

SIERRA

THE SIERRA CLUB BULLETIN



January 1978

\$1.00

1978 SIERRA CLUB OUTINGS

TALCHAKO LODGE

In scenic Tweedsmuir Provincial Park

A Sierra Club outpost for wilderness enthusiasts in the heart of the British Columbia Coast Range Mountains.



"The Talchako Wilderness Study Area is one of the least spoiled regions in North America . . . Its forests and lakes are reminiscent of Quebec, its glaciated peaks bring to mind the Alps, its canyons are similar to Yosemite's and its rain forests are like those of the Olympic Peninsula. Most of the enormous floral and faunal fecundity of the region has been preserved . . . very few areas in North America offer such a diversity of sublime wilderness scenery."

Activities available near the Lodge:

Day Hiking Along the Atnarko or Bella Coola Rivers, to eagle nests, waterfalls, Indian petroglyphs, up rugged mountain sides and through stands of gigantic old-growth firs.

Backpacking To the top of 1,320' Hunlen Falls, one of the highest waterfalls in North America, or to the gentle alpine meadows of the Rainbow or Cariboo Mountain areas.

Canoe Trips Through a 20-mile chain of seven lakes at the top of Hunlen Falls.

Climbing Unbelievable peaks up and down the Bella Coola Valley offer the greatest diversity of climbing imaginable. There are 3,000' polished granite walls, 6,000' rimrock bluffs and 6,000' to 10,000' snow and glacier-capped peaks. The area has climbing for all levels of ability with first ascents still possible. The climbing season starts about May 1st.

River Trips Rubber raft and river boat trips down the Bella Coola and Atnarko Rivers can be arranged at the Lodge. The Atnarko offers challenging whitewater for river enthusiasts who are able to bring their own kayaks or canoes.

Mushrooming Is best in early autumn. Many common edible species may be found.

Fishing King salmon to 40 lb., Coho salmon to 20 lb., steelhead to 20 lb., and trout to five lb. All may be angled for in the Bella Coola and Atnarko Rivers. Excellent fly fishing available. All fishing is best in spring, autumn and early winter.

Cross-Country Skiing Available from December to early April on the valley floor and from November to June in the alpine areas. The entire area has been scarcely touched by winter enthusiasts. Unlimited potential for true winter wilderness experience.

Snowshoeing, Ski Mountaineering Untouched, unutilized potential in all directions for all capability levels. Snowshoes or skis a must for winter wandering and exploring.

Wildlife Throughout the Talchako wilderness a tremendous diversity of wildlife occurs—moose, deer, mountain goats, upland caribou, wolves, black bear, grizzly bear, wolverine, fox, otter, mink, marten, weasel, bald eagles, trumpeter swans, Canada geese, ptarmigan, grouse and many song birds are the most common species observed. Birdwatching is best in spring, and early summer. Eagles and bears are most common in autumn, swans and geese in winter.

Accommodations The Lodge offers hostel accommodations for up to twenty people, as well as four additional cabins equipped with wood cookstoves, bunks, kerosene lamps, and cooking utensils suited for families or small groups of up to six people. Showers and hot and cold water, as well as a few other amenities, are available, if at

times scarce. Quality meals are available at reasonable rates.

Access and Transportation Talchako is accessible by car, plane, bus or a combination of train and bus; it is a two-day drive from the Seattle-Portland area. The Talchako facilities are round, offering a group rate for more than ten people. Reservations should be made 60 to 90 days in advance for the summer season. Talchako has a slide show on the Lodge and surrounding area which can be used by individuals and groups. Requests for the slide show should be sent directly to the Manager at the below address, accompanied by \$5 to cover postage, insurance, and handling. For further information and reservations write to: Manager, Talchako Lodge, Hagensborg, B.C. VOT 1H0, CANADA or telephone: (604) 982-2489.

Sierra Club Outings at Talchako Lodge in 1978

- #62 Talchako Lodge Base Camp, June 20-30
- #69 Talchako Lodge Base Camp, July 14-24
- #116 Talchako Lodge Wilderness Thresh-old, July 26-Aug. 2
- #188 Rainbow Mtn. Nature Conservancy Knapsack, Aug. 4-13
- #121 Talchako Lodge Wilderness Thresh-old, Aug. 5-12
- #131 Junker Lake Family Canoe-Base Camp, Aug. 16-26

The above trips are part of the Sierra Club Outings Program and are available only to Club members. Inquiries about these trips should be made to the Sierra Club Outing Dept., 530 Bush St., San Francisco, CA 94108 (not to Talchako).

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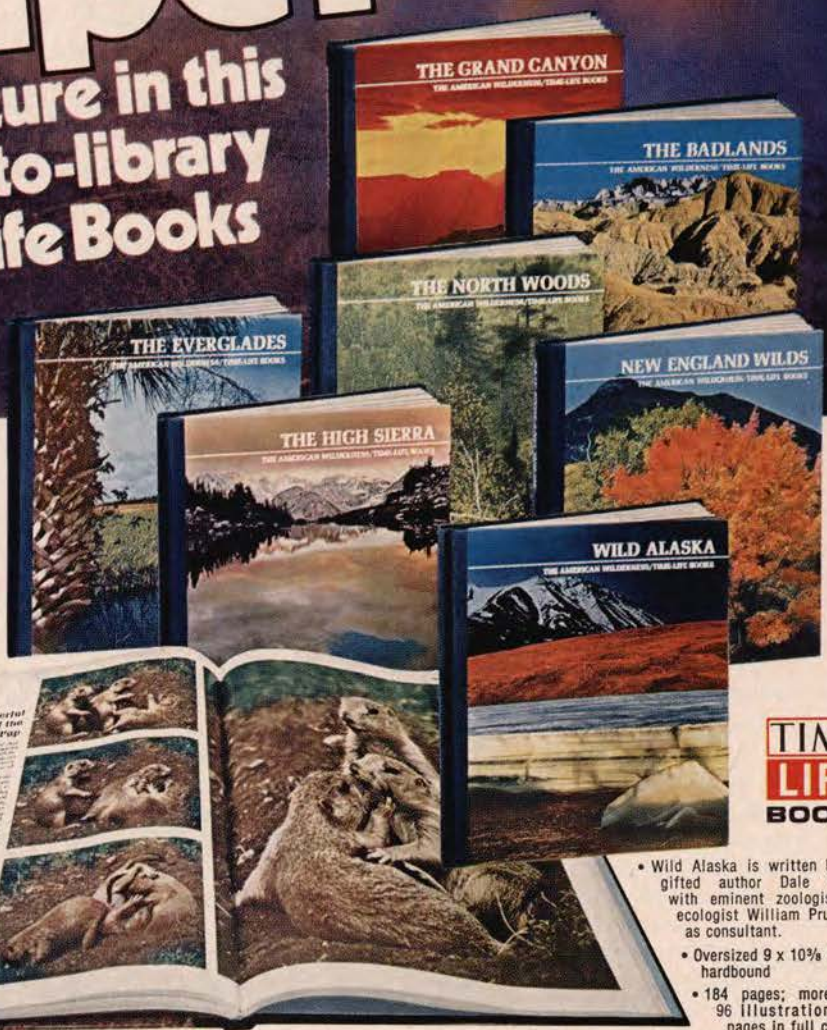
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Solid Waste

Twin Bridges is a small (population 600), isolated town in southwestern Montana. We have for years operated a land-fill dump which does not meet anybody's standards for dump operation. We must close the dump or make improvements so costly that the tax base won't support them. The nearest dump in the state plan that we could use would be thirty miles away. We just don't generate enough garbage to pay anyone to haul it that far, and if it's left to the individual householders to handle (as it is now) most of them will throw it over some rancher's fence or just toss it out along some highway. Can anybody anywhere tell us how other small rural communities have successfully coped with their solid waste? Please? My husband's Advanced Biology Class is trying to solve the problem for the town Council so send your replies to:

Advanced Biology Solid Waste
Management Plan
Twin Bridges High School
Twin Bridges, MT 59754

Martha Robinson
Twin Bridges, Montana

The Sea Otter

The Friends of the Sea Otter were delighted to find Edith Thacher Hurd's appealing poem, "When the Water Baby was Born," illustrated by our own Margaret Owings, as the first children's story in your intriguing new format (*Sierra*, October 1977).

We would like to correct two small errors that crept into the legend under the color photograph accompanying the poem: the southern sea otter is currently listed by the Department of the Interior as "threatened" (not endangered) and is protected throughout its range (not just in the 100-mile sea otter refuge) by international and state laws of 1911 and 1913, and by the federal Marine Mammal Protection Act of 1972.

Betty S. Davis
Carmel Valley, California

Kudos

I've just finished reading the October issue of *Sierra*. Of all the many issues of our *Bulletin* that I've seen over the years, I think this is the best. Congratulations!

Fred Doyce
Mill Valley, California

Just finished the October *Sierra*.

I was favorably impressed with the new format. I found it more readable and generally more interesting. The shorter stories were a definite plus. The news section is excellent.



I usually read my copy from cover to cover, but sometimes it has been a struggle. I felt that I got more information than usual from this issue and enjoyed reading most of the articles.

Congratulations on effecting some excellent changes in the format of *Sierra*.

Kimball T. Simpson
Westboro, Massachusetts

This is a short note to let you know how much I liked your new format. I feel you're definitely on the right track. My first thought on seeing the cover of the new issue was, "that's beautiful." The contents of the magazine bore out that thought. Thank you.

Kathy Thompson
Minneapolis, Minnesota

My mail just arrived with my October *Sierra Club Bulletin*. The new format is fabulous! The article on the Smokies, the *Sierra Club* history, the wildlife portfolio, the article on photography—I don't know which to read first. I always read the old *Bulletin* cover to cover, but the new one is even better. I heartily support your attempt to produce a *Bulletin* that will reach a wider audience.

I will indeed take your suggestion to give my *Bulletin* to a friend or organization after I have read it. I think that the new format and emphasis will appeal even to people who are not already convinced of the urgency of the environmental issues the Club supports—hopefully their interest in *Sierra* can help bring them into the Club or at least onto our side.

Congratulations to you and your staff. Keep up the good work!!

Jean Runzo
Hattiesburg, Mississippi

The Editor replies:

The response of our readers to *Sierra* so far has been overwhelmingly positive; only one person preferred that we remain a "house organ," and one other hoped that sometime we'll be able to use recycled paper. Thanks to all of our readers who have

been kind enough to write about the new direction in which we're taking our magazine.

Sierra Club History

I read with interest Part I of your history of the *Sierra Club* in the October *Sierra*. It entailed a good deal of research, as all historical accounts do; and for the most part it seemed quite accurate and in accordance with what I have heard. However, I wonder if two points I noticed might be misleading.

You mentioned Joseph LeConte and his *Journal of Ramblings of 1870*. In the next paragraph you mention "important maps made by LeConte. . . ." I think you will find that the maps to which you refer were made by Joseph N. LeConte, the little son whom Professor LeConte left at home in 1870. My file of *Sierra Club Bulletins* will bear me out.

The other point concerns the Hildebrand family and skiing. It is true that Alex did a great deal, but wasn't it his father, Joel, who did the most to get the whole avalanche going? Maybe I'm prejudiced because Joel taught me the rudiments as he did to many of us in the mid '30s.

I really want to thank you for provoking me to write this note, for it gave me the pleasure of spending much of this evening reading old copies of the *Bulletin* and becoming reacquainted with old names and friends.

John P. Schagen
San Francisco, California

The article by Douglas H. Strong in the October issue of *Sierra* describes the long and dedicated service to the *Sierra Club* of William E. Colby. Colby was one of the best mining lawyers of his time and was associated in the practice of law with Judge Curtis H. Lindley, author of *Lindley on Mines*—still the outstanding treatise on mining law. Colby also contributed to the literature of mining law and would no doubt be distressed by the Club's recent efforts to cripple the very industry which made possible the devotion of his free time to the *Sierra Club*.

Don H. Sherwood
Denver, Colorado

The Editor replies:

Mr. Schagen is correct on both counts: it was "Little Joe" LeConte who made the maps and Joel Hildebrand who popularized skiing. Mr. Sherwood is correct that we did not emphasize Mr. Colby's professional pursuits, but in the course of a short history some aspects of leaders' lives had to be omitted. As far as the Club's involvement with mining law, it should be pointed out that to regulate is not necessarily to cripple.

Founded in 1892, the Sierra Club works in the United States and other countries to restore the quality of the natural environment and to maintain the integrity of ecosystems. Educating the public to understand and support these objectives is a basic part of the Club's program. All are invited to participate in its activities, which include programs to "... study, explore, and enjoy wildlands."

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Canadian chapters, Western Canada Chapter, Box 35520, Station E, Vancouver, B.C. V6M 4G8 or Ontario Chapter, c/o National & Provincial Parks Assn., 47 Colborne St., Toronto, Ontario, M5E 1E3.

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SIERRA

THE SIERRA CLUB BULLETIN

JANUARY 1978

VOLUME 63/NUMBER 1

1978 OUTING ISSUE

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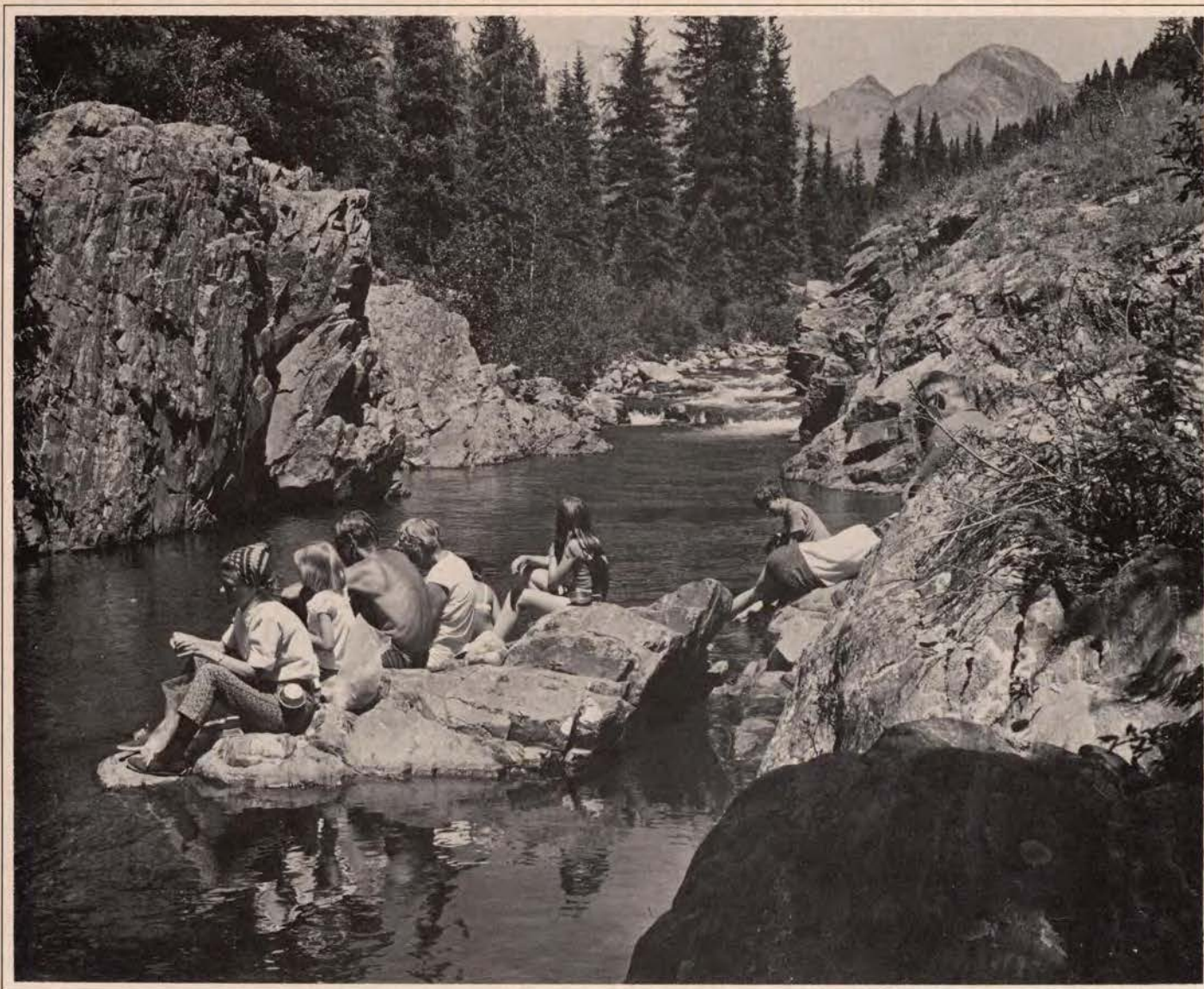
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Cover: Climbers descending a large block of ice on Mt. Rainier. Photograph by Keith Gunnar; Bruce Coleman, Inc.



H. W. Anderson

1978 Sierra Club Outings

THIS YEAR THE Sierra Club Outing Committee has chosen a new way to tell you about our 1978 outings. Instead of the detailed trip descriptions that usually fill the annual outing issue of *Sierra*, this issue offers only general descriptions of each trip category (e.g., Base Camp, Knapsack, Highlight, etc.), and a listing of the trips, their dates and leaders. To supplement this list, we have prepared eight brochures with more detailed information and great candid shots of past outings. These brochures are available through the Outing Department. After you've read the following listings, all you have to do is let us know which trip category interests you and/or your family, and we'll send you the brochures you'll need to make the best

choice. The order coupon is found on page 38.

Our new brochures describe the trip as well as the type, be it hiking with full knapsack, leading a pack animal, skiing or snowshoeing, canoeing, bicycling or horseback riding. The brochures will also give you an idea about each trip's degree of strenuousness, so that you won't end up hiking 15 miles a day when you'd rather be sunning yourself on a river bank or birdwatching in a quiet canyon. If you are a biology, botany or geology enthusiast, you'll learn which educational outing will appeal to your scientific interests. All in all, more than 250 trips are detailed in these outing brochures, enabling you to choose a location from almost every area within the United

States, from tropical Hawaii to the wilds of Alaska, and more than 20 foreign countries.

We want to continue to offer a wide variety of wilderness adventures to Sierra Club members and to hold the cost of these outings at a reasonable level. This less expensive advertising method is an important step towards that goal. Your cooperation in this effort will help us discover whether or not our new advertising has been successful. Please fill out your order coupon as soon as possible so that you can receive the information and make your trip reservations early. Then sit back and start preparing yourself for one of the most unforgettable travel experiences of a lifetime.

—John Ricker, Outing Chairman

What Can You Expect of a Wilderness Outing?

You can expect to have a great time on Sierra Club wilderness outings, and you'll come away with warm memories of shared laughter and work, smoky fires and upset schedules, rainy days and campfire camaraderie.

Every Sierra Club outing is a small and cooperative enterprise. The staff does the planning and shopping in advance, but everyone is expected to pitch in and help once the outing starts. Once or twice during a trip you'll help prepare dinner, breakfast or lunch. This is a chore, but an enjoyable one. You'll probably find yourself volunteering to gather wood, haul water, pack and unpack—in short, getting involved in every aspect of being at home in the wilderness.

With everyone pitching in, things go

smoothly—in general. But wilderness outings never run like clockwork, so be prepared for the unexpected.

One key aspect to having a good time on a wilderness outing is knowing your limitations. If you're uncomfortable at high altitudes, choose a low-altitude trip. If you tend to get lost, stick close to those who know the way. We don't mean to make this sound ominous—just bring your common sense with you.

Each trip has a leader—a competent volunteer who knows his or her stuff. The Club has entrusted them with full authority over every aspect of each outing. The leader will decide who is qualified to go—and how, when and where. This means that you must consult the leader be-

fore you head out on your own to climb a mountain or explore a canyon.

The Club is responsible for your safety, and we want to make every effort to keep you from getting lost or hurt. This involves three simple and minimal camp rules: 1) You must accept the leader's decisions and instructions; 2) You may not wander off alone; and 3) You may do anything reasonable—try a different route, climb a peak—as long as the leader knows exactly where you are going and thinks you are up to it.

Our outing program is not a commercial enterprise; we're not in it for the money. With everyone's cooperation, we've been having a good time for 77 years now. You will too.

Base Camps

TRIPS with fixed campsites allow the greatest freedom to enjoy the wilderness. Participants can choose from a wide range of activities: hiking, climbing, fishing—or whatever they wish. Optional organized activities range from overnight knapsacking (with food and utensils provided), strenuous peak climbs and cross-country trips to simpler nature walks or fishing trips. Activities will suit the abilities and wishes of the group. Trips begin with dinner at the roadhead. The following day up to 30 pounds of dunnage per person will be transported from the roadhead to camp while trip members walk in.

Everyone in camp meets for breakfast, dinner and campfire. Members take turns performing camp chores including meal preparation (with instruction and aid from the camp staff). These chores require little time and make everyone an active camp participant, not a guest. Many of our trips visit areas of current conservation interest; issues involving these areas will be subjects of discussion. All of our camps are located for minimum impact on the environment, and our leaders and staff emphasize proper wilderness procedures.

Base Camps: Especially suited for newcomers and family groups, the hike in is usually easier and the activities less strenuous than Alpine Camps.

Alpine Camps: Located in more remote spots and at higher elevations, these camps appeal to those who want a more rigorous program and deeper probing of the wilderness. Cross-country hiking, overnight knapsacking and mountain climbing are popular.

Back Country Camp: Our most remote encampment, reached by a 2-day hike, this is primarily an adult trip though teen-agers are welcome. It is more of a do-it-yourself camp where members are encouraged to conduct their own ventures, though staff leadership is always available.

Desert Camps: Spring, fall and winter—when normal alpine excursions are out of the question—are favorable times for desert camping. With timing gauged to suit the chosen loca-



Gerlin Price

tion, we will use the central base camp format for desert trips. Members' automobiles will be used for in-trip transportation. Activities will be mainly day hikes to points of scenic, historic or other interest.

Mountaineering Camps: These camps are intended for the weekend mountaineer to practice and perfect the finer arts of climbing. Particular attention will be paid to roped climbing on both rock and ice. Qualified leaders will accompany small groups so climbers can enjoy the camaraderie of the mountaineer. Participants need not be super-climbers but should have mountain experience and a fair degree of stamina and motivation. It is not necessary that all members climb, but to assure a proper balance between climbers and nonclimbers, leader approval may be required.

(25-E) Natural History of the Anza Borrego Desert, California—March 19-25. Instructor, Will Neely. Leader, Serge Puchert, 37 Southridge Ct., San Mateo, CA 94402. Cost: \$175.

(60-E) Natural History of Mono Basin, California—June 17-24. Naturalist, Will Neely. Leader, Ed Miller, 31691 Crystal Sands Dr., Laguna Niguel, CA 92677. Cost: \$160.

(61) White Mountain Forest, New Hampshire—

June 18-24. Leader, Russ Calkins, Box 209, Keene, NH 03431. Cost: \$150.

(62) Talchako Lodge #1, Tweedsmuir Park, British Columbia—June 20-30. Leader, Gary Miltenberger, General Delivery, Hagensborg, B.C., Canada VOT IHO. Cost: \$295.

(63) Penobscot Bay Schooner Cruise, Maine—June 26-July 2. Leader, Duncan Bailey, 155 Scotland Rd., Norwich, CT 06360. Cost: \$350.

(64-F) McGee Creek, John Muir Wilderness, Sierra—July 1-8. Leader, Ed Miller, 31691 Crystal Sands Dr., Laguna Niguel, CA 92677. Cost: \$160*.

(65-F) McGee Creek, John Muir Wilderness, Sierra—July 8-15. Leader, Ed Miller, 31691 Crystal Sands Dr., Laguna Niguel, CA 92677. Cost: \$160*.

(66) Minarets Mountaineering Camp, John Muir Wilderness, Sierra—July 8-22. Leader, Sy Osofsky, 237 South Mountain View, Bishop, CA 93514. Cost: \$265.

(67-E) Sierra Nevada Natural History, Lost Lake, Kings Canyon Park, Sierra—July 9-21. Instructor, John Stanley. Leader, Robin Brooks, 818 Dartshire Way, Sunnyvale, CA 94087. Cost: \$250.

(68) North Fork San Joaquin River Alpine Camp, Minarets Wilderness, Sierra—July 9-21. Leader, John Friermuth, 381 24th Ave., Santa Cruz, CA 95062. Cost: \$240.

(69) Talchako Lodge #II, Tweedsmuir Park, British Columbia—July 14-24. Leader, Marty Conoley, Box 5027, La Jolla, CA 92037. Cost: \$295.

(70-F) Devils Bathtub, John Muir Wilderness, Sierra—July 16-23. Leader, Dick May, 7 Neila Way, Mill Valley, CA 94941. Cost: \$160*.

(71) Merced Basin Back Country Camp, South Yosemite, Sierra—July 22-August 5. Leader, Ray Des Camp, 510 Tyndall St., Los Altos, CA 94022. Cost: \$320.

(72-F) Devils Bathtub, John Muir Wilderness, Sierra—July 23-30. Leader, Dick May, 7 Neila Way, Mill Valley, CA 94941. Cost: \$160*.

(73) Midnight Lake Alpine Camp, John Muir Wilderness, Inyo, Sierra—July 23-August 4. Leader, Bob Cockrell, 65 Highgate, Kensington, CA 94707. Cost: \$240.

(74) Sapphire Lake Alpine Camp, Flathead Forest, Montana—July 25-August 6. Leader, Bob Kroger, 3568 Elmwood Ct., Riverside, CA 92506. Cost: \$240.

(75-E) **Sierra Nevada Natural History, Edith Lake, John Muir Wilderness, Inyo, Sierra—July 30-August 6.** Instructor, David Dixon. Leaders, Joyce and Sid Alpert, Box 2000, El Cajon, CA 92021. Cost: \$190.

(76-F) **Dinkey Lakes, Sierra Forest, Sierra—August 5-12.** Leader, Joanne Barnes, 960 Ilima, Palo Alto, CA 94306. Cost: \$160*.

(77) **Sapphire Lake Alpine Camp, Flathead Forest, Montana—August 7-19.** Leader, John Swanson, 2760 Corabel Ln., #35, Sacramento, CA 95821. Cost: \$240.

(78) **Rangeley Lakes, Maine—August 13-19.** Leader, Connie Thomas, 128 Muriel St., Ithaca, NY 14850. Cost: \$175.

(79-F) **Dinkey Lakes, Sierra Forest, Sierra—August 13-20.** Leader, Joanne Barnes, 960 Ilima, Palo Alto, CA 94306. Cost: \$160*.

(80) **Devils Punchbowl Alpine Camp, John Muir Wilderness, Sierra—August 13-25.** Leader, Bob Miller, 25 Sharon Ct., Menlo Park, CA 94025. Cost: \$240.

(85) **Canyonlands Wilderness Camp, Utah—September 23-October 5.** Leader, Ray Des Camp, 510 Tyndall St., Los Altos, CA 94022. Cost: \$465.

(86-E) **Natural History of San Geronio Wilderness, San Bernardino Forest, California—October 22-29.** Naturalist, Will Neely. Leader, Dick May, 7 Neila Way, Mill Valley, CA 94941. Cost: \$150.

(87) **Death Valley Christmas Camp, California—December 24-January 2, 1979.** Leader, c/o Ray Des Camp, 510 Tyndall St., Los Altos, CA 94022. Cost: \$165.

(88-E) **Christmas at Organ Pipe Cactus Monument—An Educational Outing, Arizona—December 24-January 2, 1979.** Naturalist, Pierre Fischer. Leader, c/o Ray Des Camp, 510 Tyndall St., Los Altos, CA 94022. Cost: \$190.

*Children under 12, \$140.

Other Base Camps are listed under *Wilderness Threshold (Family Base Camps), Alaska, Ski and Canoe Outings.*

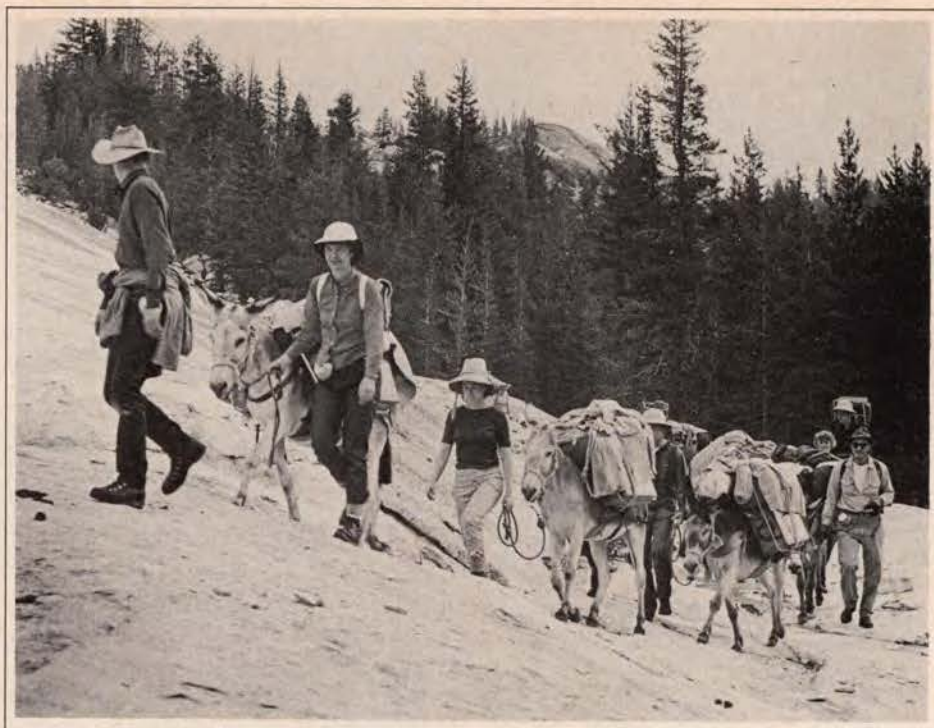
FOR MORE INFORMATION

Write to the SC Outing Department for the brochure describing Base Camps or for a more detailed supplement available for each trip, using the coupon on page 38. Trip cost includes deposit. Trips priced up to \$499 per person: \$35 deposit per individual or family application (family = parents and children under 21).

Burro Trips

THE ANIMALS are sure to win your heart on a Sierra Club Burro Trip. Walking with about 15 people and leading the burros which carry the loads, we move camp often and see a lot. Experienced trip leaders will teach you to find, handle, pack and maybe even understand the donkeys. The animals are generally affectionate and cooperative, but they can be challenging. Our trips are 7 days long, except for one 14-day outing recommended to those who want to get maximally naturalized.

Previous experience with packstock or wilderness travel is not necessary, but a cheerful willingness to help cook, wash pots and pans,



and to lead, pack and unpack the burros is essential. Burros are much smaller and easier to pack and handle than mules or horses. Normally each critter is shared by two people, so the work is quite bearable. All of our trips are suitable for novices in good shape and for children 6 years or older. Moving days are from 6 to 12 miles, usually at high elevations, sometimes over rugged terrain. There are layover days for whatever pleases you. A flexible menu gives trip members a chance to demonstrate or improve their culinary abilities.

Our recently reduced trip size, a propane stove, strict adherence to wilderness manners and thorough cleanup of trash left by thoughtless hikers before us are the primary means of minimizing our impact. Barring the nastiest weather or other circumstances beyond our control, these trips invariably provide outstanding and unforgettable wilderness experiences.

(26) **Panamint Mountains, Death Valley, California—March 26-April 1.** Leader, Jack McClure, 75 Castlewood Dr., Pleasanton, CA 94566. Cost: \$220.

(100) **Great Western Divide, Sequoia Forest, Sierra—July 1-8.** Leader, Jerry Courtheyn, 131 Station Ave., Daly City, CA 94303. Cost: \$195.

(101) **Rainbow Mountain, Sequoia Park, Sierra—July 8-15.** Leader, Richard Cooper, 67 Glen Ave., Oakland, CA 94611. Cost: \$195.

(102-E) **Mineral King Controversy, Sequoia Park, Sierra—July 16-23.** Instructor/Leader, Jack Holmes, 1419 Oak Ave., Davis, CA 95616. Cost: \$210.

(103) **Lost Canyon, Sequoia Park, Sierra—July 22-29.** Leader, Doug Parr, 3416 Davis St., Oakland, CA 94601. Cost: \$195.

(104) **Pine Creek to North Lake, Kings Canyon Park, Sierra—July 29-August 5.** Leader, Don White, 411 Walnut Dr., Monmouth, OR 97361. Cost: \$195.

Before mid-May contact Joe Holmes (see trip #108).

(105) **Pioneer Basin, Inyo Forest, Sierra—July 30-August 12.** Leader, Jack Costello, 7414 Cirro Dr., Rohnert Park, CA 94928. Cost: \$340.

(106) **North Lake to Pine Creek, Kings Canyon Park, Sierra—August 5-12.** Leader, Susan Punnett, 6841 Yale Station, New Haven, CT 06520. Cost: \$195.

(107) **McGee Creek to Red's Meadow, Sierra Forest, Sierra—August 12-19.** Leader, Linda Furtado, 1209 Hearst Ave., Berkeley, CA 94702. Cost: \$195.

(108) **Agnew Meadows to Dana Meadows, Minarets Wilderness, Sierra—August 19-26.** Leader, Joe Holmes, 2019 Blake St., Berkeley, CA 94704. Cost: \$195.

(109) **Dana Meadows to Agnew Meadows, Minarets Wilderness, Sierra—August 26-September 2.** Leader, Ted Bradfield, 5540 Circle Dr., El Sobrante, CA 94803. Cost: \$195.

FOR MORE INFORMATION

Write to the SC Outing Department for the brochure describing all burro trips or for a more detailed supplement available for each trip, using the coupon on page 38. Trip cost includes deposit. Trips priced up to \$499 per person: \$35 deposit per individual or family application (family = parents and children under 21).

Family Trips

FAMILY TRIPS include a wide range of outings: the easier Wilderness Threshold camps for parents with young children, Family Burro trips suitable for most families, Knapsack Trips for families of veteran mountain-goers and Canoe Trips designed especially for families with teen-agers. Most trips are scaled to fit family needs: hiking days are short, climbs are not too steep, and there are special rates. All get families into a wilderness they might not otherwise visit, with a minimum of cost and planning.

In the company of leader families qualified and willing to share their knowledge, families

learn to camp in the wilderness. Mastering the intricacies of cooking, clothing, equipment and safety readies families for participation in more strenuous Sierra Club outings or independently organized mountain or river trips. Along with this goes the pleasure of an all-family trip: ideas are shared, everyone has similar problems, and children have the fun of exuberant outdoor living with a group of similar-age confederates.

Menus are designed to appeal both to adults and children. Children get along fine on mountain food; a few days at high altitude develops an appetite in any picky eater. Exertion is generally mild, but short hikes near home or other activities such as bicycling or jogging prepare the city-dweller for unaccustomed exercise in high mountains. If at all possible, families should spend a couple of days before the trip at high altitude for acclimatization. A little pre-conditioning will make everyone (especially parents) feel better throughout the trip. If your family has never camped away from your car before, your first trip might be to a Wilderness Threshold camp for one week.

All family members must be competent swimmers to qualify for Canoe Trips; the Red Cross Course in basic canoeing will also be helpful.

Wilderness Threshold

The Wilderness Threshold Program is designed to educate entire families with little or no wilderness experience in the techniques of backcountry camping. In addition to teaching the basic skills (camp selection, cooking with lightweight foods, proper use of equipment), each trip will try to increase your knowledge and awareness of the ecological system of the area. Sierra Club trips will stress minimum impact camping and actively render service by cleaning up scarred and littered areas. We hope that your Threshold experience will make your family more aware, more knowledgeable, and more responsible in your use of the wilderness—and perhaps more active in the conservation cause.

Threshold camps are usually located far enough from the road to give a taste of real wilderness, yet close enough so even young children can hike in comfortably on their own. Two- to four-year-olds may need help hiking into camp, but they have a marvelous time once there. Packstock is usually used to transport food, dunnage and equipment from roadhead to camp. The area surrounding each campsite offers opportunities for varied activities: nature study, day hikes, fishing, possibly swimming, peak climbing and rock scrambling. Each participating family (adults and teen-agers) will take its turn at commissary duties and other camp chores. The group meets for breakfast and dinner; lunch is packed at breakfast. Most activities are informal and unstructured, leaving free time to explore the surrounding area. Evenings center around group activities. Those with musical interests are urged to bring their instruments and play. Instruments do not count in your dunnage weight.

Trip participants should consult both the Wilderness Threshold supplement and the trip leaders for advice on equipment and clothing for the specific trip and the specific area where they will camp. The supplement will be sent to each family upon receipt of its application.

Before you choose a trip, read each description carefully. There are camps for families with teen-agers and others with varying age limits; some are more remote and harder to reach. If you have any questions regarding the difficulty or age format of the trip, please contact the trip leaders before submitting your application.

General good health is required; otherwise no special training or skills are necessary for the trip, only the desire for all family members to participate in a wilderness experience. Threshold trips are designed to be introductory experiences; therefore, preference is generally given to families who have never participated in this type of outing. As before, the final decision about the make-up of a trip rests with the leaders.

Except for Trip #124, the initial lists of participating families will be established by a lottery system. The lottery will include all reservations received before March 10, 1978. Families will be selected at random and the trip lists established.

In completing your application, remember:

1. Each family may apply for only one Wilderness Threshold trip.
2. Only parents and their own children can be accepted.
3. Wilderness Threshold trips are cooperative ventures, and the camp chores, child care, etc., are geared to both parents accompanying their children. However, most trips accept at least one single-parent family. (An alternative to consider is a Base Camp, especially one with a family rate.)

(115) Chamberlain Basin, Sawtooth Recreation Area, Idaho—July 25-August 1. Leaders, Bonnie and Barry Howard, 5288 Kathy Way, Livermore, CA 94550. Cost: \$480/\$120*.

(116) Talchako Lodge, British Columbia—July 26-August 2. Leaders, Sally and Sandy Small, 39 Via Floreado, Orinda, CA 94563. Cost: \$495/\$125*.

(117) Donkey Creek, John Muir Wilderness, Inyo Forest, Sierra—July 29-August 5. Leaders, Kay and Ben Anderson, 1127 Sunnyhills Rd., Oakland, CA 94610. Cost: \$420/\$100*.

(118) Chamberlain Basin, Sawtooth Recreation Area, Idaho—August 1-8. Leaders, Molly and Harry Reeves, Rt. 2, Box 174-F, Oakley, CA 94561. Cost: \$480/\$120*.

(119) Beck Lakes, Minarets Wilderness, Sierra—August 5-12. Leaders, Nancy and Don Bailey, 3222 Jackson St., San Francisco, CA 94118. Cost: \$420/\$100*.

(120) Donkey Creek, John Muir Wilderness, Inyo Forest, Sierra—August 5-12. Leaders, Barbra and Rod Derbyshire, 30 Dolphin Ln., Northport, NY 11768. Cost: \$420/\$100*.

(121) Talchako Lodge, British Columbia—August 5-12. Leaders, Myrna and Tom Frankel, 3230 Jackson, San Francisco, CA 94118. Cost: \$495/\$125*.

(122) Canyon de Chelly Monument, Arizona—August 20-26. Leaders, Mimi and Don Curtin, 6395 Kimi Ln., La Mesa, CA 92041. Cost: \$415/\$100*.

(123) Mineral King, Sequoia Park, Sierra—August 26-September 3. Leaders, Nancy and Jim McDonald, 341 Avila St., San Francisco, CA 94123. Cost: \$420/\$100*.

(124) Mt. Desert Island, Acadia Park, Maine—September 24-October 1. Leaders, Tricia and David Harrison, RFD #1, Box 20, Bar Harbor, ME 04609. Cost: \$275/\$90*.



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References from previous participants supplied upon request.



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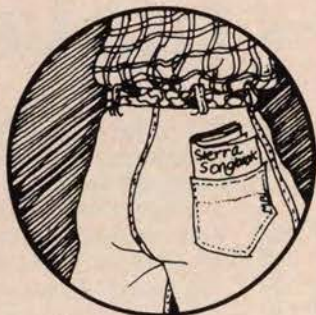
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Family Burro Trips

A Family Burro Trip enables families to travel back-country trails into remote mountain regions with the assistance of sturdy, lovable and independent pack-carrying burros. Previous experience with packstock is not required, but each member of the family should have some experience with backpacking; each family will carry its share of clothing and personal gear. The burros will carry all the food, commissary gear and the families' tents.

Moving days will average 5-7 miles. Hiking with a backpack and working with packstock at high altitudes are much more strenuous than most city activities, so some preconditioning is essential. Children must be at least 7 years old and capable of carrying a pack.

The family leader will help you select your gear and answer your questions.

(127-E) John Muir Wilderness—A Nature Study, Sierra—August 14-22. Instructor, Bob Love. Leaders, Ellie and Jim Gayner, 2960 Holyrood Dr., Oakland, CA 94611. Cost: \$380/\$115*.

Family Canoe Trips

The Family Canoe Trips are designed for families with at least one teen-ager. They introduce families to the thrill of running easy rivers, exploring the hillsides and swimming in the deep pools. Some instruction in canoeing and water safety will be provided by the leader. Everyone shares in meal preparation under the supervision of the commissary chief. On most trips, canoes and paddles are provided. Partial families and an occasional teen-age friend are welcome. Final approval of applicants will be determined by the leader.

(130) Main Eel River, Northern California—June 24-30. Leader, Judy Hacker, 303 Johnstone Dr., San Rafael, CA 94903. Cost: \$360/\$100*.

(131) Junker Lake Chain, Tweedsmuir Park, British Columbia—August 16-26. Leaders, Julianne and Robert Jones, 4410 Meadowbrook Dr., El Sobrante, CA 94803. Cost: \$645/\$140*.

(132) Rogue River, Oregon—August 27-September 2. Leaders, Ann and Doug Christensen, 520 Woodland Rd., Kentfield, CA 94904. Cost: \$485/\$105*.

Family Knapsack Trips

Family knapsacking requires teamwork. If you and your family have tried knapsacking and like it and want to learn more from the experienced family knapsackers who'll lead—here is your opportunity.

The minimum age for children depends on the number of older children in your family. In the past it has been 6 or 7. A certain family carrying-power is needed.

All youngsters must be able to walk the distance and carry part of the family's personal and community load.

(136) Caribou Wilderness, Family Knapsack for Young Children, Northern California—July 2-8 Leaders, Anneliese and Ken Lass, 712 Taylor Ave., Alameda, CA 94501. Cost: \$255/\$65*.

**The first figure listed is the cost for two parents and one child; the second figure the cost for each additional child. Adjusted rates are available for single-parent families.*

Other trips suitable for families:

Most Burro and High-light trips are suitable for families. Other trips are keyed with an "F" in their respective categories and have reduced rates for children as indicated.

Base Camps:

(64-F & 65-F) McGee Creek, John Muir Wilderness, Sierra

(70-F & 72-F) Devils Bathtub, John Muir Wilderness, Sierra

(76-F & 79-F) Dinkey Lakes, Sierra Forest, Sierra

Hawaii: (140-F) Hawaii/Maui

FOR MORE INFORMATION

Write to the SC Outing Department for the brochure describing Family Trips or for a more detailed supplement available for each trip, using the coupon on page 38. Trip cost includes deposit of \$35 per family application.

1978 Foreign Trips

SIXTEEN YEARS ago the Sierra Club Outing Committee extended its activities to include trips to foreign lands. The purpose was to offer members the opportunity to experience, in countries beyond our borders, the same type of out-of-doors adventures we find so rewarding here and to become aware of other peoples and their conservation problems. In order to do this we stay as close to the land and its inhabitants as possible, camping and walking wherever we can. In places where we cannot camp, we stay in native hotels and inns, not in plush accommodations run for foreign tourists. When possible, we contact local conservationists and mountaineers and live as they do.

Sierra Club foreign trips will take you to out-of-the-way places rarely visited by ordinary tour groups. This means, in many instances, that we adopt native ways of life, their time schedules and frequently their disregard for convenience and the amenities we often regard as essential. All this requires fortitude and a sense of humor, but it can be a high adventure to treasure for years to come.

Trip leaders are Sierra Club members, trained and experienced in domestic outings,

who give special emphasis to the conduct of the trip and the care of the trip members. Naturally, they cannot all be highly trained specialists on the country visited, or its cultural-historical or biological features. Therefore, members should inform themselves beforehand on these matters for maximum enjoyment. Of course, an effort is made to enlist native assistance when available.

(730) Venezuela/Surinam: By Foot and Paddle—February 10-March 5. Leader, Betty Olds, 131 Bret Harte, Berkeley, CA 94708. Cost: \$1,745.

(740) Ski Touring in Norway—March 3-17. (Post-trip optional tour to Glitterheim) Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941. Cost: \$695.

(745) A Spring Trek into the Foothills of the Nepal Himalaya—March 10-April 2. Leader, Al Schmitz, 2901 Holyrood Dr., Oakland, CA 94611. Cost: \$1,175.

(755) Wales, England, Scotland—

Section A: June 2-25. Leaders, Lori and Chris Loosley, 22 Westbury Rd., New Malden, Surrey KT3 5BE, U.K. Cost: \$1,150.

Section B: June 6-29. Leaders, Lynne and Doug McClellan, 88 Ridge Rd., Fairfax, CA 94930. Cost: \$1,150.

Section C: June 10-July 3. Leaders, Maggie and Mike Maule, 228 Pine, Philadelphia, PA 19106. Cost: \$1,150.

(770) Canal Casiquiare, Venezuela-Brazil—

Section A: June 4-July 1. Leader, Ted Snyder, Rt. #1, Box 261, Walhalla, SC 29621. Cost: \$2,450.

Section B: July 2-29. Leader, Ken McAmis, 2870 Twin Brooks Dr., N.E., #3, Atlanta, GA 36319. Cost: \$2,450.

(760) Japan—Inland Sea to Northern Honshu—

Section A: June 24-July 22. Leaders, Mildred and Tony Look, 411 Los Ninos Way, Los Altos, CA 94022. Cost: \$1,600.

Section B: June 24-July 22. Leader, William Balch, 16031 Matilija Dr., Los Gatos, CA 95030. Cost: \$1,600.

(765) Spain: Central Pyrenees—June 25-July 15.

Leader, Lewis Clark, 1349 Bay St., Alameda, CA 94501. Cost: \$785.

(785) Hiking in Iceland—July 10-23. Leader, Brad Hogue, 3750 Long Ave., Beaumont, TX 77706.

Cost: \$600.

(775) Kenya: Northern Frontier, East Africa—

July 12-August 7. Leader, Ross Miles, 350 Sharon Park Dr., #B-21, Menlo Park, CA 94025. Cost: \$1,865.

(790) Hiking and Canoeing in Sweden—July 20-

August 10. Leaders, Blaine LeCheminant, 1857 Via Barrett, San Lorenzo, CA 94580; and Mary Miles, 569 Rutherford Ave., Redwood City, CA 94601. Cost: \$1,015.

(800) Mont Blanc and the Vanoise, France—

mid-August (17 Days). Leaders, Pat Hopson, 907 6th St., S.W., #504C, Washington, DC 20024; and Dick Williams, 324 N. Edison St., Arlington, VA 22203. Cost: \$880.

(780) Kashmir-Ladakh Leisure Trek, India—

August 2-September 1. Leader, Tris Coffin, 500 Tamalpais Ave., Mill Valley, CA 94941. Cost: \$1,325.

(805) Wildlife Safari: Walking, Camping, Canoeing in Kenya and Botswana, Africa—August

7-September 2. (Optional walking trip, Zambia) Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941. Cost: \$2,170.

(810) Nepal, Jumla to Pokhara—September 30-

November 2. Leaders, Emily and Gordon Benner, 155 Tamalpais Rd., Berkeley, CA 94708. Cost: \$2,095.

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(812) Everest Base Camp, Nepal—November 13-December 8. Leader, Peter Owens, 117 E. Santa Inez, San Mateo, CA 94401. Cost: \$715.

(820) Hoggar Mountains Camel Caravan, Southern Algeria—November 29-December 16. Leader, Lynne Simpson, 1300 Carter Rd., Sacramento, CA 95825. Cost: \$1,515.

(822) Christmas at Annapurna, Nepal—December 18-January 6, 1979. Leader, Peter Owens, 117 E. Santa Inez, San Mateo, CA 94401. Cost: \$550.

(825) South Sea Islands—December 30-January 21, 1979. Leader, Ann Dwyer, Box 468, Geyserville, CA 95441. Cost: \$625.

1979 FOREIGN TRIPS

(900) Baja Driving-Hiking Adventure—January. Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941.

(905-E) Indian Wildlife Sanctuaries—January 4-28. Leader, Robin Brooks, 818 Dartshire Way, Sunnyvale, CA 94087. Cost: \$925.

(910) Arabian Dhow and Game-Viewing Safari, Kenya—January-February. Leader, c/o Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941.

(915) Hiking in New Zealand—February 10-March 10. Leader, Ann Dwyer, Box 468, Geyserville, CA 95441. Cost: \$1,260.

(918) Spring Trek in Nepal—March 1-31. Leader, Al Schmitz, 2901 Holyrood Dr., Oakland, CA 94611.

(920) Norway Ski Touring—March 16-30. Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941.

(922) Galapagos Islands, Ecuador—March 26-April 13. Leader, c/o Ray Des Camp, 510 Tyndall St., Los Altos, CA 94022.

(925) Hiking in Scotland—May-June. Leader, John Ricker, 2950 North 7th St., Phoenix, AZ 85014.

(928) Galapagos Islands, Ecuador—June 4-22. Leader, Bob Kroger, 3568 Elmwood Ct., Riverside, CA 92506.

(930) Wales and Southern Ireland—June. Leaders, Lori and Chris Loosley, 22 Westbury Rd., New Malden, Surrey KT3 5BE, U.K.

(932) Norway Yacht Trip—June. Leader, H. Stewart Kimball, 19 Owl Hill Rd., Orinda, CA 94563.

(935) Ecuador—June-July. Leader, Rosemary Stevens, 421 Richmond Dr., #102, Millbrae, CA 94030.

(938) Picos de Europa, Spain—June-July. Leaders, Lewis Clark, 1349 Bay St., Alameda, CA 94501; and Aurora Dorado, 757 Sutter St., #100, San Francisco, CA 94104.

(940) Hindu Kush-Hindu Raj Himalaya Trek, Pakistan—June-July. Leader, Peter Owens, 117 E. Santa Inez, San Mateo, CA 94401.

(942) Walking in Norway's Jotunheimen Mountains—early July. Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941.

(945) Yugoslavia: Mountains and Sea Coast—July. Leader, Ross Miles, 350 Sharon Park Dr., #B-21, Menlo Park, CA 94025.

(950) Kashmir Mountain Trek, India—July. Leader, Robin Brooks, 818 Dartshire Way, Sunnyvale, CA 94087.

(955) Indonesia, Land Below the Wind—July. Leaders, Lynne and Ray Simpson, 1300 Carter Rd., Sacramento, CA 95825.

(960) Climbing in Bolivia—July 2-23. Leaders, Les Wilson and Beverly Belanger, 570 Woodmont Ave., Berkeley, CA 94708.

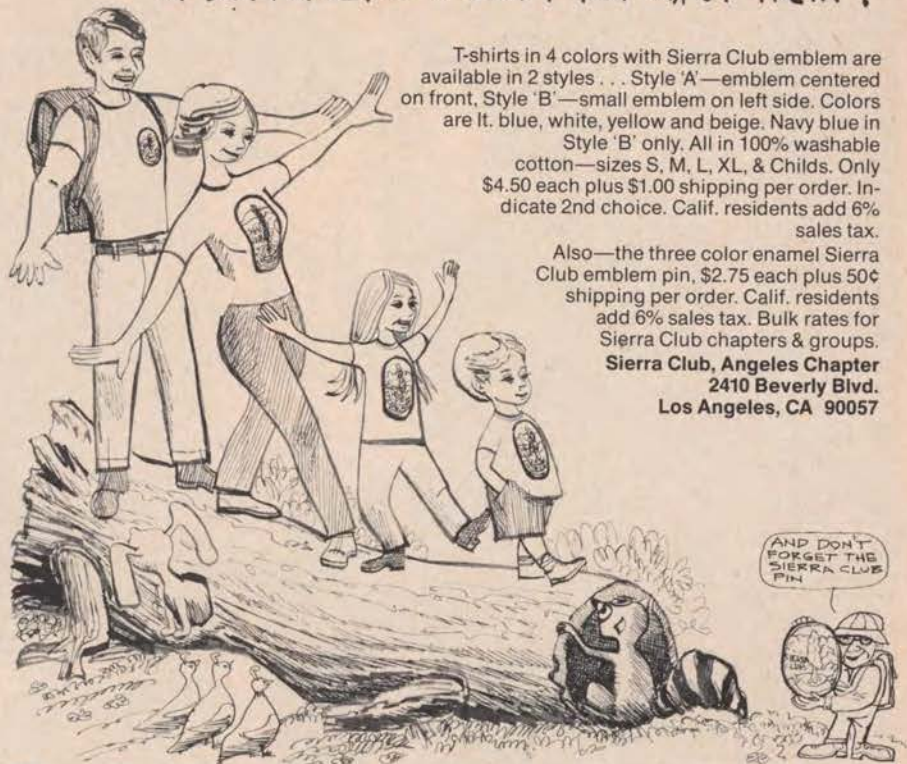
(965) Colombia—July-August. Leader, Rosemary Stevens, 421 Richmond Dr., #102, Millbrae, CA 94030.

(970) Kenya: Foot Safari, Camping, Game Viewing—July 12-August 7. Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941.



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(975) **Hiking in Norway—August.** Leader, Dolph Amster, 1205 Edgevale Rd., Silver Spring, MD 20910.

(980) **Walking and Camping in Kenya and Botswana, Africa—August.** Leader, Ross Miles, 350 Sharon Park Dr., #B-21, Menlo Park, CA 94025.

(985) **An Outing to the Bernese Oberland, Switzerland—August 22-September 8.** Tony Look, 411 Los Ninos Way, Los Altos, CA 94022.

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(505) **Nepal, Manaslu—October.** Leader, c/o Doug McClellan, 88 Ridge Rd., Fairfax, CA 94930.

(510) **Sherpa Country, Nepal—October 13-November 25.** Leader, John Edginton, 2733 Buena Vista, Berkeley, CA 94708.

(515) **Mexico—November-December.** Leader, Bob Kroger, 3568 Elmwood Ct., Riverside, CA 92506.

(520) **Omo River Expedition, Ethiopia—November 26-December 23.** Leader, c/o Al Schmitz, 2901 Holyhood Dr., Oakland, CA 94611.

FOR MORE INFORMATION

Write to the SC Outing Department for the brochure describing all Foreign Trips or for a more detailed supplement available for each trip, using the coupon on page 38. Trip cost includes deposit of \$100 per person. Trip prices are subject to change and do not include air fare. Prices of 1979 Foreign Trips not listed here will be printed in the summer issue of *Sierra*.

How to Argue and Win!

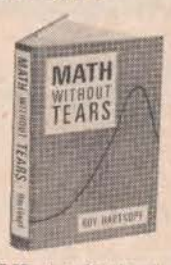
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Wayne Woodruff

Highlight Trips

HIGHLIGHT TRIPS are for individuals and families with children at least 9 years old, who want to hike from camp to camp without the burden of a full knapsack. Like Knapsack Trips, the emphasis is on going light, but our mules carry each trip member's 20-pound duffel bag plus all the food and commissary equipment. Meals are planned by the staff, but trip members take turns cooking and doing other camp chores under the supervision of the staff.

Group size varies from 15 to 25 trip members plus a small staff, which allows us great flexibility in choosing routes that give maximum enjoyment yet with minimum wilderness impact. For example, we achieve a ratio of 4 to 5 people per mule compared with the usual private commercial trip which rarely does better than 1 to 2 persons per mule. Moves between camps ordinarily range from 5 to 15 miles, with an 8-to-10-miles-per-day average, and are often followed by 1 or more layover days. The degree of strenuousness varies substantially from trip to trip. In choosing an outing you should carefully consider this factor. With camp duties only once or twice a week, layover days provide abundant opportunity to fish, climb or pursue other individual activities.

We emphasize conservation issues involving areas where trips are run, interpreting the natural history aspects of the local environment, and providing guidance in camping techniques

and minimization of wilderness impact for use on future individual outings. Highlight outings are designed to explore the largest area possible in the time involved, to give all individuals freedom consistent with group objectives and above all to provide a meaningful wilderness experience in conjunction with the benefits of group interaction.

(24-E) Natural History of the Big Bend, Texas—March 18-25. Instructor, Pierre C. Fischer. Leader, John Colburn, 11109 Shoreline Dr., El Paso, TX 79936. Cost: \$300.

(145) Marble Mountains, Northern California—July 6-13. Leader, Laurie Williams, Box 124, Canyon, CA 94516. Cost: \$220.

(146) Lake Chelan Crest, Wenatchee Forest, North Cascades, Washington—July 24-31. Leaders, Ruth Ann and Jim Angell, 3450 S.W. Talbot Rd., Portland, OR 97201. Cost: \$325.

(147) Red Mountain Basin, Sierra Forest, Sierra—July 27-August 4. Leader, Serge Puchert, 37 Southridge Ct., San Mateo, CA 94402. Cost: \$260.

(148) Willmore-Jasper Parks, Alberta, Canada—July 27-August 5. Leader, c/o Al Combs, Depot Rd., RDI, Remsen, NY 13438. Cost: \$385.

(149) Jasper Park, (Ideline Area), Alberta, Canada—August 7-17. Leader, Al Combs, Depot Rd., RDI, Remsen, NY 13438. Cost: \$400.

(150) Northern Yosemite, Sierra—August 10-24. Leaders, Diane and Al Fritz, 2447 Via Pacheco, Palos Verdes Estates, CA 90274. Cost: \$415.

(151) Western Slope of the Tetons, Idaho—August 14-21. Leader, Bill Huntley, Box 3164, San Leandro, CA 94578. Cost: \$350.

(152) Olympic Mountains, Olympic Park, Washington—August 14-25. Leader, David Horsley, 4285 Gilbert St., Oakland, CA 94611. Cost: \$430.

(153) Triple Divide, Kings Canyon Park, Sierra—August 24-31. Leader, Jerry South, 483 Throckmorton Ave., Mill Valley, CA 94921. Cost: \$220.

(154) Monarch Divide, Kings Canyon Park, Sierra—August 30-September 6. Leader, George Hall, 520 Brackney Rd., Ben Lomond, CA 95005. Cost: \$220.

(155-E) Canyonlands Natural History, Utah—September 25-October 6. Instructor, Pierre Fischer. Leader, John Ricker, 2950 North 7th St., Phoenix, AZ 85014. Cost: \$470.

Saddlelight Trips

(243) Mono Creek Canyon, Sierra Forest, Sierra—July 9-15. Leader, Ken Henrikson, 119 Montclair Ct., Los Gatos, CA 95030. Cost: \$395.

(244) Palliser Pass, Banff Park, Alberta, Canada—August 27-September 1. Leader, Kathy Jones, 21109 Serene Way, San Jose, CA 95120. Cost: \$395.

FOR MORE INFORMATION

Write to the SC Outing Department for the brochure describing all Highlight and Saddlelight Trips or for a more detailed supplement available for each trip, using the coupon on page 38. Trip cost includes deposit. Trips priced up to \$499 per person: \$35 deposit per individual or family application (family = parents and children under 21).

Climbing Kilimanjaro

TRACY MARDIGIAN

MOUNT KILIMANJARO, 18,640 feet. Outward Bound is a growth and outdoor training experience. Its intent: "To serve, to strive, and not to yield"—to reach our individual summits. My summit—the top.

Gilman's Point, the top of Africa. If you reached Gilman's and jumped up, you would be above all Africa. That was, for me, the ultimate goal.

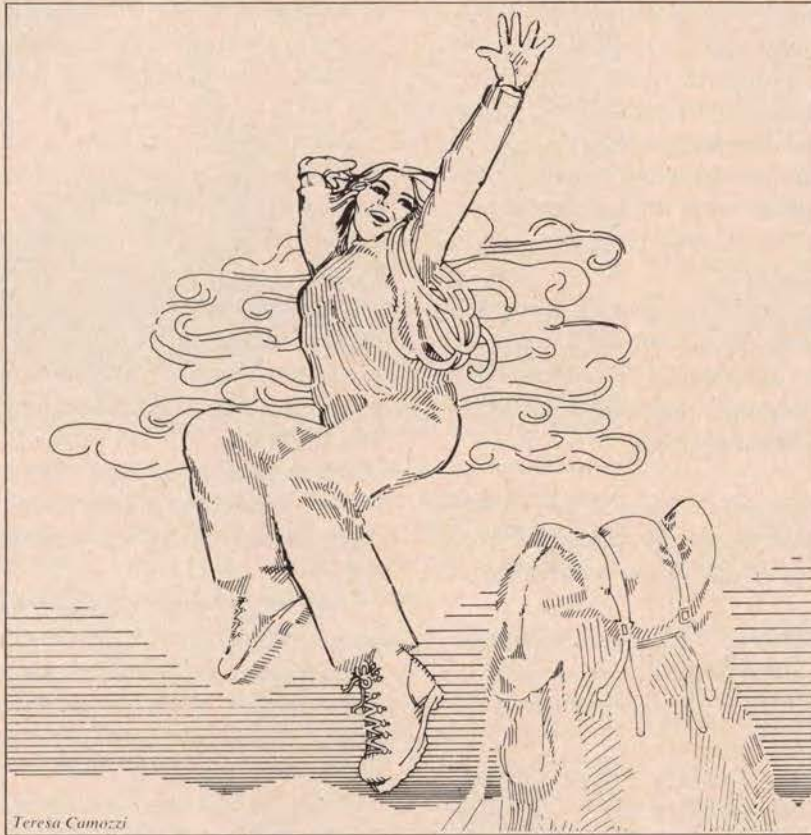
After three weeks of survival and endurance training at the East African Outward Bound Mountain School, located at the base of the Kenyan side of Mount Kilimanjaro, our group of American students was at last ready for the final expedition: the ascent of the highest mountain on the continent of Africa.

Ernest Hemingway may have marveled at the immensity and overwhelming beauty of Kilimanjaro, and he may have written about it, but he never conquered it, as I planned to do.

It was the morning of August 1, 1976. In fifteen minutes, at quarter to eight, the Duma ("Cheetah" in Swahili) Patrol would set off, leading the way up the first part of the mountain. We were all acquainted with the first 11,000 feet since we had taken two days to climb that far on our first training expedition. Today it would take us only half a day. After a last-minute speech from our instructor, Jonathan, the Patrol started off.

We passed the ropes course behind the school. I looked at it, remembering how much of a challenge it had been. Now it seemed so easy. We passed the Climbing Wall, where our Duma Patrol had been champion. I hoped our training had been sufficient. Already I could feel a numbness in my left arm from my old-fashioned rucksack. It wasn't designed for carrying forty-five pounds. All the weight pulled at my shoulders and arms, and none was supported by my hips.

Before walking out of the open grass and into the woods, I looked backed at the camp. I saw Jonathan watching us. I



knew he was proud of the first American group he had ever trained. The school was primarily for Africans, and we were a special group.

We walked into the woods, and soon the school was out of sight. For the first fifteen minutes we climbed up a narrow rocky path toward the road that was the boundary between Tanzania and Kenya. These African woods were not at all like Tarzan's jungle. There were a lot of bushy trees and pines. I could not picture Tarzan yelling and swinging on a vine in these woods.

Far from tired, our patrol chattered away,

anticipating the unknown parts of the climb. No problems so far. Everyone had plastered their feet with bandaids and moleskin. One bad blister could prevent you from going on. My boots had gotten at least fifty miles on them in the last three weeks, so the possibility of blisters didn't bother me.

We reached the road and without even pausing we started on. The road was very dusty. A battered truck drove by with a bunch of Africans in the back.

"Jambo! Habari?" we yelled. (Hello! How are you?)

"Mzuri, sana habari?" they laughed back. (Fine, thank you, and you?)

"Mzuri, kwaheri." (We're fine, goodbye.)

"Kwaheri!" (Goodbye!)

The snatches of Swahili we managed to remember seemed to amuse the Africans.

Along the side of the road were coffee and corn farms. We passed two Masai Morans, or warriors, with their spears casually resting on their shoulders. These days there isn't much fighting, so the Morans travel about, usually in pairs, leading a life of ease. Little African kids would yell and laugh at us as we walked by. Their bomas (houses) were small and made of cow dung and wood. Everywhere I went I smelled something being smoked. Even the people smelled that way. It wasn't a bad smell, but it was strange. The

lion's claw that I had bought from an African man for two American bicentennial two-dollar bills smelled that way. I hoped the smell was permanent so I'd always remember it.

We turned right, off the road, and started up a narrow trail covered with pine needles. Wanting to be way ahead of everyone else, our captain, with his six-footer's legs, picked up the pace. The scenery was again corn fields and little bomas. From the red, dusty trail we called out occasional greetings to some of the people. One of the more prosperous men rode by on his rickety bicycle. He yelled out a greeting proudly. We all admired the bike.

At half past ten, two hours and forty-five minutes after we had left, we passed the place where we had camped on the training expedition. Two weeks before it had taken us six hours to arrive there, exhausted.

We pushed on, not slowing up a bit. Again we were back in the forest. Somebody mentioned french fries: I almost died. Trying to compensate, I popped a dextrosal, a flavored glucose tablet that supposedly gets into your blood and gives you energy. Whether they work or not I don't know, but they taste good.

At last we came to the place I was dreading. It was a steep part of the trail that was uphill for twenty minutes. It was where the green vegetation gave way to dry scrub because of the altitude.

At the top, we rewarded ourselves with some cookies and water and a rest. After one effort to get up, we decided to wait for the others. It wasn't far to the place where we'd stop to eat lunch.

I looked down at the plains. The scene was spectacular. The fog at this time of year would take all day to rise to the top of the mountain. Then I looked up to the left and saw Mawenzi, a tall, narrow lava peak. To its right was Kili-manjaro. It loomed close and gigantic.

Too soon the others began to arrive. The Faru (Rhino) Patrol came first. Their group never did get it together, and they looked beat. We exchanged sarcastic comments. Chui (Leopard) Patrol came next. Duma and Chui were rivals because we were the closest in skills. Not wanting to stop where we did, they pushed on. There was a fork in the trail ahead, and in vain we warned them. In five minutes they were back and grudgingly sat down. Simba (Lion) and Tembo (Elephant) came along shortly, followed by the instructors. The Wazee (Elders) Patrol, made up of our American chaperones, was still behind. The Warden, John Lubega, and the porters who carried some of our food, a stretcher and a radio, were with them.

Duma started off once again at the same basic pace, and the instructors promptly told us to slow down.

"Duma, you show your strength too early. We have a long way to go yet," warned Kyengo.

Reluctantly, we slowed down.

We stopped for lunch at a stream. The porters had our food for this meal. When they arrived, we had a fire going and tea brewing. They gave us cans of beans, pineapple and cold meat that chewed like rubber.

After hiding our tins to pick up on the way down we started off again. Our destination for the night was Second Caves. No one but the instructors knew the way, so Kyengo took the lead, and the others walked between patrols.

We passed the turnoff to the area where Duma had done their solos. During training, each of us had survived in the wilderness alone for twenty-four hours, allowed only four matches, a can of beans, a machete, a sleeping bag and two canteens of water, one of which I had spilled on my sleeping bag.

The pace was very slow: we had to climb over a lot of rocks. I was having difficulty breathing at the altitude. We were at 10,000 feet.

We were all getting tired, and we nagged Chief Instructor Kyengo for a rest. He didn't listen. I heard a scream, and abruptly we halted. Someone behind us on the trail had stopped breathing. I wondered who it could be. It had to be someone in Tembo, judging from where the commotion was. It was Stephanie. She caught her breath in seconds but was frightened just the same. Strange how the mountain will pick on anyone, even someone who is very strong.

We continued on, a little more tired and a lot more frightened. I turned around and saw that the fog was catching up with us.

"We've got to beat the fog so we don't travel in darkness," said Kyengo. "No more rests for a while."

Hours later, we stumbled into our camp. The cave where we would all sleep (except the instructors who camped away from us) was twenty feet deep, ten feet high in front and four feet high in the back.

Everyone was there except Ike, one of the chaperones. He was a huge black man. He must have weighed 300 pounds and was six and a half feet tall. All the Africans were frightened of him. Now everyone was worried about him. One of the instructors said that Ike was taking it easy, and he'd be along in a couple of hours.

We were all feeling irritable. The instructors had gone, so there was no one to maintain peace. I got stuck with the job of filling eight canteens at the stream, which was half a mile away. Marie, another Duma, got eight canteens too. Annoyed in the first place, we dropped all the canteens in our efforts to find the water. It was getting really cold, and we almost started crying out of frustration.

To try and cheer each other up, we exchanged memories of the trip so far. I also told her about the small sketch of Beau Bridges I was carrying to help me get to the top. I first saw Beau Bridges in the movie "The Other Side of the Mountain" and hadn't forgotten him since.

Exhausted, but in slightly better spirits, we stumbled back to camp. Ike had arrived, greeted by a huge cheer. The two instructors who brought him in made him strip and get into his sleeping bag; then volunteers piled their sleeping bags on top of him.

Ike was suffering from hypothermia. All of his natural insulation had made him sweat so much that he had gotten overheated, and his clothes were drenched. The cold air

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Yet there are proven, effective methods that can boost the survival rate. To meet this need and to help those who want to help the birds, the New York Zoological Society, America's oldest wildlife conservation organization, has just published "Help! A Step-by-Step Manual for the Care and Treatment of Oil-Damaged Birds."

Written by the Society's staff veterinarian and its Curator of Ornithology, this fully illustrated handbook presents proven methods for boosting the survival rates of oil-spill victims in a way that is easy to follow—whether you're

an experienced conservationist or a concerned amateur.

Sir Peter Scott, Honorary Chairman of the Wildfowl Trust in Great Britain and one of the world's leading authorities on water birds, observed that "Help!" ". . . sets out with admirable clarity, the best methods for tackling the next disaster. Every contingency is covered, emphasis being rightly laid on careful preparation and systematic treatment." Marlin Perkins, star of the popular television series "Mutual of Omaha's Wild Kingdom," calls it "the most complete handbook for caring for oil-coated birds I have ever seen" and recommends it "for all nature lovers, conservationists, zoos, scouts, humane organizations, birdwatchers, and state and Federal conservation and wildlife officials." "Help!" has also been praised enthusiastically by Dr. Victor B. Scheffer, Consultant for the U.S. Marine Mammal Commission; Dr. Anne La-Bastille, winner of a World Wildlife Fund Gold Medal; Victor Gottschalk, Executive Vice President of the International Association of Fish and Wildlife Agencies; Dr. Paul A. Johnsgard, a Director of the International World Waterfowl Association, and officers of the American Association of Zoological Parks and Aquariums.

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The New York Zoological Society makes "Help!" available to individuals and organizations at prices that merely cover the costs of printing and mailing. And the time to get the manual is now—before tragedy strikes. Those birds will need a lot of help from their friends. Friends like you.

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Contact your local zoo or aquarium. Many leading zoological institutions in the United States and Canada will make the manual available to their members and visitors. Or use the coupon on this page (or a facsimile) and ask for "Help!" from the New York Zoological Society.

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almost froze him since he was so wet, and he almost died. He had reached his summit.

After a dinner of bread, stew and hot chocolate, everyone got into their sleeping bags. Faru had built their fire in the cave, and it was smoky and hard to breathe.

It was very cold, but the days we had spent at the school had prepared us for many different things. To build up our endurance for cold we started each morning with a run at six-thirty. It was 40°F, but we were allowed to wear only our shoes and bathing suits. Afterwards, we had to swim across an unheated pool. One day the pool literally had ice on it. We were allowed the privilege of walking back to our unheated and uninsulated rooms, but we preferred to run back to get warm. I was still cold, lying in my bag, but I thought the training might have helped.

We woke up at seven in the morning and cleaned up our area. Norlene, who acted as our patrol's mother, made us some sticky oatmeal.

At eight the instructors came. About seven people decided not to go on, including Ike and Stephanie. I still thought she could have made it. Although every other patrol had lost someone, all nine of the Duma Patrol were going on. This gave us some spirit.

Our goal for lunch break was Third Caves at 13,000 feet. Once again Kyengo led the way at the same pace. After an hour or so, everyone was tiring. Just before we were supposedly there, we stopped to collect firewood. At 13,000 feet there would be no vegetation at all, and if we wanted tea we'd have to carry our own wood. Lugging a large piece of wood and my shoulder aching, I pushed on until, finally, we arrived at Third Caves.

I sat down, exhausted and out of dextrosal. As a substitute, I pulled out my battered but precious package of Kool-Aid. I mixed it in my cup with water and some particles of dirt. I dunked my bread in it, savoring the taste.

After half an hour it was time to go on. Ten people didn't get up. They were turning back to Second Caves. Once again we lined up by patrols. Warden Lubega took the lead.

Before we left, he gave a speech. He warned us that this would be the hardest part of all, and anyone who felt sick should not be embarrassed to throw up at the side of the trail. (Many suffer from mountain sickness at such altitudes.) People who thought they would slow up the rest of us were to stop here and not go on.

No one moved. But I knew a lot of people were seriously contemplating stopping here, including myself. Apprehensively, I decided to go on. We still hadn't lost a Duma.

We started off at a very slow pace. The trail was just a faint line across the terrain. There was no more vegetation or water. The scenery was desolate.

For forty-five minutes we walked on, not seeming to get anywhere, until finally we were allowed a rest.

We shared chocolate and other compact snacks some of us had managed to save. To lighten the load on my shoulders I tied all my clothes around my waist and used my bandana to tie my canteens to my pants. The few pounds off my back seemed to help a lot.

Off we went again. The going was a little bit harder. We were traveling on scree, which is like crushed gravel or large grains of sand. For every two steps forward, we'd slide back one. After another three-fourths of an hour, we rested again. We still didn't seem to be getting anywhere.

We went on for another forty-five minutes and rested. Then another, and another, until at last we reached what Kyengo called "the Cape of Good Hope." He called it that because just around the corner was School Hut, where we would sleep that evening.

As soon as the hut was in view, we rested. It looked so close, no one understood why we had been allowed to rest. I asked Thadeo, one of the instructors, why we were stopping. He answered in his soft, comforting voice that seemed to have an English accent along with an African accent, "We have to rest before we climb on. It's not as close as it looks."

Not believing him we started up as an unorganized group. Each step I took I'd slide back. The hut looked 100 yards away, but it took us a good forty-five minutes to get there. The altitude, our exhaustion and the lack of visual clues in the empty landscape created the illusion that the hut was very close.

The last twenty-five feet were the hardest. I sat down on the nearest rock, exhausted. Looking up, I saw my sister, a rival Chui, struggling. I remembered "to serve, to strive, and not to yield," and all the competitiveness I might have felt disappeared. I got up and pushed her the last twenty-five feet to the hut.

At five-thirty Duma prepared a feast of instant chicken soup on the kerosene burner. The air was too thin for a natural fire, and anyway, there was no wood.

At six the instructors let us inside the hut to go to sleep. At midnight they were going to wake us up, and we'd do the last leg of the ascent in darkness. In daylight the sun would be too bright. We were now at 16,000 feet.

There were about fifty of us left huddled in the tiny room. The door and windows were open so we'd get as much oxygen as possible.

It was below zero, and I was freezing in my bag. We all huddled together for body warmth. No one slept much even though we were all exhausted. All night long, people threw up out the windows.

At midnight we were awakened. Unable to bring myself to face the cold, I dressed in my sleeping bag. We put on our sweaters, parkas, jeans and boots; then we put on rubber-insulated suits, face masks, and itchy wool mittens. We carried goggles to protect our eyes from the high-altitude sun the next morning.

Twenty people were too sick to go on, five of whom were Duma. They stayed in bed. The remaining Duma cooked instant tomato soup that would have tasted the same if it had been thrown up.

The four Duma combined forces with the remaining three Simba. We shared an emergency pack and rope that we took turns carrying to the top.

At two in the morning, the remaining thirty Americans

and the East African Outward Bound instructors started up the last and most difficult part of the ascent. But not before Warden John Lubega gave us another speech: "If any of you feel that you will be a burden to the group, will you please drop out now."

No one did. I wasn't about to now. I had Beau's picture in my pocket, and the mountain sickness hadn't affected me yet.

We started off at that same slow pace, in total darkness and below-zero weather. Flashlights were useless—they would only create strange, confusing shadows.

We moved on and on, stopping occasionally when someone threw up. I had no idea where or how far we'd gone. We begged for a rest, but they pushed us on, saying it was too cold. Two people in front of me kept falling down. I didn't know it, but one of them was my sister.

I felt a dry sort of nausea come over me. My head ached terribly, and I was short of breath. The rocks around me started spinning, and I heard odd noises.

Even with our heavy suits, it was freezing. I didn't think I'd make it if the sun didn't come up soon. I looked toward what I thought was east and saw a tiny glimmer of light, and hope.

Four and a half hours later the sun came up, and we got to rest.

We could see Gilman's Point, the peak. It didn't look far at all. We were surprised to see people up there.

The final part of the ascent switchbacked across the

scree. Again we'd take two steps and slide back one. When we were half way up, a hang-glider took off from the top. We watched until it landed in Tanzania. One of their porters, on his way down, stopped and told Kyengo that they had driven up the Tanzanian side of the mountain and had only hiked up the last part. The hang-glider pilot was a woman from Missouri.

Two-thirds of the way up a girl from the Faru Patrol just quit. Jonathan had to stop and sit with her until we came back.

Two and a half hours after the sun came up, we completed the ascent to the edge of the crater. All that was left was to climb the pile of rocks to Gilman's Point.

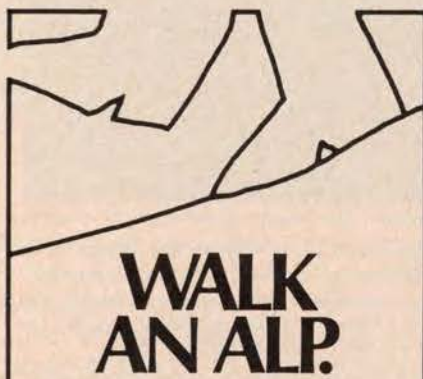
I stopped only a second to admire the view into the crater: there were beautiful ice formations, and on the other side was Kibo Peak, a 250-foot-high glacier. I climbed on up.

The top of Africa.

Then I climbed to the absolute highest spot and looked at Africa. I couldn't see much because the fog was at the bottom of the mountain. Satisfied, I jumped. For a split second, I was above all Africa.

There was a Sierra Club plaque there, and another with a psalm from the Bible. I found the book to sign your name in, and I wrote mine in. Underneath I wrote "Beau Bridges in spirit." □

Tracy Mardigan is sixteen years old; she is a student in Mill Valley, California, and is active in Women for Wilderness.



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Sierra Club, Peninsula Regional Group, P.O. Box 111, San Carlos, CA 94071 Send _____ copies of *The Wilderness World of John Muir* for which I am enclosing \$6 per copy. (For Calif. addresses add 35c per copy sales tax.)

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Knapsack Trips

KNAPSACK TRIPS are the most challenging of the Club outings. They require both organization and physical conditioning on your part—in a word, PREPARATION! Into a backpack, which always looks too small for its task, you cram 30-40 pounds (how long is the trip?) of food, sleeping bag, shelter and personal necessities. All this you carry joyfully (!) up canyon-wall trails, across streams and glaciated basins, through alpine fell fields, and over instead of around mountains. The attractions of knapsacking are evident in the increasing number of participants from all walks of life. Today, easily eight out of ten wilderness visitors carry packs. So can you.

Club trips are designed to accommodate and please old hands as well as newcomers to knapsacking—our special term for backpacking.

Club trips are run on the premise that everyone shares. Each participant supplies personal gear. Each member then carries these items plus a fair share of community food, commissary equipment and emergency supplies.

Over and above the ability to carry one's pack, all should have a reservoir of strength (carrying power) for helping fellow trip members who may need it. Members take turns cooking and pitching in with other camp chores.

We rate every trip to give you a rough idea of relative difficulty—difficulty measured in miles, amount of cross-country travel involved, climb, steep descent and the overall elevations of the outings. The supplement you will receive gives much more detail about each trip's physical demands, but we key the trips here in the listings so you can choose one likely to suit your ability and inclinations.

The ratings are: Leisure (L); Leisure-Moderate (L-M); Moderate (M); Moderate-Strenuous (M-S); and Strenuous (S). A leisure trip's daily mileages are fairly short or easy, perhaps up to 25-35 miles in a week of 4-5 actual hiking days, the remainder being layover days. Moderate trips cover greater distances, usually 35-55 miles in a week. Expect tougher climbing on these trips and more off-trail traveling. When a trip is rated strenuous, look for as many as 60-70 miles per week, with continual high-elevation camping, seasonal obstacles and greater extremes in the ups and downs. Our Leisure-Moderate and Moderate-Strenuous ratings try to express the gradations between the other ratings. Remember, though, *all* trips, however easy the rating seems, have strenuous hours. Gather together your gear, make preparation plans and come along with us on one or more of 72 trips in 1978.

Knapsack Trips require leader approval of each applicant before final acceptance. You will be asked to respond to questions regarding your knapsacking experience and physical condition for knapsacking in the Club style.

Unless otherwise specified, minimum age for the trips, excluding the Junior Knapsack Trips, is 16.

(35) Grand Canyon, Arizona—March 19-25. Leader, Tom Pillsbury, 1735 Tenth St., Berkeley, CA 94710. (Rated S) Cost: \$185.



(36) North Rim, Grand Canyon, Arizona—April 30-May 6. Leader, Bill Wahl, 325 Oro Valley Dr., Tucson, AZ 85704. (Rated M) Cost: \$135.

(37-E) Paria Canyon Photography, Arizona-Utah—April 30-May 6. Instructor, Bruce Barnbaum, Leader, Tim Ryan, Box 16051, Phoenix, AZ 85001. (Rated L) Cost: \$185.

(38) Appalachian Trail, Nantahala Forest, North Carolina—May 6-13. Leader, Dave Bennie, 2405 Churchill Dr., Wilmington, NC 28401. (Rated M) Cost: \$145.

(39) Guadalupe Mountains, Texas—May 14-20. Leader, Steve Hanson, 14734 Hornsby Hill Rd., Austin, TX 78734. (Rated M) Cost: \$140.

(160) Skyline Trail, Pecos Wilderness, New Mexico—June 4-10. Leader, Joanne Sprenger, 2805 8th St., Las Vegas, NM 87701. (Rated L) Cost: \$125.

(161) Cruces Basin Leisure, Carson Forest, New Mexico—June 7-13. Leader, John Colburn, 11109 Shoreline Dr., El Paso, TX 79936. (Rated L) Cost: \$160.

(162) Green Mountain Forest, Vermont—June 10-16. Leader, Darcy Kirk, 55 Puritan Rd., Swampscott, MA 01907. (Rated M) Cost: \$130.

(163) Great Bear Wilderness, Montana—June 11-22. Leader, Alan Schmierer, 231 Erica Way, Portola Valley, CA 94025. (Rated M) Cost: \$175.

(164) Blossom Lakes, Sequoia Park, Sierra—June

19-26. Leader, Tom Landis, 584 Monterey Dr., Laguna Beach, CA 92651. (Rated L-M) Cost: \$95.

(165) Ionian Basin, Kings Canyon, Sierra—June 20-30. Leader, Chris Carman, 5843 Balboa Dr., Oakland, CA 94611. (Rated M-S) Cost: \$120.

(166) Cranberry Leisure, Monongahela Forest, West Virginia—June 25-July 1. Leader, John W. Steele III, 1019 Timber Trail Rd., Towson, MD 21204. (Rated L) Cost: \$145.

(167) Merced Basin, Yosemite, Sierra—June 25-July 3. Leader, Phil Gowing, 2028 Pollen Ct., San Jose, CA 95131. (Rated M) Cost: \$100.

(168) Ruby Mountains, Humboldt Forest, Nevada—June 25-July 4. Leader, Bob Stout, 10 Barker Ave., Fairfax, CA 94930. (Rated M) Cost: \$120.

(169) Mono Divide, John Muir Wilderness, Sierra—June 26-July 4. Leader, Michael Sakarias, 233 Shady Ln., #32, El Cajon, CA 92021. (Rated L-M) Cost: \$100.

(170-E) Colorado Alpine Study—June 28-July 7. Instructor, Steve Paulsen, Biologist. Leader, Pat Hennigan, c/o A. LeRoy, 259 Somerset St., Belmont, MA 02178. (Rated M-S) Cost: \$195.

(171) Adirondack Mountains, Adirondack Park, New York—July 2-8. Leader, Wes Miller, 126 Tollgate Rd., #36, Warwick, RI 02886. (Rated M-S) Cost: \$145.

The Mailbox Outing



It's a special kind of outing—that trip to the mailbox to mail your Sierra Club membership application.

Membership allows you to participate in the exciting outings highlighted in this issue of *Sierra*, but more than that, Sierra Club membership offers the satisfaction of knowing you are helping to preserve these cherished wilderness areas for those who would follow us.

With each new member the Sierra Club grows stronger in our fight for those special places. If you are presently a member, won't you ask a friend to join. For your convenience, applications are on the other side.

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Mail to: The Sierra Club, Dept. 1, Box 7959 Rincon Annex San Francisco, CA 94120

(172-E) Let The Forest Burn, Kings Canyon, Sierra—July 2-9. Instructor, Mary Coffeen. Leaders, Jean and Jim Gilbreath, 7266 Courtney Dr., San Diego, CA 92111. (Rated L) Cost: \$140.

(173-E) Miter Basin Geology, Sequoia Park, Sierra—July 2-12. Instructor, Bill Guyton. Leader, Ken Maas, 7201 Wild Currant Way, Oakland, CA 94611. (Rated M-S) Cost: \$155.

(174) Mineral King-Great Western Divide, Sequoia Park, Sierra—July 5-13. Leaders, Louise and Cal French, 1690 N. Second Ave., Upland, CA 91786. (Rated M) Cost: \$105.

(175) Rainbow Lakes, Mt. Zirkel Wilderness, Colorado—July 6-13. Leaders, Marion and Bob Berges, 974 Post St., Alameda, CA 94501. (Rated L-M) Cost: \$135.

(176) Mt. Izaak Walton, Inyo-Sierra Forests, Sierra—July 16-22. Leader, Eric Bergh, 4244 Solar Cir., Union City, CA 94587. (Rated M) Cost: \$85.

(177) Lassen Park Leisure, California—July 16-23. Leader, Ray Collins, 1469 Plymouth Ave., San Francisco, CA 94112. (Rated L) Cost: \$95.

(178) Gannett Peak, Bridger Wilderness, Wyoming—July 17-26. Leader, Bob Berges, 974 Post St., Alameda, CA 94501. (Rated M) Cost: \$145.

(179) Double Top Mountain Leisure, Bridger Wilderness, Wyoming—July 17-28. Leaders, Virgene and Charles Engberg, 6906 Birchton Ave., Canoga Park, CA 91307. (Rated L) Cost: \$185.

(180) Big Bird Lake, Kings Canyon-Sequoia Parks, Sierra—July 22-30. Leader, Bob Maynard, 116 Orchard Rd., Orinda, CA 94563. (Rated M-S) Cost: \$100.

(181) North Cascades, Glacier Park Wilderness, Washington—July 23-August 4. Leader, Dave Corkran, 130 N.W. 114th, Portland, OR 97229. (Rated M) Cost: \$165.

(182) Kings-Kern Divide, Sequoia Park, Sierra—July 24-31. Leader, Bob Hartman, 1988 Noble St., Lemon Grove, CA 92045. (Rated M) Cost: \$95.

(183) Baxter State Park, Maine—July 29-August 5. Leader, Hank Scudder, 85 Suellen Rd., #A3, Schenectady, NY 12309. (Rated M/S) Cost: \$165.

(184) Golden Bear Lake, Kings Canyon-Sequoia Parks, Sierra—July 29-August 6. Leader, Jim Waters, 600 Caldwell Rd., Oakland, CA 94611. (Rated S) Cost: \$100.

(185) Southern Wyoming Range, Bridger Forest, Wyoming—July 30-August 5. Leader, Jackie E. Kerr, Box 5002, Springfield, MO 65801. (Rated L) Cost: \$175.

(186) New Fork Lakes Leisure, Bridger Wilderness, Wyoming—July 30-August 5. Leaders, Virgene and Charles Engberg, 6906 Birchton Ave., Canoga Park, CA 91307. (Rated L) Cost: \$120.

(187) Mauna Loa, Island of Hawaii—August 3-14. Leader, Pete Nelson, 5906 Dirac St., San Diego, CA 92122. (Rated M) Cost: \$295.

(188) Rainbow Mountains, Tweedsmuir Park, British Columbia—August 4-13. Leader, Gary Miltenberger, General Delivery, Hagensborg, B.C., Canada V0T 1H0. (Rated M) Cost: \$210.

(189) Blue Range Primitive Area, Apache Forest, Arizona—August 6-12. Leader, John Colburn, 11109 Shoreline Dr., El Paso, TX 79936. (Rated M) Cost: \$130.

(190) Yellowhammer Creek, Emigrant Basin, Sierra—August 12-20. Leaders, Helen and Ed Bodington, 697 Fawn, San Anselmo, CA 94960. (Rated L) Cost: \$100.

(191-E) Yosemite Peaks and Canyons, Sierra—August 12-20. Instructor/leader, Cal French, 1690 N. Second Ave., Upland, CA 91786. (Rated M) Cost: \$105.

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Boot socks so tough we guarantee you 1000 miles of wear!

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Unique in all the world.

These socks are about as close as you can come to a lifetime investment. They're made to snuggle your feet and will never lose their shape. They'll warm you in the winter . . . absorb perspiration in the summer . . . and cushion your footfalls step by step, year after year.

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The secret to the durability of our Thousand Mile Socks is the special yarn from which each is knit. By a patented process, a thread spun of 9 parts mountain Merino wool and 2 parts nylon is wrapped loosely around an elastic Lycra® core. This makes a yarn as resilient as a coil spring. Each yarn in a Thousand Mile Sock can stretch up to 300% in length . . . yet it always snaps back to its normal length so that the sock will never lose its shape.

Mountain Merino sheep wool is the strongest, most durable wool available. When combined with nylon in this extraordinary yarn, it's understandable how a man who recently hiked from Alaska to Mexico wore out 3 pairs of boots . . . but not his Thousand Mile Socks!

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When you order your Thousand Mile Socks we make this guarantee to you. If your Early Winters' Thousand Mile Socks should wear out within 1 year of purchase or 1000 miles of walking, we'll send you another pair without charge.

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GIVING FOR EARTH'S FUTURE

The Club would like to remind its members and friends that bequests to the Club can contribute immeasurably to the support of our work through the years. Our tax attorneys will be glad to consult with you and your legal adviser as to the best method of framing your will in order to serve your interests and meet the Club's needs. This includes advice on the use of trusts and insurance policies to benefit Club programs through one of our two related tax-deductible organizations.

If you desire information, please contact the Executive Director at
530 Bush Street,
San Francisco, CA 94108

It may also be useful to remind you that memorial and other gifts are frequently made to assist our program. These are carefully acknowledged to the family of the person so remembered.



let your spirit soar with the rough-legged hawk over ridge and tundra...
observe and photograph nesting peregrine falcons at 12 to 20 feet!
crawl to the edge of a gyrfalcon's nest...
watch as a young golden eagle stretches its wings in its aerie...
thrill to majestic musk oxen pounding over the tundra, hooves like echoes out of the Pleistocene...
hike to spectacular waterfalls on rushing tundra rivers...
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(192) **Crown Basin, Sierra Forest, Sierra—August 12-20.** Leader, Ellen Howard, 535 Morey Dr., Menlo Park, CA 94025. (Rated M) Cost: \$100.

(193) **Black Hills Leisure, South Dakota—August 13-19.** Leader, Faye Sitzman, 903 Mercer Blvd., Omaha, NE 68131. (Rated L) Cost: \$125.

(194) **Thunder Mountain, Idaho Primitive Area—August 13-26.** Leader, Arthur Beal, Box 63, Sweet, ID 83670. (Rated L-M) Cost: \$155.

(195) **Sawtooth Wilderness, Idaho—August 20-26.** Leader, Veda Scherer, 1716 University Ave., #16, Berkeley, CA 94703. (Rated L) Cost: \$95.

(196-E) **Trans-Inyo Wilderness Photography Seminar, Sierra—August 20-27.** Instructor, Galen Rowell. Leaders, Bobbie and Emilio Garcia, 2320 Samaritan Dr., San Jose, CA 95124. (Rated M) Cost: \$130.

(197) **Goddard Divide, Kings Canyon Park, Sierra—August 21-31.** Leader, Bob Madsen, 3950 Fernwood Way, Pleasanton, CA 94566. (Rated S) Cost: \$130.

(198) **Sawtooth Ridge, Northern Yosemite, Sierra—August 24-September 3.** Leader, Gordon Peterson, 1776 Vining Dr., San Leandro, CA 94579. (Rated M) Cost: \$135.

(199) **Cape Breton Highlands, Nova Scotia—August 26-September 2.** Leader, Philip H. Titus, 47 Woodhaven Park, Storrs, CT 06268. (Rated M) Cost: \$170.

(200) **Kaweah Basin, Sequoia Park, Sierra—August 26-September 4.** Leader, Don Lackowski, 2483 Caminito Venido, San Diego, CA 92107. (Rated M-S) Cost: \$120.

(201-E) **Cathedral Lake Photo Education, Blackcap Basin, Sierra—August 27-September 3.** Instructor, Bruce Barnbaum. Leader, William McPherson, 901 Sea View Dr., El Cerrito, CA 94530. (Rated L) Cost: \$140.

(202) **Northern Yosemite Loop, Sierra—September 1-10.** Leader, Len Lewis, 2142-A Alameda Ave., Alameda, CA 94501. (Rated L-M) Cost: \$120.

(203) **Lyell Forks, Yosemite, Sierra—September 9-17.** Leader, Jim Watters Jr., 2032 Paradise Dr., Tiburon, CA 94920. (Rated M) Cost: \$100.

(204) **Black Forest Trail, Pennsylvania—September 17-23.** Leader, John R. Hornyak, 11 Oak Glen Pl., Whippany, NJ 07981. (Rated M) Cost: \$135.

(205-E) **Paria Canyon Natural History, Utah-Arizona—September 23-30.** Instructor, Mary Coffeen. Leader, Pete Nelson, 5906 Dirac St., San Diego, CA 92122. (Rated L) Cost: \$180.

(221) **Shinumo Amphitheater, Grand Canyon, Arizona—October 1-7.** Leader, Jim DeVeny, 5307 E. Hawthorne, Tucson, AZ 85711. (Rated S) Cost: \$130.

(222) **Escalante River, Utah—October 1-7.** Leader, Nancy Wahl, 325 Oro Valley Dr., Tucson, AZ 85704. (Rated M) Cost: \$150.

(223) **Adirondack Fall Color Leisure, New York—October 1-7.** Leader, Connie Thomas, 128 Muriel St., Ithaca, NY 14850. (Rated L) Cost: \$125.

(224) **Fall Color Leisure, Upper Buffalo Wilderness, Arkansas—October 15-21.** Leader, Jackie E. Kerr, Box 5002, Springfield, MO 65801. (Rated L) Cost: \$140.

(225-E) **Grand Canyon Geology, Arizona—December 17-23.** Leader, Tom Pillsbury, 1735 Tenth St., Berkeley, CA 94710. (Rated M) Cost: \$210.

(226) **Grand Canyon, Arizona—December 18-22.** Leader, Blaine LeCheminant, 1857 Via Barrett, San Lorenzo, CA 94580. (Rated M) Cost: \$135.

(227) **Anza Borrego Desert, California—December 27-January 1, 1979.** Leader, Serge Puchert, 37 Southridge Ct., San Mateo, CA 94402. (Rated M) Cost: \$100.

(228) **Grand Canyon, Arizona—December 27-January 1, 1979.** Leader, Lester Olin, 2244 Avenue A, Yuma, AZ 85364. (Rated M-S) Cost: \$110.

Junior Knapsack Trips

JUNIOR TRIPS are just as adventurous as the regular ones, but are designed for the young knapsacker who wants a mountain trip with others the same age. Everybody takes a turn on the cook crew and with other camp chores and is expected to carry a full share of the food and commissary gear.

These trips, too, vary in difficulty, and the ratings indicate the physical demands of each trip. Each trip description and listing states the age group for which the trip is planned.

Applicants must qualify. The leader expects to hear from the individual applicant in response to the trip supplemental announcement, not from parents. Parents, however, will be asked to help drive juniors to and from the trips, at least one way.

(230) **Bell Meadow, Emigrant Wilderness, Sierra—June 17-24.** Leader, Emilio Garcia, 2320 Samaritan Dr., San Jose, CA 95124. (Ages 12-15) (Rated M) Cost: \$105.

(231) **Grizzly Lake, Trinity Alps, California—June 24-July 2.** Leader, Patrick Colgan, Box 273, La Honda, CA 94020. (Ages 12-15) (Rated M-S) Cost: \$115.

(232) **Monarch Divide, Kings Canyon Park, Sierra—July 2-12.** Leader, Brian Lemmon, 298 Los Altos Dr., Berkeley, CA 94708. (Ages 13-15) (Rated M-S) Cost: \$140.

(233) **Piute Creek-Smedberg Lake, Toiyabe/Yosemite, Sierra—July 12-18.** Leader, Elliott Smith, 423 Buena Vista Ave. East, San Francisco, CA 94117. (Ages 12-14) (Rated L-M) Cost: \$95.

(234) **Glacier Creek, Sequoia Park, Sierra—July 16-23.** Leaders, Ellen and Jim Absher, 818 Bell St., East Palo Alto, CA 94303. (Ages 13-15) (Rated M) Cost: \$110.

(235) **LeConte Canyon Older Teens, Kings Canyon Park, Sierra—July 19-29.** Leader, Bruce Ellisen, 490 West End Ave., #10A, New York, NY 10024. (Ages 15-18) (Rated M) Cost: \$140.

(236) **Wind Rivers Older Teens, Bridger Wilderness, Wyoming—July 20-29.** Leader, John Carter, Box 991, Mendon, UT 84325. (Ages 15-18) (Rated M-S) Cost: \$140.

(237) **Seven Gables Circuit, John Muir Wilderness, Sierra—August 1-7.** Leader, Lynne McClellan, 88 Ridge Rd., Fairfax, CA 94930. (Ages 12-15) (Rated L-M) Cost: \$90.

(238) **Mineral King, Sierra—August 7-15.** Leader, Dave Neumann, Box 1288, Hailey, ID 83333. (Ages 13-15) (Rated M-S) Cost: \$115.

(239) **Seven Gables Circuit, John Muir Wilderness, Sierra—August 10-16.** Leader, Lynne McClellan, 88 Ridge Rd., Fairfax, CA 94930. (Ages 12-15) (Rated L-M) Cost: \$90.

(240) **Kaweah Peaks, Sequoia Park, Sierra—August 26-September 4.** Leaders, Vicky and Bill Hoover, 74 Carroll St., Hughes, Canberra, A.C.T. 2605, Australia. (Ages 13-16) (Rated M-S) Cost: \$135.

FOR MORE INFORMATION

Write to the SC Outing Department for the brochure describing Knapsack Trips or for a more detailed supplement available for each trip, using the coupon on Page 38. Trip cost includes deposit. Trips priced up to \$499 per person: \$35 deposit per individual or family application

Reservations for Sierra Club Trips

Changes have been made in deposit/cancellation/refund policies. Please read this page carefully.

Eligibility

Our trips are open to Sierra Club members, applicants for membership and members of organizations granting reciprocal privileges. You may include your membership application and fee with your reservation request. Children under 12 need not be members.

Unless otherwise specified, a person under 18 years of age, unless accompanied by a parent or sponsored by a responsible adult, may join an outing only with the consent of the leader. If you lack a sponsor, write the trip leader for assistance.

Applications

One reservation form should be filled out for each trip by each individual. However, spouses and families (parents and children under 21) may also use a single form. Mail your reservation together with the required deposit to the address below.

Reservations are generally confirmed on a first-come, first-served basis. However, when acceptance by the leader is required (based on applicant's experience, physical condition, etc.), reservations will be confirmed upon acceptance; such conditions will be noted in *Sierra* or the trip supplement. When a trip's capacity is reached, later applicants are put on a waiting list. The Sierra Club reserves the right to conduct a lottery to determine priority for acceptance in the event that a trip is substantially oversubscribed shortly after publication of *Sierra*.

Reservations are accepted subject to these general rules and to any specific conditions announced in the individual trip supplements.

Deposits

Trips priced up to \$499 per person: \$35 per individual or family application (family=parents and children under 21)

Trips priced \$500 and over per person: \$70 per person; no "family" deposit rate (except trips listed as "FOREIGN")

All trips listed under "FOREIGN" section: \$100 per person; no "family" deposit rate

The deposit is applied to the total trip price and is *nonrefundable* unless (1) a vacancy does not occur or you cancel from a waiting list, (2) you are not accepted by the leader, (3) the Sierra Club must cancel the trip.

Payments

Full payment of trip fees is due 90 days prior to trip departure. In addition, most foreign trips require a payment of \$200 per person 6 months before departure. Payments for trips requiring the leader's acceptance are also due at the above times, regardless of your status. If payment is not received on time by any trip applicant except those waitlisted, the reservation may be cancelled and the deposit forfeited. You will be billed before the due date.

Refunds

The following policy is effective for all trips departing on or after January 1, 1978. Refunds following cancellation of a confirmed reservation (*less the non-refundable deposit*) are made as follows, based on the date notice of cancellation is received by the Outing Department:

- 1) 60 days or more prior to trip: full amount of remaining balance.

- 2) 14-59 days prior to trip: 90% of remaining balance.
 3) 4-13 days prior to trip: 90% of remaining balance if replacement is available from a waiting list.
 75% of remaining balance if no replacement is available from a waiting list.
 4) 0-3 days prior to trip: no refund.
 5) "No-show" at roadhead, or if you leave during a trip: no refund.

Transfer of a confirmed reservation from a trip priced up to \$499 incurs a \$35 transfer fee. Transfer of a confirmed reservation from a trip priced \$500 and over per person is treated as a cancellation; see refund schedule. A transfer 0-3 days prior to trip departure is treated as a cancellation.

No transfer fee is charged if your application is pending the leader's acceptance, or if you transfer from a waiting list.

One-Price Policy

Generally, adults and children pay the same price; some exceptions for family outings are noted in *Sierra*.

Your Kind of Trip

Give thought to your real preferences. Some trips are moderate, some strenuous, a few are only for highly qualified participants. Be realistic about your physical condition and the degree of challenge you enjoy.

Medical Precautions

On a few trips, a physician's statement of your physical fitness may be needed, and special inoculations may be required for foreign travel. Check with a physician regarding immunization against tetanus (lockjaw).

Emergency Care

In case of accident, illness or a missing trip member, the Sierra Club, through its leaders, will attempt to provide aid and arrange search and evacuation assistance when the leader determines it is necessary or desirable. Cost of specialized means of evacuation or search (helicopter, etc.) and of medical care beyond first aid are the financial responsibility of the ill or injured person. Medical and evacuation insurance is advised, as the Club does not provide this coverage. Professional medical assistance is not ordinarily available on trips.

Transportation

Travel to and from the roadhead is your responsibility, as is specialized transportation on some trips (e.g. air taxi, charter boats), which is not included in the trip price. To conserve resources, trip members are urged to form car pools on a shared-expense basis or use public transportation. The Outing Department does not make transportation arrangements. However, on North American trips the leader will try to match riders and drivers.

The Leader is in Charge

At the leader's discretion, a member may be asked to leave the trip if the leader feels the person's further participation may be detrimental to the trip or to the individual.

Please Don't Bring These:

Radios, sound equipment, firearms and pets are not allowed on trips

MAIL TO: SIERRA CLUB OUTING DEPT.—P.O. BOX 7959 RINCON ANNEX, SAN FRANCISCO, CA 94120

MEMBERSHIP NO. (CHECK SIERRA LABEL)		1/78	Trip number	Trip name	Departure date
Print Name	FIRST	LAST	DEPOSIT ENCLOSED	(Leave blank)	No. of reservations requested
Mailing Address			If you have already received the trip supplement, please check. <input type="checkbox"/>		
City	State	Zip Code	Residence telephone (area code)	Business telephone (area code)	
PLEASE PRINT YOUR NAME AND THE NAMES OF ALL FAMILY MEMBERS GOING ON THIS OUTING			Age	Relationship	Membership No.
					How many trips have you gone on? Chapter National
3.					
4.					
5.					
6.					

Wilderness as a Living Classroom

GALEN ROWELL

ONLY A DECADE AGO wilderness education was unavailable in most schools and colleges. The University of California, for example, insisted that any proposed wilderness course be given through the physical education department because physical activity was involved. A few progressive colleges instituted "outdoor programs" through student unions but kept them totally separate from the curriculum.

Now the tide is turning. Outdoor study is gaining acceptance at the college level and filtering down through the lower grades. Educators are realizing that learning about our wilderness heritage is as important to children who live in a rapidly changing, artificial world as learning about art, literature and science.

Most teachers, conditioned by their own educations, aren't ready to take their classes into the wilds; and most school systems aren't ready for it either. My nine-year-old, Tony, just spent three school days on a coastal wilderness trip with his class from Marin Public School of Albany, California. The school didn't run the trip; they contracted it out to a private outdoor-education group.

When I first heard about the plans, I discovered that parents, too, aren't ready for such trips. Even though I have spent a large part of my life outdoors, I imagined all sorts of problems, and I refused to believe the reassuring brochure from the trip planners. They claimed that the kids themselves would set up camp, wash the dishes and would not need any discipline from chaperones. I didn't see how three trip leaders could keep order among thirty third-graders in a classroom without walls, desks or old-fashioned rulers with which to rap knuckles. I expected three days of chaos. I knew from experience how difficult it could be to control one third-grader; two or three were definitely dynamite. Thirty, I imagined, would produce something approaching a continuous explosion.

I joined the outing only as a chauffeur to take a carload of kids to the coast, having been told no help was needed with any other aspect of the trip. I watched with disbelief as the kids, with only minimal supervision from the staff, set up two large tents in which they would sleep—no grown-ups allowed. My skepticism began to wane by the time the kids washed all the dinner dishes, and it completely disappeared as I crouched on a moonless night by the ocean, alone, yet surrounded by children sitting quietly at least fifty feet from one another. During those fifteen minutes each child learned in his or her own way what it meant to be alone in the dark in the wilds. And by the light of day we walked—four miles through a pygmy forest, past deer in the shadows and beneath osprey in the sky. Occasionally we stopped to learn something about the ecology of the region or just to sit and contemplate new sights, smells and sounds.

At night the kids disciplined themselves. Adults intervened only if there was a commotion. The kids changed their horseplay from the normal loudness of recess and parties to things more related to their natural surroundings. One group of boys quietly contemplated a plan to dangle a rubber snake by the girls' tent, project its shadow with a flashlight and crumple paper to sound like a rattlesnake. While the adults slept blissfully, the kids, in a reversal of roles, stayed awake past midnight talking about their plans for the following day.



Galen Rowell

On the last morning fog muted the landscape, but not the magic of land and ocean facing each other in age-old struggle. The kids were drawn to the tidepools more strongly than to any other spot they visited. They were attracted, like the hermit crabs, to a zone where they could skitter across the sand from pool to pool, dodging each wave with exaggerated leaps.

I watched an interesting phenomenon. Some of the quiet youngsters had trouble adapting to the less structured situation and needed special attention. Meanwhile, the "classroom brats" practically ceased to be a problem. Their attention spans lengthened tremendously as they used their extra energy to satisfy their curiosity.

Discussions of environment and ecology lost much of their classroom dryness when the students were actually part of the subject. Ecology became a real, active word instead of a vague term the kids associated with ads for laundry detergents. I couldn't help but contrast the experience of this class with that of children in a nearby school that had built an "environmental yard" adorned with stumps, rubber tires and pieces of culvert. They were confined to an artificial world instead of a natural one; their concept of ecology revolved around reuse of technology's waste rather than understanding how we fit into the earth's natural schemes.

We can never return to the era of birchbark canoes, but we can raise a new generation that might understand science while still feeling a part of nature. This is a tall order because we all have that wonderful yet destructive capability of theoretical thought; we can "know" a subject with no actual involvement whatsoever. Thus, we have produced all too many biological scientists who comprehend ecology without personal awareness of their part in an ecological system.

Marin School is just one of many institutions, from nursery schools to universities, that have recently added wilderness outings to their curricula. Science and history will always have their niches, but the knowledge most necessary for tomorrow's living may very well come from those who learned, during formative years, how to be in accord with themselves on a moonless night by the ocean. □

Galen Rowell is author of In the Throne Room of the Mountain Gods.

Backpacking in 2078

WILLIAM C. LEITCH

This excursion into the future depends on three not improbable hypotheses. First, let us assume that electronic technology continues to progress as it has in the last decade. Second, that the world's population continues to increase more or less geometrically. Finally, we will assume that increasingly frantic land managers employ every resource available to them in order to protect the areas under their stewardship. Since the utilization of technology seems to expand inexorably to its maximum potential, the final supposition is not too unrealistic.

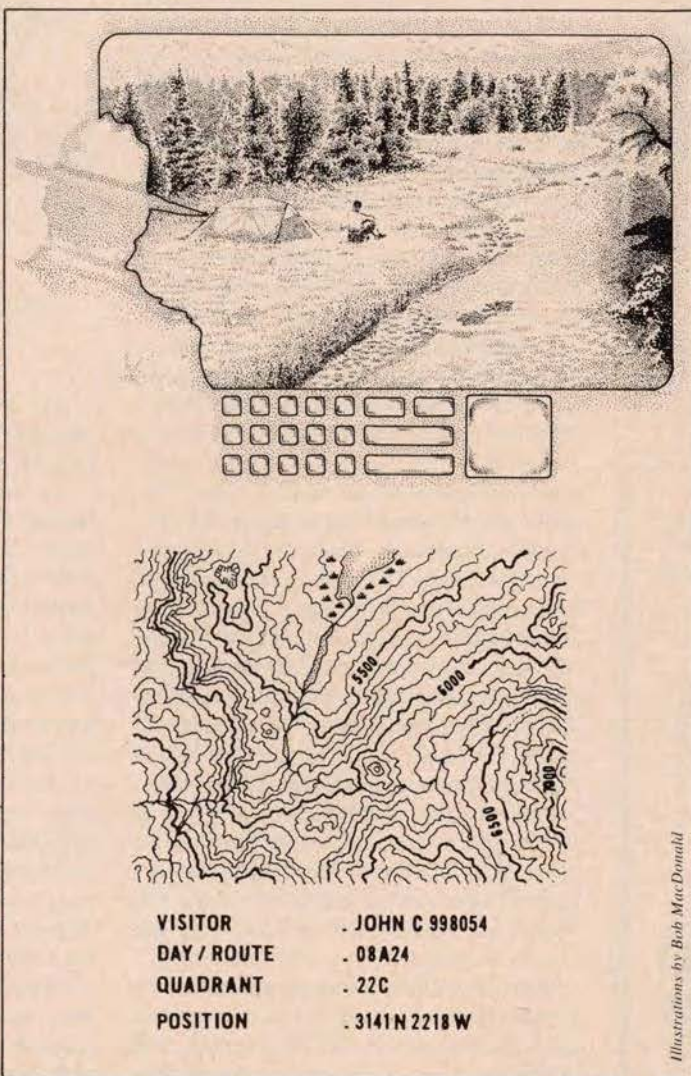
THE YEAR IS 2078. The population has increased sixteenfold in the last century; it is now thirty billion people. Our wilderness visitor of the future—John—files an application to visit the wilderness of his choice. He knows there will be a good many hopeful visitors ahead of him. John applies to the global reservation-permit system for the first available opening. He can either enter his name in the lottery or demonstrate the required wilderness knowledge and backpacking skills to receive a permit. (Both means of application had been seriously proposed in a professional resources development journal as long ago as 1973.) To John's delight, his application is accepted.

The wilderness area he has selected is within the boreal forest, located, we will say, in southwestern Alaska. It is suitable for backpacking, but cross-country travel is difficult. The managers of this park have therefore carefully designed a system of primitive but adequate trails that cover nearly all of the area, but that rarely intersect and are seldom within sight of each other.

John is informed that a four-night trail is available the following summer, that an eleven-night trail is available in three years because of a recent cancellation and that a thirteen-night trail is open five years hence. Which, asks the form letter, would he like to apply for?

John doesn't want to wait five years, but he does want to take a long trip, so he submits his name for the eleven-night trail. Fortunately, he doesn't have to buy much equipment; he had taken a three-week wilderness trip four years before, and his gear is still in good working order.

He has a top-notch radio-magnetic compass, and his backpack is in good shape. Before his last trip, he purchased a Safe-Guard



Illustrations by Bob MacDonnell

Kamp Kit. This device is well-miniaturized; it is the size of a loaf of bread and weighs only four pounds. It is designed specifically for arctic use and cost more than he wished to spend, but he bought it anyway—in case he decided to apply for a Baffin Island trip. The Kamp Kit becomes, at the flip of a switch, a self-contained, self-erecting shelter, capable of sustaining a sixty-degree environment when the outside temperature is as low as sixty below. Its replaceable ultraviolet solar cells and advanced insulative design enable these temperatures to be maintained for up to five weeks. He still has his emergency rations, a small box of capsules, left from the last trip. One capsule per day, each containing amino concentrate and carbo-lipid compounds, will keep him alive and well, although they do little to satisfy hunger pangs.

John's plans remain firm over the three years, and he duly arrives at the park headquarters, a day early as instructed, ready for orientation and eager to set out.

First, an Equipment Ranger confirms his reservation and checks over his equipment. He is then directed to another office where he is welcomed by the

Briefing Ranger, who reviews his route with him on a large-scale relief map. John is issued a map of his own, and the ranger indicates several places along his route where he will be likely to see bears, caribou and moose. He is warned to be particularly careful at two places along his route where he may encounter a bear with cubs. The map positions of transmitting beacons, all installed outside the park, are pointed out to him. He will use these with his radio compass if necessary. Finally, the locations of Escape Stations, discreetly situated heli-pads with radio-telephone installations, are indicated.

The ranger reviews John's plans and asks that he keep to the itinerary, for others will be on the eleven-day trail both ahead of and behind him. If he keeps to his itinerary, however, he is unlikely to see another person. The ranger issues John a small metalloid disc and asks him to keep it in his pocket at all times. It is a transmitting device that will enable rescuers to locate him

in case of emergency. It has a Mayday attachment that, when activated, emits a high-frequency distress signal, summoning a rescue helicopter within the hour. The ranger explains with pride that of millions of park visitors over several decades, only a handful have had fatal accidents (mostly heart attacks). He also explains how lucky John is, for hikers are again allowed to travel alone in the park since the introduction of the Mayday device. In the old days, solitary hiking had been prohibited; it was considered far too dangerous.

the ranger wishes him a good trip. John steps through the South Gate early the next morning.

* * *

Twelve days later John appears at the North Gate, tired, dirty, happy and precisely on schedule. He is pleased, for the weather has been superb, and he has several rolls of film which he is sure contain some marvelous wildlife shots.

He returns his government-furnished equipment to the park office, spends an hour with a Debriefing Ranger and is about



to leave for home when a passing ranger calls his name.

The ranger turns out to be Harry, a college acquaintance John hasn't seen for years. Harry is on his lunch break and invites John to his office for coffee. They reminisce for a while, and then Harry asks John how he enjoyed his trip. "It was pleasant," John explains, "except for a frantic hour during which I thought I had lost my Mayday device. I finally found it in the bottom of my sleeping bag. Do park visitors lose many of them, Harry? They must be terribly expensive."

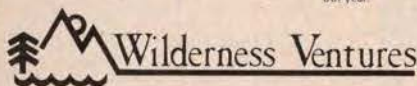
"Well . . . in fact, no, John. We've never lost any. Sure hikers lose them every now and then, but we always find them. You see," he elaborates, "the small discs transmit a signal all the time, strong enough to be picked up at several receiving stations located along the park's boundaries. If one is lost, we just take in a portable receiver and track it down. Retrieved one from six feet of water once."

Harry explains that by using different transmission frequencies and computerized triangulation, park officials know the precise location of each Mayday device at all times, day or night. "The gadgets are a tremendous help to us. Little dots of light are flashed onto a map screen at the headquarters office. We know where everybody is at all times, and if hikers get off

EDUCATIONAL OUTINGS

The Sierra Club's educational outings (trip numbers coded "E") combine exciting outdoor adventure with the thrill of learning. For example, the awesome Grand Canyon becomes even more fascinating when a qualified geologist explains the canyon's history and evolution. Photography enthusiasts can receive on-the-spot guidance from professional photographers while backpacking through remote and beautiful areas. Base Camp, Bicycle, Canoe, Highlight and Knapsack trips all offer educational outings under the guidance of qualified instructors. In some cases, university credit may be available.

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*Publishers Weekly

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While on the subject, the Briefing Ranger recommends that since guns are not allowed in the park, John should carry an alternative "protective device" along with him. It is a gadget about the size of a cigarette package that is capable of temporarily immobilizing a large animal. The park rents them to visitors during their stay, he explains, and they are easy to use, but they are to be employed only in life-threatening situations. They can be triggered only twice without recharging, the ranger warns, and if they are used, a thorough investigation of the circumstances is required. John signs one out.

When the ranger learns that John is particularly interested in wildlife observation, he shows him a small infra-red device that will enable him to view the activities of nocturnal animals with relative ease. This, too, can be rented for a nominal fee. The ranger also shows John the Eleven-day Trail Cassette. The tape contains several hours of lectures on the park, its administration and its social and natural history. The tape also contains several specific lectures corresponding to biological, geological and ecological features at specific locations along the trail. There is a section on birds and mammals of the park, on characteristics of the boreal forest and even an auditory trail-map—in case the listener loses the printed map. The tiny tape-player is furnished with an earphone, so that the visitor can listen to the tape while hiking. It, too, is available for a nominal charge.

John learns that at certain campsites indicated on his map, he will find fuel provided for his use. At all other sites, he will have to use his stove; the demand for wood has long exceeded the supply. Except at designated sites, campfires have been forbidden for decades.

The ranger then imbeds a small plate in one of John's boot heels. The plate has three raised symbols on it. A requirement, explains the ranger, to assist rescuers if the Mayday device fails—and to aid in enforcement.

Since John has no more questions, then,

schedule and begin to clump up along the trails, we can get in and straighten things out before we get a real mess."

Harry describes the master console that not only monitors the movements of park visitors but also tracks the park's mammals. "Those sheep you photographed near Rainy Pass had subcutaneous transmitters implanted in the back of their necks. The moose, too.

"Originally," he continues, "the transmitters were implanted only in brown bears, to monitor their movements and to enable rangers to steer visitors clear of



troublesome individuals. But the system worked so well that the biologists persuaded the park administration that the interests of the park would be well served if they could monitor the large herbivores as well.

"The transmitters, you see, are what enable that stunner you checked out to protect you from moose or bears. Lots of people think they're some sort of toned-down death ray. Actually they just send a signal that causes the battery attached to the subcutaneous transmitter to administer a healthy shock. The animal is stunned, and in the meantime, you get the hell out of there. That's the feature which finally sold the administration on the idea of implanting all the animals.

"It took a couple of decades," he explains, "and cost a fortune, but they managed to implant every large animal in the park over six months of age. It's an on-going program, and now they can regulate the population with great accuracy, and the park's carrying capacity isn't exceeded. No sir, you didn't see any overgrazed land out there, did you?"

"Is that how the ranger knew where I'd be likely to see big game?" asks John.

"Right. If he had been a biologist, he probably could have told you where every big animal in the park was. They're sharp, those guys. Of course the animals move around a lot."

John eventually learns that before the Mayday devices were introduced, visitors met frequent enforcement patrols on the trails, who made sure that they were on proper routes and were not setting up illegal, off-trail campsites. There were so many complaints by the visitors that the patrols were stopped. Fortunately, by that time a system had been developed that enabled the high-flying fire patrol planes to pinpoint even tiny fires with their infra-red sensors.

"We'd send a plane up each evening. If it spotted a fire outside a designated campsite, we could have a ranger in there by morning, usually before the campers were out of their sleeping bags."

"What happened to them?"

"Nothing. They'd be pretty surprised. We'd just warn them not to do it again. Sometimes kids would try it again on the same trip. We'd find them, revoke their visitor permits and escort them out. Pretty soon word got around, and nobody tried it any more."

"Do you still use the planes?"

"No, John. Now that we have the Mayday devices, we don't need to. We can tell on the console if a party is off the trail. We just keep an eye on them, and if they don't start back by the next afternoon, we send a ranger out to set them back on the right track."

"Doesn't anyone complain?"

"Not much any more. Mostly kids. Most people realize that these systems have enabled us to keep the park in excellent condition. We can keep things under control, and yet the land's nearly as undisturbed as it was centuries ago."

"It sure seems that way, Harry. I didn't see another person for twelve days out there."

"Right." Harry punches a button on his console and glances at the read-out screen. "There were, let's see . . . nearly eleven hundred people were in there on any day last week, and you didn't see any of them did you?"

"That's right."

"You're lucky you got this trip in now. The policy on solitary backpacking is being reviewed, and I wouldn't be surprised, John, if it's on the way out again. We have to do something. People are having to make reservations too far in advance. Ten years on some trails. People are getting pretty upset."

"Yeah, I'll bet." □

William Leitch is a traveler, teacher and writer. He is the author of Hand-Hewn (Chronicle Books, 1976).



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Trail Snacks for the Hiking Gourmet

You've been hiking all morning. You've worked up a sweat and a case of the "munchies," and your blood sugar level is plummeting—but it's still too early for lunch. So you look in your pack for a snack, and mere seconds later, delight returns to the world—sticky fingers and all.

Gorp. Such an ugly word for such a delicious experience. Hasse Bunnelle, author of several trail cookbooks, detests the term. "This word," she wrote *Sierra*, "comes from people who 'put down' attrac-

tive food on the trail, those who consider seasonings in food to be 'gourmet' or 'sissy.'" Ms. Bunnelle prefers the term "trail mix." But Bill Kemsley, publisher of *Backpacker*, likes the term and cites its hallowed etymology: "it's an acronym," he says, "for Good Old Raisins and Peanuts."

Whatever you call it, your basic trail munchy deserves imagination. Herewith, three classic recipes and one you may not have thought of. Call it what you will.



Bill Kemsley's Gorp

- 1 c. Sesame seeds
- 8 oz. each: Pitted dates
Dried apricots
Walnuts
Pecans
- 4 oz. each: White raisins
Brazil nuts



Spread sesame seeds on a shallow baking pan. Bake at 350° until slightly brown and seeds begin cracking open. Stir often. Cut dates into eighths and roll in the browned sesame seeds. Make sure the seeds adhere on all sides, to keep the dates from bunching together. Cut apricots into thin strips. Cut nuts into quarters. Toss all ingredients together.

Celia Hunter's Private Blend

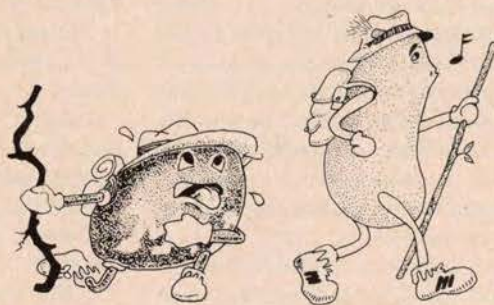
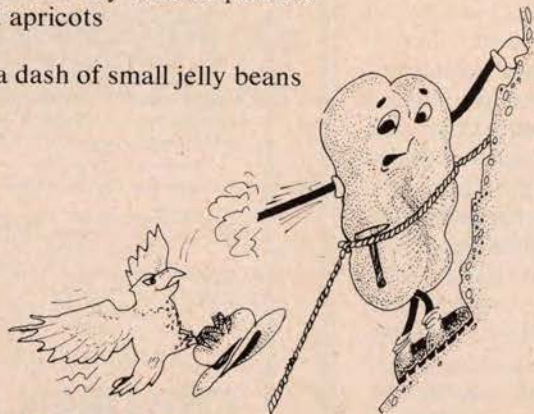
- | | |
|---------------------------------|---------------------------------|
| <i>Equal amounts, combined:</i> | <i>In smaller amounts, add:</i> |
| Cashew nuts | Salted peanuts |
| Currants | Dried chopped dates |
| Raisins | Canned mincemeat |
| Sunflower seeds | M&Ms |
| Sesame seeds | Slivered almonds |
| Coconut, shredded | |

Celia Hunter is executive director of the Wilderness Society.

Edgar and Peggy Wayburn's Classic Trail Blend

- In a bag, toss equal parts by bulk:*
- Raisins
 - M&M's
 - Cashews or dry-roasted peanuts
 - Dried apricots

Add a dash of small jelly beans



John Fitzgerald's Trail Non-Mix

- 1 Bag raisins
- 1 Bag salted cashews
- 1 Bag toasted, shelled sunflower seeds

John Fitzgerald, publisher of *Wilderness Camping*, likes to keep the ingredients separate, so he can munch just the nuts, or just the raisins, or make any combination he chooses at the time. He recommends raisins and sunflower seeds for breakfast, along with a cup of hot Tang.

Medicine for Mountaineering, second edition, edited by James A. Wilkerson; The Mountaineers, Seattle, 1975. Softcover, \$7.50.

The Outdoorsman's Emergency Manual, by Anthony J. Acerrano; Winchester Press, New York, 1976. Cloth, \$10.00. From Follett Corp., Chicago, in paper, \$5.95.

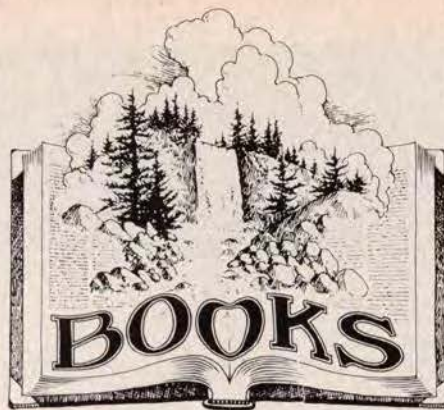
THE mountains were hard on climbers last year—more than four hundred died in Europe alone. Of course, this somber figure reflects the tremendous increase in the number of people who seek the exhilaration of scaling peaks. That they also find danger could be justified as the risk anyone must be willing to take to challenge the mountain fastness.

But injury needn't so frequently be the cost of admission to what in the past has been a select society. Climbers should be prepared for the hazards of their sport. Given modern rescue capabilities, however, many do not feel impelled to be well prepared, for professionals seem always to be waiting close by to offer a helping hand. Mountaineers should also know their gear thoroughly, and medicine must be considered part of that equipment—not just first aid, but medicine, for those times when the professionals cannot be reached in time.

Compiled by a group of climbers who also happen to practice medicine, *Medicine for Mountaineering* moves far beyond the traditional boundaries of first aid. In a purely medical sense this means that the recommended treatments represent the latest consensus among practicing physicians. In stopping severe bleeding, for example, direct pressure to the wound is the sole prescription. Pressure points simply don't work very well, and tourniquets are too dangerous to use—the harm they do can be greater than the relief they provide. In fact, a poorly applied tourniquet can stop all circulation to a limb and still not staunch the flow of blood from an opened artery.

As with all such things, though, there are exceptions, and it is one of *Medicine's* strong points that these are carefully detailed. In the case of tourniquets, *Medicine* describes when and how they should be made and applied. They should be used only when repeated attempts with direct pressure fail or when, as in the case of traumatic amputation, there is no tissue below the tourniquet to be damaged. In even such drastic situations, however, we are warned that no one but a physician should remove a tourniquet once it has been applied.

This same sort of discretion is employed when discussing such controversial topics



JAMES KEOUGH

as the use of low-salt diets and diuretics at high altitude to prevent edema, or the proper treatment of venomous snake bites. In the latter case, the reader is given a well-balanced account of the value of antivenin (recommended with extreme caution as a last resort) and the dangers of cold therapy (about as safe as tourniquets).

This second edition of *Medicine for Mountaineering* (the book was first published in 1967) is an update on specific medications—revised dosages, side effects, new medications. It also gives greater emphasis (with illustrations) to the actual technique of cardiopulmonary resuscitation and further information on high-altitude problems frequently encountered by climbers. There's a good chapter on general principles of diagnosis. (Deciding whether an illness is bacterial or viral might mean the difference between a hasty evacuation or a day's rest in camp.) This is followed by thorough, clearly described and clearly illustrated information on the treatment of a whole range of traumatic and environmental injuries and on such nontraumatic ailments as acute abdominal pain, infections and allergies. There are comprehensive sections on animal bites, genito-urinary diseases and nervous disorders, as well as helpful appendices and a glossary of medical terms. Originally designed as a textbook for mountaineering medicine courses, this softcover book is compact enough to be taken along on any outing. Whether you are a mountain climber or simply a day-hiker, this "first aid" book would be a reliable companion in a crisis.

NEXT TO KNOWING how to treat an accident victim, the best wilderness medicine is still "an ounce of prevention." And this is what Anthony Acerrano's *The Outdoorsman's Emergency Manual* is primarily about.

The first half of Acerrano's *Manual* is devoted to avoiding accidents. It is a digest of the dangers inherent in a wide range of outdoor activities: hiking, fishing, camp-

ing, boating, hunting and snowmobiling. Could you free your canoe if it were "rain-bowed" around an unavoidable white-water boulder? How should you react in an encounter with a bear? Here's a hatful of information to be stored for future use.

The second half is concerned with getting out of trouble you fail to avoid. In a restrained yet anecdotal style, Acerrano tells how to recognize edible plants, locate water in a dry creek bed, find the way without compass or map, build shelter and signal for help. Clearly, these are not the things one wants to learn through grim experience.

Unfortunately, the emergency sections of this otherwise helpful book are seriously marred by some out-of-date thinking. In teaching us how to survive in the wilderness, Acerrano describes ways to construct all manner of camp equipment—his "survival" almost equals the domesticating assaults of old-fashioned camping. Woodcraft is dead, and Acerrano should have put a few more nails into the lid of its coffin. Instead, he goes to the opposite extreme, even suggesting that one might fire an entire tree to call for help. Well, in California anyway, it might be impossible to ignite just one tree. How much should we be willing to risk to be rescued? Acerrano's techniques must not be practiced in the woods except under the most dire circumstances.

It is also a shame that such a good book—and despite its advocacy of woodcraft this is a good book—should be so carelessly produced. Lines have been dropped, and a couple of times the layout is confusing. For instance, the top of a rattler's head has been cropped from what is meant to be a primary identification aid. In a list of edible plants, the wrong line-drawing appears opposite a descriptive paragraph. But these are not the author's fault and should not be held against him.

Finally, there is one major complaint to be lodged against both of these fine books, and actually, it extends to wilderness books in general. In all of Acerrano's *Manual*, there are only two pictures of women (*Medicine* has none at all), and both of these depict women in domestic situations. Judging from these two books, outdoorswomen seem to be immune from injury and never find themselves in emergency situations while away from home.

Neither *Medicine for Mountaineering* nor *The Outdoorsman's Emergency Manual* will replace clear thinking and common sense, but they do provide the information needed to complement both. □



Wilderness World

Water Trips

A GAIN WE OFFER the adventure and exhilaration of traveling by water. Whether on a raft, a Mexican boat or paddling your own canoe, you will go places and see things that can seldom be experienced in any other way. Some of the rivers to be run are in the Wild Rivers System; others are threatened with dams; all are worth a personal visit. On all trips, unless otherwise specified, bring your own camping gear.

Raft Trips combine the excitement of white-water rapids with the enjoyment of the natural beauties and wonders of wild-river areas. Most of these trips are on rivers that many of us have worked hard to preserve, and some are in areas where the battle continues. See for yourself how worthwhile these efforts in conservation have been and continue to be. Our outfitters are carefully selected for a record of providing good equipment and food. They also have boatmen who not only get us safely down the river, but who have the ability to pass on some of their knowledge and to impart some of their love and respect for the area. Most trips are oar-powered with relatively small rafts—no motor fumes or noise and fewer people per boat allow greater awareness and appreciation of nature. The magnitude of rapids varies with river

and season. Sierra Club leaders usually succeed in guiding the group to a happier, more memorable experience and a better understanding and appreciation of the wilderness than can be gained with most commercial trips.

Canoe Trips give trip members a chance to be part of the action, whether it be running rapids, picking blackberries from a canoe or gliding quietly by a feeding moose. The leader offers advice in paddling and water safety as needed. Your craft carries your own gear and part of the commissary gear and food. You share in cooking at the beach campsites. Canoes are provided on some of the trips. The paddling skills needed vary with the trip, but the ability to swim is required for all. The leaders will screen all applicants.

Boat Trips take you by powerboat from one beach campsite to the next, where you can enjoy marine life, aquatic birds and very beautiful beaches. There we can swim, sun, snorkel or fish. Our efforts to preserve the beaches directly involve the conservation of endangered species, including turtles. Unusual menus from local produce and interesting contacts with local fishermen and others in out-of-the-way places make these trips very popular. Bring your own camping and eating gear.

Leisure Boat Trips are similar to Boat Trips but do not involve camping on beaches; trip members sleep and eat on the boat. These are

designed for those who want to participate in a Sierra Club trip, but who are not able to handle the scrambling in and out of boats or setting up camp on the beaches.

River Trips

(28) Salt River Float Trip, Arizona—April 16-22. Leader, Lester Olin, 2244 Avenue A, Yuma, AZ 85364. Cost: \$165.

(29) Illinois River, Southwest Oregon—May 1-5. Leader, Tris Coffin, 500 Tamalpais Ave., Mill Valley, CA 94941. Cost: \$285.

(30) Klamath River, Northern California—May 21-25. Leader, Martin Friedman, 353 Montford Ave., Mill Valley, CA 94941. Cost: \$255.

(31) Owyhee River, Oregon—May 29-June 2. Leader, Russell Snook, 730 W. Edmundson Ave., Morgan Hill, CA 95037. Cost: \$285.

(285) Grand Canyon Oar Trip, Arizona—May 21-June 2. Leader, Victor Monke, 414 N. Camden Dr., #602, Beverly Hills, CA 90210. Cost: \$770.

(286) Dolores River Paddle-Raft, Colorado—May 29-June 3. Leader, Rolf Godon, Box 991, Tahoe City, CA 95730. Cost: \$355.

(287) Rogue River, Oregon—June 5-9. Leader, Hunter Owens, 1850 Capistrano Way, Los Altos, CA 94022. Cost: \$245.

(288) San Juan River, Utah—June 11-16. Leader, Kurt Menning, 2151 Oakland Rd., #404, San Jose, CA 95131. Cost: \$360.

(289) Hells Canyon of the Snake River, Idaho—June 19-24. Leader, Dawn Cope, 2150 San Vito Cir., Monterey, CA 93940. Cost: \$360.

(290) Middle Fork of the Salmon River, Idaho—June 24-29. Leader, Tris Coffin, 500 Tamalpais Ave., Mill Valley, CA 94941. Cost: \$475.

(291) Westwater-Cataract Canyon Raft-Hiking, Colorado/Utah—June 25-July 2. Leader, Mary Miles, 569 Rutherford Ave., Redwood City, CA 94061. Cost: \$545.

(292) Rogue River, Oregon—July 3-7. Leader, Greg Horner, 479 Sims Rd., Santa Cruz, CA 95060. Cost: \$245.

(293) Grand Canyon Oar Trip, Arizona—July 3-14. Leader, c/o Harry Neal, 25015 Mt. Charlie Rd., Los Gatos, CA 95030. Cost: \$655.

(294) Rogue River, Oregon—July 24-28. Leader, Mary O'Connor, 2504 Webster St., Palo Alto, CA 94301. Cost: \$245.

(295) River of No Return: Main Salmon River, Idaho—August 2-7. Leader, Rolf Godon, Box 991, Tahoe City, CA 95730. Cost: \$465.

(296) Middle Fork of the Salmon River, Idaho—August 3-8. Leader, Herb Graybeal, 29 Country Club Dr., Suisun City, CA 94585. Cost: \$475.

(297) Grand Canyon Oar Trip, Arizona—August 6-17. Leader, Chuck Fisk, Box 67, Blairsden, CA 96103. Cost: \$655.

(298) Fraser River, British Columbia—August 14-19. Leader, Frank Hoover, 900 Veteran Ave., Los Angeles, CA 90024. Cost: \$420.

(299) Tatchsheni-Alek Rivers Raft Safari, Alaska/Canada—August 19-28. Leader, Lynne Dyche, 2747 Kring Dr., San Jose, CA 95125. Cost: \$985.

(300) Chilcotin River, British Columbia—August 21-26. Leader, Blaine LeCheminant, 1857 Via Barrett, San Lorenzo, CA 94580. Cost: \$565.

(301) Hells Canyon of the Snake River, Idaho—August 22-27. Leader, Anna Stedina, 357 Bryant Ct., Palo Alto, CA 94301. Cost: \$360.

(302) Grand Canyon Oar Trip, Arizona—August 23-September 3. Leader, Russell Snook, 730 W. Edmundson Ave., Morgan Hill, CA 95037. Cost: \$655.

(303) Rogue River, Oregon—August 28-September 1. Leader, Grace Hansen, 20990 Valley Green, #717, Cupertino, CA 95014. Cost: \$245.

(304) Grand Canyon Oar Trip, Arizona—September 9-20. Leader, Wheaton Smith, 243 Ely Pl., Palo Alto, CA 94306. Cost: \$655.

Canoe/Kayak Trips

(22) Okefenokee Swamp, Georgia—March 13-18. Leader, Peter Bengtson, 19315 Frenchton Pl., Gaithersburg, MD 20760. Cost: \$185.

(27) Rio Grande River through Big Bend Park, Texas—April 15-22. Leader, Bernie Millett, 708 Mercedes, Fort Worth, TX 76126. Cost: \$235.

(325) Buffalo River Leisure, Arkansas—May 28-June 3. Leader, Jackie E. Kerr, Box 5002, Springfield, MO 65801. Cost: \$150.

(326) Southern Appalachian Whitewater Canoeing Base Camp, Georgia/North Carolina/South Carolina—June 10-17. Leader, Bill Timpone, 243 Woodview Ln., Smyrna, GA 30080. Cost: \$195.

(327) Eleven Point River Leisure, Missouri—June 18-24. Leader, Gary Baldwin, 616 Second St., Clinton, MO 64735. Cost: \$150.

(328) Whitewater Instruction Clinic, North Carolina—June 19-23. Leader, David Holl, 1501 Summit Ln., Wilkesboro, NC 28697. Cost: \$245.



(329) Quetico-Superior Leisure, Minnesota-Ontario—June 25-July 15. Leader, Stu Duncanson, 1754 Ryan Ave. W., Roseville, MN 55113. Cost: \$470.

(330) Trinity-Klamath Rivers, Northern California—June 29-July 6. Leader, Charles Schultz, 14 Pacheco, #7, San Rafael, CA 94901. Cost: \$150.

(331-E) Main Eel River Naturalist, Northern California—July 2-9. Naturalist, Dick Brown. Leader, Judy Hacker, 303 Johnstone Dr., San Rafael, CA 94903. Cost: \$195.

(332) Sierra Inflatables, Mother Lode Rivers, California—July 9-15. Leader, Reg Lake, 134 Monterey St., Brisbane, CA 94005. Cost: \$155.

(333) Rogue River Cleanup, Oregon—July 24-30. Leader, Chuck Fisk, Box 67, Blairsden, CA 96103. Cost: \$95.

(334) Trinity Gorge-Klamath River Adult Trip, Northwestern California—August 9-15. Leaders, Molly and Bill Bricca, Box 159, Ross, CA 94957. Cost: \$170.

(335) Upper Mississippi River Wildlife and Fish Refuge, Wisconsin/Minnesota/Iowa—August 13-20. Leader, David Bedan, 6267 Delmar, St. Louis, MO 63130. Cost: \$135.

(336) Kipawa Reserve, Quebec—August 13-23. Leader, Jean Brumbaugh, 48 Tremont St., #6, Malden, MA 02148. Cost: \$240.

(337) Rogue River Adult Trip, Oregon—August 20-26. Leader, Hunter Owens, 1850 Capistrano Way, Los Altos, CA 94022. Cost: \$180.

(338) Rio Grande Canyons, Texas—October 8-14. Leader, John Baker, 115 E. Woodin Blvd., Dallas, TX 75216. Cost: \$140.

(339) San Francisco Bay Canoe-Catamaran—October 8-14. Leader, Ann Dwyer, Box 468, Geyserville, CA 95441. Cost: \$180.

(340) Everglades Park Canoeing and Camping, Florida—December 28-January 6, 1979. Leader, Robert B. Kelly, 6705 N. Kendall Dr., #315, Miami, FL 33156. Cost: \$190.

Boat Trips

(407) Whale-Watching Leisure Boat Trip, West Coast of Baja, Mexico—January 22-28. Leader, Monroe Agee, 13750 Rivulet Rd., San Jose, CA 95124. Cost: \$495.

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Carol Dienger

(408) Sea of Cortez Leisure Boat Trip,
Mexico—March 11-18. Leader, Wheaton Smith,
243 Ely Pl., Palo Alto, CA 94306. Cost: \$595.

(409) Sea of Cortez Leisure Boat Trip,
Mexico—March 18-25. Leader, Grace Hansen,
20990 Valley Green, #717, Cupertino, CA 95014.
Cost: \$595.

(410) River of Ruins by Raft, Guatemala and
Mexico—March 25-April 7. Leader, Frank Hoover,
30184 Arline St., Canyon Country, CA 91351. Cost:
\$870.

(411) Sea of Cortez Leisure Boat Trip, Mexico—
November 18-25. Leader, Steve Anderson, 1082
Lucot Way, Campbell, CA 95008. Cost: \$595.

(Other Water Trips are listed under Alaska and
Foreign)

FOR MORE INFORMATION

Write to the SC Outing Department for the
brochure describing Water Trips or for the
more detailed supplement available for each
trip, using the coupon on Page 38. Trip cost
includes deposit. Trips priced up to \$499 per
person: \$35 deposit per individual or family
application (family=parents and children
under 21). Trips priced \$500 and over per per-
son: \$70 deposit per individual, no family de-
posit rate.

Bicycle Trips

BICYCLE TOURING allows riders a degree
of mobility and freedom that is lacking
in many other forms of touring. It also
conserves fuel, and this is especially important
in Hawaii, where all fuel is imported. Terrain
variations contribute to the overall experience
of bicycling, as challenging rides are often in-
terspersed with lazy cruises. Leader approval is
required for all bicycle trips.

(91-E) Eco-Cycling, Southeast Minnesota and
Western Wisconsin—June 18-25. Leader,
Elizabeth Barnard, 3330 Columbus Ave. So., Min-
neapolis, MN 55407. Cost: \$115.

(92) Maui by Bicycle, Hawaii—July 6-20. Leader,
Paul Williams, 4923 Nelson St., Fremont, CA
94538. Cost: \$450.

(93) Kauai, Hawaii—August 7-21. Leader, Thelma
Rubin, 899 Hillside, Albany, CA 94706. Cost: \$390.

(94) Bay of Fundy by Bike and Ferry, Canada—
August 20-26. Leader, Shirley Proctor, RFD 1, Box
231, Peterborough, NH 03458. Cost: \$200.

(95-E) Eco-Cycling, Southeast Minnesota and
Western Wisconsin—August 20-September 3.
Leader, Elizabeth Barnard, 3330 Columbus Ave.
So., Minneapolis, MN 55407. Cost: \$185.

Ski Touring

(273) Adirondack Ski Touring, New York—
January 29-February 4. Leader, Walter Blank, Omi
Rd., West Ghent, NY 12075. Cost: \$200.

(272) Superior-Quetico Ski and Snowshoe,
Minnesota/Ontario—February 19-25. Leader, Stu
Duncanson, 1754 Ryan Ave. W., Roseville, MN
55113. Cost: \$190.

(274) Maine Backcountry Ski Touring—January
7-13, 1979. Leader, Frank Roberts, 15 Sewall Dr.,
Old Town, ME 04468. Cost: \$135.

(275) Adirondack Ski Touring, New York—
January, 1979. (7 days). Leader, Walter Blank, Omi
Rd., West Ghent, NY 12075. Cost: \$220.

(276) Superior-Quetico Ski and Snowshoe,
Minnesota/Ontario—February 25-March 3,
1979. Leader, Stu Duncanson, 1754 Ryan Ave. W.
Roseville, MN 55113. Cost: \$220.

(See Foreign Trips for Additional Ski Tours.)

FOR MORE INFORMATION

Write to the SC Outing Department for the
brochure describing Ski and Bicycle Trips or
for the more detailed supplement available for
each trip, using the coupon on Page 38. Trip
cost includes deposit. Trips priced up to \$499
per person: \$35 deposit per individual or fam-
ily application (family=parents and children
under 21).

National Membership Survey

National Membership Survey

The Sierra Club national outing program has grown in size and popularity since its creation 77 years ago. In recent years, the entire wilderness picture has changed drastically, with new agency requirements and the ever-increasing number of private and commercially-run trips making wilderness outings a highly specialized and competitive endeavor. We wish to run the finest outing program possible by meeting the needs of our membership. Even if you haven't been an outings participant, you can help us determine those needs by taking a few minutes to fill out and return this questionnaire.

1. How many years have you been a Sierra Club member? Circle one: less than 1 1-2 3-4 5-7 8-12 13-15 16+

2. Which of the following was the *most* important reason for your joining the Sierra Club? Please check the *one* response which fits best for you.

- I joined primarily to participate in outings: National; Chapter.
- I joined primarily to support the Club's conservation activities.
- I joined for both reasons.
- Other (Specify: _____).

3. Have you participated in Sierra Club outings sponsored by a Chapter or Regional group? (By Regional group, we mean a subgroup within the Chapter.)

- No; Yes: 3A. About how many? (circle one)
1 2-4 5-7 8-10 more
- 3B. We'd like to know the major activity focus (for example, day hike, underwater trip, photography) and length of Chapter and Regional trips you've participated in. Please indicate below:

Type of Activity

Type of Activity	Length (in days)			
_____	1	2	3-5	6-9 longer
_____	1	2	3-5	6-9 longer
_____	1	2	3-5	6-9 longer

4. Have you participated in outdoor-oriented outings sponsored by other organizations? Please specify the organization(s), type of trip, and year in which you participated:

Please Circle T (true) or F (false):

5. T F I have gone on one or more national Sierra Club outings. If this is true for you, please answer:
- 5A. About how many? (circle one) 1 2-4 5-7 8-10 more
- 5B. In what year was your *most recent* trip? (circle one)
1977 1976 1975 1974 Before

5C. In general, how do you feel about your experiences on national outings?
very satisfied ___: ___: ___: ___: very dissatisfied

5D. Do you intend to go on other national outings in the future?

- Yes; No:
Why not? _____;
 Don't know

PLEASE GO TO ITEM 9 AND COMPLETE THE QUESTIONNAIRE.

6. T F I haven't gone on any national Club outings, but I may in the future.

7. T F I haven't gone on any national Club outings and doubt that I will do so.

8. If you have NOT participated in any national Club outings, which of the following indicates your reasons for not participating? Check either A or B.

- A. I joined the Club for its conservation activities and am not interested in participating in its outing activities.
- B. I'm interested in outing activities, but for the following reasons I haven't gone on any of the Club's national outings: (Check as many as apply)
- Cost was too high
- Time of year didn't fit my schedule
- Length of trip didn't fit my schedule
- Types of trips didn't meet my interests
- Chapter or Regional trips suit my recreational needs better than national trips
- A family-oriented trip wasn't available when our family could go
- I didn't know anything about the quality of leadership
- Trips were too far from where I live
- The leader I wanted was not available
- I was on the waitlist, but no space was available on the trip (Type of trip: _____)
- I don't like traveling in groups so large
- Other (Specify: _____).

9. Do you think the cost of Sierra Club national outings is comparable to similar trips sponsored by other organizations?

- No; I think Sierra Club trips are less expensive.
- No; I think Sierra Club trips are more expensive.
- Yes.

10. Below is a list of types of outings, some of which the Club already offers; others are only a possibility. Please indicate for each type of trip *how likely* you would be to go on it, ASSUMING THAT DATE, COST AND LOCATION were feasible for you. (Circle the appropriate letter for each activity)
A. VERY LIKELY
B. SOMEWHAT
C. NOT AT ALL
D. Not sure.

Types of Activities

- A B C D bicycling
 A B C D underwater exploration
 A B C D knapsacking
 A B C D river raft trips
 A B C D canoeing
 A B C D boating trips
 A B C D rock climbing
 A B C D ski touring
 A B C D snowshoeing
 A B C D trail maintenance, cleanup
 A B C D base camps
 A B C D burro trips
 A B C D horseback trips
 A B C D highlight trips

Special Groups

- A B C D young people, 12-14
 A B C D young people, 15-18
 A B C D singles
 A B C D senior citizens
 A B C D single-parent families
 A B C D family trips
 A B C D handicapped
 A B C D continuing education for professionals

Special Focus Activities

- A B C D foreign trips
 A B C D vegetarian meals only
 A B C D gourmet meals only
 A B C D yoga/meditation/healing arts
 A B C D very leisure trips
 A B C D women's self-awareness trip
 A B C D men's self-awareness trip
 A B C D stress reduction techniques for executives through outdoor activity

Study Trips

- A B C D geology
 A B C D photography
 A B C D wildlife study (specify: _____)
 A B C D seashore/tidepool life
 A B C D other natural history (specify: _____)
 A B C D visiting ecologically "endangered" locations
 A B C D visits to ecological "projects" (solar heating plant, etc.)
 A B C D wildlife observation
 A B C D beginning mountain skills
 A B C D advanced mountain skills (leadership training)

11. Which of the following responses best reflects your feelings about the Club's national outings program? I believe the national outings program should be:
 ___ continued as it is; ___ expanded; ___ cut back in scope;
 ___ phased out entirely; ___ no opinion.
12. How many days would be the best length of a national outing for you? (circle one)
 5 7 8 9 10 12 14 other (specify:) not interested
13. What time of year would you prefer to participate in a national outing? Check one:
 ___ winter ___ spring ___ summer ___ fall ___ not interested
14. Your gender: ___ male ___ female
15. What state do you live in? _____
16. Check *one*: ___ single, no children ___ couple, no children
 ___ single parent ___ couple with children
17. Your age group: (circle one)
 12-14 15-18 19-30 31-40 41-50 51-60 61-70 over 70
18. We welcome any other comments or suggestions you have about the national outings program.

Place
 13¢
 Stamp
 here

Sierra Club Outing Department
 530 Bush Street
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Dick Schmidt

Hawaii Trips

THE HAWAIIAN ENVIRONMENT provides a unique setting for an unusual kind of Sierra Club trip. Each outing is a conservation effort offering the opportunity to see and experience the natural wonders of the fiftieth state with a minimum of disturbance to the land, sea and air. Trip members can visit places missed by the ordinary tourist. Campsites are normally in county, state or national parks. We move in groups of 30 or less in rental cars. Hikes are generally optional and range from mild to mildly strenuous. Trip prices do not include air fare.

(23) **Kauai's Beaches and Mountains—March 17-26.** Leaders, Lynne and Ray Simpson, 1300 Carter Rd., Sacramento, CA 95825. Cost: \$315.

(140-F) **Hawaii-Maui Family Trip—July 17-31.** Leaders, Nadine and Norton Hastings, 100 Quarry Rd., Mill Valley, CA 94941. Cost: \$390 (children under 12, \$340).

(141) **Christmas and New Year's on Hawaii—December 21-January 1, 1979.** Leaders, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941; and Walt Weyman, Star Route, Marshall, CA 94940. Cost: \$360.

(Other Hawaii trips are listed under *Bicycle and Knapsack.*)

FOR MORE INFORMATION

Write to the SC Outing Department for the brochure describing Hawaii trips or for the more detailed supplement available for each trip, using the coupon on Page 38. Trip cost includes deposit. Trips priced up to \$499 per person: \$35 deposit per individual or family application (family=parents and children under 21).

Alaska Trips

LONG AFTER YOU return home, an Alaska wilderness experience will live in your memory. Land-use decisions now being made in Alaska, where conservation issues are current and critical, will affect future generations. These trips, and you as participants, can have a real influence on how untouched wilderness areas are used or preserved. The scenery is big, powerful, remote and seldom gentle. Terrain and weather often make heavy demands on the traveler, but the rewards are great. Come and get hooked on the peculiar lure of this awe-inspiring country. Trips to Alaska feature small groups and are expensive, making a late cancellation difficult for the Outing Department (and for you).

(50) **Glacier Bay-West Chichagof Boating-Hiking—May 30-June 12.** Leader, Mary Birkeland, Box 212, Seldovia, AK 99663. Cost: \$615.

(51) **Glacier Bay-West Chichagof Boating-Hiking—June 18-July 1.** Leader, see above. Cost: \$615.

(52) **McKinley Park Wildlife-Kenai Peninsula Canoe—June 26-July 8.** Leader, Bill Huntley, Box 3164, San Leandro, CA 94578. Cost: \$360.

(53) **Copper and Chitina Rivers, Alaska—July 2-10.** Leader, John Ricker, 2950 N. 7th St., Phoenix, AZ 85014. Cost: \$360.

(54) **Lake Clark Knapsack—July 3-16.** Leader, Blaine LeCheminant, 1857 Via Barrett, San Lorenzo, CA 94580. Cost: \$390.

(55) **Admiralty Island Canoe—July 13-22.** Leader, John Ricker, 2950 N. 7th St., Phoenix, AZ 85014. Cost: \$615.

(56) **Arctic Wildlife Range Float Trip—July 14-August 1.** Leader, Molly McCammon, c/o H. Mills, 455 S.W. 156th, #13, Seattle, WA 98166. Cost: \$545.

(57) **Alaska-Yukon Knapsack Sampler—August 5-29.** Leader, Robin Brooks, 818 Dartshire Way, Sunnyvale, CA 94087. Cost: \$800.

(See *Water Trips* for another Alaska Trip)

FOR MORE INFORMATION

Write to the SC Outing Department for the brochure describing Alaska Trips or for the more detailed supplement available for each trip, using the coupon on Page 38. Trip cost includes deposit. Trips priced up to \$499 per person: \$35 deposit per individual or family application (family=parents and children under 21); trips priced \$500 and over per person: \$70 deposit per person—no family deposit rate.



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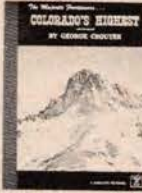
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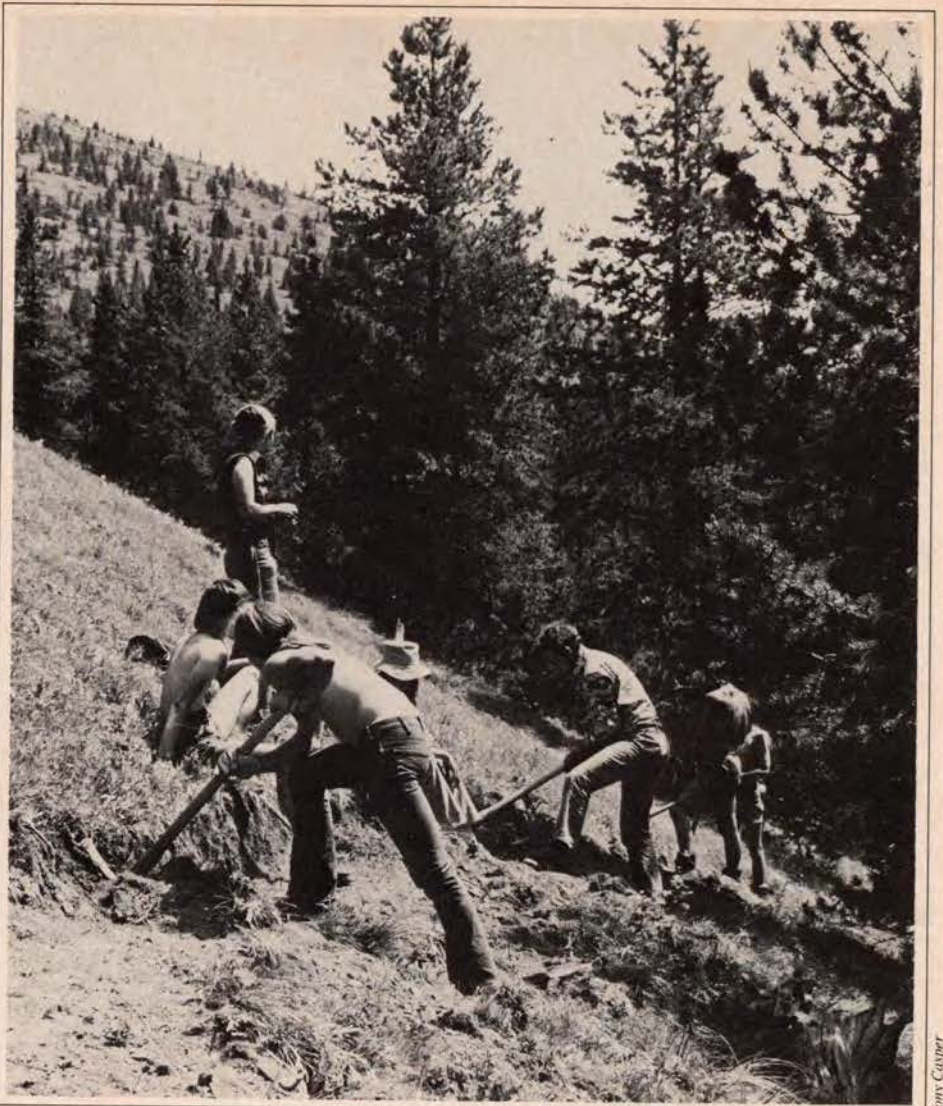


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Les Blacklock's "Meet My Psychiatrist" with 54 full-color photographs and introduction by Sigurd F. Olson. A leading naturalist and wildlife photographer, Blacklock guides the reader to "unique encounters in the wild", punctuating his superb photographs with insight, information and love. Blacklock's "psychiatrist" is nature's gentle grace and awesome majesty. "Meet My Psychiatrist" is an adventure for the spirit and a delight to the eye" — Sigurd F. Olson in his introduction. Find new paths for your eye and mind in "Meet My Psychiatrist" available at your local bookstore or write to:

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Tony Casper

Service Trips

IF YOU'VE HIKED on a rutted or eroded trail, come across another hiker's garbage or seen grassy meadows scarred by unnecessary trails; if you've ever botanized, had a water fight or climbed a peak with your best friends, then you're already familiar with the kinds of problems and joys that have given rise to Service Trip projects.

Service Trips are special. Not only do they take you to beautiful places, but they offer you a chance, through a variety of work projects, to contribute to the wilderness that you are enjoying. Whether it be rerouting a trail around a fragile meadow or removing unnecessary fire rings, Service Trips combine the hard work of wilderness conservation with the pleasures of backpacking. A flexible workday and free-day schedule makes it possible for Service Trips to offer you a most fulfilling mountain camp experience.

Now in our 20th year, Service Trips work with the Forest and Park services to realize

goals of active wildlands conservation. Cleanup projects may concentrate on an area with abandoned structures that need removal, an area blighted by airplane wreckage, or a lakeshore or trail with abundant litter. Trail crews work to construct new trails, and to re-route or upgrade poor sections of old trail, with the aim of lessening impact or eliminating hazards. Special Projects include forestry and research projects. Often the outgrowth of unusual requests, Special Projects give the hardy, more experienced adventurer an excellent chance to work more closely with the Park or Forest service.

Work is often hard, but it will occupy only half your time. The rest of your time is free for enjoying the area in whatever way you desire—swim in a lake, climb to a vista, sit in the sun, explore the flora and fauna or just loaf. Most Service Trips are held in the areas of the National Wilderness Preservation System, in *de facto* or proposed wild areas, or in national parks, so there is plenty of marvelous country to enjoy. You will discover that there is a great deal of camaraderie between fellow trip members. The accent is on easy mountain life, and everyone has the opportunity to share communal chores and cooking.

All Service Trips feature comparatively low prices. However, the fee charged to participants represents only part of the real trip cost; a subsidy from the Outing Committee helps keep fees low. Trip size will usually vary from 15-25, including staff and a volunteer physician. Minimum age is 16 years. Final acceptance of all trip applicants will be determined by the trip leader.

All personal gear (limited to 20-25 pounds per person) is packed in by the participant. Trail projects usually have pack support to carry in tools and food, while cleanup groups often carry their entire ten-day supply of food and equipment on their backs. Any Service Trip can be fairly rigorous, and a recent medical examination (within the year) is required. If you feel you can enjoy the work, then we welcome you. However, please reflect carefully before applying for a trip; some are much more strenuous than others. If you are not sure you can handle the amount of hiking or work that will be expected, don't hesitate to write the trip leader for further information.

So join a Service Trip this summer—have a great time in the mountains and contribute something practical to *your* wilderness. You can anticipate some challenging work, vivid scenery and strong friendships. But most of all, we hope that you come home feeling like one service worker who, when asked whether he and his comrades wanted a plaque to commemorate their efforts, replied: "We'll remember what we did. That's enough."

Special Projects

(248) Teton Canyon Fish Habitat Restoration, Lewis and Clark Forest, Montana—June 1-9. Leader, Alan Schmierer, 231 Erica Way, Portola Valley, CA 94025. Cost: \$55.

(249) Home Camp Creek Restoration, Kaiser Wilderness, Sierra—June 30-July 8. Leader, Roy Bergstrom, 6923 Colton Blvd., Oakland, CA 94611. Cost: \$55.

(250) Rocky Basin Lakes Restoration and Cleanup, Golden Trout Wilderness, Sierra—July 10-21. Leader, Nick Fowler, Box 9262, Stanford University, Stanford, CA 94305. Cost: \$60.

(251) Hockett Plateau Meadow Restoration, Sequoia-Kings Canyon Parks, Sierra—July 14-24. Leader, Kevin Ahern, 1863 30th Ave., San Francisco, CA 94122. Cost: \$55.

(252) Mt. Whitney Trail Crew, John Muir Wilderness, Sierra—July 24-August 4. Leader, Nick Fowler, Box 9262, Stanford University, Stanford, CA 94305. Cost: \$60.

(253) Treasure Lakes Restoration, John Muir Wilderness, Sierra—August 15-25. Leader, Kelly Runyon, 2715 Hillegass, Berkeley, CA 94705. Cost: \$55.

Cleanup Projects

(254) Mt. Massive Cleanup and Restoration, Leadville Ranger District, Colorado—July 1-11. Leader, John Kornegay, Corbett Hall, C-206, Ft. Collins, CO 80521. Cost: \$55.

(255) Seven Lakes Basin to Minam Lake Roving Cleanup, Eagle Cap Wilderness, Oregon—July 24-August 3. Leader, Don Coppock, 3931 S.E. Liebe, Portland, OR 97202. Cost: \$55.

(256) Rush Creek, Trinity Alps, Northern California—July 28-August 7. Leader, Roy Bergstrom, 6923 Colton Blvd., Oakland, CA 94611. Cost: \$55.

(257) Tenaya Canyon Airplane Wreck Cleanup, Yosemite Park, Sierra—August 7-17. Leader, Keith Proctor, 5987 Courtland Dr., Riverside, CA 92506. Cost: \$55.

(258) Granite Chief Roving Cleanup, Tahoe Forest, Sierra—August 27-September 6. Leader, Bruce Horn, Box 8990, Stanford University, Stanford, CA 94305. Cost: \$55.

(259) Little Lakes Valley Roadhead Cleanup, John Muir Wilderness, Sierra—August 28-September 7. Leader, Kelly Runyon, 2715 Hillegass, Berkeley, CA 94705. Cost: \$55.

(See trip #333, under Canoe/Kayak Trips, Rogue River Canoe Cleanup, for an additional Service Trip.)

Trail Maintenance

(34) Superstition Wilderness, Tonto Forest, Arizona—March 19-25. Leader, Rod Ricker, Box 807, Cottonwood, AZ 86326. Cost: \$55.

(260) Great Smoky Mountains Park, North Carolina/Tennessee—June 25-July 2. Leader, c/o Al Goodman, 2637 Majestic Dr., Wilmington, DE 19810. Cost: \$55.

(261) Teton Wilderness, Bridger-Teton Forests, Wyoming—July 5-15. Leader, Dave Simon, 1304

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- Todd St., Mountain View, CA 94040. Cost: \$55.
- (262) Cranberry Back Country, Monongahela Forest, Southern West Virginia—July 8-15. Leader, Dave Porterfield, Textor School Rd., R.D. 2, Box 173, Zelienople, PA 16063. Cost: \$55.
- (263) Great Bear Wilderness, Lewis and Clark Forest, Montana—July 19-29. Leader, Dave Simon, 1304 Todd St., Mountain View, CA 94040. Cost: \$55.
- (264) Two Mouth Lake, Selkirk Crest, Idaho—July 22-August 3. Leader, Tod Rubin, 302 McCarty Hall, University of Washington, Seattle, WA 98195. Cost: \$60.
- (265) Summit-to-Borum Lakes, Bridger Wilderness, Wyoming—August 1-11. Leader, Bob Korn, 120 McKay, Apts., CA 95003. Cost: \$55.
- (266) Railroad Creek, Glacier Peak Wilderness, Washington—August 6-18. Leader, Tod Rubin, 302 McCarty Hall, University of Washington, Seattle, WA 98195. Cost: \$60.
- (267) Steelhead Lake, John Muir Wilderness, Sierra—August 8-18. Leader, Kris Speer, Box 3347, Stanford University, Stanford, CA 94305. Cost: \$55.
- (268) Kaiser Wilderness, Pineridge Ranger District, Sierra—August 21-31. Leader, Keith Proctor, 5987 Courtland Dr., Riverside, CA 92506. Cost: \$55.

FOR MORE INFORMATION
 Write to the SC Outing Department for the brochure describing Service Trips or for the more detailed supplement available for each trip, using the coupon on Page 38. Trip cost includes deposit. Trips priced up to \$499 per person: \$35 deposit per individual or family application (family=parents and children under 21).

For More Details on Outings

Outings are described in the special brochures listed below which are available free of charge from the Outing Department. For more detailed information on outings, request the specific supplement on that outing. Trips vary in size and cost, and in the physical stamina and experience required. New members may have difficulty judging from the brief brochure write-ups which trip is

best suited to their own abilities or interests. Don't be lured onto the wrong one! Ask for the trip supplement before you make your reservation, saving yourself the cost and inconvenience of changing or cancelling a reservation. The first five supplements are free. Please enclose 50¢ apiece for extras. Write or phone the trip leader if any further questions remain.

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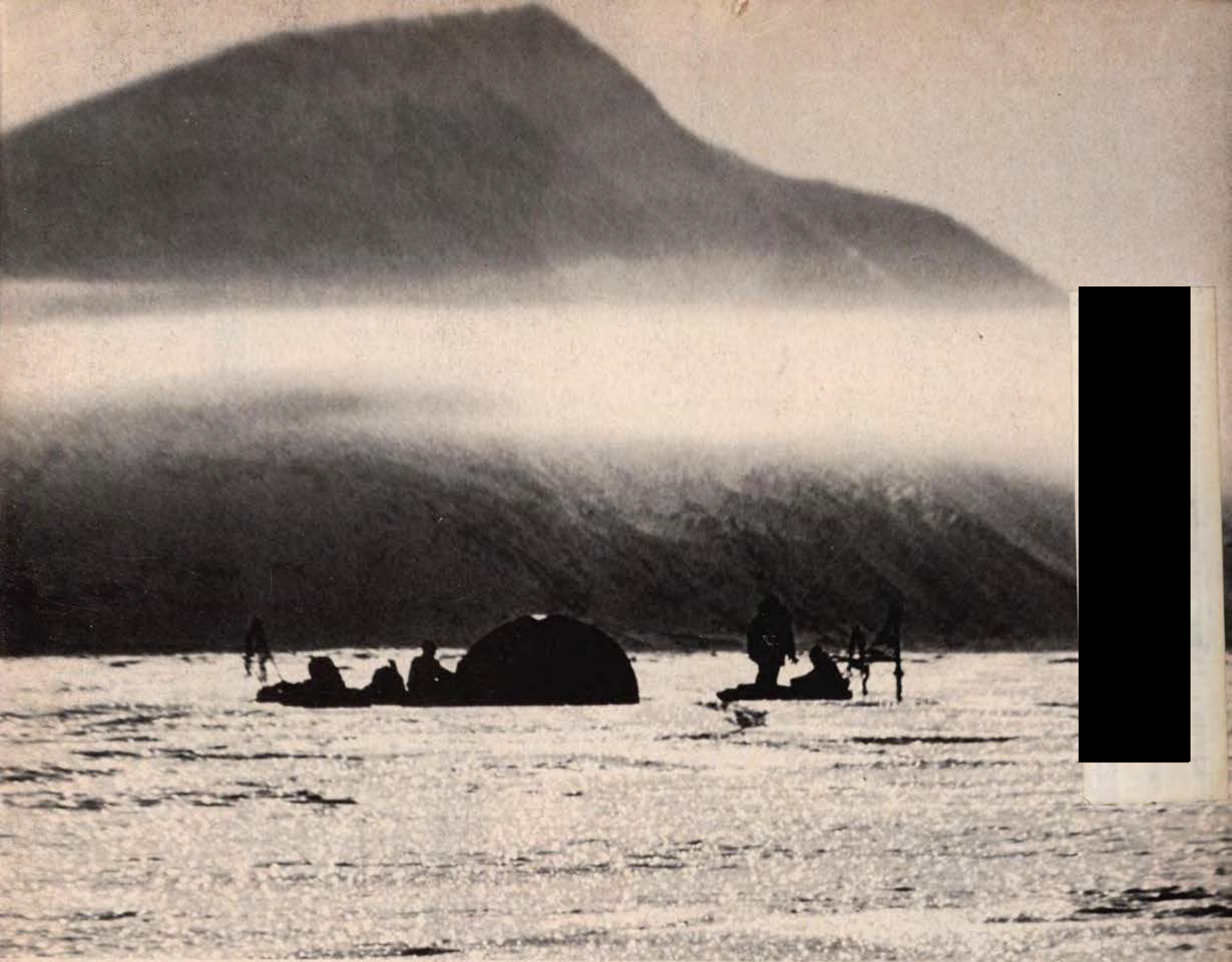
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