October 1976

Sierra Club Bulletin

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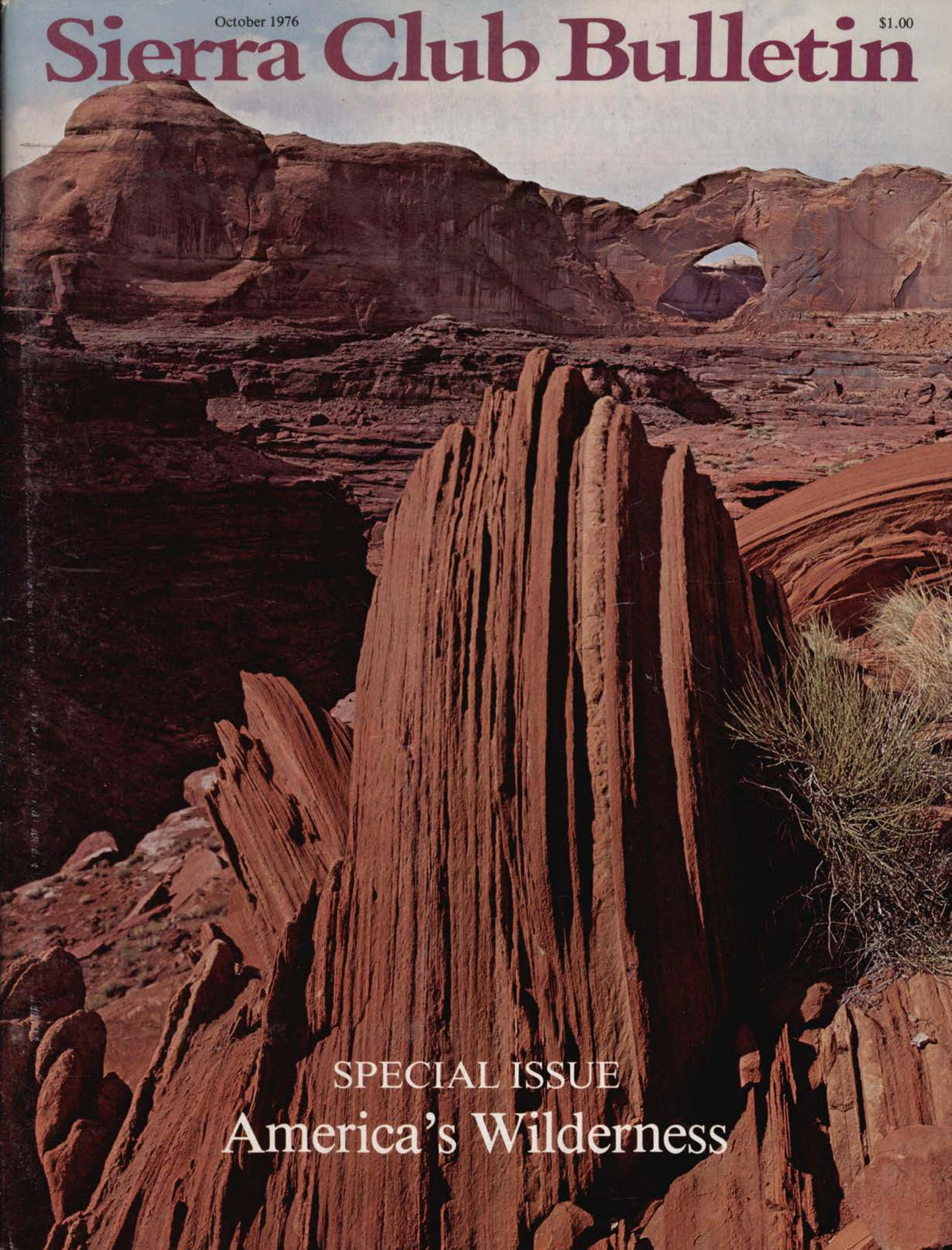

SPECIAL ISSUE

America's Wilderness

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Sierra Club Bulletin

OCTOBER 1976 VOLUME 61/NUMBER 9

SPECIAL ISSUE
AMERICA'S WILDERNESS

Cover: *Wilderness in fact, though not in law, the Escalante of southern Utah is but one of hundreds of areas under various federal jurisdictions deserving but as yet without protection under the National Wilderness Preservation System. Photograph by Philip Hyde.*

The **Bulletin** very much appreciates the cooperation and encouragement by the Sierra Club's National Wilderness Committee in this special effort. *The Editor.*

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The National Wilderness Preservation System

TED SNYDER

Russell Lamb

Mt. Hood Wilderness, Oregon.

The Wilderness Act was signed into law on September 3, 1964, creating the National Wilderness Preservation System. A complete listing, through July 1976, of areas designated as Wilderness is contained in Table 1.*

Wilderness Areas can be established only on federal lands. Although a number of agencies manage these lands, the Wilderness Act pertains to only three of them: the United States Forest Service (Department of Agriculture), the National Park Service (Department of the Interior) and the Fish and Wildlife Service (Department of the Interior).

The formal beginnings of wilderness protection in this country occurred in 1924 with the designation of the Gila Wilderness Area. The term "wilderness area" was then only an administrative designation, for then no wilderness act existed. In 1929, the Forest Service extended similar protection to other areas through adoption of uniform regulations establishing "primitive areas" in the national forests.

In 1939, the regulations were revised, and new categories of "wilderness" and "wild" were added. Areas designated as "wilderness" had to contain more than 100,000 acres; wild areas, between 5,000 and 100,000 acres. The existing list of primitive areas was reviewed, and a number of them were placed in the new categories, along with still other areas that formerly had carried no special designation. Primitive areas not thus redesignated kept their former status. New areas were added from time to time to the "wilderness" and "wild" categories, a practice that continued until 1964, when the Wilderness Act was passed.

Under the act, national-forest "wilderness" and "wild" areas automatically became Wilderness Areas in the National Wilderness Preservation System. So too did the Boundary Waters Canoe Area in northern Minnesota. The first fifty-four administrative wilderness areas became part of the new wilderness system on the day President Johnson signed the act.

The act also required that the remaining thirty-four Forest Service primitive areas be studied over the following ten years and that recommendations on them be submitted to Congress. By the end of 1974, sixteen primitive areas had been added to the National Wilderness Preservation System. The remaining eighteen primitive areas were submitted to Congress, with presidential recommendations, by the end of the ten-year

Ted Snyder is a member of the Sierra Club Board of Directors and National Wilderness Committee.

*I have drawn heavily on the statistical tables and information set forth in the Winter 1974-75 issue of *The Living Wilderness*, published by The Wilderness Society, Washington, D.C. Permission to use this material is gratefully acknowledged.

review period. As of July 1976, Congress had acted on two more primitive areas, with action still pending on the remaining sixteen.

The agencies of the Interior Department, unlike the Forest Service, had no pre-existing wilderness systems, though the national parks in some respects amounted to the same thing. But the Wilderness Act went even further by providing for formally designated Wilderness Areas within the national parks and wildlife refuges. No areas were automatically classified as Wilderness. Instead, the act directed the National Park Service and the Fish and Wildlife Service to study and review, over a period of ten years, all roadless areas of 5,000 acres or more within all national parks, monuments, and other units of the park system; within all wildlife refuges and game ranges; and all islands, regardless of size, within all wildlife refuges and game ranges. The results of the studies were to be submitted to Congress, with a presidential recommendation.

Because the Interior Department's studies took longer than expected, few national-park Wilderness Areas have been formally designated. But virtually all the reviews are now complete, and Congress has before it for consideration as additions to the National Wilderness Preservation System approximately one hundred areas from the national parks and wildlife refuges.

Where will future Wilderness Areas come from? The first and most obvious source is from the areas reviewed under the requirements of the 1964 Wilderness Act. The rush by the agencies to complete their reviews by the tenth anniversary of the Wilderness Act resulted in a mass of Wilderness proposals all at one time. Congress is now working through them. Completion of this work will mark the end of the first increment in the implementation of the Wilderness Act. Forest Service lands awaiting action in this category total just over three million acres, using agency figures. Park Service and wildlife-refuge lands awaiting action total more than nine million acres, again using agency figures.

Congress did not mean to stop there, however. A number of areas in the national forests have been identified by citizens, and Congress has agreed by adding many of them to the wilderness system. The sixteen Wilderness Areas in the eastern United States added at

Wilderness Areas TABLE 1

1964	Agency[1]	State	Acreage[2]
1. Gila	FS	New Mexico	438,626
2. Boundary Waters Canoe Area	FS	Minnesota	1,034,852
3. Mountain Lakes	FS	Oregon	23,071
4. Eagle Cap	FS	Oregon	220,280
5. Bridger	FS	Wyoming	383,300
6. Mount Hood	FS	Oregon	14,160
7. Goat Rocks	FS	Washington	82,680
8. Marble Mountain	FS	California	214,543
9. Yolla Bolly-Middle Eel	FS	California	111,091
10. South Warner	FS	California	69,547
11. Thousand Lakes	FS	California	16,335
12. Cucamonga	FS	California	9,022
13. San Gorgonio	FS	California	34,718
14. Hoover	FS	California	42,800
15. San Jacinto	FS	California	21,955
16. Caribou	FS	California	19,080
17. Minarets	FS	California	109,559
18. John Muir	FS	California	504,263
19. San Pedro Parks	FS	New Mexico	41,132
20. Bob Marshall	FS	Montana	950,000
21. Mount Zirkel	FS	Colorado	72,180
22. West Elk	FS	Colorado	62,000
23. Rawah	FS	Colorado	26,797
24. Galiuro	FS	Arizona	55,000
25. North Absaroka	FS	Wyoming	359,700
26. South Absaroka (Washakie)	FS	Wyoming	506,300
27. La Garita	FS	Colorado	49,000
28. Chiricahua	FS	Arizona	18,000
29. Sierra Ancha	FS	Arizona	20,850
30. Maroon Bells-Snowmass	FS	Colorado	66,280
31. White Mountain	FS	New Mexico	28,230
32. Pecos	FS	New Mexico	165,000
33. Teton	FS	Wyoming	563,500
34. Cabinet Mountains	FS	Montana	94,272
35. Selway-Bitterroot	FS	Idaho, Montana	1,243,659
36. Three Sisters	FS	Oregon	196,708
37. Anaconda-Pintlar	FS	Montana	159,086
38. Mazatzal	FS	Arizona	205,346
39. Superstition	FS	Arizona	124,140
40. Strawberry Mountain	FS	Oregon	33,653
41. Mount Adams	FS	Washington	42,411
42. Gearhart Mountain	FS	Oregon	18,709
43. Kalmiopsis	FS	Oregon	78,850
44. Gates of the Mountains	FS	Montana	28,562
45. Linville Gorge	FS	North Carolina	7,655
46. Diamond Peak	FS	Oregon	35,440
47. Mount Washington	FS	Oregon	46,655
48. Jarbridge	FS	Nevada	64,827
49. Great Gulf	FS	New Hampshire	5,400
50. Wheeler Peak	FS	New Mexico	6,051
51. Glacier Peak	FS	Washington	458,505
52. Dome Land	FS	California	62,561
53. Mokelumne	FS	California	50,400
54. Shining Rock	FS	North Carolina	13,400
			9,310,141
1965/1966/1967			
None			
1968			
55. San Rafael	FS	California	143,000
56. San Gabriel	FS	California	36,000
57. Great Swamp	FWS	New Jersey	3,750
58. Pasayten	FS	Washington	500,000
59. Mount Jefferson	FS	Oregon	100,000
51. Glacier Peak Addition	FS	Washington	10,000[3]
			792,750
1969			
60. Ventana	FS	California	98,000
61. Desolation	FS	California	63,500
			161,500
1970			
62. Bering Sea	FWS	Alaska	41,113
63. Bogoslof	FWS	Alaska	390
64. Tuxedni	FWS	Alaska	6,402
65. St. Lazaria	FWS	Alaska	62
66. Hazy Islands	FWS	Alaska	42
67. Forrester Island	FWS	Alaska	2,630
68. Three Arch Rocks	FWS	Oregon	17
69. Oregon Islands	FWS	Oregon	21
70. Washington Islands	FWS	Washington	179
71. Salt Creek	FWS	New Mexico	8,500
72. Island Bay	FWS	Florida	20
73. Passage Key	FWS	Florida	20
74. Wichita Mountains	FWS	Oklahoma	8,900
75. Seney	FWS	Michigan	25,150

the end of 1974 were principally citizen-sponsored units. Citizens will continue to identify and wage campaigns for other such areas.

The United States Forest Service, in 1973, announced the results of a survey it had made of all the national forests to identify roadless areas of Wilderness potential. The Forest Service inventory led to the promulgation of a list of areas to be studied for Wilderness designation. The list included all the remaining primitive areas, which had not been submitted to Congress. The great majority of the 274 areas identified, however, had not been classified previously. The areas on the list became known as the "new wilderness study areas," all of which are now being reviewed in the same manner as the primitive areas were. Several of these "new" areas have already been added to the Wilderness System by Congress.

Most conservationists feel that the "new wilderness study areas" list was assembled too hastily and that many qualified areas were either overlooked or eliminated for inadequate reasons. We may expect citizen Wilderness proposals on these to be presented regularly to Congress.

Over the years, Congress itself has designated a number of areas to be studied for Wilderness potential. Many of these studies are now under way, and all of these areas eventually will be studied. After the studies are completed, congressional action is likely to result in substantial additions to the Wilderness System.

On Department of Interior lands, Wilderness reviews have been called for on a number of park and wildlife-refuge units that have been established since 1964.

In Alaska, very substantial acreages of de facto wilderness remain to be designated. The process has been slowed by the federal government's decision to allow the native peoples to complete their land selections first.

The major federal land-managing agency not mentioned in the 1964 Wilderness Act is the Bureau of Land Management (BLM). The lands under its jurisdiction are all open to public use, but so far they remain unaffected by the provisions of the Wilderness Act. Without question, BLM lands do contain many thousands of acres fully qualified for addition to the National Wilderness Preservation System.

SCB

76.	Huron Islands	FWS	Michigan	147
77.	Michigan Islands	FWS	Michigan	12
78.	Wisconsin Islands	FWS	Wisconsin	29
79.	Moosehorn	FWS	Maine	2,782
80.	Pelican Island	FWS	Florida	3
81.	Monomoy	FWS	Massachusetts	2,340
82.	Craters of the Moon	NPS	Idaho	43,243
83.	Petrified Forest	NPS	Arizona	50,260
84.	Mount Baldy	FS	Arizona	7,000
				199,262
	1971			
	None.			
	1972			
85.	Pine Mountain	FS	Arizona	19,500
86.	Sycamore Canyon	FS	Arizona	48,500
87.	Cedar Keys	FWS	Florida	375
88.	Scapegoat	FS	Montana	240,000
89.	Sawtooth	FS	Idaho	216,383
90.	Lava Beds	NPS	California	28,460
91.	Lassen Volcanic	NPS	California	78,982
4.	Eagle Cap Addition	FS	Oregon	72,420
26.	Stratified (Washakie)	FS	Wyoming	208,000
				912,620
	1973			
	None.			
	1974			
92.	Okefenokee	FWS	Georgia	343,850
93.	Farallon	FWS	California	141
94.	Sipsey	FS	Alabama	12,000
95.	Caney Creek	FS	Arkansas	14,433
96.	Upper Buffalo	FS	Arkansas	10,590
97.	Bradwell Bay	FS	Florida	22,000
98.	Beaver Creek	FS	Kentucky	5,500
99.	Presidential Range-Dry River	FS	New Hampshire	20,380
100.	Joyce Kilmer-Slickrock	FS	North Carolina, Tennessee	15,000
101.	Ellicott Rock	FS	North Carolina, South Carolina, Georgia	3,600
102.	Gee Creek	FS	Tennessee	2,570
103.	Bristol Cliffs	FS	Vermont	6,500
104.	Lye Brook	FS	Vermont	14,300
105.	James River Face	FS	Virginia	8,800
106.	Dolly Sods	FS	West Virginia	10,215
107.	Otter Creek	FS	West Virginia	20,000
108.	Rainbow Lake	FS	Wisconsin	6,600
109.	Cohutta	FS	Georgia, Tennessee	34,500
110.	Chamisso	FWS	Alaska	455
111.	Florida Keys	FWS	Florida	4,740
112.	St. Marks	FWS	Florida	17,746
113.	Blackbeard Island	FWS	Georgia	3,000
114.	Wolf Island	FWS	Georgia	5,126
115.	Breton	FWS	Louisiana	5,000
116.	Brigantine	FWS	New Jersey	6,603
117.	Bosque del Apache	FWS	New Mexico	30,850
118.	Chase Lake	FWS	North Dakota	4,155
119.	Lostwood	FWS	North Dakota	5,577
120.	West Sister Island	FWS	Ohio	85
121.	Cape Romain	FWS	South Carolina	28,000
122.	Agua Tibia	FS	California	16,971
123.	Emigrant	FS	Colorado	106,910
124.	Weminuche	FS	Colorado	405,031
125.	Mission Mountains	FS	Montana	75,588
79.	Moosehorn (Baring Unit)	FWS	Maine	4,719
				1,271,535
	1975			
126.	Flat Tops	FS	Colorado	235,230
	1976 *(First four months only)*			
127.	Hells Canyon	FS	Oregon, Idaho	193,840
128.	Eagles Nest	FS	Colorado	133,910
129.	Alpine Lakes	FS	Washington	391,558

1. The following abbreviations are used: FS: United States Forest Service; FWS: Fish and Wildlife Service; NPS: National Park Service.

2. Acreage figures are taken from the joint annual reports on The Status of the National Wilderness Preservation System and from bills as enacted. They do not reflect adjustments made after the final boundaries are drawn and the official maps filed. In any event, the variances are minor.

3. In some cases, original acreage was increased at a later date. These new areas have here been listed chronologically, but the numbering indicates the original acreage which has been increased.

TABLE 2

Year	Forest Service	Fish and Wildlife Service	National Park Service	Total
1964-76	12,838,470	562,931	200,945	13,602,346

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And desert winter
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Photo: Earl Petroff

The RARE Opportunity

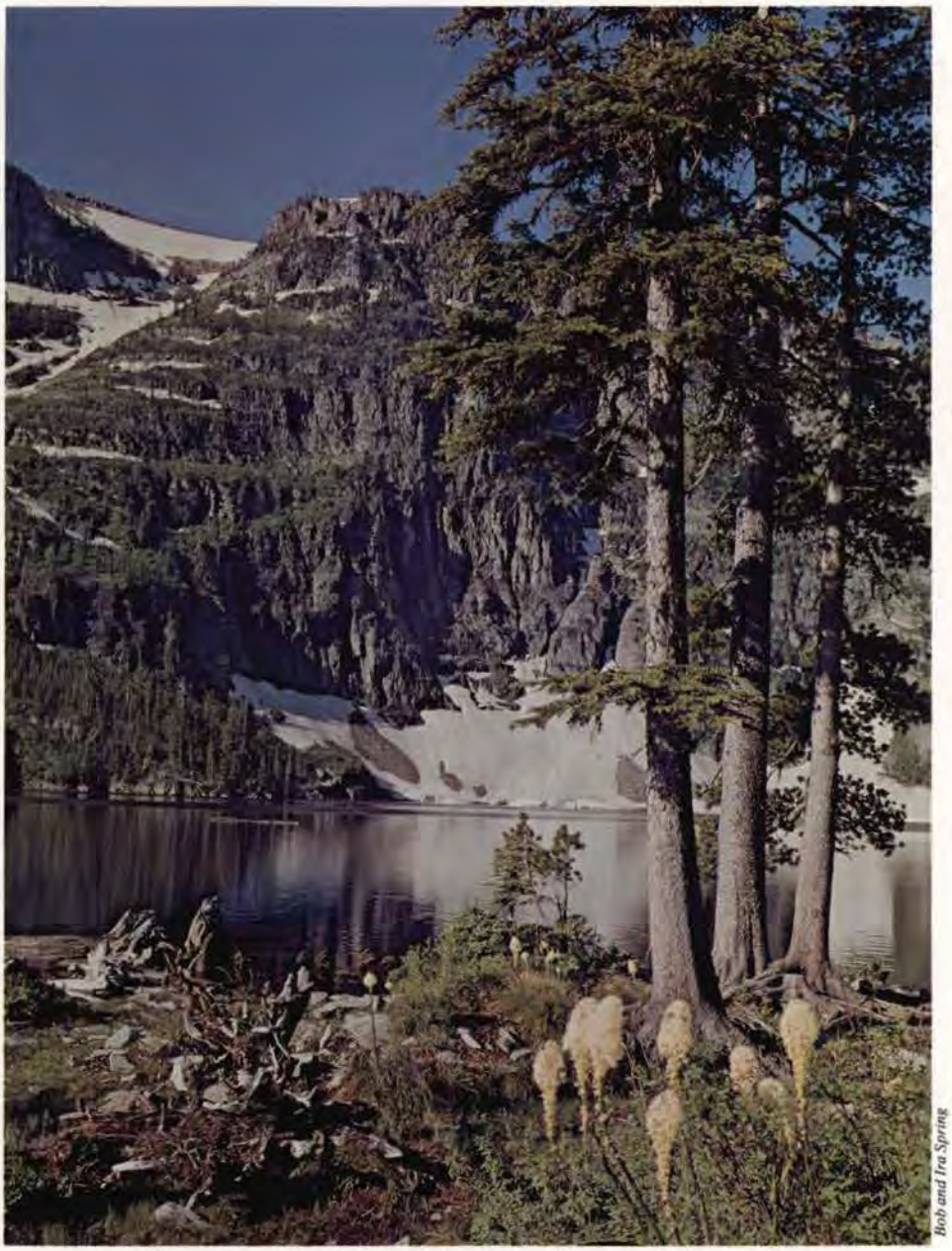
HOLWAY R. JONES

Act One: Anytown, USA.
Time: February, 1972.

As the curtain goes up, a clean-cut, middle-aged, athletic-looking man in the tidy green uniform of the U.S. Forest Service steps to a microphone to announce the beginning of a town meeting. This headquarters community for the Douglas Fir National Forest, "Lumber Capital of the World," has buzzed for several weeks as citizens, the Chamber of Commerce, the mill workers and their bosses, and the local chapter of the Sierra Club sharpen their testimony for the Roadless Area Review and Evaluation (RARE) meeting to be held tonight. All across the western states, in a hundred different towns and cities, in the next three or four weeks folks will have their say about remnants of the public's forest lands that, miraculously, have escaped the bulldozers and chainsaws. These are the lands identified by the service, under directives from the chief and regional foresters, beginning in 1967, but held up for critical action, unpublicized, until August, 1971. To some in the audience, this may be the last opportunity to save thousands, perhaps millions of acres of de facto *wilderness and "round out" the National Wilderness Preservation System. For others, this may be the last opportunity to cut the remaining virgin trees, thus postponing for a few years the inevitable day when there must be a "fall down" in allowable cut because of decades of indulgence and overcutting of private timber lands. The drama is set: the lumber barons vs. the preservationists; the cash-register ring of economic values vs. the unknown life-giving actions of the total ecosystem; the man-dominated, manipulated environment vs. the unplanned, chaotic chances of nature.*

If this were really a play, not one man's attempt to describe an actual historical situation, there would now be a flashback, perhaps first with a prologue, as in all good Elizabethan drama. The prologue would remind us of David Brower's provocative definition: "De facto Wilderness Areas are [lands] which have been set aside by God but which have not yet been created by the Forest Service."[1]

Holway R. Jones chairs the Sierra Club's National Wilderness Committee.



Bob and Ira Spring

Dome Mountain and Upper Cedar Lake, Cabinet Mountains Wilderness, Montana.

Flashback, scene one:
Denver, Colorado.
Time: December 6, 1919.

Huddled over a desk in the regional forester's office are two young men. One is Arthur Carhart, landscape architect assigned to the District II office as "recreation engineer"; the other is Aldo Leopold, who had rejoined the Forest Service that year in the Southwest and had already talked to his superior about the values of a "wild" forest. Here, in Denver, they share ideas about wilderness preservation. Carhart describes his ideas for wilderness recreation at Trappers Lake as well as some of his ideas about the Quetico-Superior

country in Minnesota.[2] Delighted to find a kindred spirit, Leopold returns to the Southwest with much grander ideas than Carhart's. In 1921 he writes in the *Journal of Forestry:* "Wilderness should be a continuous stretch of country preserved in its natural state, open to lawful hunting and fishing, big enough to absorb a two-week pack trip, and kept devoid of roads, artificial trails, cottages, or other works of man."[3]

Not worried about the remnants of *de facto* wilderness facing advocates today, Leopold dared to suggest that every western state should have a wilderness over 500,000 acres, but then softened this startling idea by saying that "such wilderness areas should occupy only a small fraction of the total National Forest area . . . only areas naturally difficult of ordinary industrial development should be chosen . . . and each area should be representative of some type of country of distinctive recreational value, or afford some distinctive type of outdoor life."[4] Remember, this was written in 1921, when the service was still largely a custodian rather than an industrial manager. In 1922, Leopold prepared two reports for Supervisor Frederic Winn, following a personal inspection of the Gila National Forest in New Mexico. Two years later, on June 3, 1924, the District III Forester formally designated the first official wilderness in the United States —695,296 acres of wild lands "big enough to absorb a two weeks pack trip." This was *administrative* wilderness, however, and it wasn't long before the Gila became a political yo-yo, reduced to 563,107 acres in the early 1930s, then to less than 440,000 acres, with proposals from the Service in 1952 to reduce it still further.[5]

Flashback, scene two: Chief Greeley's office, Washington, D.C. Time: 1926.

William Greeley and his chief of lands, L. F. Kneipp, are discussing size standards for the inventory of wild lands Greeley has asked Kneipp to undertake. Greeley is curious: [as Kneipp later expresses it] "Just how far have the National Forests been invaded with joy-riding highways, polluted with the malodorous fumes of burned gasoline, . . . degraded with the modern types of resorts catering to a depraved taste for jazz, bathtubs, bridge and dinner clothes?"[6] Let's find out, says Greeley, and the two of them settle on a minimum size standard greater than 360 square miles—a little less than half of Leopold's original 500,000 criterion—about the equivalent to Mt. Rainier National Park.[7] Using "'quarter-inch maps' upon which was recorded each Forest Supervisor's 'wildest flights of fancy as to the ultimate road and trail systems for his Forest,'" including ongoing construction plans, Kneipp came up with seventy-four areas ranging in size from 230,400 acres to 7 million acres!

Flashback, scene three: Greeley's office. Time: July, 1929.

Tupper Ansel Blake

Centennial Mountains, Red Rock Lakes National Wildlife Refuge, Montana; potential Wilderness classification.

Greeley issues Regulation L-20, which places authority for the establishment of "Primitive Areas" with the Secretary of Agriculture, upon the recommendation of the Chief of the Forest Service. The Gila had been set up at the option of the regional forester. Now, for the first time, there was an officially sanctioned service-wide policy incorporating ideas that Chief Greeley had first expressed in a letter to district foresters in December, 1926. Furthermore, Greeley's order mandated protection of wilderness values by declaring, ". . . primitive conditions of environment, transportation, habitation, and subsistence with a view to conserving the value of such areas for purposes of public education and recreation; . . . no occupancy under the special-use permit shall be allowed, or the construction of permanent improvements by any public agency be permitted, except as authorized by the Chief of the Forest Service or the Secretary of Agriculture."[8] By the end of 1933, sixty-three primitive areas ranging in size from 5,000 acres to a little over one million had been approved, for a total of 8.4 million acres.

Flashback, scene four: Chief's office, ten years later.

Ferdinand Silcox, now chief, at the urging of his head of recreation and lands, Bob Marshall, issues new regulations (U-1, U-2 and U-3) replacing L-20. Now, at last, the size question is pinned down. U-1 provides for "Wilderness" of not less than 100,000 acres. U-2 sets the pattern for "Wild Areas" of less than 100,000, but not smaller than 5,000 acres. U-3 calls for "suitable areas of national forest land, other than wilderness or wild areas, to be managed principally for recreation use . . . ." By September, 1939, when the new regulations are issued, thirteen additional Primitive Areas had been approved—a total of seventy-five—thirty over 100,000 acres; forty-two less than 100,000 acres; and "three units in Minnesota classified as 'Roadless Areas.'"[9] This brought administrative protection of wild lands to about 14 million acres. Although it was the intent of the Forest Service to reclassify its Primitive Areas under the new "U regulations" by size criteria, by 1941 only three had been reclassified as "Wilderness," six as "Wild Areas," and three others consolidated into the Bob Marshall Wilderness in Montana. Unique to Region Six (Washington and Oregon) were "Limited Areas," temporary withdrawals "recognized by the Forest Service as possessing outstanding value for alpine types of recreation but [which] because of lack of information, time, knowledge of probable developments, etc." could not be definitely classified. This was the situation when Pearl Harbor plunged the nation into war.

Act Two: Administrative discretion comes to a halt—almost! Place: Rose Garden, White House.

On this bright Washington day, President Lyndon Johnson hands the pens with which he has just signed the Wilderness Act to Mrs. Olaus J. Murie and Mrs. Howard Zahniser, widows of the late former president and the late executive director of the Wilderness Society.

After eight years and eighteen hearings, Congress, with only thirteen dissenting votes, brings wilderness decisions under statutory definition. Under the elaborate procedures mandated by the act, Congress, not the Forest Service, is now to make the final decision about wilderness areas.

The passage of the Wilderness Act marks the formalization of the process of identifying and reviewing the roadless areas remaining in the western United States. Of course, the

Forest Service was already engaged in reviewing its Primitive Areas as mandated by its own 1939 regulations. On the other hand, the Forest Service was "desultory" in these efforts "until proposals for a Wilderness Act appeared."[10]

Spurred by this threat to its administrative discretion, the Forest Service hastened its review process. By 1964, about three-fifths of the Primitive Areas had been processed. Not satisfied by this, Congress itself mandated a timetable for the Primitive Area review, setting a ten-year period for completion. Thus, the service was required to examine thirty-four Primitive Areas, 5.5 million acres, by September, 1974. Moreover, the service was required, at the same time, to review wild lands contiguous to these Primitive Areas. In the ten-year review period, this provision in the law has been a source of controversy between conservationists and the agency, particularly in the East Meadow Creek area adjacent to the Gore Range-Eagle's Nest Primitive Area in Colorado. Here, in a landmark decision later upheld by the U.S. Supreme Court, Judge William Doyle ruled that the service's planned timber sale adjacent to the Primitive Area would "frustrate the purposes of the Wilderness Act" by taking a decision for wilderness designation away from Congress, where it belonged. In making this determination, the court also knocked down the Forest Service's "purist" argument that an area with man-made scars is not suitable for Wilderness.[11] The significance of this case cannot be overstated. The decision meant that no roadless areas contiguous to a Primitive Area could be developed *prior to* a just determination by Congress that the area was unsuitable for wilderness. Pressed by congressional mandate, then, the Forest Service barely succeeded in completing its Primitive Area recommendations by the deadline imposed by the Wilderness Act. As of September, 1976, fifteen of these proposals were awaiting congressional action.[12]

In addition to establishing an instant statutory wilderness system of fifty-four Forest Service areas of 9.3 million acres and requiring review of thirty-four Primitive Areas, the Wilderness Act set the stage for the eventual identification of all other roadless areas as well. Paragraph three of Section 3(b) appears to "permit, though it does not specifically mandate, review of other roadless areas . . ."[13] The Wilderness Society interprets Section 3(b) this way:

> Other national forest areas that are in fact wilderness but have never been so classified for protection as such could also be added to the National Wilderness Preservation System. Nothing in the Wilderness Act would prevent the Secretary of Agriculture from considering such areas for preservation.[14]

Act Three: Somewhere in the depths of the huge Agriculture Department complex in Washington, D.C. Time: Thanksgiving, 1972, give or take a few days.

A whirr of computer signals! A tired and frustrated employee leans over the IBM. It has been a long night—a long six months, in fact—since the first "input" arrived from the regional foresters in July. But here, at last, is the final printout. Nearly 54,000 public oral and written statements analyzed. Condensed into several standardized factors, the computer spits out a "stratification" of 1,448 roadless areas identified by the service—fifty-six million acres. "Here at last was the ultimate removal of the forester from the trees."[15]

In its crude attempts to quantify the assessment of roadless areas, the Forest Service assigned, quite arbitrarily, as it turned out, several key factors, including a "quality index" number, a "total opportunity cost" dollar amount, and a "public involvement" figure. Take the quality index as an example of the problem the Service faced: this was a numerical designation from zero to 200, purporting to express in a single, consolidated figure, judgments about the scenic quality, size, isolation, and dispersion of visitors in the area. That no two humans would be likely to assign the same numbers was proved by a little test run by Dick Gale, a sociologist consultant for the Willamette National Forest in Eugene, Oregon. Using the same raw data form used by the Forest Service, he surveyed a few citizens in the community, and came up with a wide variety of judgments from people who were familiar with the roadless areas in question. Admitting that his sample was biased toward the side of those favoring no development of the roadless area, his figures uniformly came out much higher than the Forest Service, particularly on roadless areas with considerable commercial timber. For example, the quality-index number assigned by the Forest Service to the French Pete roadless area was 104; Gale's citizen survey produced an average of 161! There was less of a spread for the North Fork John Day unit in eastern Oregon, but it was still twenty-four points—enough so that had the citizens' average been used rather than some forester's judgment, this 82,000-acre roadless area might well have qualified for the chief's study list.

Some of the other factors used by the service were even more complicated. The total-opportunity cost, expressed in a dollar figure, attempted to get at the value of foregone resources if the area were preserved, as well as land-acquisition costs and estimated administrative costs for management. Public-involvement factors attempted to distinguish between areas with varying levels of support for preservation or development. And so it went.

On the basis of these factors and others, the computer ground out three lists: a "green" registry of areas already under wilderness study (the remaining Primitive Areas for example) and other units having the highest apparent wilderness potential *as determined by the Forest Service;* a "yellow" list of areas of intermediate desirability; and a "red" inventory of areas with high opportunity costs and low quality indices and therefore assumed to be least desirable for wilderness purposes. Using these lists (with their built-in subjectivity and procedural difficulties) and separate recommendations from the regional foresters, the chief announced in January, 1973, a preliminary roster of 235 areas (out of 1,448) as roadless regions suitable for study for possible addition to the National Wilderness Preservation System. Total acreage of the 235 was 11 million. However, only 174 of the 235 were really *new* areas for study since 61 had previously been selected for wilderness evaluation. By this accounting, only 6.3 million *new de facto* acreage was to be studied.

The January list was accompanied by a draft environmental-impact statement (EIS) in which ten basic flaws were specified by the Sierra Club and The Wilderness Society in a joint flyer mailed to their members. Among the objections: (1) insufficient information for the Forest Service to make valid decisions on roadless areas; (2) stringent and "pure" criteria and inconsistent application of those criteria used by field personnel in making initial decisions; (3) discrimination against smaller roadless areas because of the statistical weight given to the quality

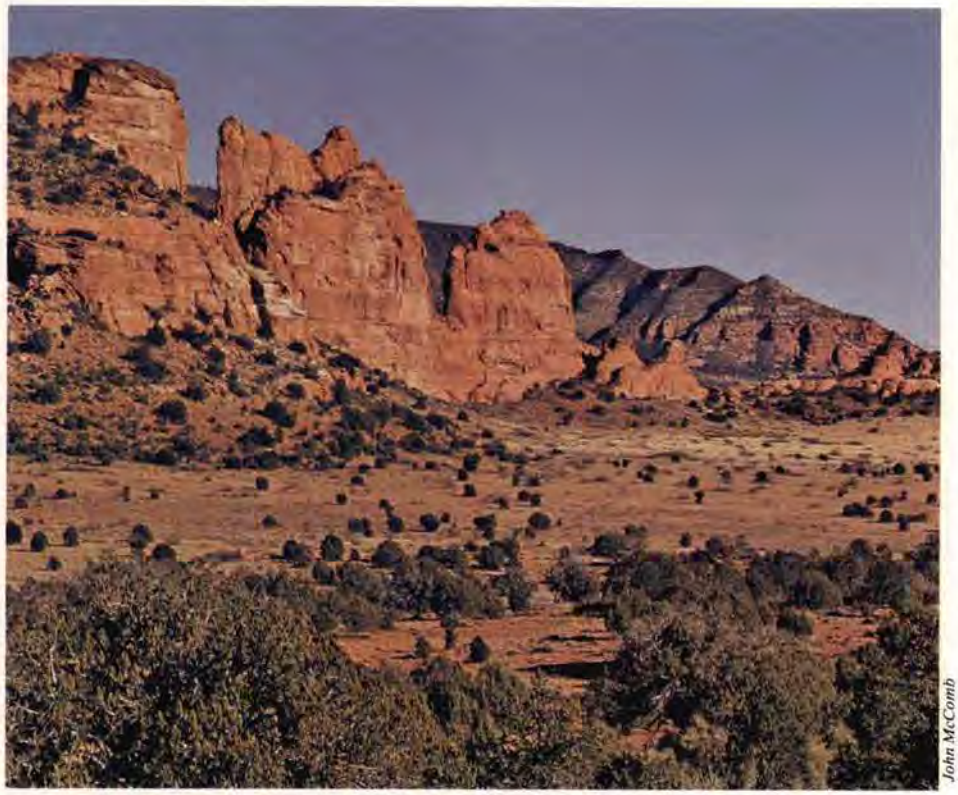
index on the basis of size of areas; (4) evaluation of the quality of an area without taking into account the demand for wilderness; (5) improper subdivision of large roadless areas into smaller units, resulting in lower individual "scores" on such factors as variety, size, and isolation; (6) failure to recognize that little can be determined about the *relationship* between the value of a roadless area devoted to wilderness and the costs involved in establishment, maintenance, and resources foregone, making the stratification of roadless areas more nearly a ranking of estimated costs than a ranking of the "value" of each area in comparison with the others; (7) inadequate explanation of the factors used in the analysis, critical to a thorough understanding of the methodology; (8) failure to document or even to recognize important conservation values of wilderness; (9) minimization of the scientific and educational values of wilderness; and (10) public involvement too localized in the West to afford public input from millions of urban residents in the East.

Ninety days were allowed for reply to the draft EIS. Once again the service received several thousand written comments on the roadless areas, with support for more Wilderness Study Areas in Washington, Oregon, California, and Colorado, but conversely, a desire for less or no additional wilderness in Wyoming, Nevada, Idaho, and parts of Montana.

Meanwhile, conservationists became steadily more outraged by the Forest Service's procedures. Volunteers in the field, who had worked so hard on their favorite roadless areas, urged action. In April, 1972, the Pacific Northwest Chapter urged the Sierra Club to file suit against the Forest Service. Later the same month the Club's wilderness classification committee recommended legal action to the board of directors. In June, a formal request for an injunction was filed to prevent the Forest Service from developing any of the fifty-six million acres until thorough studies had been made of their wilderness potential, including fair procedures for public participation. A temporary restraining order was issued by the federal district court in Washington, D.C., against timber cutting, road building, or any other development on the fifty-six million acres after July 1, 1972. Soon thereafter, several forest-product companies and associations, the states of Washington and Alaska, three counties in Oregon, and the United States Ski Association intervened on the side of the Forest Service and succeeded in having the case transferred to San Francisco, presumably to make it easier for their witnesses to appear. On August 16, Judge Samuel Conti ruled against the Forest Service and issued a preliminary injunction against any development of inventoried roadless areas until environmental-impact statements were prepared. Trial was scheduled for December. The case was never heard. Just before going to trial, the chief of the Forest Service, conceding the main point raised by conservationists, ordered the preparation of EISs on all roadless areas before any development would be permitted. This took the steam out of the pending suit and meant that roadless areas *not* selected by the Forest Service as Wilderness Study Areas would presumably be studied during the land-use planning process of individual forests, at which time EISs would be required on every planning unit. It was apparently left open to question whether this meant that an EIS had to be prepared on every roadless area, or only on the larger planning units embracing several roadless areas or parts of roadless areas on different units. In the case of at least one forest, the Willamette in Oregon, which has prepared a forest-wide land-use plan covering twenty-two roadless areas, there is serious question whether separate EISs will ever be done on the five separate planning units, although local environmentalists are urging the supervisor to do so.

In October, 1973, the final EIS of the Roadless Area Review and Evaluation (RARE) was released. There were few surprises. On the "plus" side, total acreage for study was increased from 11 million to 12.3 million, and the number of areas increased from 235 to 274. As noted earlier, however, in the draft EIS sixty-one areas were not new, having already been committed to study before the RARE process. Now, in the final EIS, with the dropping of twenty-one areas adjacent to Primitive Areas found to have already been studied (and with recommendations at that time *against* wilderness classification), and with five areas contiguous to Primitive Areas, which the service had failed to report to Congress and now *added* to the list, forty-six (4.4 million acres) were still "duplicates," or previously committed to study. Still, there was a gain in total acreage, some states faring reasonably well, such as Colorado, Idaho, and Washington; others, dismally, particularly Alaska, Oregon and the eastern states, which had no additional areas added in the final list.

Presumably the issuance of the final EIS completed the roadless area review. Not so, as the service, prodded by conservationists becoming more and more familiar with their own forests, continued to identify roadless "pockets" of 5,000 acres or more. Although "discovered" after the Chief's November, 1972, announcement requiring EISs on all roadless areas, the newer candidates are also being worked into the individual forest land-use planning processes. In fact, the chief of the Forest Service sent a mandate to all regional foresters (August 24, 1974) requiring them to identify, in the unit planning process, any roadless areas omitted from the earlier RARE inventory. Conservationists should call this directive to the attention of any forest supervisor or district ranger who fails to include a roadless area "discovered" by the public.



John McComb

Sycamore Canyon Wilderness, Arizona.

Epilogue. Time: Year 2020.

A man in his late teens is bending low under the weight of his heavy pack, eye screwed to the viewfinder of his camera, squinting at the slanting rays of the sun as the great ball appears to roll down the side of Ingalls Peak. Outlined in silhouette is an older man, ramrod upright under his lighter pack. The older man turns to the younger.

"Do you realize, Eric, how lucky we are that your grandfather fought for this area as Wilderness? Every time I walk up this North Fork Teanaway from the ranch I realize how fortunate it was that someone in another generation was wise enough to pressure Congress into setting aside the Alpine Lakes/Mt. Stuart country."

A pause . . . silence . . . a muffled "click" as the shutter responds to Eric's finger. He responds to his dad.

"Yeah . . . . You know, I saw a small news item in yesterday's Seattle Times *announcing that the Forest Service had just sent in its last wilderness proposal to Congress . . . some small area in Utah, as I recall. The one thing that struck me, though, was the comment that this would complete the Wilderness System in the U.S. and that its total size was, or soon would be, about 27 million acres on National Forest lands."*

Eric paused as he swatted a mosquito. "What really got me was the newsman's reference to an old act passed by Congress . . . I think it was back in 1974 . . . called the Forest and Rangeland Renewable Resources Planning Act. Apparently sometime in the late '70s the Forest Service sent a plan to Congress which Congress subsequently accepted . . , and it included a top *acreage figure of thirty million for wilderness on National Forest lands by 2020. That's this year!"*

Eric's dad pushed his cap back, tightened the belt on his pack. "Damn shame," he said. "That wilderness acreage ought to be two or three times that amount by now . . . and would be if only folks like us and your granddad had worked as hard thirty to forty years ago to convince their neighbors and their Congressmen to save more land in wilderness. Maybe we wouldn't be suggesting rehabilitation of mined-out cut-over lands in the 1980s. At least Congressman Smith is pushing our bill for the Teanaway headwaters addition to the Alpine Lakes Wilderness . . . ."

Perhaps with tongue in cheek, but with a very serious purpose nonetheless, I proposed to the 10th Biennial Northwest Wilderness Conference in Seattle (1974), a new acronym, WYRE, that last "E" pronounced long to emphasize all the connotations we associate with this characterization: tough, sinewy, great resistance power—precisely the qualities necessary "to hang in there" and win wilderness battles! I said then that WYRE stands for "Wilderness Youth and Retired Equals," and what I suggested was that the wilderness movement needs a youth corps, like the Peace Corps of VISTA. WYRE would concentrate on wilderness classification and preservation, and it would also add to its "youth" dimension those somewhat older folks, retired or not, who have time, experience and sometimes the money to lend to wilderness projects. There is nothing new about this idea, of course. The Wilderness Society has been working on this theory for several years and is now funding a rejuvenated field-representative program in six or more western states. The Sierra Club's wilderness classification committee, under Francis Walcott's direction, was a pioneer in developing grass-roots wilderness-survey trips and reports to find out what's "out there."

Today conservationists have perhaps six years (three Congresses) to complete the *legislative* job on Forest Service lands; they have much *less* time to influence *administrative* decisions leading to protective land-use classifications that do not go to Congress. In the Northwest, for example, the regional forester set December 31, 1978 as a goal for completion of all impact statements on some ninety planning units! If an organic act for the BLM ever survives the tumult of a congressional conference committee with a wilderness review procedure, conservationists will find themselves in a whole new round of study, hearings, and controversy extending at least ten to fifteen years into the future.

Neither the Sierra Club nor The Wilderness Society can do the job alone. These organizations, and others, must work in unison and to complementary purposes. And they must have, in addition to the essential volunteers, another necessary element. In fact, the volunteer corps cannot reach its full effectiveness, and certainly new recruits will be brought into the program much more slowly, without the "missing" element. That element is staff, full-time and part-time, at the field level, within each western state and in the East, and in the Washington office and the San Francisco headquarters of the Club. Staff are needed to inspire, coordinate and provide expert continuity to the volunteers at grass roots.

Club members and other environmentalists *really* do have a RARE opportunity. The significance of the Roadless Area Review and Evaluation procedure of the 1970's is that it has identified more *de facto* wilderness on National Forest lands than most citi-

zens realized were there. More important, it opened the door to widespread citizen involvement and spurred activists to find even *additional* roadless acreage unknown to the agency. RARE has, in short, provided conservationists with a golden opportunity to greatly enlarge the National Wilderness Preservation System—much greater in size than Eric and his father share in that mythical 2020 year.

First, the 274 Wilderness Study Areas, and additional areas being added as a result of the land-use planning process, are relatively safe—momentarily. The Forest Service agrees to protect these areas "from any activity that would change the land characteristics in such a way as to preclude the area from wilderness designation," and, furthermore, agrees to do this "during the entire study process, including filing of environmental statements."[16] Until recently, however, it has not been clear what would happen to areas which the Forest Service decides *not* to recommend for wilderness. Forest Service Chief, John McGuire, clarified this question in a letter to Senator Lee Metcalf of Montana during the markup on S. 3091, a bill to amend the Forest and Rangeland Renewable Resources Planning Act of 1974: "If the decision set forth in *any final* environmental statement affecting an inventoried roadless area is to use the area for purposes other than wilderness, we will delay implementation of such a decision for 90 calendar days while Congress is in session." He also said that the Forest Service would further delay implementation "if, during the 90 day period, one of the appropriate committee chairmen requests a further delay . . . so that hearings can be held." He urged that such additional delays be requested "only under unusual circumstances and that they . . . normally be of no more than six months duration."

The McGuire letter appears to answer the question of what happens to *de facto* wilderness not selected for wilderness study. One option—obviously a last-ditch stand—is to ask the appropriate congressman to request a delay in implementation. A far better option is the vigorous pursuit of congressional support to establish the wilderness area or areas long before the administering agency has an opportunity to render a possible negative decision. Proof that this option is being aggressively followed are the many *citizen* bills, individual and omnibus, now before the Ninety-fourth Congress to establish wilderness areas *not* recommended by the federal agencies. Such areas total fifty named additions to the system or approximately 3.3 million acres. The gap between agency recommendations and citizen proposals is all the more dramatic with the addition of the fifteen remaining Primitive Areas, where there is a total acreage difference of 2.6 million acres! This difference is the major factor in the failure of these bills to move speedily through Congress. Many of them will certainly not become law this session, but persistent environmentalists will seek reintroduction in subsequent Congresses until success is achieved or all legislative remedy fails.

There is yet another option which conservationists dare not neglect. The Forest Service is embarked on a nationwide program to formulate land-use plans and update timber-management plans for all national forests. Adopt-a-roadless area, or, alternately, adopt-a-planning unit programs should be a major priority for every Club group in the country in whose territory a national forest exists. Through this network, augmented with the state wilderness coordinators to assist volunteers, individuals will be able to monitor the planning process and will be ready to justify wilderness classification for roadless lands on all forests. This way, a significant acreage may be added to the Wilderness Study Area list or the agency may be convinced to protect the land in an administrative roadless category.

The RARE opportunity actually does exist. Will conservationists and the Sierra Club be ready to take advantage of the next few, critical years, to save "all that will ever be saved"? **SCB**

Notes

1. David Brower, "The De Facto Wilderness: What Is Its Place?" Keynote address before the Fourth Biennial Conference on Northwest Wilderness, Seattle, Washington, April 14, 1962, p. 1.

2. Donald N. Baldwin, *The Quiet Revolution: Grass Roots of Today's Wilderness Preservation Movement* (Boulder, 1972), pp. 30-36.

3. Aldo Leopold, "The Wilderness and Its Place in Forest Recreational Policy," *Journal of Forestry*, 19 (November, 1921), 719.

4. *Loc. cit.*

5. The present size of the Gila Wilderness is 433,690 acres. A proposal (HR 3508) to enlarge the area to 543,500 acres is in the 94th Congress.

6. Undated draft of an article by L. F. Kneipp, "These Tame National Forests," in Carhart Papers, Conservation Library Center, Denver Public Library, and quoted in Baldwin, *op cit.*, p. 179.

7. Greeley later revised his ideas about size standards for wilderness areas in a letter he wrote on December 30, 1926, to each western district forester: "The size of the wilderness area is not, in my judgment, important or subject to standardization. It must be determined by natural factors and the location of roads for protection." Quoted in James P. Gilligan, *The Development of Policy and Administration of Forest Service Primitive and Wilderness Areas in the Western United States* (Ph.D. dissertation, University of Michigan, 1953), vol. I, p. 104. See also Gilligan's discussion of size, pp. 135-137.

8. Quotation from Regulation L-20. In 1930 it was amended to insert a qualifying phrase, "to the extent of the Department's authority," and the word, "inspiration" was added as a conservation value. The L-20 regulation brought an abrupt change in terminology for roadless areas —"primitive" was substituted for "wilderness." Kneipp explained the change: "The colloquial term 'Wilderness Areas' most frequently used, is a misnomer for areas prospected, grazed, logged or otherwise occupied or utilized for a half-century, threaded with trails and telephone lines, bounded by highways, scrutinized daily during the fire season by lookouts and now traversed by airplanes. These considerations equally disqualify the terms 'virgin' or 'primeval' or 'pristine.' The term 'natural' creates a false distinction." L. F. Kneipp, "What Should We Call Protected Recreation Areas in the National Forests?" *American Planning and Civic Annual*, I (1929), 34, as quoted in Gilligan, *op. cit.*, vol. I, p. 127.

9. Michael Frome, *Battle for the Wilderness* (New York, 1974), p. 121.

10. Glen O. Robinson, *The Forest Service: A Study in Public Land Management* (Baltimore, 1975), p. 162. The chapter on "Wilderness" is the best overview of the problems and conflicts of wilderness classification in print.

11. 309 F.Supp. 593 (D Colo. 1970), *aff'd*, 448 F.2d 793 (10th Cir. 1971), *cert. denied*, 405 U.S. 989 (1972). For conservationists this was a long legal and legislative battle with a happy ending when President Ford signed the Eagles Nest Wilderness bill to include the East Meadow Creek area on July 12, 1976.

12. As of September 1, 1976, only two Primitive Area proposals before the 94th Congress had been signed into law as units of the National Wilderness Preservation System, both in Colorado: Flat Tops and Eagles Nest.

13. Robinson, *op. cit.*, pp. 162-163.

14. Wilderness Society, *A Handbook on the Wilderness Act*, p. 12.

15. Jack Shepherd, *The Forest Killers: The Destruction of the American Wilderness* (New York, 1975), p. 255. Written in the muckraking tradition of Lincoln Steffens, this is a highly readable, if biased account, occasionally erroneous on factual data.

16. Letter from John McGuire, Chief, U.S. Forest Service, to Lee Metcalf, Senator and Acting Chairman, Committee on Interior and Insular Affairs, U.S. Senate, Washington, D.C., May 14, 1976. Other quotations are also from this letter. Emphasis has been added by this author.

Howard Zahniser
Architect of Wilderness

DOUGLAS SCOTT

Howard Zahniser was truly the "father" of the Wilderness Act of 1964, not merely because he drafted most of its language and catalyzed the legislative campaign to secure its passage, but because he motivated so many others to see the need, inspired thousands to think it possible and emboldened all to persevere until it was achieved. He was happiest when his leadership was least visible.

During the 1920s, wilderness advocates such as Aldo Leopold, Stephen Mather and Robert Marshall, all of whom worked for the federal government, concentrated their efforts on identifying the most deserving areas and securing their preservation—at least temporarily—through whatever mechanisms were available. Marshall, a forester by training, became head of the recreation and lands division of the Forest Service, where he played a central role in securing "primitive area" designation for millions of acres of wilderness. He was also the prime mover in the formation of The Wilderness Society in 1935.

When Marshall died in 1939, at the early age of 38, the society's first director, Robert Sterling Yard, said the wilderness movement had lost its "most effective weapon of preservation." Marshall's contribution had been to identify and set aside areas requiring protection, but he recognized the inherent insecurity of preserving wilderness by administrative action. He also knew that, even with his success in saving some areas, wilderness was still disappearing.

Zahniser, a journalist by trade, had become involved in the wilderness movement through his job as an editor with the United States Biological Service, where he met such men as Olaus Murie, with whom he would later work so closely. He was a charter member of The Wilderness Society, and when Yard's health began to fail in the early forties, Zahniser stepped in to edit the society's magazine, *The Living Wilderness*, in his spare time.

After Yard died, in 1945, The Wilderness Society enlisted Olaus Murie to be its director and Howard Zahniser to stay on as editor as well as serve as executive secretary. In planning details

Courtesy of the Wilderness Society

of a renewed post-war campaign to win support for wilderness, Zahniser was ideal. He saw that wilderness could be preserved securely only when a new, broader concept of "civilization" included wilderness by definition. Zahniser wrote: "Out of the wilderness, we realize, has come the substance of our culture, and with a living wilderness—it is our faith—we shall have also a vibrant culture, an enduring civilization of healthful citizens who renew themselves when they are in contact with the earth."

From the start, Zahniser's vision was to secure the preservation of wilderness through the passage of legislation in Congress. He understood, however, that success would require far wider support and much more work than his colleagues in The Wilderness Society could supply by themselves. So he set about developing a consensus among conservationists that a national wilderness act was essential. His first goal was to provide a clear picture showing why.

Zahniser found a way to obtain his "clear picture," enlisting the aid of the Legislative Reference Service (LRS), the research arm of Congress, then directed by Ernest Griffith, a leader in The Wilderness Society. In 1948, a congressman from Ohio formally requested—at Zahniser's behest—that the LRS conduct a detailed study of the problems of wilderness preservation. In response to a questionnaire on the problems of wilderness sent out by the LRS, Zahniser prepared a fifty-five-page memorandum analyzing the problem of wilderness definition and values, cataloguing the kinds of threats facing wilderness and reporting the views of The Wilderness Society on what a national wilderness policy should be. It was, and remains today, a remarkable document, one that Harvey Broome called "by all odds the finest and most comprehensive statement on wilderness in existence."

The report resulting from the LRS study, published as a congressional document, was widely distributed by Zahniser. The basic concept of the need for Congress to act for wilderness—to establish a national wilderness policy—became the constant theme of his writings, talks and correspondence. By 1951, Zahniser had completed his plan to secure a national wilderness act, but the circumstances were not quite right. The Echo Park dam controversy was already brewing and soon enveloped all conservationists in the era's greatest conservation battle. Even while immersed in this conflict, Zahniser continued working quietly, irrepressibly, to develop the strong consensus he felt was essential to the enactment of national wilderness legislation. He consulted widely with his colleagues even while he led them in the Echo Park fight, doing much of the tiring footwork in the corridors of Capitol Hill.

When a satisfactory conclusion to the Echo Park fight was finally assured, Zahniser turned to drafting his long-planned wilderness bill. The drafting process went fast, with Zahniser enlisting the aid mainly of George Marshall, but also of such conserva-

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Douglas Scott is the Sierra Club's Northwest representative.

tion leaders as David Brower, Charles Callison, and Stewart Brandborg, who helped Zahniser tighten the language of the bill and frame its provisions very carefully.

Zahniser had been optimistic all along that he could persuade the key federal agencies to support the bill, so he took great pains at this early stage to make them aware of the new bill he was drafting. But the Forest Service was not responsive; nor was the director of the National Park Service. Although their recalcitrance surprised Zahniser, he had recognized from the start that a national wilderness bill would not be easy to pass. Nevertheless, he worked vigorously to understand the nature of the opposition and to meet its objections. The opponents —and there were many—were not enemies, so far as he was concerned; he genuinely yearned to reconcile their views with those of conservationists, so that the opponents would join in supporting wilderness legislation. As each objection was raised, he said, "We sought not to refute, but to explore and understand."

It became essential to translate abstract concepts into the most concrete terms so that possible confusion and misunderstanding could be anticipated and avoided. Zahniser did not feel himself to be the ideal draftsman, though in retrospect we must disagree with this judgment. As he wrote to George Marshall, "I am not a bill drafter. If I had to do this again, I would much prefer to state all this in iambic rhyming couplets or even in the sequence of sonnets, than attempt to do this in bill language." Yet how careful was his work, how penetrating his analysis, how precise his language.

The fight for the wilderness bill was long and trying, but Zahniser did not weaken in his resolve. David Brower called him its "constant advocate," in tribute to his enormous patience and steadfastness of purpose. In the words of Olaus Murie, he was always "eager to find an opportunity, taking advantage of every opening, always with good judgment in crises, and an unusual tenacity in lost causes." To Murie, Zahniser had "grown in stature, if that is possible. His work is characterized by a moral flavor, an honesty, that, however the present struggle turns out, will have an eventual effect."

After seven years of being the "constant advocate" of the wilderness act, Zahniser died, quietly, in his sleep, on May 5, 1964, just two days after he had testified at what proved to be the final hearing on the wilderness act. He died six months too soon to see the bill enacted, but he had been at the center of the final consultations and knew that its success was assured.

It seems Zahniser was haunted all his life by the idea that wilderness set aside merely by administrative action was in fact not saved at all, but could be devoured whenever economic circumstances seemed to warrant. His commitment was to our absolute fundamental need for a continuing wilderness heritage if we, as a people, were to maintain the best of ourselves and our culture. His vision was to assure this heritage forever. "We cannot set aside wilderness for a decade or two," he said, "merely until we get to it with our cutting program, without defrauding both our own and future generations. For the essence of wilderness preservation is perpetuity . . . ."

Howard Zahniser was a great man. His contribution was formed of equal parts of intellect, conscience and spirit. His monument is not a mountain peak or river or park bearing his name: no, wherever wilderness exists today, by whatever name—there is Zahniser's memorial. His was the great boldness —to see a dream of wilderness in perpetuity. He refined and evangelized this idea, helped it to flourish in the minds of millions, and helped them bring it to fruition in the form of the Wilderness Act of 1964. It really *was* Zahniser's bill. Speaking from the floor of the House of Representatives, Congressman John Saylor said of Zahniser: "As I worked with 'Zahnie,' as I knew him, my respect and admiration for him grew and grew. I realized that I was truly in the company of one of God's great noblemen." **SCB**

Eastern Wilderness
A Small Price for a Large Heritage

ALLEN E. SMITH

Ed Cooper

White Mountains, Presidential Range-Dry River Wilderness, New Hampshire.

In the corner of the town green in the northern New England community of Lancaster, New Hampshire, is a bronze plaque mounted on the side of a small granite boulder. This is a very common form of marking and commemorating historical sites in much of our country, and this one ordinarily would not have drawn any particular attention except for its very unusual nature. Atop the granite boulder is a life-size bronze statue of a wolf standing in a very submissive and defeated pose. The bronze plaque below reads:

1763 To Honor 1913
The Brave Men And Women
Who Redeemed
LANCASTER
From The Wilderness
This Memorial Is Erected By
Their Loyal Sons And Daughters
Upon The One Hundred And Fiftieth
Anniversary Of The Founding
Of The Town
July 6th, 1913

The historical picture depicted by this monument epitomizes the struggle between conflicting value systems over the past, present and future use of our national wilderness resource. On one side are arrayed the forces of unlimited growth and development, and on the other, those who recognize that mankind, as an integral part of nature, has "limits to growth."

Immediately east of Lancaster is the Kilkenny Management Unit of the White Mountain National Forest. The Sierra Club and others have proposed that an area of up to 16,000 acres of upland spruce, fir and hardwood forests, and 4,000-foot mountains be designated the Kilkenny Wilderness Study Area. The Forest Service manages the Kilkenny unit under the Multiple-Use, Sustained-Yield Act, but has heavily emphasized timber production. Even so, the 16,000-acre core area still has excellent wilderness characteristics and has not been logged since the turn of the century. It is the home of bear, deer, bobcat, eastern coyote and many other animals. It supports many birds and has sites identified as suitable for the reintroduction of the endangered peregrine falcon.

Kilkenny is but one example of a larger issue that includes more than one hundred individual Wilderness-Area proposals in the eastern United States. On January 3, 1975, Public Law 93-622, the Eastern Wilderness Areas Act, was signed into law. This marked a major turning point in the movement to add geographical balance to the National Wilderness Preservation System by providing a specific vehicle to identify, study and designate areas in the eastern National Forests for inclusion in the system. The act designated sixteen areas as Wilderness and seventeen others for Wilderness study and review for possible future designation.

Kilkenny was not among the thirty-three areas covered by the Eastern Wilderness Areas Act. Neither were Big Island Lake, Glades, Irish, Alexander Springs, La Rue Pine Hills, Lusk Creek, Nebo Ridge, Kisatchie Hills, Saline Bayou, Caribou-Speckled Mountain, Bell Mountain, Rockpile Mountain, Carr Mountain, Great Gulf Extension, Wild River, Pocosin, Archers Fork,

Allen E. Smith is controller of the Sierra Club.

Hickory Creek, Tracy Ridge, Allegheny Front, Big Slough, Chambers Ferry, Black Jack Springs, Whisker Lake, and El Cacique. These twenty-six areas, totalling 291,490 acres, were subsequently reintroduced in S. 520 on February 3, 1975. Many other areas still being shaped to determine the best approach to boundary definition, study and review, and designation, have also not been considered thus far. This category includes the 50,000-acre Pemigewasset area in New Hampshire. If all eligible lands were included, the National Forest Eastern Wilderness Areas probably would total less than a million acres—small price for a large heritage. The need for Wilderness Areas is especially apparent in the East, which contains more than half the nation's population, but only thirteen percent of the National Forest lands.

Embodied in the "Statement of Findings and Policy" of the Eastern Wilderness Areas Act are a series of conclusions that reflect the history of the process of debate and testimony leading to the act. This history should be told, now and periodically, as a measure of the obstacles that will continue to block completion of the National Wilderness Preservation System, not only in the East, but in the entire nation.

In 1964, when Congress passed the Wilderness Act, it required the systematic review of National Forest Primitive Areas and of roadless areas in the National Parks and Wildlife Refuges for Wilderness designation. Reviews of other roadless areas in the National Forests were not required. While this compromise may have been justified in the interest of securing passage of the Wilderness Act, it left millions of acres of deserving National Forest roadless areas unreviewed.

In 1967, the chief of the Forest Service issued a directive providing for review and identification of roadless areas of 5,000 acres or more as potential Wilderness Study Areas. Implementation of this directive, not to mention the 1964 Wilderness Act, seemed to move all too slowly over the following years. By 1971, it was apparent that something was amiss in the National Forests. The Forest Service could have reviewed more than fifty-six million acres in over one thousand separate roadless areas, but it did not. Instead, through its unit-planning process, which tended to favor various commercial uses, the agency in effect began to remove one roadless area after another from possible wilderness review.

Though conservationists in the East deplored the way in which the Forest Service was approaching the review of roadless areas, they did not as yet fully understand its implications for their own region. It still seemed to be largely a "western" issue. But when the Forest Service began to extend roads into eastern roadless areas such as Joyce Kilmer Memorial Forest and Caney Creek—areas with wilderness potential —the relationship became clearer.

On February 25, 1972, the chief of the Forest Service issued a letter asking citizens to submit answers to the question: "How can the National Forest System in the East and South meet those needs of people which are answered in the West by National Forest Wilderness?" The agency suggested an alternative system of "wild" areas in the East and South. Within weeks, the House and Senate agriculture committees were circulating drafts of various Wild Area bills.

The Sierra Club met in April, 1972, to discuss the issue of National Forest roadless areas, gathering together volunteer leaders from all parts of the country to take stock of what was happening. Two important conclusions emerged from that meeting: (1) the U.S. Forest Service was not following its own regulations in implementing the roadless-area review in the West, which led to the Sierra Club's roadless area lawsuit, and (2) the roadless-area review process and regulations had been structured in such a way as to preclude review of National Forests in the East. The message by this time was only too clear: the Forest Service was trying to close out quickly the option of Wilderness designation in the East.

On June 3, 1972, another letter from the agency asked citizens in the East to "help in developing criteria for the iden-

Eastern Wilderness Areas Act
Designation of Wilderness Areas

	Area Name	National Forest(s)	State(s)	Acres
1.	Sipsey	Bankhead	Alabama	12,000
2.	Caney Creek	Ouachita	Arkansas	14,433
3.	Upper Buffalo	Ozark	Arkansas	10,590
4.	Bradwell Bay	Appalachicola	Florida	22,000
5.	Beaver Creek	Daniel Boone	Kentucky	5,500
6.	Presidential Range — Dry River	White Mountain	New Hampshire	20,380
7.	Joyce Kilmer — Slickrock	Nantahala/Cherokee	North Carolina/Tennessee	15,000
8.	Ellicott Rock	Sumter/Nantahala/ Chattahoochee	South Carolina/ North Carolina/Georgia	3,600
9.	Gee Creek	Cherokee	Tennessee	2,570
10.	Bristol Cliffs	Green Mountain	Vermont	6,500
11.	Lye Brook	Green Mountain	Vermont	14,300
12.	James River Face	Jefferson	Virginia	8,800
13.	Dolly Sods	Monongahela	West Virginia	10,215
14.	Otter Creek	Monongahela	West Virginia	20,000
15.	Rainbow Lake	Chequamegon	Wisconsin	6,600
16.	Cohutta	Chattahoochee/Cherokee	Georgia/Tennessee	34,500
				206,988

Designation of Wilderness Study Areas

1.	Belle Starr Cave	Ouachita	Arkansas	5,700
2.	Dry Creek	Ouachita	Arkansas	5,500
3.	Richland Creek	Ozark	Arkansas	2,100
4.	Sopchoppy River	Appalachicola	Florida	1,100
5.	Rock River Canyon	Hiawatha	Michigan	5,400
6.	Sturgeon River	Ottawa	Michigan	13,200
7.	Craggy Mountain	Pisgah	North Carolina	1,100
8.	Wambaw Swamp	Francis Marion	South Carolina	1,500
9.	Mill Creek	Jefferson	Virginia	4,000
10.	Mountain Lake	Jefferson	Virginia	8,400
11.	Peters Mountain	Jefferson	Virginia	5,000
12.	Ramsey's Draft	George Washington	Virginia	6,700
13.	Flynn Lake	Chequamegon	Wisconsin	6,300
14.	Round Lake	Chequamegon	Wisconsin	4,200
15.	Cranberry	Monongahela	West Virginia	36,300
16.	Big Frog	Cherokee	Tennessee	4,500
17.	Citico Creek	Cherokee	Tennessee	14,000
				125,000

tification and direction for management of National Forest Wild Areas." This was quickly followed by hearings before the House and Senate Agriculture committees and by Forest Service "listening sessions" on the proposed wild-areas legislation. The conservation community, divided on the proposal, was drawn into a very controversial defensive posture at a point when it was not organized to deal constructively with the issue.

The issue was further confused because the wild-areas legislation was being proposed by the agriculture committees. Wilderness legislation is normally the province of the interior committees, which handled the original Wilderness Act of 1964, as well as subsequent additions to the National Wilderness Preservation System. In general, the members of the agriculture committees were not receptive to Wilderness designation, and were proposing wild areas as a less protective, more easily exploited, land-preservation system. Clearly, this move was designed to block Wilderness designation in the eastern National Forests. In a strange twist of irony, both industry and the conservation movement came down hard on the wild-areas proposal in the Agriculture Committee hearings, so the proposal died for lack of an audience, even though the Forest Service continued to promote it.

Senator George Aiken of Vermont, a member of the Senate Interior Committee, remained interested in establishing a strong land-preservation system in the eastern National Forests. To this end, he contributed the large amount of strong "language" and provisions he had intended for the wild-areas legislation to a coalition working to draft strong eastern *Wilderness* bills. These were subsequently introduced in the interior committees.

In the fall of 1972, a coalition called Citizens for Eastern Wilderness was formed to provide a forum for cooperation among all interested parties in the East. In January 1973, the Sierra Club formed a national task force to carry out its strategy for securing an Eastern Wilderness Areas Act in conjunction with the coalition. The conservation movement was now organized to work for the passage of the proposed Eastern Wilderness Areas bills which had been introduced by Congressman John Saylor and others in the House and by Senator Henry Jackson and others in the Senate.

On February 21, 1973, Senator Henry Jackson, chairman of the Senate Committee on Interior and Insular Affairs, opened hearings on the Eastern Omnibus Wilderness Bill (S. 316) before the Subcommittee of the Committee on Lands. The first speaker was Representative Ken Hechler of West Virginia:

> In protecting twenty-eight outstanding eastern areas, S. 316 constitutes a major step in providing the truly national system of wilderness areas envisioned in the original Wilderness Act of 1964. It will offer the benefits of wilderness to people in all sections of the nation, including those sections with the greatest concentrations of population. Citizens in the East have waited nearly a decade to see Wilderness protection extended to the unique unspoiled lands in our eastern National Forests. Only three areas, the Great Gulf Wilderness in New Hampshire, Linville Gorge and the Shining Rock Wilderness in North Carolina, totalling a paltry 26,447 acres, have been classified as wilderness in the eastern National Forests, while more than ten million acres have been set aside in the National Forests of the West. S. 316 promises to correct this imbalance through a comprehensive effort to preserve all of the major eastern wilderness areas.
>
> But the crucial point is that Congress has the right and the obligation to decide what is and what is not wilderness. We do not need any more squabbles over definitions. What we need is action to designate wilderness areas close to our large East Coast population centers. The East cries out for wilderness—here where the rush and bustle of twentieth-century society reaches its dizziest pace, places of solitude and natural unspoiled beauty are desperately needed. To provide the wilderness experience for our people in this period of burgeoning leisure time must be a top priority.

Public Law 93-622
93rd Congress, S. 3433
January 3, 1975

An Act

To further the purposes of the Wilderness Act by designating certain acquired lands for inclusion in the National Wilderness Preservation System, to provide for study of certain additional lands for such inclusion, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

STATEMENT OF FINDINGS AND POLICY

SEC. 2. (a) The Congress finds that—

(1) in the more populous eastern half of the United States there is an urgent need to identify, study, designate, and preserve areas for addition to the National Wilderness Preservation System;

(2) in recognition of this urgent need, certain areas in the national forest system in the eastern half of the United States were designated by the Congress as wilderness in the Wilderness Act (78 Stat. 890); certain areas in the national wildlife refuge system in the eastern half of the United States have been designated by the Congress as wilderness or recommended by the President for such designation, and certain areas in the national park system in the eastern half of the United States have been recommended by the President for designation as wilderness; and

(3) additional areas of wilderness in the more populous eastern half of the United States are increasingly threatened by the pressures of a growing and more mobile population, large-scale industrial and economic growth, and development and uses inconsistent with the protection, maintenance, and enhancement of the areas' wilderness character.

(b) Therefore, the Congress finds and declares that it is in the national interest that these and similar areas in the eastern half of the United States be promptly designated as wilderness within the National Wilderness Preservation System, in order to preserve such areas as an enduring resource of wilderness which shall be managed to promote and perpetuate the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation for the benefit of all of the American people of present and future generations.

The next speaker was John McGuire, chief of the U.S. Forest Service, whose agency had previously opposed eastern Wilderness on the grounds that most areas in the region, having once felt the hand of human intervention, were insufficiently pristine to qualify under the standards of the 1964 Wilderness Act. The language in question defined eligible areas as those "generally appearing to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." Conservationists argued that "substantially unnoticeable" did not rule out once-exploited eastern Wilderness areas that had since reverted to a natural state. They suggested that the Forest Service's rigorous standards of "purity" were meant to disguise other, less high-minded motives for excluding areas from Wilderness designation. Known as the "purity debate," this disagreement was a crucial issue in the fight over eastern Wilderness.

When McGuire outlined his agency's proposed bill to establish fifty-three wilderness-study areas in the eastern National Forests, it was evident that the Forest Service meant to amend the 1964 Wilderness Act by providing a new, "purer," more rigorous standard for areas in the East. The agency's bill stated:

> Provided, that only within those National Forest system units east of the one hundredth meridian the Secretary of Agriculture may consider for review areas where man and his own works have once significantly affected the landscape but are now areas of land (1) where the imprint of man's work is substantially erased; (2) which have generally reverted to a natural appearance; and (3) which can provide outstanding opportunities for solitude or a primitive and unconfined type of recreation.

Subcommittee chairman Floyd K. Haskell, along with senators Frank Church, James A. McClure, Mark O. Hatfield and James L. Buckley, was quick to criticize the Forest Service's proposal. Senator Church told Chief McGuire that the discrepancy in definition between the agency's proposed bill and the 1964 Wilderness Act was unacceptable. "The cat is out of the bag," Senator Haskell declared, when McGuire expressed his agency's fear that to allow eastern areas to be classified as Wilderness under the definition provided by the 1964 Wilderness Act would in effect qualify additional areas

Ed Cooper

Linville Gorge Wilderness, North Carolina.

in the West. "If no distinction is made," McGuire said, "it would be difficult to disqualify, by any criteria, areas in the West." Haskell replied that it was the committee's position that only Congress—not the Forest Service—had the right to choose what did or did not qualify for Wilderness designation.

The testimony then shifted to the conservation community: The Wilderness Society led off, followed by every major conservation organization in the East including the Sierra Club, Izaak Walton League, National Audubon Society, West Virginia Highlands Conservancy, Friends of the Earth, Appalachian Mountain Club, and others. Most testimony recommended that the first sixteen areas listed in S. 316 be designated as Wilderness Areas and the more than fifty additional areas be studied for possible future designation.

The day went quickly as people scurried to the outside corridor for last-minute conferences and to compare their study proposals with those of the Administration in order to modify their testimony accordingly. At times it was difficult to hear the testimony over the sounds of the Senate buzzer-page system and the undercurrent of sideline discussions; but, as a white-haired gentleman came forward to speak, the hearing room quieted.

> My testimony will be somewhat different from most of what we have heard today. My name is Sigurd Olson. My home, Ely, Minnesota, is adjacent to the Superior National Forest, gateway to the famous Boundary Waters Canoe Area along the Minnesota-Ontario border. As a young man, I was a guide in this relatively unknown area and traveled thousands of miles along the waterways. Later I made expeditions by canoe into the far north and northwest of Canada retracing the routes of early exploration as far as the tundras of the Arctic Coast. I have been very fortunate in having had the opportunity of knowing many wilderness regions across the continent. During those days I became involved with the protection of wilderness, became convinced that its preservation is a social and cultural heritage and that what Henry David Thoreau said long ago is the truth: "In wildness is the preservation of the world." I believe that without such spiritual values in their broadest connotations mankind is lost.

All attention was focused on this well-known author as he listed his credentials, which include five years as president of The Wilderness Society and consultant to three secretaries of the Interior, as well as author of seven books on wilderness. No one's attention wavered as he continued in support of S. 316:

> To me, the memberships of The Wilderness Society, the Izaak Walton League of America, uncounted dedicated individuals and organizations across the nation, including those who worked for the Wilderness Act nine years ago, the issue is clear. There are many areas in the East that are reverting swiftly to wilderness which do qualify. While the ideal situation is to find areas that have never been subjected to man's influence such as a few high mountain areas of the West, in the East such places are rare. It is interesting to note that most wilderness areas set aside or being considered for inclusion in the Wilderness System in the East and West have known some interference by man. Anyone familiar, however, with the recuperative powers of nature in the East can testify that with abundant rainfall, a good climate and protection, wilderness can and does return.
>
> It is vitally important that S. 316 be enacted into law and that the areas east of the Mississippi being con-

sidered be brought into the Wilderness System under the act of 1964. The years of effort that went into the passage of this act, the careful refinements and adjustments worked out, the eight years of actual experience with it largely in the West, have given the original law the prestige that only actual commitment and cooperation between agencies of government, Congress and an involved citizenry can give. It would be a tragedy to set up a new and different wilderness system now when we already have a time-tried law that has proven eminently workable and satisfactory.

In this era of environmental concern, we have a great opportunity to bring into the Wilderness System, by orderly and tried procedures, a hoped-for 55 million acres, which is actually less than three percent of our land mass. Surely we as a nation will not be bankrupt economically if this much is set aside for the spiritual welfare of a people who increasingly hunger for the kind of satisfaction wilderness can provide.

The Senate Interior Committee held field hearings the following May at Concord, New Hampshire, and in late June at Roanoke, Virginia. These hearings allowed various local interests to express their opinions on the proposed legislation, and where local industries were tied to extractive resources such as timber and coal, opinions tended to oppose S. 316 and the idea of eastern Wilderness. Even so, the Senate passed the bill in the fall of 1973, but the first session of the ninety-third Congress adjourned without any House action on the companion bill H.R. 10469. About this same time, the bill lost an important advocate in the House with the death of Representative John Saylor.

In early 1974 the Eastern Wilderness bills were reintroduced in the House (HR. 13455) and Senate (S. 3433). This time, the House Interior Committee's Subcommittee on Public Lands, under Congressman John Melcher of Montana, held a series of hearings, which entailed a good deal of public debate, during March, April, September and November of 1974. A major effort was required to steer this legislation successfully through the House in an acceptable form. The Forest Service continued to oppose the measure, but the House passed it on. The Eastern Wilderness Areas Act was signed into law on January 3, 1975.

The Forest Service has continued to limit the advance of wilderness designation both in the East and West, using the unit-planning process to eliminate future wilderness possibilities. Rather than presenting Congress with a wide range of roadless areas with wilderness potential, the Forest Service has circumscribed legislative opportunities by committing roadless areas to development without bothering to consult Congress.

The issues are simple, even though the record is not. Wilderness is not a question of "purity" or the complete absence of man's temporary incursions. Wilderness is testament to nature's ability to restore itself. It is a place where natural ecological communities persist in spite of man's incursions. In stressing "purity" and the recreational aspects of wilderness, the Forest Service has ignored the important function of wilderness as a reservoir of clean air and water, and as a refuge for life forms we have destroyed elsewhere. Nor can the Wilderness System in the West accurately represent the unique landforms and natural communities of the East. Only a National Wilderness Preservation System that includes complete representation of eastern-wilderness opportunities can answer the question: "How can the National Forest System in the East and South meet those needs of people that are answered in the West by National Forest Wilderness?" It is an issue of preserving ecological diversity as an enduring resource of wilderness.

January 3, 1975, marked a major step toward this goal, but many more steps remain. Only an enlightened and involved citizenry is going to save its wilderness. Only a deep concern for each of the areas and a dedication to identifying and testifying in their behalf is going to protect them from being "planned away" by the Forest Service and the forces of development.

If we were to look ahead one hundred years from now, we might hope to see a different kind of story commemorated in stone and bronze:

1776 2076

To Honor
The Prudent Men And Women
Who Redeemed The
Wilderness
From Irretrievable Loss
And Development
July 4th, 2076

It might even have a bronze statue of a wolf running with ears erect and tail outstretched, a fitting tribute to an enduring resource of wilderness. **SCB**

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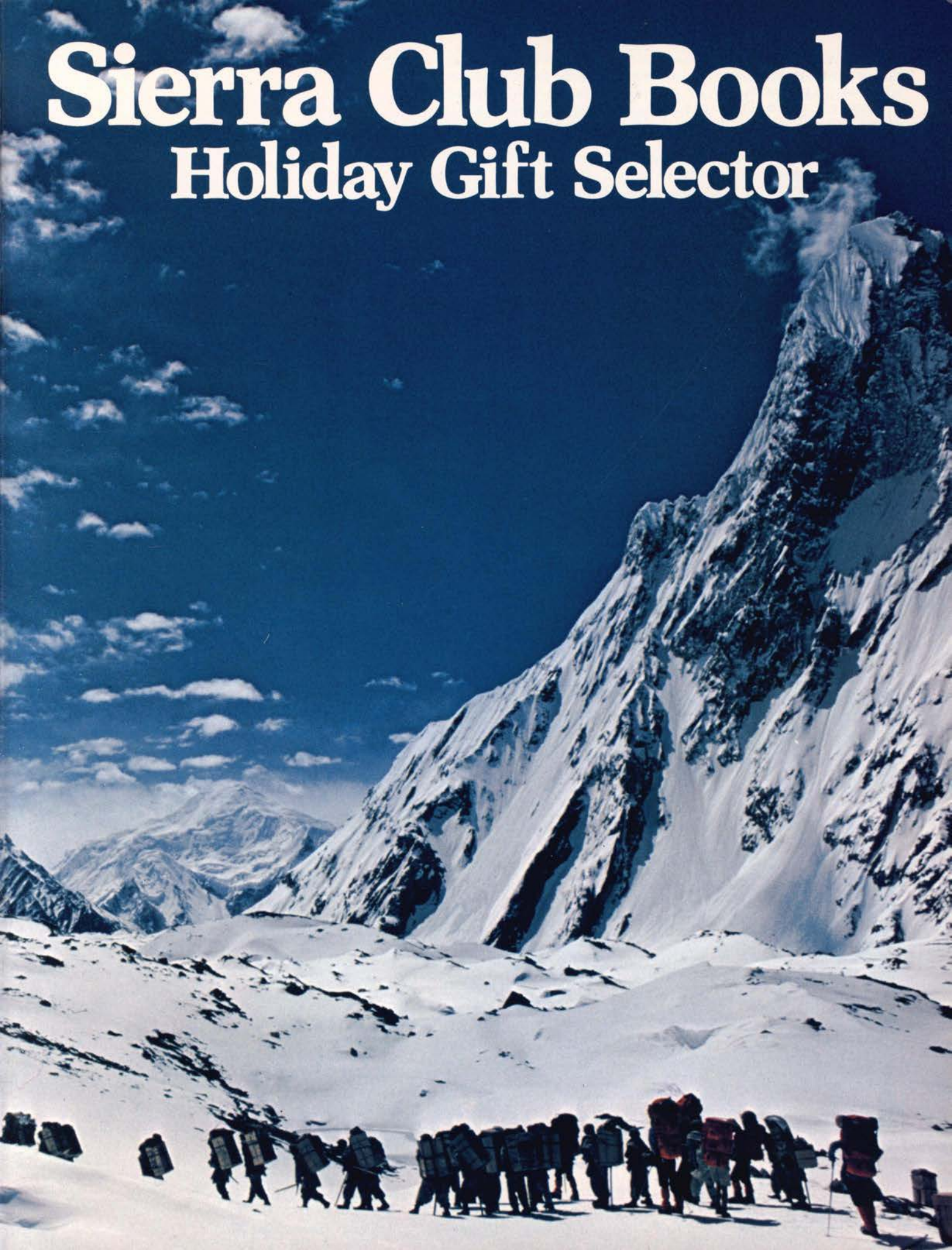
Holiday Gift Selector



Sierra Club Books has been seeking out fresh, lively and useful books — departures in some cases from what we've published in the past — and it is with some pleasure that we offer our 1976 Holiday Gift Selector.

The challenge of mountains, the celebration of wilderness in great photography and evocative prose — these are still with us. But look, too, in the following pages, for significant books on political and environmental problems, on natural history, natural science, and alternative technology. Here are books that will make distinctive, unusual gifts for your friends, for members of your family, and for yourself as well.

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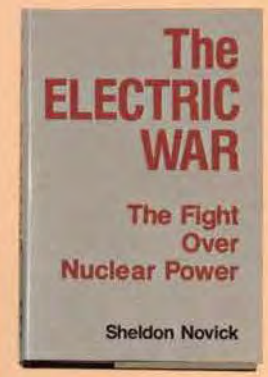
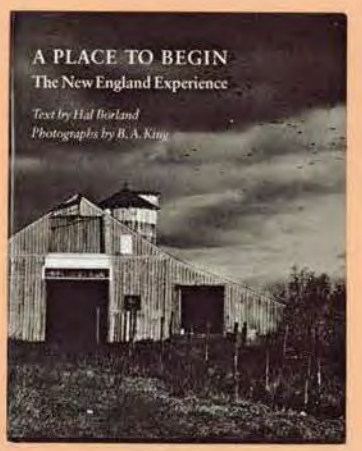
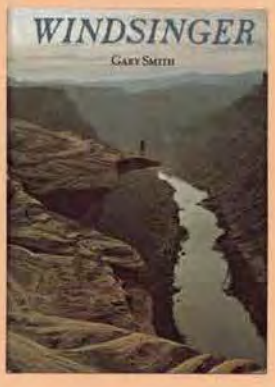
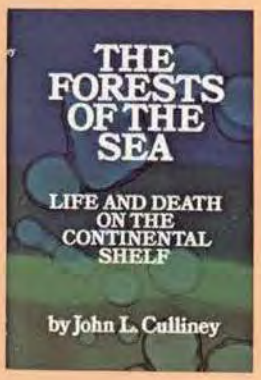
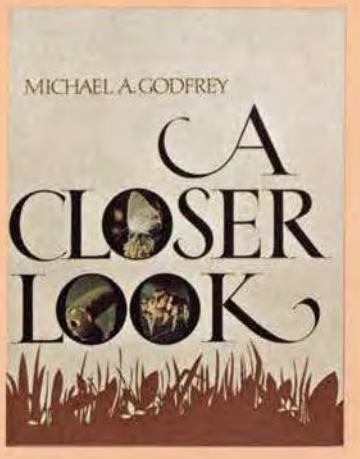
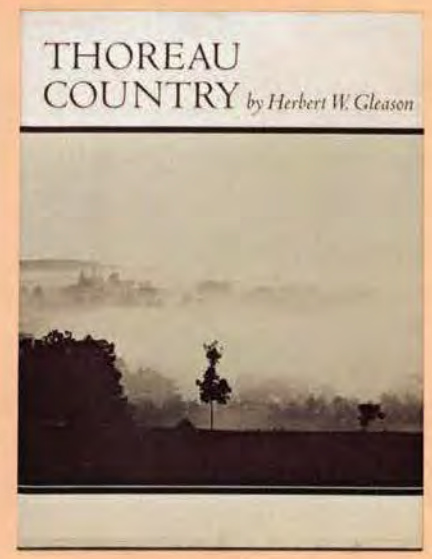












To order use Special Holiday Order Form on page 40

WINDSINGER

by Gary Smith

Gary Smith is regarded in the mountain West as a kind of Renaissance man: mountaineer, folksinger, writer, photographer, and television personality, advocate and champion of the canyonlands of Utah where he makes his home. Growing up in the Idaho backcountry—a skinny, wild kid with the "typical Westerner's macho marksman's attitute"—Smith served three years in the Marines, worked as one of the first forest-service naturalists and wilderness patrolmen in the rugged Sawtooth Mountains of Idaho, and spent two years as a ranger in Canyonlands National Park, Utah. The conviction grew in him that Americans, no longer engaged in subduing physical frontiers, are rediscovering in the American west a new frontier in the territory of the spirit. Now in his early thirties, he recently learned that he has multiple sclerosis; unable to climb actively, he has directed his energies toward a formidable campaign to protect the West's wildlands, and to his songs.

Windsinger is Gary Smith's memoir, and something more. Accompanied by his photographs and lyrics, Smith's vernacular narrative ranges wide and deep—through a farm outside Payette, Idaho; Utah's Robbers Roost and Canyonlands; Okinawa and the Ryukyu Islands in the Pacific; the American South and Southwest—scenes of his life's significant encounters and wellsprings of his music. Looking to literary antecedents like Ernest Hemingway and Vardis Fisher, Smith sets down a living picture of the peoples and landscapes among which he has moved. The songs and tales transmit, powerfully and unsentimentally, the record of a life rooted in the earth, the testament of a man who has spent his best years in the wilderness heartland. It reaches beyond simple experience to realize a form of spiritual ecology.

"*Windsinger* is, like the theme of its title song, an odyssey to the Four Winds of the Mountain. It speaks of the development of awareness, the search for universality through shared experience and understanding. It appeals to us through all our key centers—our thinking, feeling and moving centers."—from the foreword by Frank Waters.

176 pages. 16 pages color photos and 48 black-and-white photos. 6½ x 9¼. Cloth.

THE ELECTRIC WAR

The Fight Over Nuclear Power

by Sheldon Novick

The nuclear power controversy might sardonically be called "the hottest show in town." Its advocates insist that we cannot hope to meet future energy requirements without it, that it is the only alternative to dwindling supplies of fossil fuels and a dangerous degree of dependence on the OPEC nations. Its opponents argue that the risks—both proven and theoretical—inherent in the technology are far too great, and that there *are* alternatives, if government and industry would make the commitment to develop them.

Sheldon Novick presents this complex issue from every aspect in *The Electric War*, and the people in the forefront of the controversy speak for themselves. He interviews scientists, officials in government and the power industry, uranium miners, plutonium plant employees; as well as private citizens who have made the study of nuclear power their business.

The most dramatic elements of the nuclear fight are fairly well-known: the danger of theft of radioactive materials; the possibility of malfunction, or sabotage, in nuclear plants with the consequent prospect of radioactive contamination of surrounding areas; the hazards of storing nuclear wastes over periods of generations. But behind the headline-making news of "meltdowns" and energy crises is an even bigger story: the fascinating, revealing history of the nuclear industry. This story, told in full for the first time, is the heart of Novick's account. Why do we have a nuclear industry? What is the profitability—the motivation—of the industry, and what are its actual (and potential) effects on our energy supply? How are decisions made, and how is the industry regulated? What laws apply to it, and how are they interpreted? And, fundamentally, what is the nuclear industry and how did it come to be? *The Electric War* provides answers.

Citizens' groups such as Project Survival and the Utility Consumers Council of Missouri, concerned lawyers, scientists Barry Commoner and Henry Kendall, opposition spokesmen including Ralph Nader and David Brower, are heard from on one side of the issue. Power company executives, the heads of the Nuclear Regulatory Commission and the Atomic Industrial Forum, and pro-nuclear politicians represent the other. Their audience is the great majority of Americans as yet uncommitted on nuclear power, who know little on which to base their judgments, but who, when they go to the polls, may decide the future of the nuclear industry. This book is addressed to them.

Sheldon Novick is an editor of *Environment* Magazine. He is the author of the book, *The Careless Atom.*

376 pages. 26 black-and-white photos, appendices, index. 6⅛ x 9¼. Cloth.

1. Frank Zarb, Administrator, Federal Energy Administration
2. Congressman Mike McCormack
3. Ralph Nader
4. Madeleine Adamson

1.

2.

3.

4

THE FORESTS OF THE SEA

Life and Death on the Continental Shelf

by John L. Culliney

Rimming the shores of the North American continent is a hidden wilderness, largely unknown. The submerged shelf ringing Canada and the United States is a world unto itself, as different from the abyssal ocean depths beyond it as from the land mass it surrounds.

The Forests of the Sea is a full-scale exploration of the marine biology of the continental shelf, incorporating its geological background and an analysis of the events which threaten it. The shelf contains great resources: in food and minerals, and in the opportunities it affords for understanding the evolution and sustenance of life on the planet. If these are wasted or damaged, the consequences would be irreversible. The author brings this twilight wilderness alive, and details the circumstances by which it could die.

The continental shelf is, first, a world of abundant life. Its flora resembles North America's primeval forests in its vastness and wealth of animal habitation. Culliney divides the shelf into five distinct areas, and follows the characteristic creatures of each through their life cycles. The lobster on the New England Shelf; schools of herring and bluefish in the Middle Atlantic region; the brown, pink, and white shrimp of the Gulf of Mexico; kelp and the creatures it harbors along the Pacific shore; salmon in Alaskan waters, are some of the life forms examined in the various eco-systems. Every species (and its competitors) occupies a special depth in the shelf's waters: near the surface, the air-breathing mammals such as whales, otters, and seals; on the sandy bottom, the skimmers, stalkers, and leapers. Each contributes to the diversity and fascination of the shelf.

Man has only recently begun to exploit this watery world, and like his restless forebears on the western frontier a century ago, understands it on but a rudimentary level. But he has not hesitated to introduce the technology of this century into the waters surrounding his home, and the results have already been dramatic. These complex and fragile domains, which in the past changed only due to geological upheaval, are now faced with sudden, often catastrophic events, to which they and their indigenous life forms either adapt or succumb. The daily struggle to survive in the world of the shelf now entails thermal pollution, incredibly sophisticated fishing techniques, an abrupt increase in predators, oil spills, *pcbs* and other toxic substances, effluents (sewage), cadmium, mercury—and the list goes on. No contemporary depiction of the continental shelf can ignore the alteration of its environment by man.

John Culliney is a marine biologist, formerly attached to the Marine Biological Laboratory at Woods Hole, on Cape Cod. He has a special interest in mariculture, and now lives and works in Hawaii.

256 pages. 20 line illustrations by Bonnie Russell. 6 x 9. Cloth. Available in November.

A PLACE TO BEGIN

The New England Experience

Text by Hal Borland
Photographs by B. A. King

In rural New England, as perhaps in no other part of the United States, does the land retain its integrity — its separateness. It offers to the sensitive inhabitant a very special sense of place, in manifestations as dramatic as the fabulous autumn colors and as subtle as the satisfaction of weathering a severe winter. Hal Borland, in words, and B. A. King, in photographs, have set down in this book the relationship between man and land which defines the true New Englander.

Borland's is the unique vantage point of the outlander, having moved to New England from Colorado. He turns from his own quarter-century's experience in the region to those other outlanders: the first Indians to migrate there, the colonists, the post-Revolution settlements, and finally, the outlanders from city and suburb. History, geology, and natural history work together in Borland's portrait of New England, and of the men and women who have lived there and do still. The disappearance of hollyhocks and the tragic elm blight, the botanical make-up of the woodland today, the seagoing traditions of the coast, the old-timers' lingo, are a few of the subjects which inform his theme of the land's influence on people and that of people on the land.

B. A. King's photographs capture and impart both the severity and beauty of the New England scene. Depicting human lives and landscapes that contribute to each other, while remaining apart, his images perfectly complement the text.

Hal Borland came to New England a quarter-century ago from Colorado. He is the author of numerous books, among them: *When the Legends Die, Beyond the Doorstep, High, Wide and Lonesome, Our Natural World,* and *Hill Country Harvest.* He contributes a piece about the changing of the seasons to the Sunday *New York Times* editorial page.

B. A. King, a Canadian transplanted to New England, has had many photographic exhibits. He contributed photographs to the book *Ojibwa Summer,* and a New England calendar of his photographs is published each year.

160 pages. 75 black-and-white photographs. 8½ x 11. Cloth.

IN THE THRONE ROOM OF THE MOUNTAIN GODS

by Galen Rowell

This is a book about a quest. Mountains have given those closest to them experiences that can best be described as mystical. A climber may be blessed by success or be damned, even destroyed, in his encounter with the mountain gods.

In the Spring of 1975 a team of American mountaineers set off to climb K2, the world's second highest peak, dominating the Karakoram range of Pakistan. Located near the border of mainland China, the heart of the world's highest range of peaks had been closed to mountaineers for political reasons until 1974. Now it was to be the site of the convergence of a number of expeditions: a Polish expedition composed predominantly of women was aiming at Gasherbrum III, a two-man South Tyrolean team had set their sights on Hidden Peak; and many other teams from as many countries planned to launch their own treks in the Karakoram.

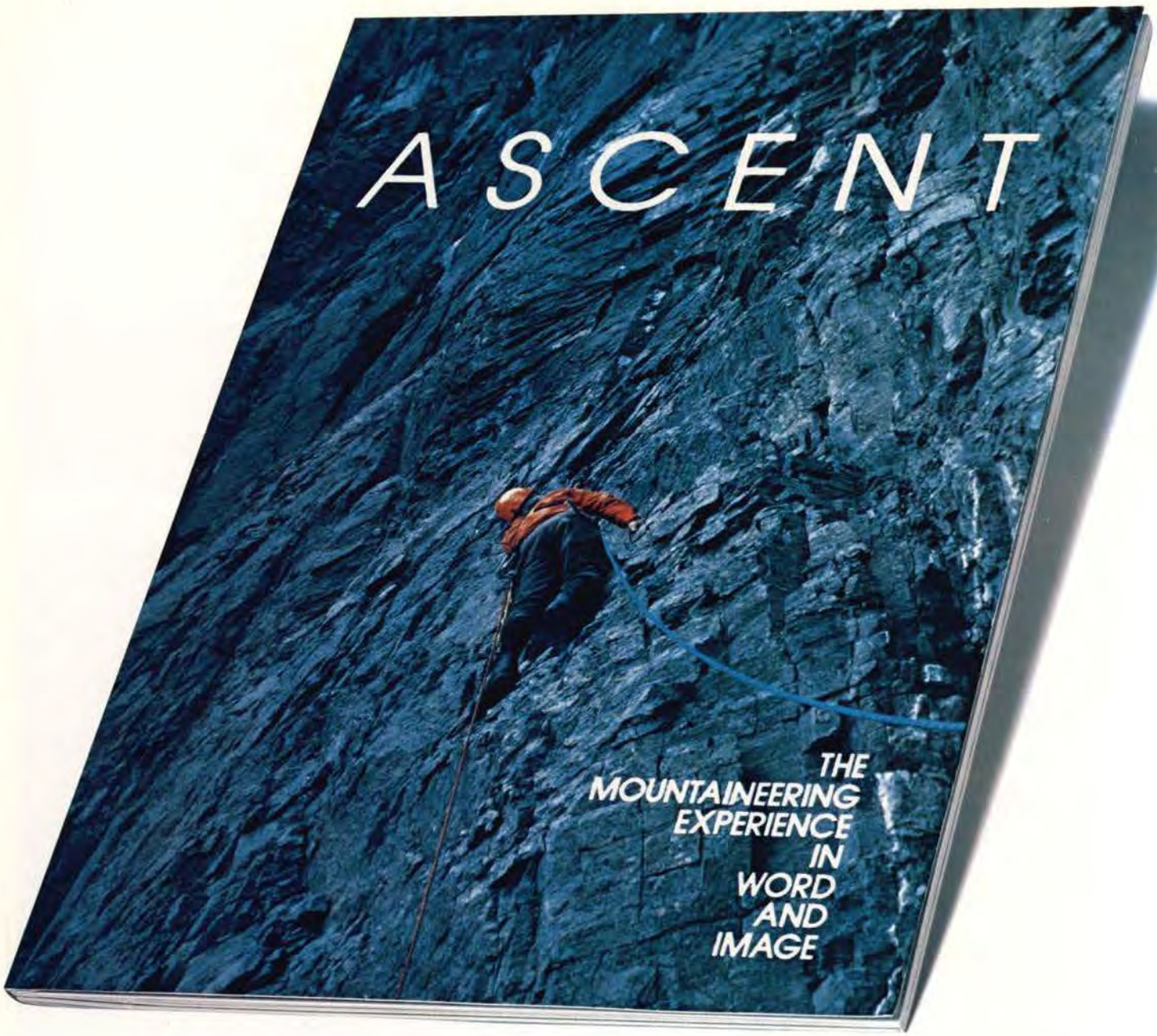
In the Throne Room of the Mountain Gods eloquently describes the Karakoram range, in the voices of the men and women who went there to climb. Galen Rowell utilizes their diaries and the breathtaking photographs, taken by himself and others on the American expedition, to depict K2 in all its majesty, and to bear witness to that quality of mountaineering that often leads the climber to liken his experience to that of the artist.

Drawing on his own experiences and those of his teammates he deals frankly with the politics of mountaineering, the problems of personality and temperament on an expedition, the aspirations and fears of mountaineers. He reveals why some expeditions may succeed—and why some fail. In addition, he delves into the fascinating history of K2 and of the monumental Karakoram.

Why do people risk their lives to stand on a pinnacle of rock? The presence of so many climbers, in one remote Asian mountain range, beautifully exemplified this classic question. Rowell takes up this and the many other strands of that Karakoram year—the expeditions, with their successes, failures, and inevitable tragedies; the country of Pakistan, caught unprepared for the inundation of the area by climbers; the Pakistani people and their own responses to the range, and to the climbers; and the majestic but savage peaks themselves—and weaves them into a dramatic chronicle of men and mountains.

Galen Rowell is a veteran rock and mountain climber, and a photographer and journalist. His work has appeared in *National Geographic, Mountain Gazette,* and many other magazines and journals. His book *The Vertical World of Yosemite* has received acclaim within and without the mountaineering world. He resides in northern California.

320 pages. 40 pages of color photographs; 50 black-and-white photographs. 8¼ x 10⅞. Cloth. Available in January.



ASCENT *Edited by Steve Roper, Allen Steck, Jim Stuart and Lito Tejada-Flores*

With this new paperback book, *Ascent*, the popular Sierra Club mountaineering publication, inaugurates a new series from Sierra Club Books. The newly-expanded *Ascent* combines personal reminiscences, factual accounts, fiction, photography, and graphics to illuminate the many sides of the mountaineering experience. Here are the experiences and insights of some twenty well-known mountaineers. Galen Rowell, Chris Jones, Harvey Manning, Fred Beckey, and other eminent mountaineer-authors have contributed personal and historical accounts of climbing in Alaska, in the Tetons, in Yosemite, and in the Himalayas, a personal account of working on location in Switzerland with the film crew for *The Eiger Sanction*, a whimsical treatment of mountaineering leadership. 120 duotone prints will include rare shots of the Baltoro Glacier region of Pakistan and a remarkable collection depicting hard climbing in Colorado.

Edited by Steve Roper, Allen Steck, Lito Tejada-Flores, each an author with books to his credit, and Jim Stuart, a widely-published wilderness photographer, *Ascent* catches the beauty, whimsy, and sheer visual delight of climbing, demonstrating why enthusiastic reviewers from many sides have acclaimed its position at the forefront of interpretive American mountain writing.

128 pages. 120 duotone prints. 8½ x 11. Paper only.

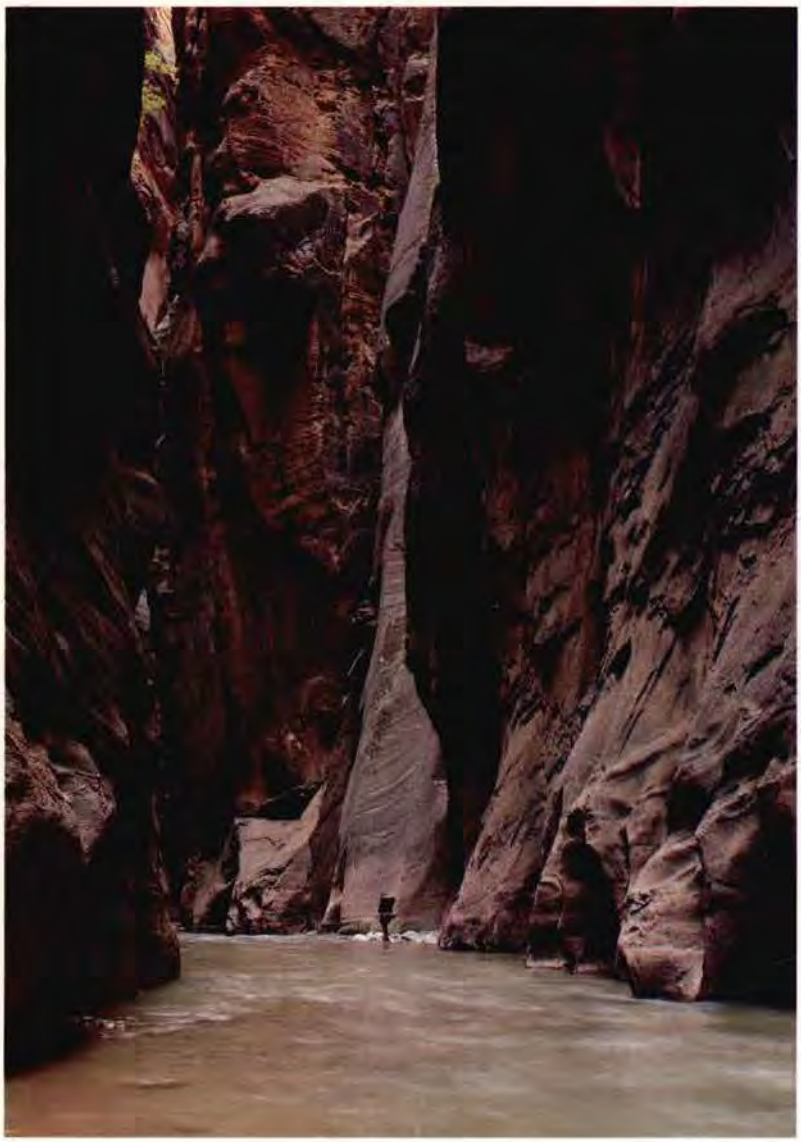
1977 Sierra Club Calendars are ready!

(. . . order now by using the handy order form on page 40.)

Wilderness 1977
Sierra Club Engagement Calendar

This week-by-week tribute in full color to the natural glory of our continent, and the wild creatures who find in it a home, comes in a practical desk format, designed for appointment and note-keeping. The Introduction is by Michael McCloskey, Executive Director of the Sierra Club. The photographs are by such eminent photographers as Ed Cooper, Steve Crouch, Philip Hyde, Stephen J. Krasemann, David Muench, Boyd Norton, Galen Rowell, Bob Waterman, and many others. Spiral-bound at the side and individually packed in a self-shipping carton. 6½ x 9½.

1977 Sierra Club Calendars



Sierra Club Trail Calendar 1977

Mountaineering, wilderness skiing, rock climbing, kayaking, scuba diving, backpacking, or just a wildlands ramble—this calendar celebrates all of these activities; from California's High Sierra to the camp of the 1975 American K2 Expedition team; from the rapids of the rivers of Washington to the coral reefs of the British West Indies. Photographs by Steve Crouch, Kent and Donna Dannen, Keith Gunnar, Dan Jones, Dewitt Jones, Boyd Norton, James Randklev, Galen Rowell, Kent Schellinger, Tom Tracy, with line illustrations and selections from the literature of the trail. Introduction on the art and experience of walking by Edward Abbey. Spiral-bound at the top, hole-punched for hanging, individually packed in a self-shipping carton. 10¼ x 10¼.

Wilderness Calendar 1977 Sierra Club

The natural beauty of North America through each season, depicted in full-color by photographers Dennis Brokaw, Ken Carlson, Robert Carr, Peter Kresan, Wendell Metzen, David Muench, Robert Ketchum, Boyd Norton, Galen Rowell, Art Twomey, and Hans Wendler. Quotes drawn from the literature of natural America by such authors as Burroughs, Whitman, Emerson, and Thoreau, accompany each month. Introduction by novelist, critic and photographer Wright Morris. Spiral-bound at the top, hole-punched for hanging, individually packed in a self-shipping carton. 10½ x 13¾.

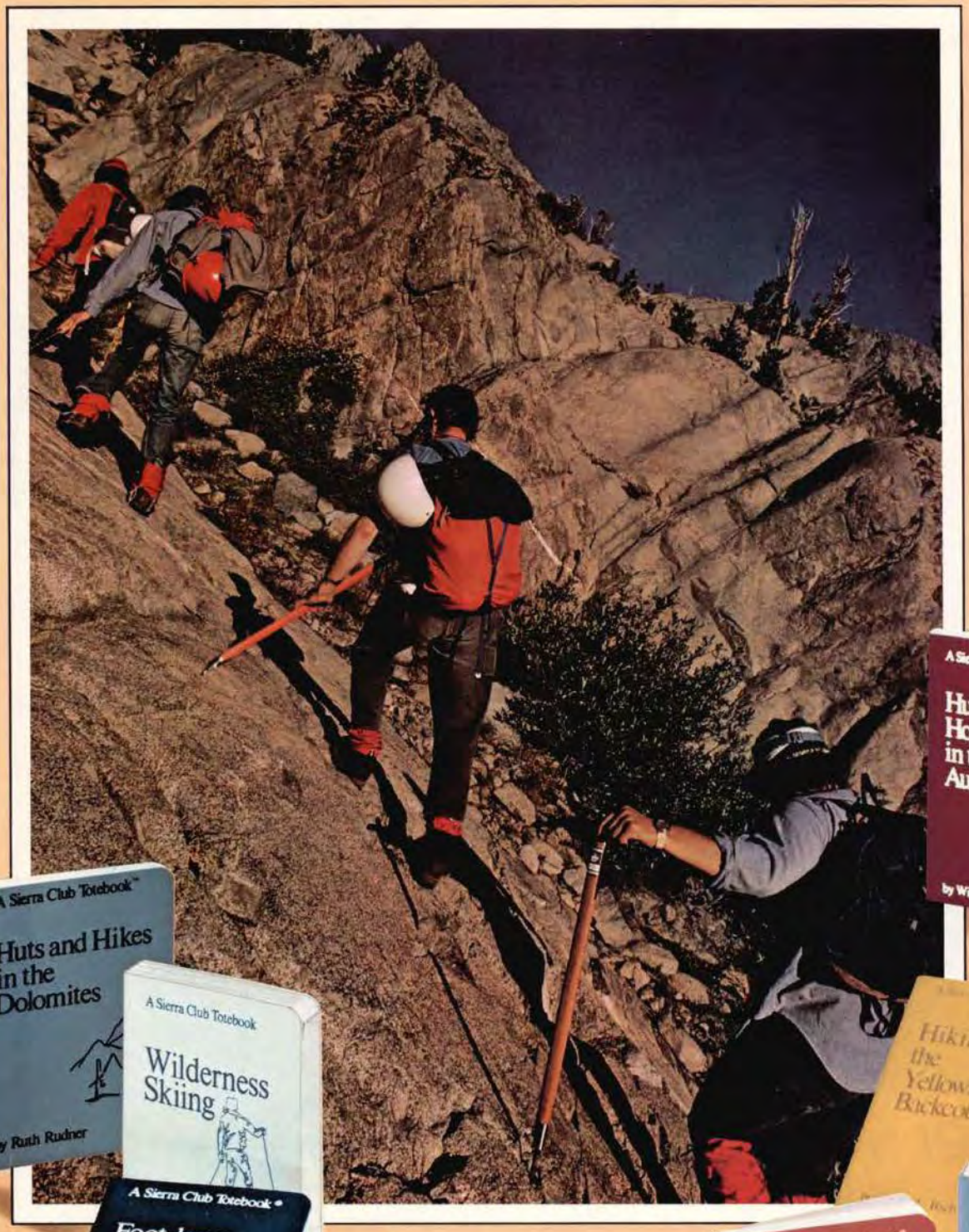
1977 Sierra Club Calendars

Sierra Club Wildlife Calendar 1977

The golden eagle, the coyote, the killer whale, the jaguarundi and the moose are among the 14 full-color subjects — depicted in their natural habitats ranging from the Okefenokee Swamp of Georgia to Mount McKinley National Park — of this year's Wildlife Calendar. Photographs by Fred J. Alsop, Ken Carlson, Stephen J. Krasemann, Wendell Metzen, C. Allan Morgan, Tom Myers, Leonard Lee Rue III, Bob Waterman and Gus Wolfe. Introduction by the eminent field biologist and author, George B. Schaller, of the New York Zoological Society. Spiral-bound at the top, hole-punched for hanging, individually packed in a self-shipping carton. 10¼ x 8½.

...and introducing the Sierra Club Calendar and Almanac for Children

New from Sierra Club Books, this calendar-almanac for young people draws on the endless wealth of stories our earth has to tell. Every page is a visual delight, covering one week of the year. The space for each day is illustrated by drawings, descriptions of earthly and celestial events, and facts of natural history — nature explored through human cultures, animal behavior and husbandry, botany and gardening, nature lore and crafts. The calendar-almanac includes a section of nature-oriented activities for children and 13 color photographs of North American wildlife. Spiral-bound at the side and individually packed in a self-shipping envelope. 88 pages. 13 pages of color photos. 10¼ x 10¼.



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Hiking the Teton Backcountry

A Sierra Club Totebook™
Huts and Hikes in the Dolomites
by Ruth Rudner

A Sierra Club Totebook
Wilderness Skiing

Hiking the Yellowstone Backcountry

A Sierra Club Totebook®
Foot-loose in the Swiss Alps
by William Reifsnyder

Fieldbook of Nature Photography
by Patricia Maye

A Sierra Club Totebook®
Starr's Guide to the John Muir Trail and the High Sierra Region
by Walter A. Starr, Jr.
Twelfth Revised Edition

Sierra Club Totebooks® are incomparable as practical companions on the trail, in the wilderness, at the campsite—anywhere one travels. Measuring 4⅜ x 6⅛ inches, they're jean-pocket sized but packed with authoritative information, drawings, photographs, and, in many instances, maps—all printed in large, easy-to-read type. Best of all, they're "wilderness tough"—bound in sturdy, flexible weather-resistant covers—with rounded corners to give them extra life.

Just published

The Climber's Guide to the High Sierra
by Steve Roper.
An all-new guide to climbing over 500 peaks and passes in the most exciting and challenging range in North America. 384 pp. Maps and photos.

The Best About Backpacking
edited by Denise Van Lear.
From a dozen articulate experts—a full pack of advice on backpacking equipment and technique. 288 pp. Sketches and photos. Appendices.

Climber's Guide to Yosemite Valley
by Steve Roper.
16 "locater" photos. 320 pp.

Cooking for Camp and Trail
by Hasse Bunnelle with Shirley Sarvis.
Recipes. 192 pp.

Fieldbook of Nature Photography
edited by Patricia Maye.
A practical Totebook® tailored to the needs of the amateur photographer and attuned to the advanced outdoor photographer. 192 pp. Photos in color and black-and-white.

Food for Knapsackers
by Hasse Bunnelle.
Recipes. 144 pp.

Foot-loose in the Swiss Alps
A Hiker's Guide to the Mountain Inns and Trails of Switzerland
by William E. Reifsnyder.
450 pp. Maps and photos.

Hiker's Guide to the Smokies
by Dick Murlless and Constance Stallings.
374 pp. Maps.
Smokies Map available separately:

Hiking the Bigfoot Country
The Wildlands of Northern California and Southern Oregon
by John Hart.
400 pp. Maps and black-and-white photos.

Hiking the Teton Backcountry
by Paul Lawrence.
159 pp. Maps.

Hiking the Yellowstone Backcountry
by Orville Bach.
228 pp. Maps.

Hut Hopping in the Austrian Alps
by William E. Reifsnyder
207 pp. 30 photos and maps.

Huts and Hikes in the Dolomites
A Guide to the Trails and Huts of the Italian Alps by Ruth Rudner.
244 pp. Maps and photos.

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A Layman's Guide to the Geologic Secrets of Canyons, Mesas, and Buttes of the American Southwest
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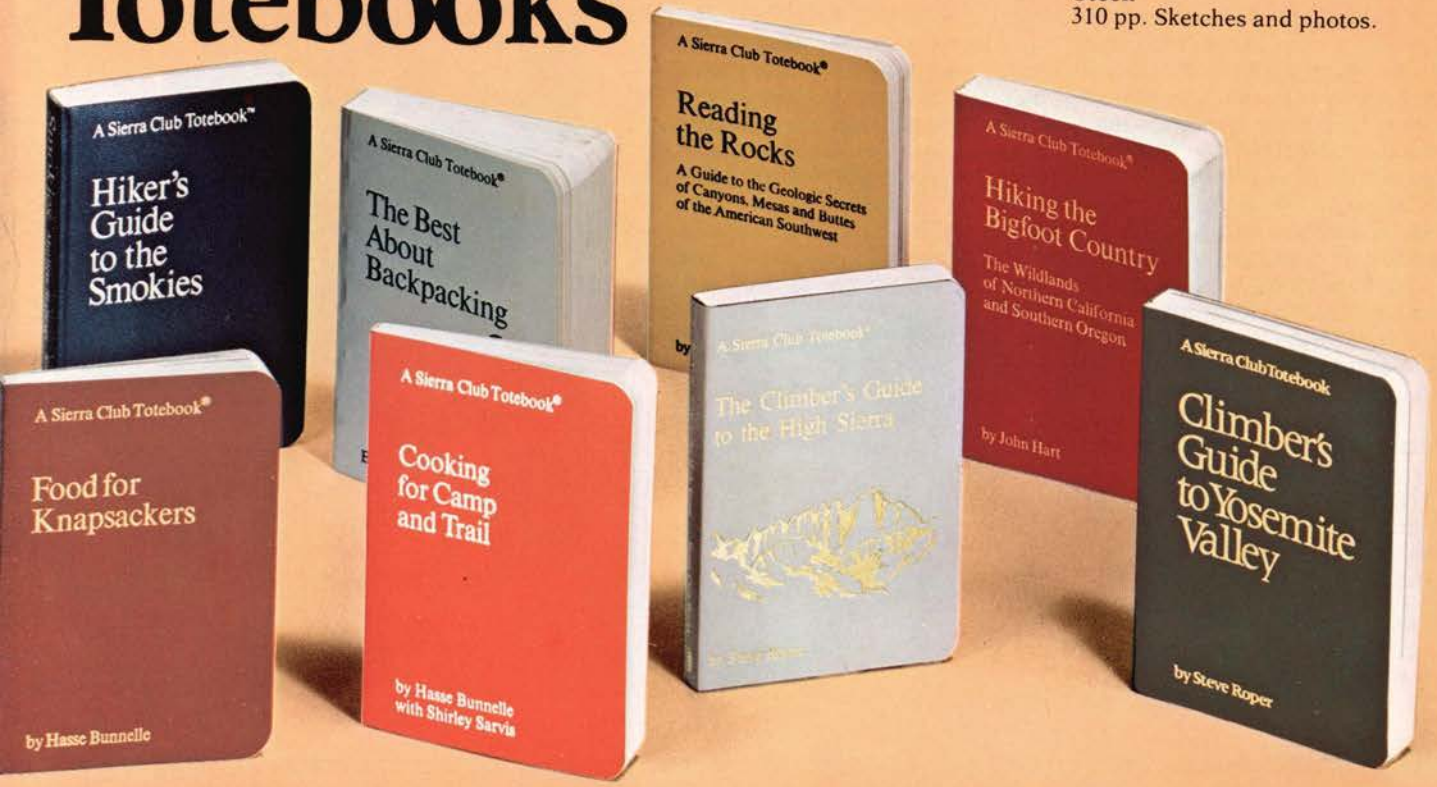
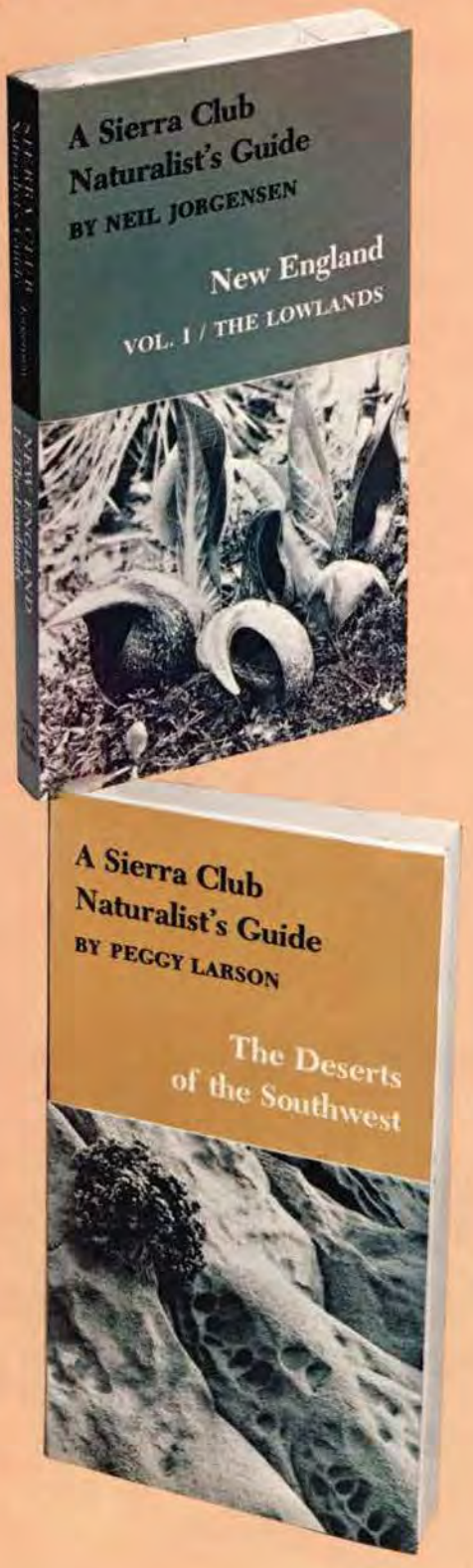


Sierra Club

Introducing the new Sierra Club Books Naturalist's Guide Series

This winter Sierra Club Books inaugurates a series of field guides to the natural history of various regions of North America. Each title will identify distinctive flora, fauna, geology, and the interrelationships of these elements in specific physiographic units — regions that share and are defined by a characteristic ecology. While multitudes of guides to *subjects* exist — to birds, trees, flowers, etc., the Sierra Club Books Naturalist's Guides include *all* of the identifying data on the representative life forms to be found in an area, and in addition explain the ecology of the whole — the relationships that exist between the animal life, the plant life, and the terrain they inhabit. Clearly written, profusely illustrated, and easily portable, these guides will enable the budding naturalist, the hiker, and the backpacker to understand the nature of his and her countryside — how it is formed, what life it supports, why it is the way it is.



The Sierra Club Naturalist's Guide to New England

Volume I: The Lowlands
by Neil Jorgensen

This is the first of a two-part field guide to the ecology of New England. "The Lowlands" provides a comprehensive picture of southern Connecticut, Rhode Island, and the eastern areas of Massachusetts, New Hampshire, and Maine.

Here in detail are the fields and forests, herbs and shrubs, sandy areas, swamps, marshes and bogs, ravines, chasms, hills, lakes and rivers — and all of the varied life of these "wilderness areas." This book identifies, for each region, its common and unusual species of plants, animals and insects; climate; geological history; and provides clear explanations of such ecological considerations as forest types and forest succession, zonation, indicator species, and invasions by foreign life. Neil Jorgensen offers valuable advice on macro- versus micro-touring, foot travel, trail versus off-trail hiking, maps to carry, and on hazards to watch for — from poisonous plants to the formidable New England weather.

Neil Jorgensen, a geologist, is the author of *A Guide to New England's Landscape*. He is a trustee of the New England Wildflower Society, and a member of the New England Botanical Club and the Massachusetts Audubon Society. He lives in Harvard, Massachusetts.

288 pages. 150 diagrams and illustrations. 4½ x 8. Bound in cloth and paper.

The Sierra Club Naturalist's Guide to the Deserts of the Southwest

by Peggy Larson,
with Lane Larson
Foreword by Edward Abbey

This multi-faceted guide to America's deserts carefully describes and illustrates the special beauty and intricate life systems of the Great Basin Desert, the Mojave Desert, the Chihuahuan Desert, and the seven regions of the Sonoran Desert.

The author details desert climatic conditions and characteristics, including differences between upland and lowland deserts; characteristic plants and animals, and their means of suvival under desert conditions; the geology and topography of the areas; and non-desert areas found within the deserts' boundaries. She advises the desert hiker as to books and maps, rules for driving in the desert, necessary equipment, hiking manners in this fragile environment, and general rules for being prepared. Hazards, from poisonous reptiles and other animals, to the dangers of sunstroke and heat exhaustion, are spelled out, and there are sections on first aid and survival in problem situations.

Peggy Larson, currently affiliated with the Arizona Sonoran Desert Museum, is the author of several books, including *Deserts of America*.

224 pages. 40 diagrams, illustrations, and maps. 4½ x 8. Bound in cloth and paper.

Not available until January.

Paperbacks

"Anyone planning a wilderness trip should read *Simple Foods for the Pack,* for in addition to some sound and sometimes inspired recipes, there are excellent tips on what basic utensils to carry and how to package the foods."—Nelson Bryant, *New York Times*

"If toting freeze-dried beef stroganoff packed in little plastic or aluminum pouches doesn't fit in with your picture of wilderness camping, you'll probably want to try a few of the 175 'trail-tested' meatless, sugarless recipes using natural ingredients in *Simple Food for the Pack.*"—*Organic Gardening* Magazine

"Comes close to being the ultimate manual on nourishment for the backpacker...The beauty of this book, besides its modest price, its convenient size, and the loving care of its writing, is that it offers recipes that can be worked into a person's existing system for keeping his stomach happy on the trail."—*High Country News*

"Great, well-explained recipes, a first-rate book, and a service to wilderness wanderers."—Sharon Cadwallader, author, *The Whole Earth Cookbook*

175 recipes. 216 pages. Line drawings, glossary, bibliography. 4½ x 8.

Simple Foods for the Pack
by Vikki Kinmont and Claudia Axcell

Other Homes and Garbage
by Jim Leckie, Gil Masters, Harry Whitehouse, Lily Young
"An excellent reference source for those who wish to study, design, construct, or renovate a building while reducing demands on the environment."—*Library Journal.* 320 pages. Diagrams, charts, tables, line drawings, mathematical formulae, index, and bibliographies. 8½ x 11.

Mind In The Waters
assembled by Joan McIntyre
A book to celebrate the consciousness of whales and dolphins. "A remarkable compendium of mythology, scientific studies, whale lore, photographs, drawings and poetry."—*Washington Post.* 224 pages. 16 pages of color photos. Illustrations. 8½ x 11. *Published in association with Charles Scribner's Sons.*

Thoreau Country
Photographs and text selections from the works of H. D. Thoreau
by Herbert W. Gleason.
Edited by Mark Silber.
Introduction by Paul Brooks.
160 pages. 121 duotone photographs. 10½ x 13¾. *Winner of the 1976 Carey Thomas Award: Honorable Mention for Creative Publishing.*

Alaska
The Great Land
by Mike Miller and Peggy Wayburn
The last great wild place in North America presented in full-color photographs and authoritative text. 152 pages. 71 color photos. 8½ x 11.

Brother Sun
A Photographic Appreciation
by Dennis Stock
Exquisite photo-essay with appropriate captions from world literature. 96 pages. 40 full-color photos. 10¼ x 10¼.

The Grass Roots Primer
edited by James Robertson and John Lewallen
How to save your piece of the planet, by the people who are already doing it. "The primer's case-studies testify that individuals inspired by a cause...can make their voices heard."—*New York Times Book Review.* 192 pages. Photographs, diagrams, line illustrations. 8½ x 11.

Island in Time
The Point Reyes Peninsula
Photographs by Philip Hyde.
Text by Harold Gilliam.
96 pages. Color photos. 8¼ x 10¾. Sierra Club/Scribner Library.

Slickrock
Endangered Canyons of the Southwest
by Edward Abbey and Philip Hyde.
Photographs of the wildlands of southeast Utah by Hyde and a brilliant, militant essay by Abbey. 144 pages. 68 color photos. 8½ x 10¾. Sierra Club/Scribner Library.

Action for Wilderness
edited by Elizabeth Gillette.
Key guidelines for identifying and protecting wildland resources. 176 pages.

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_____	113-X	**Alaska: The Great Land**, $7.15	_____
_____	105-0	**Brother Sun: A Photographic Appreciation**, $5.35	_____
_____	233-3	**Ecotactics**, $ .85	_____
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_____	096-8	**Island in Time: The Point Reyes Peninsula**, $4.45	_____
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_____	141-7	**Other Homes and Garbage**, $8.95	_____
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_____	144-1	**Thoreau Country**, $8.95	_____
_____	555-3	**Ascent (1973)**, $6.00	_____
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QUANTITY		SPECIAL CHRISTMAS SALE (Hardcover Titles)	AMOUNT

All prices for titles listed below include **30% discount** on regular retail price for this one-time-only Christmas sale. The offer is valid until **December 31, 1976** and is available only to members.

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_____	016-X	**Almost Ancestors: The First Californians**, $10.50	_____
_____	104-2	**Brother Sun: A Photographic Appreciation**, $10.45	_____
_____	143-3	**A Closer Look**, $10.45	_____
_____	045-3	**Everglades**, $19.25	_____
_____	006-2	**Gentle Wilderness: The Sierra Nevada**, $21.00	_____
_____	000-3	**In Wildness is the Preservation of the World**, $22.75	_____
_____	130-1	**The Lands No One Knows**, $6.95	_____
_____	170-0	**Mind in the Waters**, $10.45	_____
_____	007-0	**Not Man Apart; Photographs of the Big Sur Coast**, $22.75	_____
_____	018-6	**On the Loose**, $5.55	_____
_____	109-3	**A Separate Place**, $10.45	_____
_____	051-8	**Slickrock: Endangered Canyons of the Southwest**, $19.25	_____
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Special Christmas Book Sale for Sierra Club members only...

Through December 31, 1976, the Sierra Club titles listed on this page are available at 30% off the retail price in a one-time-only Holiday Price-Saving Offer. Take advantage of these substantial savings—and insure the earliest possible delivery—by placing your order now. Use the convenient order blank on the opposite page.

Thoreau Country
Photographs and text selections from the works of H.D. Thoreau
by Herbert W. Gleason
Edited by Mark Silber
Introduction by Paul Brooks

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Essay by John G. Mitchell

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Alaska: The Great Land
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"Makes a persuasive argument against the despoilation of Alaska by essay... (and) by superbly-lithographed photographs, which reflect a land of almost primordial beauty."—*The National Observer*. 152 pages. 71 color photos. 8½ x 11. Cloth.

On the Loose
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A chronicle of triumph and tragedy by two young artists—the triumph of gaining an insight about oneself through an understanding of the natural world; the tragedy of seeing the splendor of that world increasingly threatened by men who don't know or don't care. 128 pages. Color photos. 6½ x 9½. Cloth.

A Closer Look
by Michael A. Godfrey

A fascinating description of the animal and plant life that can be found in or near your home or backyard. "An ecological masterpiece...*A Closer Look* is appropriately grand for a Sierra Club Book, with spectacular color blowups of nature's intimate details."—*Smithsonian Magazine*. 160 pages. 45 color photographs. 8½ x 11. Cloth.

Almost Ancestors
The First Californians
by Theodora Kroeber and Robert F. Heizer.
Edited by F. David Hales.

168 pages. 117 black-and-white photographs of California Indians. 8½ x 11. Cloth.

Brother Sun
A Photographic Appreciation
by Dennis Stock.

Exquisite photo-essay with appropriate captions from world literature. 96 pages. 40 full-color photos. 10¼ x 10¼. Cloth.

Mind in the Waters
assembled by Joan McIntyre.

A book to celebrate the consciousness of whales and dolphins. 224 pages. 16 pages of color photos. Illustrations. 8½ x 11. Cloth. *Published in association with Charles Scribner's Sons.*

The Lands No One Knows
by T.H. Watkins and Charles S. Watson, Jr.

The colorful history of America's "forgotten inheritance," the Public Domain. 256 pages. 64 pages of black-and-white photographs. 7 x 10. Cloth.

Alaska Wilderness
The 140-million-acre Challenge

PEGGY WAYBURN

Rollie Ostermick

Mt. Katolinat across Naknek Lake, Katmai National Monument, Alaska; potential Wilderness classification.

Many believe Alaska's wilderness to be unmatched on the planet. Also unmatched is the challenge it now presents. For this wilderness, still intact in many places, is at this moment largely in uncommitted public land. Congress is deciding its fate: the terms of the Alaska Native Claims Settlement Act (ANCSA), passed in December, 1971, provide for classifying large areas as "national interest lands." Thus, while there are enormous pressures to exploit all of Alaska's energy resources, there is also a real chance to protect what is unquestionably this country's greatest remaining wilderness resource. There is a chance to profit from our old mistakes and, at long last, to exercise wisely our stewardship of the land.

Peggy Wayburn is coauthor of the Sierra Club book Alaska: The Great Land.

Consider the opportunity: to date more than 150 million of Alaska's 365 million acres have been committed by Congress to multiple use and potential development as state-owned or privately owned lands. Roughly another 50 million acres are reserved in national forests (21 million acres), national wildlife refuges (19 million acres) and national parks and monuments (7.2 million acres). Nearly 30 million acres are being administered by other federal agencies, including the military; 4.5 million acres have been tagged for the trans-Alaska pipeline, and one million more acres for a second utility corridor. Thus some 235 million acres of Alaska lands have now been earmarked for future use, and the great majority of this land will be available for development. As much as possible of the approximately 140 million acres remaining can, and many advocates feel must, be protected for their wilderness values. Considering the magnitude of these values, and the total land-use pattern emerging in Alaska, this amount hardly seems unreasonable.

To describe the beauty of Alaska's wilderness has always been a challenge. The Aleuts, among the first settlers, met the challenge by simply naming the place "Alaska," which means "The Great Land." Bob Marshall, one of Alaska's early and eloquent advocates, spoke of its "most staggering grandeur," and he provided a classic description of the Arctic when he wrote of it: "All was peace and strength and immensity and coordination and freedom." Henry Gannett, the explorer-geographer who visited Alaska in 1898, was so overcome by the scenery that he advised young people to postpone see-

ing it: ". . . [it] is much grander than anything else of the kind in the world," he wrote, "and it is not well to dull one's capacity for enjoyment by seeing the finest first." But "if you are old," he advised, "go by all means . . . ." And John Muir, speaking of Alaska's Southeast, said, "Never before this had I been embosomed in scenery so hopelessly beyond description."

But immensity, diversity and beauty alone, it can be argued in our world of conflicting values, no longer provide sufficient reasons for keeping large areas in wilderness, particularly since the myth persists that wilderness is for the use of only "the hardy few." Quite aside from aesthetic considerations, however, Alaska's wilderness has many incalculable values. It is an unequaled natural laboratory for the biologist, the botanist, the anthropologist, the archaeologist, the geologist, the meteorologist and the ecologist. It is one of the few places on earth left for the adventurer and explorer. Most important, it is the only home remaining for our last large populations of free-roaming animals: the caribou, the Dall sheep, the bear, the wolf, the wolverine, the moose, the mountain goat. These animals cannot survive close to people nor live in altered, restricted habitats. Having evolved in terms of space and freedom, they require wilderness on what John Milton calls poignantly "the old vast scale."

Add to the land mammals the mammals of the sea—the seal, the sea lion, the sea otter, the walrus, and the many kinds of whales, all of which Alaska's wilderness nurtures—and the millions upon millions of migratory birds that wing their way from nearly every part of the planet to nest and rear their young in Alaska's coastal areas, along its wild river banks and lakes, and in the rich wetlands of the interior and the great river deltas. There are also the fish, like the salmon that in John Muir's time so thickly crowded the rivers of southeast Alaska during spawning runs that he wrote there were more fish than water in the streams. Even terribly depleted as they are today, Alaska's salmon feed the people of at least three countries, and they are essential to Alaska's natives for their subsistence. Like the animals of the land, the animals of the sea, the birds and the fish have evolved in a wilderness habitat. Their future is threatened as more and more of this wilderness is lost.

Following the congressional guidelines of ANCSA, and observing the realities of established use, conservationists have outlined six areas in Alaska where superb wilderness remains and can be protected. These regions—along with thirty-nine identified wild rivers, thirteen of which lie outside these regions—have peerless scenic and recreational values, but more important, contain unique ecosystems whose integrity can be maintained only by wilderness protection. Four of the six regions contain established national wildlife refuges and/or national parks.

Six regions

Here, broadly sketched, are the six Alaskan areas proposed for wilderness protection:

The *Arctic-Subarctic Region* sweeps from the Arctic Ocean and Beaufort Sea over the crest of the Brooks Range and south to the Yukon. Being irrevocably divided by the Trans-Alaska Pipeline, it has been fractured into two regions, one to the east, one to the west. In the *Eastern Arctic-Subarctic Region*, the nine-million-acre Arctic Wildlife Range provides a major encounter between the Arctic land and sea. Here the broad apron of coastal tundra is patterned in large polygons by the permafrost, which forms a huge lens of frozen ground as much as 2,000 feet thick beneath a fragile layer of plant cover. In this vast wild place, distances defy the eye: standing at the coast and looking south, the mountains of the Brooks Range look to be only a few miles off. Yet they lie from thirty to eighty miles from the shore.

This is the land of the caribou. Tens of thousands (once hundreds of thousands) of these creatures, which link us to prehistoric times, subsist on the feathery lichen that curls from the tundra. They move with the seasons, traveling hundreds of miles in pursuit of their food. The lichen they eat may require as long as forty years to replace itself once it is grazed.

The caribou crowd south through the mountain passes of the Brooks Range in age-old migratory patterns. Through the southern foothills runs the Porcupine River to swell the muddy waters of the Yukon. Even as people do, the salmon use the Yukon as a lifeline, and at least twenty species of wildfowl depend upon the Yukon wetlands in this interior region for their nesting and breeding places.

Within roughly thirty million acres of undisturbed wilderness, the fragile ecosystems of the eastern portion of Alaska's *Arctic-Subarctic Region* still persist.

West of the trans-Alaska pipeline, the Arctic land mass contains some of the most magnificent scenery on earth. The beautifully colored and folded metamorphic rocks of the Brooks Range culminate in rough young granite spires, the Arrigetch Peaks. Nearby broods Mt. Doonerak, the Devil Mountain; and Mt. Boreal and Frigid Peak form the Gates of the Arctic, which open the way to the Arctic slope. This land lies rigid in the grip of cold for more than three-quarters of the year. For nearly two months, the winter sun does not show above the horizon, and the dark lies deep and icy in the shadows of the high mountains. The Arctic slope, which tilts so gently beneath the Arctic Ocean, is frequently swept by cruel winds, which drive the snow like sandblasting machines. But the slope thaws into myriad lakes and ponds when summer's endless days and starless nights release it. Thousands of birds nest here.

Draining the central portion of the Brooks Range to the south, the rivers pass through dwindling hills and then form immense meanders on the flatlands. In summer, these rivers run clear as turquoise until a sudden storm turns them muddy. In winter, they freeze into broad, white, immobile ribbons.

To the west, the Noatak, one of the last extensive unmolested river-drainage ecosystems anywhere, extends from Mt. Igikpak to the Bering Sea. In the Noatak country, the tundra and the forests form unique encounters. Southwest of the Noatak, there are huge, mysterious inland sand dunes, and the ancient wild lands of the Seward peninsula, which contain vast frozen lava flows. Here, a few thousand years ago, the land of the North American continent was linked to Siberia. Across this land bridge wandered the animal forebears of today's Alaskan wildlife, as well as many species now extinct. Pursuing these animals came the early hunters and fishermen who became the forebears of Alaska's native peoples. This area is a unique resource for archaeologists and anthropologists, many of whom are now working with the natives in excavating digs.

This *Western Arctic-Subarctic Region* supports caribou, polar bear, grizzlies, wolves, Arctic foxes and whales, as well as gyrfalcons, pere-

grines, emperor geese and countless other wildfowl. About thirty million acres of this exceptional region remain relatively undisturbed.

Where the western sea meets the tundra-clothed land, cool winds sweep in from the water. Days are often fog-shrouded. The wildlife is prodigious. Stretching along these western shores are some of the world's greatest remaining wildlife sanctuaries. Nearly three dozen different mammals thrive along these coasts. This is a crossroad for birds that winter widely throughout the Pacific. In the Yukon-Kuskokwim deltas, the Togiak region, and further south in Bristol Bay are some of the biologically richest areas known. Thirty million acres here in *Western Alaska* now support an invaluable living resource.

The mountains of the *Alaska Range and Aleutian Range* form a unique landform. In the northern portion, lying in Alaska's interior, the continent swells to its greatest height in Mt. McKinley. The Alaska Range and its vast tundra-covered foothill country is watered by immense glacial streams, which rise in the high peaks. This land supports its own caribou population, grizzly bears, wolves and Dall sheep. It also contains friendly terrain for humans. Farther south in this extraordinary montane complex, Lake Clark and Lake Iliamna (the country's seventh largest freshwater lake and home to both the Beluga whale and the only freshwater seal colony in the United States) offer exceptional recreation—and subsistence—for fishermen, hunters and ordinary beauty-lovers. The rivers in this region provide unmatched opportunities for kayakers and rafters.

In the Aleutian Range, the land changes character dramatically. This volcanic area, part of the Pacific's Ring of Fire, has many active peaks, including the Mt. Katmai complex, where eruptions in 1912 formed the Valley of 10,000 Smokes. Another peak, Mt. Augustine, in January, 1976, spewed out ash which showered onto places as distant as Anchorage. The southern part of this range contains two of the world's great calderas, Mt. Veniaminof and Mt. Aniakchak. This is prime brown-bear territory. (One brown bear, it should be noted, requires about 64,000 acres of range to support itself.)

Some twenty million acres of the *Alaska-Aleutian Range* contain wilderness habitat that is immensely important to moose, caribou, wolves, sea lions, sea otters, seals, sea birds, wildfowl, and red salmon, as well as people.

The scenery of south-central Alaska and southeast Alaska is overpowering in its beauty. In south-central, the Wrangell Mountains, massive volcanic peaks, lift their snow-covered heads more than three miles into the sky. Some of their deep-cleft sculptured canyons could hold a half-dozen Yosemites. Yet there is gentle living space here for many animals; there are rivers for fish, and meadows for wildflowers. This is prime country for recreationists. The Wrangell area also offers a unique opportunity for establishing an international park with Canada.

Exceptional qualities

To the southwest curve the Kenai-Chugach mountains, capped with one of North America's great ice-fields, laced with superb canoeing streams and dotted with clear deep-green lakes, where trumpeter swans nest and rear their young. These mountains dip westward until only their snow-streaked peaks rise above the water to cradle the idyllic Kenai Fjords. Within more than twenty million acres of Alaska's *South-Central Region* there are exceptional wilderness qualities.

To the south and east, the mountains of the St. Elias and Fairweather Ranges soar directly from the sea. Their lower flanks and coastal lands are carpeted thickly with Sitka spruce and hemlock forests. This is the domain of the United States Forest Service, which has committed almost all of these forests to logging. In the more than sixty years of its administration, the service has failed to establish any wilderness for protection. Currently, it is studying three areas with unique values, but few forests—Tracy Arm-Ford's Terror, Granite Fjords and Russell Fjord—for wilderness classification, but these areas, although exceptional, do not adequately represent the total forest ecosystem. Two further areas—West Chichagof Island and Admiralty Island—still contain meaningful samples of the home of the bald eagle, brown bear, "blue" bear, Sitka deer, moose, beaver and countless birds. With Glacier Bay National Monument, these additional 1.5 million acres of Forest Service land constitute *Southeast Alaska's* finest remaining typical wilderness.

Such then is the incomparable wilderness potential of Alaska. How this potential will be realized—how much wilderness will be protected, and how it will be protected—will be decided by Congress within the next two years. The decision will, of course, reflect the will of the American people whose land this is, but it cannot and should not be made without consideration of Alaska's native peoples. Traditionally, they have lived closely with the land and in relative ecological balance with their fellow creatures as hunters and fishermen. Now, under the terms of ANCSA, Alaska's 65,000 Natives (Indians, Aleuts, Eskimos) have been, by law, cast into the role of businessmen. They are currently selecting the 44 million acres of Alaska allotted them for their private ownership and exploitive use. As our energy-hungry country turns toward Alaska, viewing it like a giant socket into which we can plug our energy needs, Alaska's Natives will play an increasingly important role in the state's rapidly evolving business development. Already many of the newly formed Native corporations are working with major oil companies. And oil is but one of the natural resources with potential for development on their lands.

Many Natives—as well as other Alaskans—believe that wilderness status will "lock up" the land around them. In fact, it is private property and development—not wilderness—which locks up the land. Witness the forty-eight contiguous states.

Many Alaskan Natives cherish their cultures and wish to retain their old way of life. If their traditional hunting and fishing are to be maintained, the animals on which they depend must have adequate range and habitat to survive. Large areas of wilderness will, in fact, be essential.

If we are to meet the great challenge Alaska's wilderness offers, if we are to be true stewards of this last great land resource, we need to revise some of our land-use priorities. Instead of having to justify the protection of each acre of Alaskan land we are trying to retain as wilderness, we should begin instead to require justification for the development of each acre turned over to economic exploitation. And the justification for development must be in terms of long-range needs, not just immediate economic or energy demands. Our own survival, as well as the survival of many of our fellow creatures who share our planet home, may be at stake.

SCB

The Boundary-Waters Compromise

PATRICIA RECORD

When our nation was in its beginnings, the Boundary Waters region was already old. Its tall, dark red- and white-pine forests were part of the conifer forest that stretched from what is now western Minnesota to the coast of Maine. The call of its loons and the music of its wolves were picked up and echoed across the virgin expanse of the new land. Its rocky islands, shrouded in mist, were then the spirit lands of the Ojibwa, and here and there rocks bearing ancient pictographs attested mutely to the lives of earlier inhabitants. Beaver and moose, marten and fisher were abundant, and for a while the region became part of the land of the *Voyageurs*, as they plied its waters in their long canoes, trading for the pelts of the area's smaller furred denizens.

But as the country grew, the demand for timber increased. The sound of the woodsman's axe began to rival the cry of the loon; bit by bit, acre by acre, the virgin forest fell. There were those, however, who marked its passage and fought to ensure that some remnant of that original forest would escape unscathed. The Boundary Waters region in northern Minnesota was a logical target for their efforts, for here the dark forest was interrupted by chains of interconnecting lakes, creating an area of unusual beauty. Preservation attempts began at the turn of the century and seemed to have climaxed with the inclusion of the one-million-acre Boundary Waters Canoe Area (BWCA) within the National Wilderness Preservation System, as established by the 1964 Wilderness Act.

Today, the BWCA is the most heavily visited area of our Wilderness System, but if you come to the North Woods, be prepared for some jarring encounters. The whisper of your canoe paddles in the clear lake waters may be drowned out by the roar of a passing motorboat, and the quiet crunch of your snowshoes in the winter air may be overcome by the whine of snowmobiles. Walk back from the lakeshore on a seemingly untouched island and you may discover a clearcut area, its virgin pines gone, the area coming back to aspen and birch forest. How can this happen in a designated and protected wilderness area? Special management language.

In 1964 when the Wilderness Act was being written, environmentalists compromised. In order to secure passage of the Act with the BWCA included as wilderness, it was agreed to allow the inclusion of language that would leave the door open a crack for logging and the continued use of motorboats. Environmentalists relied on the provision that management of the area should be for the general purpose of maintaining its primitive character. Under Forest Service interpretation, however, the door has been flung wide open to an ever-increasing number of motorboats, snowmobiles, roadbuilding equipment and logging trucks.

A decade of litigation and administrative appeals has seen some progress toward protecting the BWCA. (See Midwest Regional Representative's Report, "The Boundary Waters Canoe Area and Winterized Motorboat Waterway," *Sierra Club Bulletin*, July/August 1976.) Even so, it has become increasingly clear that the only effective protection for the Boundary Waters will be to legislatively remove those special-management provisions and to accord the area the full protection of the Wilderness Act. Donald Fraser, congressman from Minnesota's Fifth District, has introduced legislation that would do so: H.R. 14576 would redesignate the Boundary Waters Canoe Area as the Boundary Waters Wilderness Area and would withdraw any authority for logging and vehicle use within the area. This legislation is being actively supported by wilderness advocates and stands in strong contrast to legislation introduced by Congressman Oberstar, within whose district the BWCA lies. Oberstar would attempt to resolve the conflicts by removing large segments from the wilderness, an approach that environmentalists find unacceptable.

Les Blacklock

Boundary Waters Canoe Area, Minnesota.

The results of a judicial appeal on logging and an administrative appeal on motorized use may force a quick legislative resolution of the controversy. Senators and congressmen will need to know that the entire Boundary Waters Canoe Area deserves full wilderness protection. Spirit islands of the Ojibwa, land of clear lakes and dark forests, lonely realm of the loon and the lynx, the eagle and the wolf . . . it will continue to exist only if we who understand and appreciate its timeless worth act in its defense.

(If your organization would like to see a slide and tape presentation on the BWCA and the problems that beset it, write to Friends of the Boundary Waters Wilderness, Twin Cities Office, 1783 Lindig St., St. Paul, MN 55113.)

Patricia Record is assistant Midwest representative of the Sierra Club.

Organizing for Wilderness
The Oregon Example

ROBERT T. WAZEKA

A Volkswagen van eased past the lumber mill at the edge of a small Oregon community, drove another half mile and stopped in the center of town. Two people got out and walked into a cafe. Over coffee, they passed 3x5 index cards back and forth while talking steadily and writing furiously on yellow pads of legal-sized paper. At the front counter, lined with steaming coffee cups, three men in checkered shirts and suspenders turned around to stare. One of them quietly snorted.

At the cash register, the two people each asked for a dollar's worth of dimes. Then they headed across the street to a pair of telephone booths.

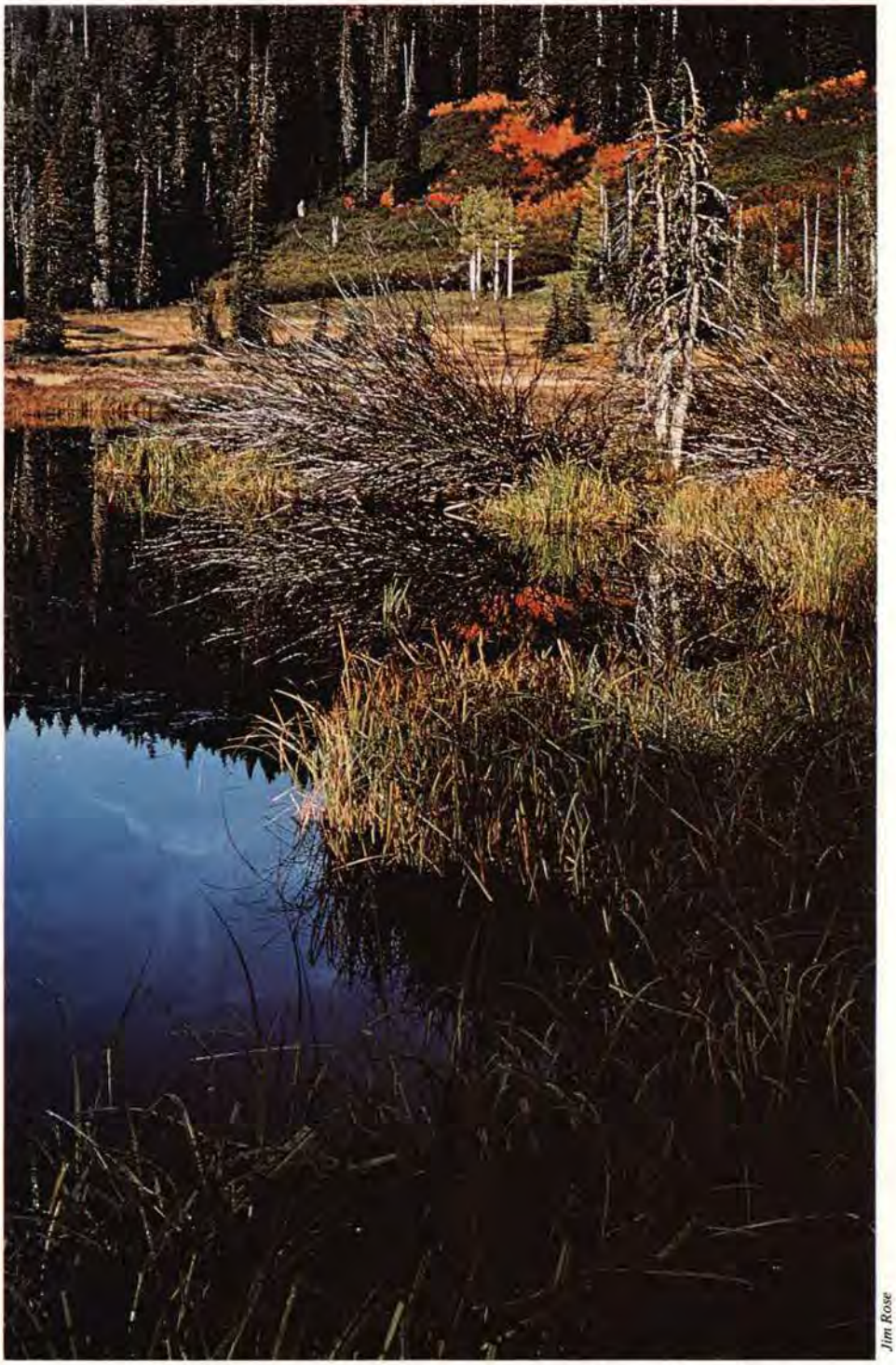
"Hello," said one caller. "I'm with The Wilderness Society, and I'm in town trying to make contact with local environmentalists. I want to find out what's happening here."

"No, there isn't much Sierra Club activity around here," said the caller in the other booth, "but we thought it might be a good idea if local environmentalists got together and talked things over."

For the next hour and a half, they stayed in the phone booths, calling everyone in town who was a member of the Sierra Club, The Wilderness Society, Friends of the Earth, and the Oregon Environmental Council. One person they called suggested they try to get a meeting together for the next evening. She offered her house as a place to meet.

Ten people had told them they would try to come to the meeting. Three showed up. They expressed interest in trying to preserve a particular roadless area nearby, but said things looked bad given the economic realities of their community.

Three weeks later, the two organizers returned to town for another meeting of the fledgling group. This time eight



Jim Rose

Quaking Aspen Camp, French Pete roadless area, Willamette National Forest, Oregon.

Robert T. Wazeka is a member of the Club's National Wilderness Committee.

people showed up. Following a rather lengthy discussion, it was decided to put together a formal group. A month later, the new group put on a slide show that attracted sixty people, including seven who later became active members. Representatives of the group then met with some Forest Service officials. In the next four months, members incorporated the group, wrote bylaws, met three times and put out a two-page newsletter. At the suggestion of the organizers, they joined the Oregon Wilderness Coalition. Two months later, they filed a formal appeal to a Forest Service timber sale.

Since its inception early in 1974, the Oregon Wilderness Coalition (OWC) has been the prime moving force in the formation of at least twenty such local, ad hoc groups primarily devoted to wilderness. In total, there are nearly sixty groups in Oregon devoted to wilderness preservation, all active members of OWC. Unlike similar environmental coalitions, clearing houses or councils in other states, OWC is devoted to the single issue of wilderness and attempts to generate citizen activity at the grassroots level around every roadless area in the state, whether on Forest Service, Park Service, Bureau of Land Management, or Fish and Wildlife Service land.

So successful has OWC been in this effort that Holway Jones, former Sierra Club Board member and chairman of the Club's National Wilderness Committee, says that every western state needs a wilderness coalition modeled on OWC and with at least one full-time staff person. At a recent conference in Bend, Oregon, bringing together wilderness activists from almost every western state, one of the focal points was how to build OWC-type coalitions in other states. In California, conservationists, led by Don Morrill and Jim Eaton, have already formed a wilderness coalition modeled upon OWC; Montana conservationists have begun similar efforts.

If, as many believe, OWC has made Oregon the best-organized state in the country for wilderness action, why is it that Oregon has proportionally fewer Wilderness Areas than other western states? The simple answer is that Oregon is also the leading timber-producing state in the nation. Environmentalists and the timber industry have fought each other to a virtual standstill over the past five years. Having long since cut over its own lands, the industry began in the fifties to cut prime, low-elevation timber sites on National Forest lands. With these lands now beginning to be depleted of timber, pressure to cut higher-elevation, less-productive Forest Service lands has increased. Environmentalists, having helped preserve some spectacular high country with rock faces, open meadows, glaciers and scattered timber stands, are now fighting to preserve lower-elevation areas with more significant timber stands on them. With the timber industry moving uphill and the environmentalists downhill, a clash is occurring in the middle slopes.

That OWC has been able to spearhead a successful holding action at all is a considerable accomplishment, especially when compared to other western states with less timber-cutting pressure. Jim Monteith, the current OWC coordinator, says that Oregon might be the only western state that hasn't lost a single roadless area to exploitation or development since the completion of the Forest Service's Roadless Area Review and Evaluation (RARE) program. Without OWC, says Monteith, Oregon might well have lost *more* roadless areas than most states.

OWC publishes a monthly newsletter and various memoranda and special mailings which discuss, in great detail, the month-by-month developments in land-use planning on Oregon's thirteen

Citizen Organizations Affiliated with the Oregon Wilderness Coalition

West of the Cascades

ASHLAND-MEDFORD
Crater Lake Protection Committee
Red Buttes Wilderness Council
Rogue Group, Sierra Club
Sky Lakes Wilderness Committee

BLUE RIVER
McKenzie Guardians

CENTRAL POINT
Stop the Applegate Dam Committee

COOS BAY
Kalmiopsis-Illinois Wilderness Group
Lower Illinois River Committee

CORVALLIS
Corvallis Center for Environmental Services
Mary's Peak Group, Sierra Club

COTTAGE GROVE
Northern Umpqua Preservation Association

DAYS CREEK
Stop the Days Creek Dam Committee

EUGENE-SPRINGFIELD
Concerned Citizens for the Rogue Environment
Environmental Studies Center (U.O.)
Eugene Group, Sierra Club
Friends of the Three Sisters
L.A.W. (Land-Air-Water, U.O. Law School)
Outdoor Program (U.O.)
Save French Pete Committee
Survival Center (U.O.)

FLORENCE
Mid-Coast Livability Council

GOLD HILL
Kalmiopsis Committee

GRANTS PASS
Josephine Conservation Council

OAKRIDGE
Oakridge Audubon

PORTLAND
Badger Creek Association
Bull Run Interest Group
Columbia Group, Sierra Club
Friends of Bull-of-the-Woods
Friends of Huckleberry
Mt. Hood Forest Study Group
Northwest Environmental Defense Center
Portland Advocates of Wilderness
Portland Audubon
Twin Lakes Council

ROSEBURG
Umpqua Wilderness Defenders

SALEM
Central Cascades Conservation Council
Mt. Jefferson Group, Sierra Club

ST. PAUL
Oregon High Desert Study Group

East of the Cascades

BAKER-ONTARIO
Elkhorn Study Committee

BEND
East Cascades Action Committee
PURE (Preserve Urban & Rural Environment)

ENTERPRISE
Hells Canyon Preservation Council

KLAMATH FALLS
Klamath Falls Group, Sierra Club

LA GRANDE
Committee for Catherine Creek
Save the Minam, Inc.

LAKEVIEW
Fremont Liberation Front

PENDLETON
Maintain Eastern Oregon Wilderness (MEOW)
Pendleton Environmental Association
Wenaha-Tucannon Wilderness Council

PRAIRIE CITY
People for the Malheur

Statewide Organizations

1,000 Friends of Oregon
Oregon Environmental Council
Oregon Shores Conservation Coalition
OSPIRG (Oregon Student Public Interest Research Group)

National Organizations

Friends of the Earth
Sierra Club (Pacific Northwest Chapter)
The Wilderness Society

National Forests, ten BLM districts, fourteen National Wildlife Refuges, two National Monuments (Oregon Caves and John Day Fossil Beds), and one National Park (Crater Lake). OWC has organized more than fifty roadless-area study trips and maintains active files on more than 150 roadless areas in the state. It has created a technical-information service, involving scientists all over Oregon, that provides information in such areas as geology, fisheries, soils, biology, forestry and economics. It reviews all wilderness-related environmental-impact statements (EIS) released in Oregon and funnels its findings to OWC member groups. Moreover, it has also begun a series of publications for wilderness activists, including roadless-area study guidelines and EIS response guidelines.

OWC has assumed an active, even aggressive role in certain areas by organizing new groups; putting on statewide conferences and regional workshops focusing on techniques of wilderness preservation; monitoring and reviewing EISs and timber sales; creating ad hoc task forces and coordinating communication, research and educational functions for Oregon wilderness activities. By contrast, its policy role has been passive. The member groups of OWC, which are fully autonomous, make decisions on specific wilderness recommendations and on strategies for implementing them. Because OWC does not, as an entity, take positions on issues, it has preserved its tax-deductible status.

Nevertheless, OWC's impact on wilderness policy *in general* has been dramatic. Most people involved feel that OWC has tended to make wilderness activists across the state more zealous, more concerned that *every* roadless area be given due consideration and study before it is written off—by environmentalists or by anyone else. OWC has also influenced people's attitudes about why wilderness should be preserved. Reading through the testimony given at a wilderness hearing held in Oregon as recently as three years ago, one comes away with the dominant impression that wilderness is needed for recreational and aesthetic reasons. By contrast, testimony today is filled with data on the economic value of anadromous fisheries, on projected timber volumes, on the need of certain wildlife species for undisturbed habitat; with concern for critical soils and watersheds; and, above all, with an understanding of scientific, historical and ecological values of wilderness. This marked shift in the rationale for wilderness has come largely through OWC's educational and research efforts, efforts that have affected the way workshops, conferences, memoranda and task forces have been put together.

Jim Rose

French Pete roadless area, Willamette National Forest, Oregon.

OWC would have been impossible without a rich heritage of Oregon wilderness activism. The first local, ad hoc wilderness group in the state, the Friends of the Three Sisters, was started in 1954, ten years before the passage of the Wilderness Act. In the same year, the Pacific Northwest Chapter of the Sierra Club was formed, making it only the second Club chapter to be formed outside of California.

During the battle over the removal of French Pete from the Three Sisters Primitive Area in the late fifties, Club board members such as Edgar Wayburn and Polly Dyer came to Eugene to testify. David Brower and David Simons helped form the now-defunct Oregon Cascades Conservation Council in 1960, and an issue of the *Sierra Club Bulletin* followed with a proposal for an Oregon Cascades National Park. The rising tempo of these issues caused the Club and other groups to ask Michael McCloskey to open the Northwest conservation representative office in Eugene in 1961. During the sixties, as the Forest Service omitted key roadless-area segments from its Mt. Jefferson Wilderness proposal—which took almost five years to complete—environmentalists began looking closely at other roadless areas adjacent to previously established Wilderness Areas such as Mt. Hood, Eagle Cap, Mountain Lakes, Strawberry Mountain, Gearhart Mountain, Kalmiopsis, Diamond Peak and Mt. Washington.

In 1972, the Forest Service began to prepare an impact statement for all 1,449 roadless areas in the country under the Roadless Area Review and Evaluation program. In Oregon, Holway Jones, Joe Walicki of The Wilderness Society, and others began coordinating a comprehensive response to the RARE program by traveling around Oregon and finding out what areas were important to local environmentalists and what information they had about them.

Their efforts resulted in a 368-page document prepared by the Pacific Northwest Chapter, which OWC people have come to refer to as "the Bible." Meanwhile, Senator Mark Hatfield of Oregon began soliciting ideas for a possible "Oregon Omnibus Wilderness Bill." In January, 1973, environmentalists around Oregon, drawing largely upon "the Bible," sent in a formal response to Hatfield on behalf of eight different groups calling themselves the "Oregon Wilderness Coalition." Earlier, the name "Oregon Wildlands Coalition" had been used by Jones at a RARE hearing in Roseburg on March 18, 1972. In neither case, however, did anyone realize that the OWC name would soon take on a very imposing reality. The response to RARE and to Hatfield's proposed legislation (which has since been introduced) forced Oregon environmentalists to think about wilderness priorities on a statewide basis. New patterns of communication and cooperation among groups and individuals emerged. The Sierra Club hired two half-time staff members to work solely on RARE. The Oregon High Desert Study Group was formed and began to survey the 15 million acres in Oregon under the jurisdiction of the Bureau of Land Management. Environmentalists took steps to assure that roadless areas omitted from the initial RARE inventory were added to the list. This process still continues: in 1975 alone, OWC discovered ten roadless areas not identified by the Forest Service.

So many people were involved in the creation and development of OWC that it is perhaps misleading to mention any names without mentioning them all. Nonetheless, three people, each with one outstanding skill, stand out: Joe Walicki, Fred Swanson, and Jim Monteith.

Walicki was instrumental in organizing the Ashland Workshop, which brought together seventy-five people in Ashland, Oregon, on April 22-23, 1972, for leadership-training, education and discussion. This, the first successful wilderness workshop in the state, had been carefully planned in advance. National leaders in the wilderness movement were brought in as "resource people." Sitting in the back of the room during the workshop was a quiet man from Klamath Falls, Joe Monteith, who had given up a promising scientific career in order to return to Oregon to fight for wilderness. Though largely unnoticed at the workshop he began working two years later, as the OWC coordinator at a salary of $100 a month.

Out of the Ashland workshop was formed the short-lived "Southern Oregon-Northern California Wilderness Coalition," which held another meeting in June at Boulder Flat Campground in Umpqua National Forest. From that meeting, which attracted about a dozen new local people, Walicki laid the groundwork for the creation of the Umpqua Wilderness Defenders, which became one of the most successful ad hoc wilderness groups in Oregon. The coalition moved rapidly, holding six more workshops during October and November, two in California (Yreka and Redding) and four in Oregon (Klamath Falls, Grants Pass, Roseburg, and Medford). Ad hoc groups sprang up: the Josephine Conservation Council, the Lower Illinois River Committee, the Central Cascades Conservation Council, and the Mid-Coast Livability Council.

Joe Walicki

The third annual conference of the Oregon Wilderness Coalition.

Over the next three years, Walicki organized ten more workshops and traveled around Oregon trying to stimulate the creation and development of additional ad hoc groups. He also coordinated the first Statewide Wilderness Conference in October, 1973, at which a task force was appointed to bring into being the Oregon Wilderness Coalition. The task force met repeatedly over the next four months, designing an organizational framework, a fund-raising scheme, a list of purposes, and a proposal for an OWC coordinator. On February 16, 1974, OWC was incorporated with Fred Swanson as coordinator.

For several years, Swanson had been active in the Sierra Club. With the appearance of RARE, a number of environmental leaders asked him to establish a program to survey many of the relatively unexplored roadless areas in Oregon. Accepting this responsibility, Swanson also began to teach a wilderness course at the University of Oregon and assist at the Survival Center, a student-run environmental-action group. When he became OWC coordinator about ten months later, OWC worked out of the Survival Center office and kept Swanson's survey-trip reports there until it was able to find an office of its own eighteen months later.

With Swanson scheduled to leave for Montana in the fall, Monteith became

OWC coordinator in July, 1974. Drawing upon the roadless-area files and the numerous student volunteers who appeared at the Survival Center, he began compiling a detailed overview of the Forest Service and BLM planning processes, something that OWC had previously lacked. Memoranda began spinning out on land-use-planning methods, procedures and timetables, memoranda which greatly assisted the ad hoc wilderness groups in their efforts.

Monteith's efforts at upgrading the roadless-area files resulted in notable changes. While trying to obtain more quantitative data and scientific analysis for the roadless areas, he hit upon the idea of establishing a technical-information service bringing together a statewide scientific network. A volunteer cartographer was found who redrew OWC's maps with precision.

Since many wilderness-related EISs had slipped by without significant response from environmentalists, Monteith brought Kurt Kutay on staff. Kutay began as a land-use and EIS analyst, but his role broadened as he and Monteith were increasingly needed by ad hoc groups to provide quasi-legal services such as assistance in filing appeals and other administrative actions through various public agencies. This led, in turn, to a legal workshop, to the development of appeal guidelines, and to the establishment of a network of environmentally conscious lawyers around the state upon which the ad hoc groups could draw for assistance.

The rapid expansion of OWC's staff and capabilities allowed Monteith to concentrate on other needs, particularly in Eastern Oregon, where more than half of the state's roadless areas were located, but where population was sparse and where ad hoc wilderness groups were either floundering or nonexistent. A number of successful organizing trips took place, and within a year, OWC was working with ten different Eastern Oregon groups, which collectively were covering every Forest Service roadless area east of the Cascades.

Time, however, remains short for wilderness. With the Forest Service planning process accelerating, Monteith feels that the next three years will be the most crucial ever for the wilderness movement. Through OWC, groups across the state are moving together in a coordinated effort to preserve as much as possible of the last four percent of Oregon's still undeveloped land.

Walicki, Swanson, and Monteith all think the OWC model can be transplanted elsewhere, but that its success in Oregon depended a great deal upon coincidence. A core group of perhaps thirty people of various ages, temperaments, backgrounds and life styles all found themselves in Eugene at the same time working toward the same goals. What Paris did in the twenties for the literary world, Eugene did in the early seventies for wilderness activists: it offered a rich, stimulating milieu in which ideas could be planted and could then have sufficient time to grow, ferment and mature. And yet what happened with OWC happened only because of support from other wilderness activity around the country, because there were people of experience and expertise to draw upon, because there has grown up in America a viable wilderness tradition whose fruits are still in the process of ripening. **SCB**

Wilderness Myths and Misconceptions

BROCK EVANS

R. Knolan Benfield, Jr./Image Inc.

Okefenoke Wilderness, Georgia.

On a cold, wet night in the timber country of southwest Oregon, I found myself facing a crowd that had gathered to hear me debate officials of the timber industry on their home ground. The faces in the audience were unsmiling; their hatred for what I believed in, almost tangible. After I gave my speech, one angry woman approached me and said, "Here you are, you and your people, trying to turn the Northwest into one vast wilderness area, locking up all the forests for an elite few who hike every now and then while we starve."

Brock Evans is head of the Sierra Club's Washington Office.

The woman's statement is an extreme example of an attitude encountered almost daily by environmentalists in every region where wilderness is a political issue. Sometimes, such statements result from deliberate, calculated campaigns by industry to misinform local residents and turn them against the idea of wilderness. But more often, they result from misunderstanding what wilderness is, who uses it, and what is involved. Indeed, during my years as a Sierra Club field representative in the Pacific Northwest, I went to hearing after hearing where local people would get up and say, "We don't want any of this wilderness area; we want the place to stay just like it is."

Over the years, quite a bit of experience and expertise has developed within the Club to articulate wilderness values and address the legitimate concerns of those who do not understand them. The purpose of this article is to examine some of the more common misunderstandings, or "myths," about wilderness and to answer some of the more frequently encountered objections to preserving it.

MYTH #1

Only a tiny minority of people use wilderness areas.

Anyone who believes this statement probably has not been in a wilderness area for some time or has not

talked to the Forest Service or the Park Service, which administer the Wilderness Areas we now have. Use of most Wilderness Areas in the United States is not only very heavy, but has been increasing rapidly in recent years. For example, figures available for Wilderness Areas in Idaho, Washington and Oregon show that since 1941, wilderness use in this region has increased from ten to fourteen percent per year.

In some areas, the increase in use has been astronomical. In California, between 1969 and 1970, use of all Wilderness Areas went from about 100,000 persons to almost 300,000 a year—a 300-percent increase. The situation has indeed become so bad on the whole Pacific Coast that the Forest Service now requires permits to use all Wilderness Areas there. The same situation has been encountered in most of the eastern units of the National Wilderness Preservation System. In addition, the National Park Service requires back-country permits (and in some cases reservations) in some of the more popular parks such as Yosemite, Great Smoky Mountain, Sequoia and Kings Canyon, Olympic and Mt. Rainier.

Because of heavy winter snow in most Wilderness Areas, use is concentrated in the summer, but with the growing popularity of ski touring, wilderness use during the winter is also increasing. According to the Outdoor Recreation Resources Review Commission's report on wilderness, about two million people used the Wilderness Areas in National Parks and Forests in 1960. The report predicted that usage would increase about tenfold by the year 2000, this, of course, in an ever-shrinking amount of wilderness. But this prediction now seems conservative, for today, about twenty-five years early, at least twelve to fifteen million persons a year already visit the back-country areas of the National Parks and Forests.

Those who believe "Wilderness Myth #1" do not give up easily: they contend that even if twelve to fifteen million people do use wilderness each year, this is still a minority of our population; that the wilderness system reserves far too much land for such a small group.

Although those who actually walk into Wilderness Areas do constitute a minority, it is a very substantial one. In addition are the millions who "use" wilderness in many other ways: those who live far from Wilderness Areas, but buy books about it; those who think or dream about it, who write letters to support it, who go to movies about it, or who drive into park and forest roads and look into it. These people are also "users" of wilderness, and they must be counted among those who benefit from knowing it is there. Another important point is that we live in a country that believes in protecting minority rights.

Joe Walicki

Proposed Wilderness Area in the Oregon Dunes National Recreation Area.

Wilderness is part of our culture, our American heritage. The constant contact our forebears had with wilderness made a deep impression on the American soul, and in many ways, was the most important single catalyst that made us "Americans," that distinguished us from Europeans. Americans have always had a love-hate relationship with wilderness, one characterized by the wish to preserve it as well as the desire to conquer it. The theme of contact with wilderness has been a source and inspiration for much of our art, music, philosophy and folklore.

Indeed, it is only because wilderness had become an important element in the American culture that the thought of preserving it even occurred. The idea of setting aside an area of land in its natural state, not for commercial gain but simply for its intrinsic value, is a uniquely American idea. In the form of National Parks and other reserves, this idea has spread to the entire world. Many of us believe this is our most important and enduring export, that a philosophy of reverence for the land and its intrinsic qualities will have more lasting impact than all the tanks, TV sets and soda-pop bottles put together.

As a nation, we have consistently and strongly supported government endeavors to protect and support cultural institutions, even if only a minority of Americans ever makes use of them. For example, the National Gallery of Art in Washington, D.C., is subsidized by appropriations of at least $5 million a year. Most Americans will never see, or may never want to see, the treasures in the National Gallery, but there is no argument, nor should there be, about the need to support this cultural institution. We also spend many millions of dollars each year to expand and protect our National Park System, again with almost no argument, simply to preserve the land in its natural state. The wilderness idea and Wilderness Areas themselves are also a part of our national culture, as much so as parks or the National Gallery of Art, and they should be supported and preserved for the same reasons.

Finally, we are not talking about a large amount of land in proportion to the total area of the United States, which, Alaska aside, is about two billion acres. Right now, only about twelve million of these acres are formally classified as units of the National Wilderness Preservation System —about one-half of one percent.

The Forest Service is now reviewing twelve million additional acres for protection, and the Park Service is reviewing its twenty million acres in the forty-eight states, much of which could qualify for Wilderness designation. An additional ten million acres in the National Wildlife Refuges could also qualify. Thus, a total of forty-two million acres is now being considered for Wilderness in the three land categories authorized by the Wilderness Act. When we add to this the potential for up to thirty to forty million more acres of Wilderness in the National Forests in the so-called "de facto" or "roadless" areas, and perhaps over eighty million more on lands under the jurisdiction of the Bureau of Land Management, we have a total Wilderness potential in the lower forty-eight states of about 160 million acres, or about eight percent of our total land area. When we consider that a crowded country such as Japan has reserved about ten percent of its area for national parks or similar reserves, our 140 million acres do not seem excessive, especially because, for the most part, they comprise the lands left after the rest had been picked over by industry. Furthermore, this eight percent is merely the total *potential;* it does not indicate what will become the final reality. Because, as in the past, each

proposal for a new Wilderness Area is bitterly contested and resisted, it is highly unlikely that this much land will ever be protected. Indeed, if the Forest Service's current plans are carried out, at least forty million acres of the roadless areas now being studied will be lost to logging or other development.

MYTH #2

Wilderness is an "elitist" concept: wilderness areas are playgrounds for the affluent, the leisure class, the physically fit.

A wilderness vacation is one of the least expensive recreational activities. The total cost of a good pair of boots, a backpack, a sleeping bag, and other equipment is between $150 and $300 amortized over a useful life of at least five years. This amount is far below the cost of ski togs and a weekend on the slopes, a snowmobile, a motorcycle or a motorboat. It is untrue that "only the rich" can afford to visit the wilderness. Furthermore, the decision to vacation in the wilderness is a matter of preference, as is going to Yankee Stadium, the symphony, the drag races or a football game. It is not necessary to deny wilderness to those who prefer it in order to support other forms of recreation or the pursuit of other interests.

Some studies have tended to show that generally, the higher the educational level, the more likely a person is to seek a wilderness experience, which may account for the belief that wilderness is only for the rich. But the fact remains: wilderness itself is free, and the expense necessary to enjoy it is minimal. Wilderness use is a matter of preference, not of income.

Nor does wilderness require more leisure time than other forms of outdoor recreation. A study done in the Three Sisters Wilderness Area in Oregon showed that most use there consists of day hikes, or weekend trips at most. Other studies have shown that many wilderness users are professional people, who traditionally work many more than the standard forty hours a week. These people actually have less leisure time than many other groups, but they still choose to go into the wilderness. A recent Forest Service study of the Mission Mountain Wilderness in Montana showed that at least fifty percent of the use of that area consisted of one-day trips by people with low incomes. Wilderness use depends not on having unusual amounts of leisure time, but on personal preference.

Finally, wilderness is not only for the physically fit, or the "hardy." The amount of physical conditioning required depends on the kind of wilderness experience one wants. Some Wilderness Areas have trails through flat, low, gentle valleys, trails most people can walk on. Other Wilderness Areas can be visited by boat or by walking on the beach. Of course, many Wilderness Areas are dominated by rugged alpine country, which does require one to be reasonably fit, but even here, many places exist that can be visited by anyone in average physical condition. For those who wish no exertion at all, there are thousands of miles of roads elsewhere in the National Parks and Forests. In addition, there are many vantage points from which one can look into the wilderness, especially along roads such as those through Great Smoky, Yellowstone or Yosemite national parks. There is no lack of opportunity for those who do not wish to exert themselves to see and enjoy natural areas. Opportunities to walk or ride horseback into areas without roads, however, continue to diminish.

MYTH #3

Wilderness represents a single use of National Forests that "locks out" other uses.

The only people locked out of wilderness areas are those who want to build roads, ride motorized vehicles or log the trees: these are the *only* uses that are forbidden. Wilderness Areas are open to hunters, fishermen and walkers; to scientists for study, even to miners (under an unfortunate compromise in the Wilderness Act of 1964). Grazing is also permitted. In addition, Wilderness Areas are often valuable sources of water supply for many cities. Thus, of the so-called "Multiple Uses," the only ones precluded by Wilderness designation are logging and motorized recreation.

There is ample opportunity to enjoy motorized recreation within our National Forest System. In fact, about 100,000 miles of roads now exist within the National Forests; these roads visit virtually every kind of terrain and landscape: high country and low, meadows and valleys, alpine peaks and deep forests, lakes, streams and glaciers. Even in the North Cascades area of Washington state—considered a howling wilderness by many—there are at least 5,000 miles of roads within National Forest boundaries. Surely it is not too much to ask that some areas be reserved as islands in this vast network of roads.

MYTH #4

Locking up vast areas of wilderness will pose a severe drain on our nation's economy and reduce opportunities for local employment.

Advocates of wilderness have two answers to this assertion: first, it is highly unlikely that many, if any,

jobs in the resource-extraction industries will be affected for any length of time because of the establishment of Wilderness Areas; second, the preservation of wilderness is itself a big business, with the potential of becoming even bigger.

The argument that setting aside Wilderness Areas will adversely affect the timber industry has been raised in almost every wilderness and park dispute in the West over the past century. During the battle to establish Olympic National Park, in the state of Washington, for example, it was argued that without the twenty-four billion board feet of timber to be included in the park, the timber industry there would fail. The park was established, however, and the magnificent forest inside it is still intact. Even so, the local timber industry is as prosperous as ever. Why? Because the industry was forced sooner to utilize with less waste the wood it already had and to spend more care in reforestation.

Similar dire predictions have been made in other highly contested areas, such as the Boundary Waters Canoe Area in Minnesota, the Glacier Peak Wilderness in the state of Washington and the Hells Canyon Recreation Area in Oregon and Idaho. But in every case, studies have shown that the actual amount of timber involved would have supplied local mills only for a few days each year and that mills looking for new sources of timber would do far better to concentrate on better reforestation and utilization of what they already have. (The Japanese, for example, get about two to three times as much wood and pulp out of a single log as many mills in this country.)

National Parks, which are essentially wilderness reserves, and Wilderness Areas are big business. The National Park System, for example, brings about $5.7 billion a year into the nation's economy. Olympic National Park, consisting almost entirely of wilderness, has been estimated to contribute about $70 million per year to the state of Washington's economy. Everywhere across the country, the sale of pictures, books and articles about parks and wilderness areas, and the sale of backpacks and other wilderness equipment, is big business indeed, running into many millions of dollars.

In many areas with wilderness nearby, guiding and packing users in and out is also a significant part of local economies. For example, testimony on hearings dealing with the proposed Scapegoat Wilderness in Montana revealed that the existence of that wilderness was essential to the local guiding business, which contributed about $850,000 a year to the local economy. Unlike the timber resource or the mining resource, the wilderness resource is there forever, to be used year after year in just the same way.

MYTH #5

Wilderness designation permits the spread of forest insects and disease and prevents effective forest-fire control.

The fact is that when wind and temperature are right, nothing can stop a forest fire, no matter how many roads there are. For example, in 1967, northern Idaho's great Sundance fire in several days burned 70,000 acres in an area laced with logging roads. Nothing could have stopped it, no matter what the access. The Raft River fire in Washington in 1967 started on a clearcut in heavy slash and spread over 4,500 acres in a four-day period. Again, even in this highly accessible area, the fire raged uncontrolled. In fact, the major burned areas had already been logged, and the logging roads between the clearcuts acted as conduits for the fire. Hardly any of the unlogged old-growth timber was burned at all. The fire funneled through the clearcuts into the road corridors and spread rapidly to the slash in adjacent clearcut units. Thus, it appears that logging in a virgin forest, with its accompanying clearcuts and roads, can increase fire hazards under the right conditions. This is so, partly because opening up the forest canopy rapidly dries out the forest floor and slash.

As for insects and disease, the Wilderness Act plainly provides that the Forest Service may take any necessary measures to control insect infestation, where such infestation is likely to spread to green timber outside. In addition, the Forest Service can take measures under the Wilderness Act to control fires if they are likely to spread outside.

With the great mass of factual information available on the subject of wilderness—who uses it, what its values are, how inexpensive it is, its impact on the economy—conservationists faced with wilderness battles everywhere have a formidable arsenal for shooting down the tired but, alas, sometimes still effective "wilderness myths." **SCB**

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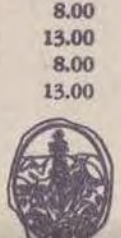

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Our Largest Wilderness Resource
BLM Roadless Areas

LINDA M.B. HAVERFIELD

The Bureau of Land Management (BLM) administers more than 450 million acres of public domain, two-thirds of all federal land. Yet only about 234,000 acres have been designated as "primitive areas." Conservationists estimate that approximately sixty to seventy million acres of BLM land are worthy of protection as "Wilderness," an amount roughly equal to the total potential wilderness acreage (excluding Alaska) held by the other three federal land-and-resource agencies—the National Forest Service, National Park Service and U.S. Fish and Wildlife Service. BLM lands are not clearly eligible for Wilderness Area designation because they were not included in the review process set out in the 1964 Wilderness Act.

The BLM has had no congressional authorization or instructions to recommend roadless areas under its jurisdiction for inclusion in the National Wilderness Preservation System, and the agency has been slow to take the initiative to do so. Indeed, the BLM has only recently begun to inventory its lands thoroughly in order to determine the extent of its roadless-area holdings.

A 1976 publication of the Department of the Interior entitled "The United States Department of the Interior: America's Guardian of Natural Resources" describes the BLM as follows:

> Caretaker of 450 million acres of public domain, the Bureau of Land Management looks after America's 'last frontier.'
>
> An area twice the size of France, covering twenty percent of our Nation's total land base, the land administered by BLM contains some of America's most spectacular desert, mountain, and canyon scenery. Every year millions of people hunt, fish, and camp on these lands.
>
> They also are a storehouse of minerals, forests, waters, and wildlife, and it is the BLM's responsibility

Joe Walicki

Burnt River, eastern Oregon; potential BLM Primitive Area.

Linda M.B. Haverfield is research assistant at the Sierra Club's Northwest regional office.

List of Designated BLM Primitive Areas

Aravaipa Canyon, Arizona, 5,080 acres
Paria Canyon, South Utah & North Arizona, 27,515 acres
Dark Canyon, Utah, 57,248 acres
Grand Gulch, Utah, 24,080 acres
Humbug Spires, Montana, 7,041 acres
Beartrap Canyon, Montana, 2,761 acres
Powderhorn Primitive Area, Colorado, 40,400 acres
Scab Creek Primitive Area, Wyoming, 6,680 acres
Centennial Mountains Primitive Area, Montana, 24,165 acres
Paiute Primitive Area, Arizona, 35,092 acres
Chamise Mountain Primitive Area, California, 3,941 acres

to provide balanced management of such valuable resources in the public interest while protecting the environment.

In addition, the public lands are a substantial source of income—from oil and gas leases, grazing rights, and the sale of timber, minerals, and other raw materials.

Through offshore oil and gas leasing—as well as coal, oil shale, geothermal, and other programs—BLM is in the forefront of the search for new energy sources.

BLM, with its varied activities, is the Nation's largest, most important land manager and is a major producer of revenue.

Three points of interest stand out in this statement: (1) the enormous amount of land administered by the BLM and Interior's recognition of its scenic and recreational values; (2) the stated objective of providing "balanced management"; and (3) the agency's conflicting double duty of managing the land while exploiting its energy resources. The BML's record as a land manager has been questioned frequently, even by the agency itself, since its inception in 1946, when it was created by merging the General Land Office with the Grazing Service. Thus, in 1975, the agency submitted to the Senate Appropriations Committee two reports—on the impact of grazing and the condition of the range—that illustrate the BLM's poor record in protecting the land. The 1975 "Range Condition Report" states:

> General rangeland condition reached its most critical level about the time of the passage of the Taylor Grazing Act [1934]. Subsequent administration and management of grazing have slowed the rate of decline, but have not reversed it, except on approximately 25 million acres (16 percent) under intensive management and in some localized areas. As a result, over 50 million acres (33 percent) are in poor or worse condition —an area roughly equal to all the lands in the state of Utah.
>
> Present studies show only 28 million acres (17 percent) of the public grazing land is in satisfactory or better condition and 135 million acres (83 percent) are producing less than their potential.

The BLM has also been strongly criticized for its management of national energy resources, even though large allocations of money and personnel have been devoted to this function, compared, at least, to new allocations for land management. A Ford Foundation study, *A Time to Choose*, states:

> A major finding is that the existing Interior Department management mechanism is not capable of addressing and resolving the crucial policy issues inherent in expanded exploitation of the federally controlled energy resources base. It lacks adequate resource and environmental data, a sound preleasing planning system, stringent post leasing regulation, and in general, a consolidated structure to make sound public policy and carry it out.

This statement was directed at the BLM.

The agency's problems stem for the most part from Congress' failure to provide it with a comprehensive statutory definition of its authority and responsibilities; in other words, with an "organic act" like those governing the other federal land-and-resource agencies. Senator Floyd Haskell (D-Colorado) points out the difficulties facing the BLM in this regard:

> The only management tools available to the BLM remain some 3,000 public land laws which have accumulated

> over the last 170 years. A goodly proportion of these laws were written in the last century at a time when the [land] disposal policy prevailed. Not unexpectedly, therefore, these laws are often conflicting, sometimes truly contradictory, and certainly incomplete and inadequate.

Lacking uniform guidelines, BLM policies have varied widely from one region to the next, often in response to pressures from local ranching and mining interests that use the land, in many cases as if they owned it. These same interests are seldom sympathetic to wilderness proposals, so the BLM, with no explicit instructions to recommend roadless areas for Wilderness designation, has been reluctant to defy the wishes of local constituents. But wilderness review is only one of several areas where the agency is hampered by lack of statutory authority.

Attempts to pass a BLM Organic Act to correct this situation have been frustrated repeatedly, but this year both the House and Senate passed versions of an organic act, both of which authorize the BLM to make Wilderness recommendations. At press time, a conference committee is attempting to reconcile differences in the two bills. Agreement is likely, but whether the president will sign the bill is uncertain.

An Organic Act acceptable to environmentalists would have to include a provision instructing the agency to propose areas for wilderness classification under the terms of the Wilderness Act. The agency has been limiting itself to recommending lands for classification as primitive areas, an administrative designation subject to review and approval by the Secretary of the Interior. Not requiring congressional approval, primitive areas lack the statutory authority of Wilderness Areas and thus are much more vulnerable to pressures from special interests to have them decreased in size, or perhaps even abolished. As of April 1976, the BLM has officially designated eleven primitive areas totaling 234,003 acres. There are additional areas identified in the agency's land-use-planning process that still await formal designation. The BLM estimates that its roadless areas of 5,000 acres or more total about forty-seven million acres.

Charles Watson and T. H. Watkins, in their book *The Lands No One Knows*, refer to the public domain as "that luckless pawn of history." BLM lands can remain a pawn no longer if they are to escape degradation and destruction. The appalling condition of the public range, largely due to overgrazing, is inexcusable in the light of the world's limited capacity to produce food, and frightening indeed when we remember that overgrazing has contributed to the advance of the Sahara south into Sahel. When we consider that *most* BLM lands in the West are used for grazing, the prospect seems even bleaker. Some of these lands, which once supported native grasses and forbs, are already barren. Others have been invaded by less palatable alien species of plants, and the nutritious native bunch grasses continue to retreat before the onslaught of livestock. Soil is being eroded into rivers, muddying clear waters and leaving the land a maze of dry gullies.

Some relief may come in response to the court decision in the lawsuit, *Natural Resources Defense Council v. Morton*, which requires the BLM to write 212 environmental-impact statements on grazing allotments, district by district, over the next twelve years. One of the effects of this decision has been to spur the agency to complete its land-use plans (called "management framework plans") more rapidly.

The problems facing our "national resource" lands (as BLM lands are also called) will not, however, be solved in twelve years. Obviously, the completion of land-use plans does not automatically ensure good management. Overgrazing will continue to be a serious problem, even as the BLM, in its alter-ego role as energy-resource developer, proceeds to encourage such enterprises as oil-shale development and strip mining for coal.

The BLM's conflict of functions must be eliminated or both land management and energy-resource development are likely to degenerate into a farcical parade of insipid and ineffective compromises between the agency's right hand and its left. It has been suggested that the latter function be transferred to another agency, or even another department. Assuming this will not happen soon, at least the BLM's Washington, D.C., office must learn to listen to voices other than those of the American National Cattleman's Association, the National Coal Association, The American Petroleum Institute and the like. After all, the lands belong to all Americans, not merely those with cows or shares of oil stock.

Suggested Readings in Wilderness Conservation

CHRISTIE HAKIM

Wilderness Areas

Sutton, Ann & Myron Sutton. *Wilderness Areas of North America.* New York: Funk & Wagnalls, 1974.

Wilderness Society. "The Wilderness System—A Report Covering Every Existing or Proposed Wilderness," *Living Wilderness*, Winter 1974-75, pp. 38-47. (Reprints available from the Wilderness Society and the Sierra Club.)

Wilderness Values

Abbey, Edward. *Desert Solitaire: A Season in the Wilderness.* New York: Simon and Schuster, 1968.

Brooks, Paul. *Roadless Areas.* New York: Alfred A. Knopf, 1964.

Brower, David R. "Individual Freedom in Public Wilderness," *Not Man Apart*, May 1976, Vol. 6, No. 8, p. 1.

Darling, Frank Fraser. *Wilderness and Plenty.* Boston: Houghton Mifflin, 1970.

Douglas, William Orville. *A Wilderness Bill of Rights.* Boston: Little Brown, 1965.

Huth, Hans. *Nature and the Americans: Three Centuries of Changing Attitudes.* Berkeley: University of California Press, 1957.

Leopold, Aldo. *A Sand County Almanac, and Sketches Here and There.* New York: Oxford University Press, 1949.

Louise, Mary, et al. *Our Vanishing Wilderness.* New York: Grosset & Dunlap, 1969.

Marsh, George Perkins. *Man and Nature.* Cambridge: Harvard University Press, 1965. (Originally published in 1864.)

Marshall, Robert. *Alaska Wilderness: Exploring the Central Brooks Range.* Berkeley: University of California Press, 1970.

———. "The Problem of the Wilderness," *Scientific Monthly*, 1930, Vol. 30, pp. 142-143, 145-148.

Muir, John. *The Mountains of California.* New York: The Century Company, 1903.

Nash, Roderick. *Wilderness and the American Mind.* New Haven: Yale University Press, 1967.

Thoreau, Henry David & Eliot Porter. *In Wilderness is the Preservation of the World.* San Francisco: Sierra Club, 1962.

Sierra Club Wilderness Conference Proceedings *(In chronological order)*

Brower, David R., ed. *Wildlands in our Civilization.* Highlights of the first five Biennial Wilderness Conferences, 1949-1957. San Francisco: Sierra Club, 1964.

———. *The Meaning of Wilderness to Science.* Proceedings of the Sixth Biennial Wilderness Conference, 1959. San Francisco: Sierra Club, 1960.

———. *Wilderness: America's Living Heritage.* Proceedings of the Seventh Biennial Wilderness Conference, 1961. San Francisco: Sierra Club, 1961.

Leydet, Francois, ed. *Tomorrow's Wilderness.* Proceedings of the Eighth Biennial Wilderness Conference, 1963. San Francisco: Sierra Club, 1963.

Kilgore, Bruce M., ed. *Wilderness in a Changing World.* Proceedings of the Ninth Biennial Wilderness Conference, 1965. San Francisco: Sierra Club, 1966.

McCloskey, Maxine E. & James P. Gilligan, eds. *Wilderness and the Quality of Life.* Proceedings of the Tenth Biennial Wilderness Conference, 1967. San Francisco: Sierra Club, 1970.

Schwartz, William, ed. *Voices for the Wilderness.* Key papers from the Sierra Club Wilderness Conferences. New York: Ballantine, 1969.

McCloskey, Maxine E., ed. *Wilderness: The Edge of Knowledge.* Proceedings of the Eleventh Biennial Wilderness Conference, 1969. San Francisco: Sierra Club, 1970.

Gillette, Elizabeth R., ed. *Action for Wilderness.* Selected papers from the Twelfth Biennial Wilderness Conference, 1971, with supplementary articles. San Francisco: Sierra Club, 1972.

Schofield, Edmund A., ed. *Earthcare: Global Protection of Natural Areas.* Proceedings of the Fourteenth Biennial Wilderness Conference, 1975. To be published in early 1977 by Westview Press, Boulder, Colorado.

Wilderness Policy, Planning & Protection

Brooks, Paul. *The Pursuit of Wilderness.* Boston: Houghton Mifflin, 1971.

Frome, Michael. *Battle for the Wilderness.* New York: Praeger Publishers, 1974.

Haight, Kevin. "The Wilderness Act Ten Years After," *Environmental Affairs*, 1974, Vol. 3, No. 2, p. 275.

McCabe, John M. "A Wilderness Primer," *Montana Law Review*, 1971, Vol. 32, p. 19.

McCloskey, Michael. "A New Perspective on Wilderness Opportunities." Speech given at the Thirteenth Biennial Wilderness Conference, Boulder, Colo., Oct. 7, 1973.

———. "The Wilderness Act of 1964: Its Background and Meaning." Reprinted from the *Oregon Law Review*, June 1966, Vol. 45, p. 288.

Sierra Club. "National Wilderness on the Line," *Sierra Club Bulletin*, March 1973, Vol. 57, No. 3, p. 9.

Sierra Club Wilderness Classification Committee. *Handbook on Procedures for Wilderness Classification Studies.* San Francisco: Sierra Club, 1972.

Stone, Christopher D. *Should Trees Have Standing? Toward Legal Rights for Natural Objects.* Los Altos, California: Wm. Kaufmann, Inc., 1974.

Watkins, T. H. & Charles S. Watson, Jr. *The Lands No One Knows: America and the Public Domain.* San Francisco: Sierra Club, 1975.

Wayburn, Edgar, M.D. & Peggy Wayburn. "Great Stakes in the Great Land—Alaska Lands for Public Good," *Sierra Club Bulletin*, September 1974, Vol. 59, No. 8, pp. 17-24.

The Forest Service, Economics, and Wilderness

Clawson, Marion. *Forests for Whom and for What?* Baltimore: Published for Resources for the Future by Johns Hopkins University Press, 1975.

Krutilla, John V. & Anthony C. Fisher. *The Economics of Natural Environments: Studies in the Valuation of Commodity and Amenity Resources.* Baltimore: Published for Resources for the Future by Johns Hopkins University Press, 1975.

Shepherd, Jack. *The Forest Killers: The Destruction of the American Wilderness.* New York: Weybright & Talley, 1975.

Special Tools for Wilderness Activists

Ambler, Julie, ed. *Guide to the Middle and South Santiam Roadless Areas.* Corvallis, Oregon: Sierra Club Mary's Peak Group/Corvallis Center for Environmental Services, 1976. (A model of how to publicize de facto roadless areas for protection.)

Coan, Eugene V., ed. *Sierra Club Political Handbook.* San Francisco: Sierra Club, 1976.

Environmental Affairs Commission. *Washington Wildlands Tool Kit.* Seattle: Environmental Affairs Commission, University of Washington, 1976.

Farrell, Phil. *Forest Service Planning: A Guide to Citizen Involvement.* Supplement to the *Wilderness Record*, May 1976, Vol. 1, No. 2, 4 pages.

Oregon Wilderness Coalition. *A Model for Unit Planning on Public Lands.* Edited by Jim Monteith. Eugene, Oregon: Oregon Wilderness Coalition, PO Box 3066, 1976. 75c

———. *Roadless Area Study Guidelines with Emphasis on Oregon Federal Lands.* Edited by Jim Monteith. Eugene, Oregon: Oregon Wilderness Coalition, PO Box 3066, 1976. $1.00

O'Toole, Randall Lee. *The Citizens' Guide to Forestry and the Environment.* Emphasis on the Forest Service, Bureau of Land Management & Environmental Impact Statements. Portland, Oregon: Cascade Holistic Economic Consultants, 3544 S. E. Washington, No. 6, 1976. $1.00

Wilderness Society. *A Handbook on the Wilderness Act.* Washington, D.C.: Wilderness Society, 1970.

Government Publications

Forest Service. *Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA):*
—The Nation's Renewable Resources—An Assessment, 1975.
—A Recommended Renewable Resource Program: Final Environmental Statement & Renewable Resource Program, 1977-2020.
—Summary: Renewable Resource Assessment and a Recommended Renewable Resource Program.
Forest Service, U.S. Department of Agriculture, Washington, D.C., 1976.

———. *Multiple Use Management Review of Undeveloped Roadless Areas on the National Forests.* Division of Recreation, Forest Service, U.S. Department of Agriculture, Washington, D.C., 1972.

———. *New Wilderness Study Areas.* Forest Service, U.S. Department of Agriculture, Washington, D.C., October 1973. Current Information Report No. 11.

———. *Roadless Area Review and Evaluation (RARE)—Final Environmental Impact Statement.* Forest Service, U.S. Department of Agriculture, Washington, D.C., 1973.

Christie Hakim is librarian of the Sierra Club's Colby Memorial Library.

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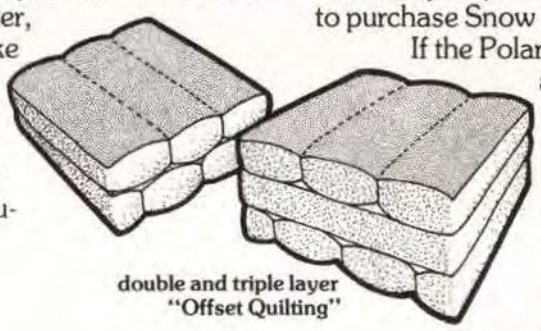

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Clair Tappaan Lodge

Photos by F.T. Molm

Winter is approaching, and at Donner Summit our own Clair Tappaan Lodge is being prepared for its forty-third season as headquarters for Sierra Club winter sports enthusiasts. In addition to basic cooking and eating facilities, the lodge has a variety of living accommodations: dormitories, family rooms of five to eight bunks each, and cubicles of two bunks each. There is a large living room, a reading and quiet-game room, and a recreation room.

Ottmar Goebel

Manager Mark Shapiro, aided by a tow operator and a cook, operates successfully and economically thanks to cooperation of each lodge visitor, who signs a daily work sheet to volunteer for housekeeping or kitchen chores.

Hot meals are provided morning and evening and food for bag lunches is available at breakfast time. All bunks have mattresses but members must bring their own sleeping bags, flashlights, and toilet articles.

Clair Tappaan Lodge, at 7,000 feet elevation, is located west of Donner Summit on old Highway 40, two miles after leaving Interstate 80 on the turnoff to Soda Springs and Sugar Bowl. Or, you can reach the lodge by our chartered bus, which leaves the San Francisco Bay Area Friday evenings (beginning January 7, 1977), returning Sunday nights. It is advisable to wear warm clothes and adequate footgear on the bus trip because the trail to the building is over snow and the weather may be frigid.

In the morning after breakfast, skiers may ski our own Signal Hill (longest rope tow in the West) or go to one of the nearby resort areas. The warming hut at Signal offers a comfortable respite for skiers and snowshoers and is a pleasant objective for other visitors. The Sierra Club Ski Patrol is on duty each weekend when the tow is running. Ski instruction, both Alpine and Nordic, is available at modest cost.

Skiing, snowshoeing, and ski touring are the main attractions during the winter season, and races, such as the weekly Sunday slalom, are open to all. For those who desire to participate, our ski team competes in various other races held in the area. Local one-day ski touring is a popular way to enjoy the area, but there are also opportunities for overnight tours to our nearby shelter huts.

Advance reservations will be needed for meals and lodging for any stay beginning November 29, 1976, through Easter, April 10, 1977. To make these you can write to Clair Tappaan Lodge Reservations, Sierra Club, 530 Bush Street, San Francisco, CA 94108. Requests will be handled at this address from November 16 through April 8, and can be made in person, by mail, or by telephone if money is on deposit for this purpose. **Full payment must be made before a reservation can be issued.** To stay at the lodge before November 29 or after Easter, write or telephone the lodge manager at P.O. Box 36, Norden, CA 95724 (916-426-3632). Tell him the time you plan to arrive, the length of your stay, and the size and composition of your party.

The application envelopes that contain information on lodge rates and procedures should be used when requesting reservations. These envelopes can be obtained from either the Club office in San Francisco or the lodge. Reservations are made only for weekends of two full days (starting with Friday night's lodging and including three meals for each full day), and for any number of weekdays. Anything less than one full weekday or one full weekend must be arranged with the lodge manager on a space-available basis. Members are encouraged to send money in advance as a deposit to draw upon during the season. Records are kept, and any balance will be refunded upon request.

George Homsey

The deadline for making lodge reservations at the office for a weekend is 11 a.m. on the Thursday before that weekend. For those who have worked to maintain the lodge, ten beds are held in reserve until the preceding Monday noon. Until Wednesday of each week, a maximum of ten nonmember guest reservations will be accepted at the rate of no more than one guest per member. After Wednesday, additional guest reservations will be accepted if space is available. Sponsors must accompany guests for their entire stay.

Our charter bus leaves San Francisco and

Berkeley each Friday night, beginning January 7, and returns each Sunday night throughout the season as long as there is sufficient demand. (After the three-day Washington's Birthday weekend, the bus will return on Monday night, February 21.) There will be no bus service Easter weekend. The bus leaves San Francisco each Friday at 6:15 p.m. from the United States Mint at Market and Duboce streets, and will stop for passengers in Berkeley at 7 p.m. at the foot of University Avenue alongside Spenger's parking lot at Third Street and University Avenue. Departure from Norden will be at 6 p.m., after Sunday dinner, with arrival in Berkeley about 10 p.m. and San Francisco about 10:30 p.m. There is space for skis, snowshoes, and luggage. If previous arrangements have been made, passengers may be picked up near the freeway at Vallejo, Davis or Sacramento. Other than private car, this chartered bus is now the only direct transportation to Norden.

Applications for the Christmas and Easter holiday periods will be accepted after November 1, but will be held until December 1 and March 1, respectively, before being confirmed. If demand exceeds available space, the lodge will be filled by lot, and remaining applications kept on a waiting list, or the money refunded or credited.

If a reservation has to be cancelled, telephone the Clair Tappaan Lodge reservations office as soon as possible because there are graduated cancellation charges. Ask the name of the person receiving the call and follow up at once with a letter of confirmation enclosing the reservation slips. If cancellation of a weekend reservation is made after 11 a.m. on the preceding Thursday, it is also necessary to telephone the lodge manager. Even on Fridays, however, charter bus cancellations must be cleared through the Club office.

Hutchinson Lodge, just west of Clair Tappaan, is ideal for groups of up to twenty persons. The group brings its own food and sets its own schedule of activities. As at the main lodge, members bring their own sleeping bags, toilet articles and flashlights. (An air mattress or foam pad may be a welcome luxury.) Rates are $3 per day per person, with a minimum nonrefundable payment of $24 per day due at the time the reservation is confirmed. (For weekends, minimum reservation at Hutchinson is for two days; i.e., $48.) Preference will be given to Sierra Club groups that make reservations a month or more in advance. All Hutchinson Lodge arrangements and reservations are made by the Clair Tappaan Lodge manager and not through the Club office. Chapters, committees, sections and other divisions of the Sierra Club may have reservations confirmed up to six months in advance in order to meet publication deadlines. For other parties, reservations will not be confirmed longer than thirty days in advance.

A series of outlying overnight shelter huts is maintained at about a day's journey from various roadheads: Peter Grubb Hut to the north and Benson Hut to the south of the lodge; Bradley Hut, reached from Squaw Valley or Alpine Meadows; and the Ludlow Hut, reached from Highway 89. The memorial huts are primarily for the benefit of Sierra Club groups, but if space is available they can also be used by other conservation groups. Food and supplies must be carried in to all four huts. Potential hut users should always clear their plans with the manager at Clair Tappaan. The suggested voluntary rate per person is $1.50 per day, which can be paid at Clair Tappaan Lodge when checking out for the hut. The lodge manager is instructed to deny use of a hut and assistance to any group that, in his judgment, is inexperienced or lacks necessary equipment, or if the weather conditions or other factors would, in his judgment, make the trip to a hut too great a risk.

Any member may be required by the lodge manager to produce his membership card.

Although we love animals, please do not bring pets.

Clair Tappaan Lodge Committee

1976-1977 Winter Rates at Clair Tappaan Lodge

American plan by reservation	**For members applicants, and guests**
Weekends—Friday lodging through Sunday dinner	$23.00
7 consecutive days (not to start with Saturday lodging)	69.00
5 weekdays—Sunday lodging through Friday dinner	50.00
5 weekdays—children under 12 except Christmas weeks	36.00
Single days—weekdays may be reserved at the Club office	11.50
Single days—children, weekdays only except at Christmas	8.00

Charter bus transportation

(Weekends only) *January 7 through April except Easter weekend*

Round trip	18.00
One way	10.00

(Bus $21 on 3-day weekends.)

Partial reservations made only at the lodge

Lodging—available only at the lodge	5.00
Breakfast—available only at the lodge	3.00
Breakfast and lunch—available only at the lodge	4.50
Lunch alone or as first unit of stay	not available
Dinner—available only at the lodge	4.00

Cancellation charges to the nearest 25c

Minimum charge for cancellation of meals and lodging	$2.50, Bus $5.00
Cancellation with more than six days' notice	10 percent
One to six days' notice	25% meals and lodging
	$6.00 bus ($5.00 one way)
Less than 24 hours' notice—meals and lodging	$3.50 per day
—chartered bus	$7.00 ($5.00 one way)
Failure to arrive or give notice of cancellation	100 percent

Reservation slips must be returned for cancellations and refunds. Make CTL reservations at the Sierra Club office, 530 Bush Street, San Francisco 94108. Send full payment, and give age and sex of each person wishing reservations, to facilitate assignment of bunks.

Hutchinson Lodge—Reservations are made directly with the manager. Clair Tappaan Lodge, Norden, California 95724. Rates are $3 per person per night with a minimum charge of $48 per weekend. Bring your own food. Scheduled groups of the Sierra Club have priority.

Memorial Ski Huts—Scheduled trips have priority. Reservations are made with manager at CTL, and keys are obtained from him. The suggested voluntary donation of $1.50 per day can be paid at the lodge when checking out for the hut.

"On K-2, the second highest mountain in the world, blizzard conditions kept us zipped in our sleeping bags of *Dacron® fiberfill II*... day and night for six days...."

JIM WHITTAKER, leader of the 1975 American assault on K-2.

"We were using a man-made fiberfill at altitudes where down had always been the traditional choice.

"But our sleeping bags and parkas of 'Dacron' fiberfill II performed perfectly. Just as I expected them to.

"Don't get me wrong. I'm not anti-down. In dry cold you can't beat it. But down can collapse when it gets wet. It can lose its ability to insulate. 'Dacron' fiberfill II is different. It can be fully saturated, and then wrung out and, like wool, still provide some insulation.

Unique hollow filaments of "Dacron" fiberfill II

"On the K-2 expedition, we encountered most of the wet conditions on the approach march. And we simply draped our sleeping bags on top of the tents to dry.

"But it was at Base Camp (17,500 ft.) that the real test came. We had to live in our sleeping bags day and night for six days. And we appreciated every one of those 500 miles of hollow fibers that ran through every pound of 'Dacron' fiberfill II.

"Du Pont's 'Dacron' is the only fiberfill that has these hollow fibers. It's interesting to note that caribou is one of the best furs for arctic wear...and this fur has hollow follicles. Hollow fibers add loft without weight. And loft helps determine warmth.

"It's a pretty smart idea. And 'Dacron' fiberfill II proved it...on the second highest mountain in the world."

You'll find most manufacturers of sleeping bags offer Dacron* polyester fiberfill II in quality-constructed models. Usually at very affordable prices. For a list of suppliers and more details on the advantages of hollowfill write us: Du Pont, Dept. SB, Fiberfill Marketing Division, 308 E. Lancaster Ave., Wynnewood, Pa. 19096.

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Du Pont makes fibers, not sleeping bags.