

# State-Designated Wilderness Programs in the United States

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## Introduction

While the 1964 Wilderness Act (TWA) in the United States pertains only to lands in federal ownership, many states have taken legal action to preserve state-owned lands with wilderness qualities (Cutler 1971; Trumbly and Gray 1984). State-designated wilderness areas add to the geographic and ecological diversity of areas given wilderness protection in the United States. In particular, Midwestern and Eastern states with limited federal lands can extend wilderness protection and stewardship to state lands and offer primitive recreation opportunities that might otherwise not be available.

A national survey in 1983 examined the establishment of state-level wilderness programs (Stankey 1984) and used five criteria to determine if a state had a state designated wilderness program: (1) statutory or administrative recognition of the program, (2) provision for preserving natural qualities and for offering primitive recreational opportunities, (3) prohibition of resource development activities, (4) establishment of area size, either as specific acreage or qualitative description, and (5) recognition of other values, such as features of historic or scientific interest, considered consistent with management as wilderness. Nine states were found to have wilderness preservation programs meeting these criteria in 1983 (Stankey 1984). In addition, three states had designated areas for wilderness protection and purposes, but did not meet all the criteria. Most states reportedly modeled their wilderness designation process on TWA of 1964. However, some important differences exist, such as in Alaska, where wilderness is either designated by the legislature or by the park administration that uses a zoning designation in units of the state park system. In



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California, the state legislature can designate wilderness, or proposals can be brought before the California Park and Recreation Commission (see Figure 1).

Most states reported a definition of wilderness similar to the 1964 U.S. federal definition. The most common variation was related to the minimum size of a wilderness area and reflects the typically smaller areas found in state ownership, such as the minimum of 1,000 acres (405 ha.) in Missouri. California requires 5,000 acres (2,024 ha.), the same as TWA; and New York recommends a larger minimum area of 10,000 acres (4,049 ha.). In 1983, there were reportedly 48 areas and 1.7 million acres (688,259 ha.) designated in the nine state programs (Stankey 1984).

The states typically accepted more evidence of previous human impacts in candidate wilderness areas compared to TWA (Stankey 1984). In Minnesota, for example,



**Figure 1—The Anza-Borrego Desert State Park in Southern California has 386,000 acres (156,275 ha.) of designated state wilderness (2/3 of the park) in 12 subunits. Shown above is a Palm Oasis in wilderness in the Borrego Palm Canyon wilderness unit of the park. Photo by Marilyn Riley.**

state wilderness must appear to have been primarily affected by the forces of nature, with the evidence of humans being substantially unnoticeable or where the evidence of humans could be eliminated by restoration. Similarly, in Alaska, resource modification

within a wilderness zone of a state park was permitted to restore the area to a natural condition. The California legislation provides for the admission of areas where previous impacts had been already remedied or substantially restored to a near natural appearance.

## California

The California legislature established the California Wilderness Preservation System (CWPS) in 1974. Three basic criteria govern admission to the system: (1) the land must be state owned; (2) the area must remain in, or have been returned to, or have substantially reestablished its principal, natural character, and influence; and (3) the area must be of sufficient size to make its preservation practicable. The 1974 legislation created two wilderness areas: the Santa Rosa Mountains Wilderness Area of about 87,000 acres (35,223 ha.) and the 10,000-acre (4,049 ha.) Mount San Jacinto Wilderness Area abutting the federally designated San Jacinto Wilderness. The CWPS is small compared to the federal wilderness acreage in the state, with 466,320 acres (188,794 ha.) in state ownership by 2002 as compared to 14 million acres (5.7 million ha.) administered by federal agencies in 2000. The types of wilderness areas in the California state system are an important complement to those in the National Wilderness Preservation System. Much of the land in the state system is in the Anza-Borrego Desert State Park; other areas are along the coastline and in mountain ranges along the coast. The CWPS adds to the broad diversity of ecosystems under wilderness protection.

By 1994 eight of the nine state wilderness programs studied by Stankey in 1983 were still operating (Peterson 1996). Florida had its wilderness legislation repealed when it came up for reauthorization in 1989, and the 10 wilderness areas there were transferred to other state land management programs. In 1994, 58 areas and 3.1 million acres (1.3 million ha.) were established in the eight remaining state programs.

## State Survey on Wilderness Programs in 2002

We contacted the nine states identified by Stankey (1984) as having a state-designated wilderness system. Through a combination of telephone interviews and mail surveys during 2002, we documented changes in number of areas and acreages, and asked about the types of techniques used to manage visitor use and perceived threats to wilderness resources and values. Additionally, we contacted land management agencies in the other states to determine if recent legislation had created new state wilderness systems or designated individual wilderness areas.

In 2002, there were seven state wilderness programs still operating from the original nine studied by Stankey in 1983 (see Table 1). As noted previously, Florida no longer had a wilderness program and Minnesota was no longer listed in 2002 because there were no state-designated wilderness areas. Although previous studies reported that Minnesota state-owned land located within the federal Boundary Waters Canoe Area was a state wilderness, recent interviews and contacts with authorities in Minnesota indicated that it was never so designated by the state legislature.

The number of states with wilderness programs had declined since 1983, but

the total number of areas had increased from 48 to 74 areas and the total acreage from 1.7 million (688,259 ha.) to 2.7 million acres (1.1 million ha.) (see Table 1). Peterson had reported in 1994 that there were 3.1 million acres (1.3 million ha.) in eight state wilderness systems; however, reconciling the discrepancies between the number of areas and acreage in each state system between the 1983, 1994, and 2002 studies was not possible since numerous administrative and statutory adjustments and corrections had been made to the number and size of areas during that 19-year period. The most important observation was that the seven remaining state wilderness programs had made important progress from 1983 through 2002.

Most state designated wilderness areas are small in size with one-half the areas less than 5,000 acres (2,024 ha.) (see Table 2). About 96% of the total acreage in 2002 was in the states of Alaska, California, and New York; these three states reported the largest size areas and averaged over 86,000 acres (34,818 ha.) per area. The other four states included mostly the smaller size wilderness areas, and these averaged just over 2,700 acres (1,093 ha.) per area.

Managers were asked about the types of visitor management regulations used in their state wilderness areas in 2002. The three most commonly used restrictions were designating campsites, limiting group size, and limiting the number of people in a management area (see Table 3). State responses indicate that these restrictions are used, but not necessarily across all areas within any state. These results are nearly identical to those found by Peterson (1996) in his 1994 study.

Managers were asked to rate the severity in 2002 of 17 potential threats to state wilderness resources and values, as outlined by Hendee and Dawson (2001). All seven states reported that

**Table 1—The Characteristics of State Wilderness Programs in 2002, Based on Nine States Identified in 1983 (Stankey 1984) As Having a Wilderness Program.**

State	Year Established	Wilderness Programs in 2002		
		Number of Areas	Total Acreage (hectares)	Level of Protection
Alaska	1970	3	922,700 (373,563)	administrative
California	1974	10	466,320 (188,794)	administrative and statutory
Florida	1970 (removed in 1989)	0	0	statutory
Maryland	1971	27	39,412 (15,956)	statutory
Michigan	1972	1	40,808 (16,521)	statutory
Minnesota	1975	0	0	statutory
Missouri	1977	11	22,993 (9,309)	administrative
New York	1972	21	1,170,312 (473,811)	administrative
Wisconsin	1973	1	6,358 (2,574)	administrative
<b>TOTAL</b>		<b>74</b>	<b>2,668,903</b> <b>(1,080,528)</b>	

**Table 2—Size of Wilderness Areas in the Seven States Identified As Having Wilderness Programs in 2002.**

Wilderness Size in Acres	Number of Areas
Less than 1,000	11
1,000—1,999	16
2,000—4,999	10
5,000—9,999	8
10,000—99,999	20
100,000—1,000,000	9
<b>TOTAL</b>	<b>74</b>

four potential threats were a slight to severe problem in their state: fragmentation and isolation of wilderness as ecological islands, increasing commer-

cial and public recreation visits (see Figure 2), motorized and mechanical equipment trespass and legal use, and aircraft noise (see Table 4). Another



**Figure 2—The High Peaks Wilderness in New York’s Adirondack Mountains is the largest area in this state system at 226,435 acres (91,674 ha.), and has the greatest recreation use per year with 140,000 visits. Photo by Chad Dawson.**

eight potential threats were listed by four to six of the seven states as a slight to severe problem. Since management of most state wilderness areas is decentralized, many state-level managers do not get involved in day-to-day operations of each area. Thus, their responses were based on their general perceptions of statewide threats to wilderness and they reported a wide variety of severity ratings. Overall, the state-level managers expressed concern about numer-

ous threats to wilderness (see Table 4) that are similar to what Peterson (1996) reported in his assessment of 16 wilderness problems in 1994.

### Individual State Wilderness and Wild Areas

Of the several states we contacted that did not have a wilderness program, some did have isolated wilderness areas. While some of these areas include the word *wilderness* in their name, they

were established and operated more like natural areas (e.g., protecting a very specific natural location and related species) for interpretation and recreation opportunities, rather than as wilderness areas (e.g., providing solitude and primitive recreation opportunities). Examples include the Bridgestone/Firestone Centennial Wilderness in Tennessee, which was established in 1998 and is managed by the Tennessee Wildlife Resources Agency as a 10,000 acre (4,049 ha) preserve under protective restrictions against development and motorized vehicles and allows “low impact” recreation. The Nature Conservancy’s Disney Wilderness Preserve was established in 1992 as a 12,000-acre (4,858 ha.) preserve managed for environmental education, interpretation of native flora, and fauna protection and restoration in wetland and upland areas of Florida. The Alakai Wilderness Area on the Island of Kauai in Hawaii is an approximately 9,000-acre (3,644 ha.) natural area to protect a rain forest wetland and is managed by the Division of Forestry and Wildlife. The 10,000 acre (4,049 ha.) Mountain Bridge Wilderness is managed within South Carolina’s state park system.

Some of the best-known examples of state areas managed more like state and federal wilderness program areas are in Maine. Baxter State Park is a 202,064-acre (81,807 ha.) area managed by the Baxter State Park Authority to ensure that the Park “shall forever be kept and remain in the natural wild state” and to provide recreational opportunities to the public. The 92-mile long Allagash Wilderness Waterway in Maine was established in 1966 and then designated in 1970 as a state-administered river under the federal Wild and Scenic Rivers program. The Waterway includes

**Table 3—Visitor Management Regulations Employed in Some Areas of the Seven States Identified As Having Wilderness Programs in 2002.**

Visitor Regulations	Number of States Using (n=7)
Designated campsites	6
Group size limits	5
Limit number of people in the area	3
Length of stay limits	2
Require camping reservations	2
Trailhead quotas on use	1
Require travel permits that specify destination for each day	1

a “working forest” area allowing continued forest management and agricultural use.

Other areas managed for wilderness characteristics are included in state forestry programs. Examples include the “wild” forest designations used in Pennsylvania and New York to manage lands that have numerous wilderness characteristics, but that may allow such human intrusion as roads and motorized vehicle access.

We were unable to define and categorize all the different natural and wild area programs identified in our survey of the 50 states because of the great variety of program goals, protection approaches, and scale of operation, from comprehensive programs to individual and isolated protection efforts. We were able to locate one secondary data source that systematically documented one important and structured program—state natural areas programs within state park systems. However, there are many natural area programs that are not located in state parks, such as Minnesota’s Scientific and Natural Areas Program that was created by the 1969 Minnesota Legislature. Its over 130 natural areas are administered by the Minnesota Department of Natural Resources. Similarly, there are private organizations such as The Nature Conservancy that own and manage natural areas in many states.

McLean et al. (2000), in a report on state park systems, noted that State Natural Areas (SNAs) increased 50% in acreage from 803,133 acres (325,155 ha.) in 1990 to 1,235,312 acres (500,126 ha.) in 1999. Thirty-one states reported SNAs in 1999, and the total acreage grew at a faster rate than any other type of park-administered area during that time period. SNAs include natural areas, protected areas, preserves, wild areas, and some wilderness areas. These SNAs are created to

<b>Wilderness Threats</b>	<b>Number of States Reporting (n = 7)</b>
Fragmentation and isolation of wilderness as ecological islands	7
Increasing commercial and public recreation visits	7
Motorized and mechanical equipment trespass and legal use	7
Aircraft noise	7
Exotic and nonnative species	6
Adjacent land management and use	6
Inholdings of private or public lands	6
Wildland fire suppression	6
Urbanization and encroaching development	6
Polluted air	5
Lack of political and financial support for protection and management	5
Loss of threatened and endangered species	4
Excessive administrative access, facilities, and intrusive management	3
Water storage facilities and related dams and reservoirs in wilderness	2
Advanced technology	2
Mining and extraction from established claims	2
Livestock grazing	0



**Figure 3—The Siamese Ponds Wilderness in New York’s Adirondack Mountains adjoins the cabin community where Howard Zahniser spent time writing and revising what became The Wilderness Act of 1964. Photo by Chad Dawson.**

## New York

The wilderness preservation movement in New York State began in 1885 with legislation to create the Forest Preserve lands. The citizens of the state then passed a referendum in 1894 to add constitutional protection to the Forest Preserve lands set aside within the Adirondack and Catskill Mountains. The most often quoted portion of the legislation is Article XIV, which, in part, states: "The lands of the state, now owned or hereafter acquired, constituting the forest preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged, or be taken by any corporation, public or private, nor shall the timber thereon be sold, removed or destroyed." The state-owned Forest Preserve lands within the Adirondack and Catskill forests, in combination with extensive private land holdings, were established as the Adirondack and Catskill Parks. The specific designation of some of the Adirondack Forest Preserve lands as "wilderness" was first proposed by the state legislature in 1960 and finally adopted in 1972. The New York State definition of wilderness is nearly identical to the federal wilderness definition, except New York State requires a minimum size of 10,000 acres (4,049 ha.). Today, there are 17 wilderness management units in the Adirondack Forest Preserve, totaling more than one million acres (433,811 ha.). The latest addition was the 20,500-acre (8,300 ha.) Whitney Wilderness area in 1999. In 1985, four wilderness units in the Catskill Forest Preserve, totaling more than 100,000 acres (40,486 ha.), were created by state agency action. Overall, there were 1,170,312 acres (473,811 ha.) of wilderness in state ownership by 2002, as compared to the one 1,363 acre (522 ha.) federal wilderness in the state administered by the National Park Service.

protect significant natural resources and features. SNAs are most often fairly small areas of up to several hundred acres. Of the 478 SNAs in 2002, the majority were located in 10 states: Illinois (94), Colorado (71), Connecticut (43), Vermont (33), Oregon (29), Washington (23), Florida (22), California (16), Maine (16), and Maryland (16) (McLean 2002).

### Conclusion

Wilderness preservation through state programs represents an important complementary activity to federal efforts in the National Wilderness Preservation System. The states have adopted and modified federal legislation to define wilderness and set man-

agement guidelines that apply to their own situations (see Figure 3). The total number of state wilderness areas increased 54% from 48 to 74 areas and increased 57% from 1.7 million (688,259 ha.) to 2.7 million acres (1.3 million ha.) from 1983 to 2002, even though the number of states with wilderness programs declined from nine to seven. In addition, many states are actively engaged in other types of programs, designed to protect the quality of the natural resources. The management of many state-level wilderness and natural area preservation programs is decentralized, and specific information about the areas and their management is difficult to collect. Given the tremendous diversity of program

purposes, definitions, names, sizes, management approaches, and administration, there is a need for additional research on state-level wilderness and natural area preservation to better understand more specifically what problems and threats the areas and programs are facing. Most importantly, additional research could provide information about successful management approaches to mitigate and manage these numerous problems and threats. 

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