural resource concerns can be mitigated through trail maintenance or temporary closures.
4. Most NPS trails have little impact to neighbors and communities because they do not connect to adjacent villages or private lands.

TRAILS EVALUATION: STEP 1

Three park staff members familiar with park trails initially rated 169 trails in their entirety (not trail segments) using a point system described below. Trails that were rated included all currently maintained trails and many abandoned trails. New trails proposed for inclusion or trails proposed for deletion were also rated. These proposals came from park staff and from the public in focus group sessions and public workshops. Individual trail segments (between intersections) were not rated because of concerns about continuity for historic trails and the time needed to conduct many more evaluations.

In this first step, the three-person team developed and weighted these four criteria, which are more fully described in Table 2.

1. Cultural Resource Values - Factor Weighting Value = 5
2. Effects on Natural Resources - Factor Weighting Value = 5
3. Effects on Communities and Neighbors - Factor Weighting Value = 2
4. Visitor Experience Values - Factor Weighting Value = 4

For all existing trails (as described in the parks trail maintenance inventory), and all trail proposals (abandoned and new), the team scored each criterion on a scale of 0 to 10. The scores for each criterion were multiplied by the factor weighting value (2, 4, or 5) to obtain a weighted score. These weighted scores for each criterion were then added to obtain a total score for the trail.

For example, the Precipice Trail scored the maximum of 10 on the cultural resource value criterion. Ten multiplied by the Factor Weighting Value of 5 gave a total cultural resource score of 50. Because the Precipice Trail was felt to have substantial negative effects on natural resources, the team gave it a score of four out of ten on this criterion. Four multiplied by the Factor Weighting Value of 5 gave the Precipice Trail a total natural resource score of 20. Adding these total scores and the total scores of the other two criteria gave the Precipice Trail an overall score of 120. It should be noted that two criteria are values and two criteria are effects. For the values criteria, a higher score indicates a higher value. For the effects criteria, a higher score reflects fewer negative impacts.

The highest possible trail score for existing and abandoned trails was 160 points. For new trails that were proposed, the highest possible score was 110 points, because proposed new trails generally had little or no cultural resource value. All total numerical scores were converted to percentages to allow comparisons between currently maintained, abandoned, and new trails. All numerical and percentage scores for trails are shown in Table 3.

The three-person team used the percentage scores to help develop a draft version of the preferred alternative, Alternative 3. Alternative 3 balanced preservation of natural and cultural resources. Higher percentage scores generally indicated a greater likelihood for retaining or adding a trail to the system. This draft version of Alternative 3 was then reviewed and discussed by a larger group in Step 2.

TRAILS EVALUATION: STEP 2

In Step 2, a second team of six to eight park staff (including the three on the first team) again considered each currently maintained trail, each proposed trail deletion, and each proposed trail addition (abandoned and new).

The discussion started with a review of each trail's percentage score and point scores on the four criteria. The second team then moved into the second phase of evaluation. This phase focused on evaluating each trail's contribution to the trail system. Here, the following questions were considered:

- Does this trail contribute to meeting trail system goals?
- Specifically, relative to other trails, how does this trail contribute to providing diverse visitor experiences? Do other trails nearby provide the same experience?
- Does this trail, by increasing use or reducing opportunities for low density recreation, compromise the General Management Plan goal of preservation of the relatively undeveloped quality of the West Side of MDI?
- Is this trail or trail segment required in order to access other trails?

Using the park's geographic information system (GIS), a computerized mapping and analysis system, the evaluation team was able to add and subtract individual trails on maps to view alternative configurations of the trail system. After deciding what trails would be added to or deleted from the system, a final system-wide review was made to re-examine the questions posed previously, with an emphasis on examining the trail system as a whole. The second team then asked these questions:

- Is this system sustainable?
- Does the system possess enough integrity to retain its historic significance?

The end result of this process was Alternative 3 as described in the *Draft Hiking Trails Plan and Environmental Assessment* (NPS 2001a).

To craft alternatives 2 and 4 for the *Draft Hiking Trails Management Plan and Environmental Assessment* (NPS 2001a), somewhat different techniques were used.

Alternative 2 emphasized the preservation and protection of natural resources. For this alternative, the second team looked at closing trails that would offer the greatest benefits for natural resource protection. Creating an alternative that emphasized protecting natural resources based solely on the evaluation scores - that is, eliminating trails with the lowest scores in the natural resource criteria - would have resulted in dismantling the hiking trail system as we know it. Too many trails, especially popular ones, are located in sensitive natural resource areas such as summits, or along streams and shores. Instead, the second team looked to those trails suggested for deletion by park staff and the public, and to trails that could be deleted from the system without dismantling it. These deletions would still leave some semblance of an interconnected trail system intact.

Alternative 4 emphasized the preservation and protection of cultural resources. We were able to use the evaluation scores to help create Alternative 4. The second team included in Alternative 4 almost all trails that scored 30 points or higher on the cultural resource criteria. These included most of the important historic trails that retained some degree of integrity. A few trails with cultural resource criterion scores under 30 were also considered important enough to include in this alternative.

Three trails that scored high overall were excluded from alternatives three and four: the Gurnee Path, the Goat Trail, and the South Bubble Cliff Trail.

The Gurnee Path was not included in the proposed trail system because: 1. it was considered unsafe to access; 2. it would be difficult to protect vehicles on Route 3 below the trail from rocks dislodged by hikers; and 3. the trail experience would be severely degraded by traffic noise and utility lines between the trail and views of Frenchman Bay.

The Goat Trail on Pemetec Mountain was not included because it would be difficult to protect vehicles on the Park Loop Road below the trail from falling rocks dislodged by hikers. There is also no parking where the trail crosses the Park Loop Road. The parking area a short distance north (towards Bubble Rock Parking) was felt to be inadequate in size. Making a loop hiking option available for Pemetec Mountain would probably increase use on this less-used summit.

The South Bubble Cliff Trail was not included because of conflicts with technical rock climbing, including the danger of falling rocks.

ADDITIONAL TRAIL PROPOSAL EVALUATIONS

Following public comment on the *Draft Hiking Trails Management Plan and Environmental Assessment* (NPS 2001a), the team evaluated 13 new trail proposals using the above methods and considered them for inclusion; the scores for these trails are provided at the end of Table 4.

Table 2. Trails Evaluation Guideline (considers trail alone, not as part of system)

Criteria	Score 5	Score 10
Cultural Resources (FWV 5)	<p>Not historically significant as determined by the Draft National Register Nomination criteria (retains little integrity, not highly crafted construction, not associated with significant person, place, or event; was not once part of or fulfills intent of trail that was part of system as of 1942).</p> <p>Does not provide access to cultural resources other than the trail.</p> <p>Compromises Native American sacred sites/values.</p>	<p>Historically significant as determined by the Draft National Register Nomination criteria (retains most integrity, highly crafted construction, associated with significant person, place, or event, was once part of or fulfills intent of trail that was part of system as of 1942).</p> <p>Provides access to cultural resources other than the trail itself.</p> <p>Protects Native American sacred sites/values.</p>
Natural Resources (FWV 5)	<p>Affects Federal, State, or locally rare species or sensitive habitats.</p> <p>Large natural areas:</p> <ol style="list-style-type: none"> 1. areas greater than 50 acres without trails. 2. trail divides habitat into two large blocks of land. 3. habitat divided is especially susceptible to human caused disturbance. 4. trail increases density of trails in/near pristine or high quality area. 5. trail crosses small, high quality habitat patches. <p>High erosion potential difficult to mitigate.</p> <p>No adverse effects on environment from mining/harvesting native materials (inside or outside park).</p> <p>Less than 25 feet from water (stream, lake, vernal pool, ocean)</p> <p>Near/in existing or potential high quality beaver habitat.</p> <p>Risk of contamination to public water supply from improper disposal of human waste is high because trail is less than 200 feet from water, landscape and soil characteristics preclude effective decomposition, visitor use is high, and no toilet is available (or will be).</p>	<p>Does not affect Federal, State, or locally rare species or sensitive habitats.</p> <p>Large natural areas:</p> <ol style="list-style-type: none"> 1. areas less than 50 acres without trails. 2. trail divides habitat into one small and one large block of land. 3. habitat divided is not especially susceptible to human caused disturbance. 4. trail does not increase density of trails in/near pristine/high quality habitat. 5. trail crosses small, high quality habitat patches. <p>Low erosion potential or easy to mitigate erosion.</p> <p>No adverse effects on environment from mining/harvesting native materials (inside or outside park).</p> <p>More than 25 feet from water (stream, lake, vernal pool, ocean).</p> <p>Not near/in existing or potential high quality beaver habitat.</p> <p>Risk of contamination to public water supply from improper disposal of human waste is low because trail is more than 200 feet from water, landscape and soil characteristics promote effective decomposition, visitor use is low, and a toilet is available.</p>
Communities & Neighbors (FWV 2)	<p>Does not connect with towns or villages (GMP for new trails only).</p> <p>Increases parking/traffic problems outside park and need for policing.</p> <p>Reduces privacy of park neighbors.</p> <p>Does not connect to concentrations of residents or visitors (existing trails).</p> <p>Detracts from community life for residents.</p> <p>Increases maintenance responsibilities for other trail maintainers.</p>	<p>Connects with towns and villages. (GMP for new trails only)</p> <p>Does not increase parking/traffic problems outside park or need for policing.</p> <p>Does not reduce privacy of neighbors.</p> <p>Connects to concentrations of residents or visitors. (existing trails)</p> <p>Enhances community life for residents.</p> <p>Reduces maintenance responsibilities of other trail maintainers (VIAs).</p>

Table 2. Trails Evaluation Guideline Continued (considers trail alone, not as part of system)

<p>Visitor Experiences (FWV 4)</p>	<p>Does not provide loop in heavily used area. (GMP/for new trails only) Does not connect with park campgrounds. (for new trails only) Does not offer outstanding features of interest to hikers. (views, flora, fauna) Does not form loop or contribute to loop opportunities. (GMP/existing trails) Adds to parking congestion or creates new problems. Not accessible through existing parking or bus system. Does not provide exceptional education opportunities. Provides no opportunity for special populations. Contributes to visitor confusion or visitor conflicts (e.g. climbing/hiking).</p>	<p>Provides loop in heavily used area. (GMP/for new trails only) Connects with park campgrounds (for new trails only). Offers outstanding features of interest to hikers. (views, flora, fauna, thrills) Forms a loop or contributes to loop opportunity. (GMP/for existing trails) Does not add to parking congestion or create new problems. Accessible through existing parking or bus system. Provides exceptional education opportunities. Enhances opportunities for special populations. Reduces visitor confusion or conflicts.</p>
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Table 3. Trail Evaluation Scores Grouped by Trail Status for Abandoned (Trail Status=A in Column 3) , Currently Maintained (Status=M), and Proposed New Trails (Status=N) Based on Cultural Resource, Natural Resource, Communities and Neighbors, and Visitor Experience Criteria

Trail Name	Trail ID Number	Trail Status 1999	Trail Proposal ⁵	Cultural Resource Score (Max=50)	Natural Resource Score (Max=50)	Communities and Neighbors Score (Max=20)	Visitor Experience Score (Max=40)	Total Score (Max=160 or 110)	Percent Score (see text)
Abandoned Trails									
Gurnee Path	352	A	Yes	45	45	12	28	130	81.25
Homans Path	349	A	Yes	45	40	10	32	127	79.38
Upper Ladder Trail	334	A	No	40	40	10	32	122	76.25
Orange and Black Path	348	A	Yes	40	40	10	32	122	76.25
(Precipice to Bear Brook Trail)									
BH connectors (319, 320, 321-Stratheden, Kebo, Gorge)	734	A	Yes	35	40	12	32	119	74.38
Schooner Head Road path	362	A	Yes	40	40	12	20	112	70.00
Great Cave Path	347	A	Yes	45	20	10	36	111	69.38
Green Mountain Railway	357	A	No	50	20	10	20	100	62.50
South Bubble Cliff Trail	451	A	No	40	25	10	24	99	61.88
North/Middle Bubble Cliff Trail	459	A	No	35	25	10	28	98	61.25
Beech Cliff Trail to Lurvey Spring	625	A	No	40	15	10	32	97	60.63
Beech Mountain Road/path (+618)	624	A	Yes	35	15	14	30	94	58.75
Golf Links to Norumbega Mtn	530	A	No	25	35	10	24	94	58.75
Canon Brook to Bowl (333,358)	732	A	Yes	30	30	8	28	91	56.88
Dane Farm Trail	713	A	Yes	30	35	10	16	91	56.88
Day Mountain Caves Trail	424	A	No	25	30	10	24	89	55.63
Red and White Path	335	A	Yes	30	20	10	28	88	55.00
Jordan South End Path	409	A	Yes	20	30	10	28	88	55.00
Potholes Area Trails (342, 343, 332)	733	A	Yes	30	20	6	32	88	55.00
Dorr's Bicycle Path (354)	331	A	Yes	45	15	14	12	86	53.75
Blue and White Path (also 366)	337	A	Yes	35	20	10	21	86	53.75
Goat Trail, Pemetic Mountain	444	A	Yes	35	20	10	20	85	53.13
Boyd Road/path	449	A	Yes	25	25	10	24	84	52.50
Spring Trail	621	A	Yes	30	20	10	24	84	52.50
Amphitheatre Trail, north	528	A	Yes	25	25	10	24	84	52.50

⁵Trail proposals came from interested citizens and park staff, and a "yes" refers to a proposed new trail or the proposed reopening of an abandoned trail.

Table 3. Trail Evaluation Scores Grouped by Trail Status for Abandoned (Trail Status=A in Column 3), Currently Maintained (Status=M), and Proposed New Trails (Status=N) Based on Cultural Resource, Natural Resource, Communities and Neighbors, and Visitor Experience Criteria

Trail Name	Trail ID	Trail Status 1999	Trail Proposal ⁵	Cultural Resource Score (Max=50)	Natural Resource Score (Max=50)	Communities and Neighbors Score (Max=20)	Visitor Experience Score (Max=40)	Total Score (Max=160 or 110)	Percent Score (see text)
Abandoned Trails (continued)									
Southwest Valley Road/Path	316	A	No	30	20	10	24	84	52.50
Amphitheatre Tr (Asticou Tr to LHB Br)	523	A	Yes	30	20	10	24	84	52.50
Echo Lake Trail (to St Sauveur Pkg)	622	A	Yes	20	30	10	24	84	52.50
Chasm Path/Waldron Bates Mem Path	525	A	Yes	35	15	10	24	84	52.50
Pine Hill to Bernard Mountain	606	A	No	25	25	12	20	82	51.25
Great Hill to Duck Brook (+306)	310	A	Yes	20	30	12	20	82	51.25
Aunt Betty's Pond Path	526	A	Yes	30	15	10	24	79	49.38
McFarland Path	524	A	Yes	30	15	10	24	79	49.38
Curran Path	315	A	Yes	40	5	10	24	79	49.38
Grandgent/Maple Spring(58)	701	A	Yes	25	25	10	16	76	47.50
Connector (slope)									
Grandgent/Maple Spring(58)	731	A	Yes	25	20	10	20	75	46.88
Connector (strm)									
Quarry Trail	628	A	Yes	25	20	14	16	75	46.88
Ox Hill Summit to Day Mtn	421	A	Yes	25	30	8	12	75	46.88
East Ridge Trail	350	A	Yes	25	15	10	24	74	46.25
Brown Mountain, North	521	A	Yes	20	20	8	16	64	40.00
Old Bridle Path to Acadian Ridge Tr.	702	A	Yes	25	10	10	16	61	38.13
McFarland Hill to Lakewood (incl. 309)	705	A	Yes	10	20	10	20	60	37.50
Currently Maintained Trails									
Jordan Pond Seaside Trail	401	M	No	50	45	12	28	135	84.38
Perpendicular Trail	119	M	No	50	35	10	36	131	81.88
Emery Path/ Dorr Mtn East Face Tr	15	M	No	50	35	10	32	127	79.38
Ladder Trail	64	M	Yes	50	35	10	32	127	79.38
Kurt Diederich Trail	16	M	No	50	30	10	32	122	76.25
Precipice Trail	11	M	No	50	20	10	40	120	75.00
Asticou Trail	49	M	No	45	30	14	28	117	73.13
Bass Harbor Head Light Trail	129	M	No	40	30	10	36	116	72.50
Beachcroft Path	13	M	No	50	20	10	36	116	72.50

Table 3. Trail Evaluation Scores Grouped by Trail Status for Abandoned (Trail Status=A in Column 3), Currently Maintained (Status=M), and Proposed New Trails (Status=N) Based on Cultural Resource, Natural Resource, Communities and Neighbors, and Visitor Experience Criteria

Trail Name	Trail ID	Trail Number	Trail Status 1999	Trail Proposal ⁵	Cultural Resource Score (Max=50)	Natural Resource Score (Max=50)	Communities and Neighbors Score (Max=20)	Visitor Experience Score (Max=40)	Total Score (Max=160 or 110)	Percent Score (see text)
Beech Mountain South Ridge Trail	109		M	No	35	35	12	32	114	71.25
Champlain East Face Trail	12		M	No	50	20	10	32	112	70.00
Beech Cliff Ladder Trail	106		M	No	40	30	10	32	112	70.00
Jordan Cliffs Trail	48		M	No	45	15	10	40	110	68.75
Stratheden Trail	24		M	Yes	40	35	10	24	109	68.13
Flying Mountain Trail	105		M	No	40	15	12	40	107	66.88
Great Pond Trail	118		M	No	45	10	12	40	107	66.88
A. Murray Young Path	25		M	No	45	15	10	36	106	66.25
Wonderland	198		M	No	25	35	14	32	106	66.25
Day Mountain Trail	37		M	No	25	35	14	32	106	66.25
Beehive Trail	7		M	No	45	10	10	40	105	65.63
Valley Trail	116		M	No	35	30	12	28	105	65.63
Gorge Path	28		M	No	45	10	10	40	105	65.63
Sargent Mountain South Ridge Trail	52		M	No	35	20	12	36	103	64.38
Pemetic West Cliff Trail	30		M	No	35	30	10	28	103	64.38
Gorham/Cadillac Cliffs Trail	5		M	No	35	25	10	32	102	63.75
Ocean Path	3		M	No	35	25	10	32	102	63.75
Beech Mountain Loop Trail	113		M	No	40	15	10	36	101	63.13
Penobscot Mountain Trail/Spring Trail	47		M	No	40	15	10	36	101	63.13
Great Head Trail	2		M	No	30	25	10	36	101	63.13
Canon Brook Trail	19		M	No	40	10	10	40	100	62.50
Triad Pass Trail	29		M	No	30	30	10	28	98	61.25
Mansell Mountain Trail	115		M	No	30	30	10	28	98	61.25
Razorback Trail	112		M	No	30	30	10	28	98	61.25
Bernard Mountain South Face Trail	111		M	No	30	25	10	32	97	60.63
Kebo Mountain Path/Dorr Mtn N&S	21		M	No	35	20	10	32	97	60.63
Maple Spring Trail	58		M	No	35	15	10	36	96	60.00
Jordan Pond Loop Trail	39		M	No	45	5	10	36	96	60.00
Jesup Path	14		M	No	35	10	18	32	95	59.38
Tarn Trail/Kane Path	17		M	No	45	20	10	20	95	59.38

Table 3. Trail Evaluation Scores Grouped by Trail Status for Abandoned (Trail Status=A in Column 3), Currently Maintained (Status=M), and Proposed New Trails (Status=N) Based on Cultural Resource, Natural Resource, Communities and Neighbors, and Visitor Experience Criteria

Trail Name	Trail ID Number	Trail Status 1999	Trail Proposal ⁵	Cultural Resource Score (Max=50)	Natural Resource Score (Max=50)	Communities and Neighbors Score (Max=20)	Visitor Experience Score (Max=40)	Total Score (Max=160 or 110)	Percent Score (see text)
Saint Sauveur Trail	102	M	No	30	30	10	24	94	58.75
Jordan Pond House to Stepping Stones	46	M	No	35	25	10	24	94	58.75
Jordan Stream Trail	65	M	No	40	15	10	28	93	58.13
Jordan Pond Nature Trail	45	M	No	35	20	10	28	93	58.13
Hadlock Brook Trail	57	M	No	35	20	10	28	93	58.13
Gorham Mountain Trail	4	M	No	35	10	10	36	91	56.88
Gilley Trail	125	M	No	25	40	10	16	91	56.88
Pemetic Mtn Trail/Southeast/East	31	M	No	35	10	10	36	91	56.88
Jordan Pond Carry	38	M	No	40	20	10	20	90	56.25
Great Notch Trail	122	M	No	25	30	10	24	89	55.63
Cadillac Mountain South Ridge Trail	26	M	No	35	10	12	32	89	55.63
Bear Brook Trail	10	M	No	30	15	12	32	89	55.63
Valley Peak Trail	104	M	No	30	15	12	32	89	55.63
Cadillac Mountain North Ridge Trail	34	M	No	35	15	10	28	88	55.00
Pond Trail	20	M	No	35	15	10	28	88	55.00
Amphitheatre Trail	56	M	No	30	20	10	28	88	55.00
Beech Cliff Loop Trail	114	M	No	25	25	10	28	88	55.00
North Bubble Trail	41	M	No	30	15	10	32	87	54.38
Acadia Mountain Trail	101	M	No	30	10	10	36	86	53.75
Sluiceway Trail	110	M	No	25	25	10	24	84	52.50
Norumbega, Lower - to goat trail	69	M	No	20	30	10	24	84	52.50
Norumbega Mountain Trail	60	M	No	30	15	10	28	83	51.88
Penobscot East Trail	50	M	No	25	20	10	28	83	51.88
Cadillac Mt S Ridge, Eagle Crag Loop	27	M	No	25	20	10	28	83	51.88
Beech Mountain West Ridge Trail	108	M	No	30	15	10	28	83	51.88
Sargent Mountain North Ridge Trail	53	M	No	25	20	10	28	83	51.88
Parkman Mountain Trail	59	M	No	25	20	10	28	83	51.88
Cold Brook Trail	117	M	No	30	20	12	20	82	51.25
Grandgent Trail	66	M	No	25	15	10	32	82	51.25
Sieur de Monts - Tarn	18	M	No	35	25	10	12	82	51.25

Table 3. Trail Evaluation Scores Grouped by Trail Status for Abandoned (Trail Status=A in Column 3), Currently Maintained (Status=M), and Proposed New Trails (Status=N) Based on Cultural Resource, Natural Resource, Communities and Neighbors, and Visitor Experience Criteria

Trail Name	Trail ID	Trail Number	Trail Status 1999	Trail Proposal ⁵	Cultural Resource Score (Max=50)	Natural Resource Score (Max=50)	Communities and Neighbors Score (Max=20)	Visitor Experience Score (Max=40)	Total Score (Max=160 or 110)	Percent Score (see text)
Western Mtn West Ridge Trail	123		M	No	20	20	10	32	82	51.25
Canada Cliffs Trail	107		M	Yes	25	30	10	16	81	50.63
Harbor Brook Trail	55		M	No	25	20	12	24	81	50.63
Deer Brook Trail	51		M	No	30	15	10	25	80	50.00
Cadillac Summit Loop Trail	33		M	No	25	5	10	40	80	50.00
Ledge Trail	103		M	No	20	30	10	20	80	50.00
Hemlock Trail	23		M	No	20	25	10	24	79	49.38
Cadillac-Dorr Trail	23		M	No	20	25	10	24	79	49.38
Giant Slide Trail	63		M	No	30	15	10	24	79	49.38
Jordan Cliffs-closed section	736		M	Yes	25	15	10	28	78	48.75
Lower Hadlock Pond, east side	511		M	No	25	15	10	28	78	48.75
South Bubble Trail	43		M	No	25	10	10	32	77	48.13
Hunter's Beach Trail	67		M	No	25	10	14	28	77	48.13
Ship Harbor Trail	127		M	No	10	20	14	32	76	47.50
Ledge Trail, South	121		M	No	20	30	10	16	76	47.50
Bubbles-Pemetic Trail	36		M	No	25	20	10	20	75	46.88
Eagle Lake Trail	42		M	No	30	15	10	20	75	46.88
Bowl Trail	6		M	No	25	15	10	24	74	46.25
Bald Peak Trail	62		M	No	20	20	10	24	74	46.25
Bar Island Trail	1		M	No	20	15	10	28	73	45.63
Western Mountain Trail	120		M	No	25	20	10	16	71	44.38
Lower Hadlock Trail,	502		M	No	25	10	12	24	71	44.38
Parkman to Gilmore	61		M	No	20	20	10	20	70	43.75
Upper Hadlock Trail,	501		M	No	30	10	10	20	70	43.75
Hunter's Brook Trail,	35		M	No	20	20	10	20	70	43.75
Beehive, West	8		M	No	20	10	10	28	68	42.50
Cadillac West Face Trail	32		M	No	20	10	10	28	68	42.50
Echo Lake Ledges	126		M	No	0	15	14	28	57	35.63
Jordan Pond Carry Spur	40		M	No	0	35	10	12	57	35.63
Sand Beach - Great Head Access	9		M	No	10	20	10	8	48	30.00

Table 3. Trail Evaluation Scores Grouped by Trail Status for Abandoned (Trail Status=A in Column 3), Currently Maintained (Status=M), and Proposed New Trails (Status=N) Based on Cultural Resource, Natural Resource, Communities and Neighbors, and Visitor Experience Criteria

Trail Name	Trail ID Number	Trail Status 1999	Trail Proposal ⁵	Cultural Resource Score (Max=50)	Natural Resource Score (Max=50)	Communities and Neighbors Score (Max=20)	Visitor Experience Score (Max=40)	Total Score (Max=160 or 110)	Percent Score (see text)
Proposed New Trails									
BWCG to Gorham Mtn Tr (incl 346)	709	N	Yes	0	40	10	32	82	74.55
SWCG to ocean (west side CG loops)	721	N	Yes	0	40	10	28	78	70.91
Handicap Access To Great Meadow (2)	739	N	Yes	25	30	18	36	109	68.13
Handicap Access to Great Meadow (1)	738	N	Yes	35	15	18	36	104	65.00
Duck Brook connector	714	N	Yes	0	40	16	12	68	61.82
Giant Slide reroute	712	N	Yes	0	30	14	24	68	61.82
Gatehouse/cemetery reroute	703	N	Yes	0	30	12	24	66	60.00
Bar Harbor to Eagle Lk Carr Rd	711	N	Yes	0	35	12	16	63	57.27
Bear Brk Tr to Schooner Hd Rd (328)	704	N	Yes	25	30	12	24	91	56.88
Seawall to SWH	723	N	Yes	0	30	12	20	62	56.36
Long Pond Trail to LP FR near pond	728	N	Yes	0	35	10	16	61	55.45
HCP accessibility on Cadillac	715	N	Yes	0	10	10	40	60	54.55
Beehive to Precipice low route (329)	706	N	Yes	0	25	10	24	59	53.64
Ski trail PLR to Eagle Lake CR	710	N	Yes	0	30	12	16	58	52.73
Great Head to Anemone Cave	707	N	Yes	0	15	10	32	57	51.82
Ship Harbor to Wonderland	718	N	Yes	0	15	10	32	57	51.82
Tremont School Nature Trail	737	N	Yes	0	5	18	32	55	50.00
W Mtn Rd to Marshall Brk Fire Rd	725	N	Yes	0	30	8	16	54	49.09
Seawall to Bass Harbor Light-inland	730	N	Yes	0	10	12	32	54	49.09
Big Rocks to Hio Rd	726	N	Yes	0	15	14	24	53	48.18
Bass Harbor Light to Ship Harbor	719	N	Yes	0	15	10	28	53	48.18
SW Picnic Area to Wonderland	722	N	Yes	0	15	10	28	53	48.18
Bubble Saddle/N.Bubble dir connection	708	N	Yes	0	35	10	8	53	48.18
A loop off Hio Rd (west side)	724	N	Yes	0	15	10	24	49	44.55
Hio Rd to Western Mountains	727	N	Yes	0	10	8	28	46	41.82
W Mtn Loop along Seal Cove Pond	729	N	Yes	0	10	10	24	44	40.00
Big Heath boardwalk	720	N	Yes	0	5	10	24	39	35.45

Table 4. Trail Evaluation Scores for Trail Proposals from Draft Trails Plan Comments, Grouped by Trail Status for Abandoned (Trail Status=A in Column 3), Currently Maintained (Status=M), and Proposed New Trails (Status=N) Based on Cultural Resource, Natural Resource, Communities and Neighbors, and Visitor Experience Criteria

Trail Name (comment number)	Trail ID Number	Trail Status 1999	Trail Proposal ⁴	Cultural Resource Score (Max=50)	Natural Resource Score (Max=50)	Communities and Neighbors Score (Max=20)	Visitor Experience Score (Max=40)	Total Score (Max=160 or 110)	Percent Score (see text)
East Side Schooner Head Road (103)		N	Yes	0	10	8	24	42	38.18
Bar Harbor to MDIHS (Millbrook) (58)		A/N	Yes	10	10	6	16	42	26.25
MDIHS to Town Hill (58)		N	Yes	0	20	18	24	62	56.36
Town Hill to Indian Point (Blagden)(58)		N	Yes	0	35	10	16	61	55.45
Hall Quarry to Acadia Mountain (58)		A	Yes	15	25	10	20	70	43.75
Tremont to SWH (58)		N	Yes	0	10	8	16	34	30.90
Town Hill to Somesville (58)		N	Yes	0	20	10	16	46	41.82
McFarland Hill (up and back) (22)		A/N	Yes	15	30	8	24	77	48.13
Valley Tr to Lurvey Sp Rd (in draft plan, A3)		A/N	No	20	40	14	20	94	58.75
Gorge Path to NR Cad (Toll House)(106)	318	A	Yes	40	20	16	24	100	62.50
Aunt Bettys Pond, Carr Rd to Sgt (106)	526	A	Yes	30	10	10	24	74	46.25
Chasm Brk, SWV Rd to Sgt (106)	525	A	Yes	30	10	10	28	78	48.75
Jordan Bluffs (106)	457	A	Yes	20	30	10	28	88	55.00

Suggested but already evaluated:

SWH to Park (already done via Valley Tr)

Lurvey Spr. Rd (connector supported in concept by park)

Bubble Pond ADA Path (terrain issues
Pond has carriage road already-no need)

APPENDIX 3: ACTIVITIES RELATED TO REHABILITATION, MAINTENANCE, AND MANAGING USE OF TRAILS

TRAIL REHABILITATION & NEW CONSTRUCTION (One-time)

- **Planning, Environmental and Cultural Compliance, Information Management, & Research**

Includes development of *Cultural Landscape Report Volume II* specifications, environmental permits, producing NEPA, NHPA, and other compliance documents, data management, research concerning trail history, research concerning methodologies for monitoring visitor use and resource condition, outreach and coordination with communities and partners for trails issues beyond park boundaries.

- **Labor, Materials, Equipment, & Training**

Includes labor, supplies, materials, and equipment for rehabilitation/construction work on trails, making & replacing signs and other trail markings, and professional training to improve skills and knowledge applicable to trail preservation and rehabilitation.

- **Natural and Cultural Resource Consulting**

Includes site-specific reviews for rare species and habitats, monitoring effects of rehabilitation on natural and historic resources, guidance for erosion control, beaver management, etc.

- **Site Restoration**

Includes site preparation, development & purchase of native plants/seeds for revegetation, installing plants and signs, planting seeds, watering, and weeding until disturbed sites are recovered following rehabilitation.

- **Education/Public Information⁶**

Includes development and construction of trailhead exhibits, publishing information regarding trail condition during rehabilitation work, cooperative work with publishers of trail information specifically related to rehabilitation, development of official trail name list, posting of information related to rehabilitation on park web page and in park newspapers.

- **Program Administration**

Includes supervision, purchasing, personnel management, budgeting, and data management.

TRAIL MAINTENANCE (Recurring)

- **Planning, Environmental and Cultural Compliance, & Information Management**

Includes preparation of site-specific permits, NEPA, NHPA and other compliance documents, data management, planning for future actions, mapping, documenting work and trail conditions, coordinating with communities and partners for trails issues beyond park boundaries.

- **Labor, Materials, Equipment, & Training**

Includes labor, supplies, materials, and equipment for maintenance of rehabilitated trails, signs, and trail markings, and professional training to improve skills and knowledge applicable to trail preservation and resource protection.

⁶Does not include museum featuring trail and carriage road system

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- **Resource Monitoring/Consulting**

Includes site-specific reviews for rare species and habitats, monitoring resource condition relative to trails, guidance for erosion control, beaver management, etc.

- **Site Restoration**

Includes site preparation, development/purchase of native plants/seeds for revegetation, installing plants and signs, planting seeds, watering, and weeding until disturbed sites are recovered following maintenance.

- **Administration**

Includes supervision, purchasing, personnel management, budgeting, and data management.

MANAGING VISITOR USE (RECURRING)

- **Education**

Includes Ridgerunner Program, annual review of privately-produced trails publications, revision and publication of NPS trails publications, web sites, and other public information, interpretive programs, Leave No Trace ethics training/education.

- **Enforcement**

Includes safety inspections/reporting, enforcement of NPS regulations to protect resources and visitors, and search and rescue related to trail use.

- **Visitor Use & Visitor Experience Monitoring**

Includes recurrent monitoring of visitor use levels, hiker satisfaction.

- * **Administration**

Includes supervision, purchasing, personnel management, budgeting, and data management.

APPENDIX 4: ESTIMATED COSTS OF IMPLEMENTING PLAN (2002 DOLLARS, NOT ADJUSTED FOR INFLATION)

The Hiking Trails Planning Committee has attempted to provide a rough estimate of the costs of fully implementing this Hiking Trails Management Plan. These costs include the one-time costs of trails rehabilitation, and the annual, recurring costs of maintaining trails and managing trail use.

Implementing this plan imposes one time and annual costs on all park divisions to perform rehabilitation, maintenance, visitor management, education, visitor and resource protection, and administration. Table 5 provides one time costs and Table 6 outlines annual costs following rehabilitation (some ten years ahead).

These projections are made, and should be understood and interpreted with the following caveats:

1. Costs are estimated in 2002 dollars. However, at the end of Table 6 (Annual Costs) we apply a 1.04 percent inflation factor over ten years to the total annual cost to provide an estimate of the costs in 2012. It would have been difficult to apply this inflation factor to the one time costs, even though they are spread out over ten years.
2. Some estimates were made through relatively detailed calculations, while others were estimated from professional experience.
3. Administrative costs were estimated at 5% of all other costs.
4. Park staff will probably absorb many of these actions as an accretion of duties.
5. The Acadia Trails Forever Program will cover some of the costs of trails rehabilitation, management, and maintenance. Many actions prescribed in this plan will require additional sources of funding.
6. Additional information about how these estimations were made can be found in park files.

Table 5. Estimated Non-Recurring Costs of Implementing the Hiking Trails Management Plan (in 2002 dollars)

Activity	Amount	Subtotal
<i>Planning and Research</i>		
• Cultural Landscape Report V1	\$58,750	
• Cultural Landscape Report V2	\$387,500	
• National Register Nomination	\$32,500	
• Research Trails History, IAH and Schoodic, Develop Treatment Plans and Nominations	\$100,000	
• Research Methodologies for Monitoring Trail Conditions and Visitor Experiences (Visitor Experience/Resource Protection Process)	\$247,500	
• Work/Consult on Connector Trails with Community Groups	\$47,500	
Subtotal-Planning and Research		\$873,750
<i>Trail Rehabilitation / New Construction</i>		
• Labor, Materials, Equipment, and Training (begun in 1999)	\$10,000,000	
• Natural Resource Compliance, Consulting, and Management	\$95,000	
• Cultural Resource Compliance (in support of rehabilitation)	\$12,500	
• Trails Database Management and Documentation		
• Worksite Restoration	\$82,000	
• Contract trails work/storage space	\$500,000	
Subtotal-Trail Rehabilitation / New Construction		\$10,689,500
<i>Education/Public Information</i>		
• Update maps/brochures	\$20,000	
• Review Guidebooks, Maps, etc	\$42,500	
• Publicize trails plan, work projects	\$7,500	
• Interpret trails rehab	\$12,500	
• Develop trailhead exhibits	\$44,300	
Subtotal-Education/Information		\$126,800
<i>Program Administration</i>		\$584,503
Total One Time Trails Plan Costs		\$12,274,553

Table 6. Estimated Annual Recurring Costs of Implementing the Hiking Trails Management Plan (in 2002 dollars)

Activity	Cost/Year	Subtotal
<i>Trail Maintenance</i>		
• Labor, materials, equipment, training, database management and documentation, some cyclic rehab	\$351,000	
• Acadia Youth Conservation Corps Program (AYCC)	\$55,000	
• Ridgerunner program	\$10,000	
• Natural Resource Compliance, Consulting, and Monitoring	\$2,500	
• Cultural Resource Compliance and Consulting	\$500	
• Monitoring Trail Conditions (Natural Resources-erosion, plant cover etc.)	\$3,000	
• Worksite restoration	\$6,000	
Subtotal-Trail Maintenance		\$428,000
<i>Education</i>		
• Ridgerunner program	\$10,000	
• Leave No Trace Ethics Training, Outreach, Publications, Signs	\$5,000	
• Review of Guidebooks etc.	\$3,000	
• Interpret Trails History and Rehab	\$5,000	
Subtotal-Education		\$23,000
<i>Enforcement</i>		
• Patrol, Search and Rescue, Emergency Medical Services, Fire	\$32,000	
Subtotal-Enforcement		\$32,000
<i>Visitor Management</i>		
• Visitor Use/Visitor Experience Monitoring	\$9,000	
Subtotal-Visitor Management		\$9,000
<i>Planning</i>		
• Continue Village Connector Trails	\$1,250	
• Work with Communities to Protect Viewsheds	\$2,500	
Subtotal-Planning		\$3,750
<i>Program Administration</i>		\$25,000
Total Annual Recurring Costs		\$520,750



Canon Brook Trail, rocky gorge (Acadia NP Archives).



As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

