SIERRA THE SIERRA CLUP

Alaska: How They Voted in the House A Success at Boston Harbor Fluorocarbons on Trial

ENVIRONMENTALISTS CAN GIVE A CAR COMPANY SOMETHING BESIDES A

Not long ago, a panel of distinguished environmentalists gave Volvo an award: the National Environmental Industry "Award for Excellence" in air pollution control.

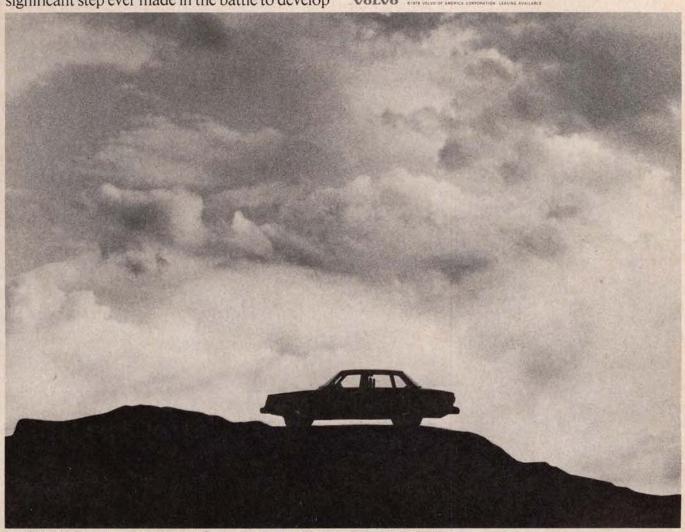
This award was presented to Volvo for the development of an automobile emissions control system which the California Air Resources Board has called "...virtually pollution-free...the most significant step ever made in the battle to develop clean automobiles."

This system is called "Lambda-sond."™And many of our 1978 Volvo sedans and wagons are equipped with it.

So if you're in the market for a new car this

year, give some thought to a Volvo.

Compared to most other cars you could buy, it's a breath of fresh air.



VOLVO. A CAR YOU CAN BELIEVE IN.

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."

Directors

Theodore Snyder President Joseph Fontaine Vice President Ellen Winchester Secretary Denny Shaffer Treasurer Richard A. Cellarius Fifth Officer Phillip S. Berry Mark G. Hickok Helen K. Burke Leslie V. Reid Richard Fiddler Nicholas A. Robinson Marty J. Fluharty Lowell Smith Kent Gill Edgar Wayburn

Regional Vice Presidents

Howard Saxion
Edward Easton III
Doris Falkenheiner
Ruth Frear
Jake Miller

Norman E. Nelson
Michele Perrault
Roger Pryor
Susan Steigerwalt
Peter Wyman

Michael McCloskey Executive Director

SIERRA Staff

Frances Gendlin
David Gancher
James Keough
Gene Coan
Carey Charlesworth
Vivi Lazarus
Richard Dinihanian

Editor
Managing Editor
Manuscript Editor
News Editor
Editorial Assistant
Advertising Manager
Art Director

United States offices: Alaska: 545 E. 4th Ave., #5, Anchorage. AK 99501/New York & International: 800 Second Ave., New York, NY 10017/Legal Defense Fund: 311 California St., San Francisco, CA 94104/Midwest: 444 West Main. Madison. WI 53703/Northwest: 4534½ University Way NE, Seattle, WA 98105/Southern California: 2410 Beverly Blvd., Los Angeles, CA 90057/Southwest: 338 East DeVargas, Santa Fe, NM 87501/Washington, D.C.: 330 Pennsylvania Ave., SE, Washington, D.C.: 20003/Wyoming and Northern Great Plains: Box 1078, Lander WY 82520.

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.

Sierra, published monthly, with combined issues for July-August and November-December, is the official magazine of the Sierra Club, 530 Bush St., San Francisco, California 94108, (415) 981-8634. Annual dues are \$20 of which \$3.00 is for subscription to Sierra. (Nonmember subscriptions: one year \$8.00; three years \$20; foreign \$10: single copy \$1.00) Second-class postage paid at San Francisco, California, and additional mailing offices. Copyright © 1978 by the Sierra Club, Publication number 495920. No part of the contents of this magazine may be reproduced by any means without the written consent of Sierra.

Change of address should be sent to Sierra Club Member Services, 530 Bush St., San Francisco, CA 94108. Along with your old and new addresses, please include an address label from a recent issue, if possible.

Editorial and business offices: 530 Bush Street, San Francisco, CA 94108. Unsolicited manuscripts must be accompanied by a stamped, self-addressed envelope.

Advertising: General Advertising East and Midwest: Erwin Baker and Associates, 20 Evergreen Place, East Orange, NJ 07018, (201) 673-3950." Ecology Sports East: William H. Fields III, 22 Montgomery St., Boston, MA 02116, (617) 262-7532. Pacific States: Cindy Anderson, 97 Clark St., San Rafael, CA 94901, (415) 454-1862. Mountain States and Midwest: Jean K. Olin, 655 South 44th St., Boulder, CO 80303, (303) 499-3018.

SIERRA THE SIERRA CLUB BULLETIN

SEPTEMBER 1978

VOLUME 63/NUMBER 7

6 Alaska in the House How They Voted

Staff Report

8 In Peril: The Atchafalaya Basin

Charles Fryling, Jr.

10 The Fluorocarbon Controversy Who Has the Burden of Proof?

Lydia Dotto and Harold Schiff

14 Influencing the Public Works and Transportation Committee

Samuel H. Sage

15 1979 Foreign Outings

20 A Conversation with Jim Whittaker and Dianne Roberts

Frances Gendlin

29 A Picture of Our Annual Meeting

Ron Sugiyama

34 Edward Taylor Parsons Memorial Lodge

Elizabeth S. O'Neill

36 Revival of a Wasteland

The Boston Harbor Islands State Park

Leanne Cowley

Departments

4 Letters to the Editor

A Sea-Level Canal The Impact of Outings

Harry Loughlin George Smith

5 Editorial

Some Good News to Spread

Michael McCloskey

42 News

Supreme Court's nuclear decision; Parks bill passes; Political education; RARE II; Nuclear liability; Snail darter; National water policy

44 For Younger Readers

Why I'm a Snake-Lover

Barbara Brenner

46 Books

Brief Reports

Staff Report

48 The Observer

Robert A. Irwin

Cover: Clematis blossoms in Sausalito, California. Photo by Richard Dinihanian.

A Sea-Level Canal

I am somewhat confused by an article in Sierra that opposes a sea-level canal in Panama on the grounds that the sea life of the Atlantic and the Pacific are dissimilar and mixing the two could create damage. I accept this as a possibility. In view of the tremendous benefit such a canal would confer, I think this calls for clarification—and a reasonable explanation of what the environmental damage would be.

The points I would like to have examined include the effects on the two oceans of passage of barnacle-encrusted ships, of the Chugres River water flushing both ways from the locks, of the slight difference in latitude and longitude, of climatic conditions, and of the waters of the Atlantic and Pacific mingling at both ends of the continent. Also, what are the effects of passage of sharks, whales and other sea life from ocean to ocean and the impact of the Suez Canal on the Mediterranean Sea and the Indian Ocean? Wouldn't the impact of a sea-level canal be minimized by the vastness of the seas and the proportionately small amount of water passing through the canal, and by opposition of the ocean's tidal action?

> Harry Loughlin Haledon, New Jersey

Nicholas Robinson replies:

Extensive studies by our National Academy of Sciences, the Smithsonian Institution and others document problems ranging from the loss of endangered species that Canal Zone Development may cause to the ecological disturbances that a mix of Atlantic and Pacific waters can cause. The Final Environmental Impact Statement on the treaties is available from the State Department and makes a start at outlining these and other issues. Interested Sierra readers may wish to request a copy. The FEIS is available from William Mansfield, Office of Environmental Affairs (Room 7820), Department of State, Washington, D. C. 20520.

In the wake of the Senate's vote to ratify the Panama Canal treaties, Sierra readers have raised several other interesting conservation questions. My Sierra essay of April 1978 outlined why environmental protection in Panama bears directly on health, conservation and the ecology of Canada, the United States and other countries. The Sierra Club board of directors urged ratification at its January meeting, and President Carter has written personally to our Washington representative, Brock Evans, thanking the Club for its help.

Where does the treaty go from here?



The U.S. and Panamanian presidents exchanged formal documents of ratification and the treaties have become effective. Within a short time, the Joint Environmental Commission required by the treaties must be established. The U.S. members must be nominated; among them, environmentalists and a scientist. Relevant literature must be searched and analyzed to consolidate existing environmental knowledge and to determine further research needs. Plans must be designed for soils conservation and tropical forestry protection. Staffs and consultants must be arranged for, budgets drawn, administrative details examined.

Since the Joint Environmental Commission was added to the treaty in "eleventh hour" negotiations, all aspects of its implementation remain to be decided. U.S. participation in the commission must be provided for through legislation and executive orders.

The Impact of Outings

The Lone Star Chapter is concerned about the apparent new direction being taken by the Club's outing program in sponsoring highly mechanized trips such as the "driving-hiking adventure" to Baja (#722) and the use of rented cars in

The Sierra Club's role in society has changed since the 1890s, when the stated purpose of the outing program was to inform people about the existence and natural values of wilderness areas. Today the public is well aware of wilderness areas and visits them in hordes; a legitimate concern of the Club now must be the protection of these areas from overuse. In addition, the scope of the Club's activities now encompasses more than the protection of wild areas; many of our activities deal with various problems related to energy. The National Energy Act, with its emphasis on energy conservation, was recently adopted for one of 1978's major campaigns by the Club's board of directors.

With this in mind, the Lone Star Chapter believes the direction of the Club's outing program must be carefully reevaluated to reconcile it with primary Club purposes. At the very least, all trips should be of a nonenergy-intensive nature. It would further seem that the Club's goals could be best promoted by trips that have education, research, cleanup or trail maintenance as a primary emphasis.

> George Smith Chairman, Houston Group Houston, Texas

Outing Committee Chairman John Ricker replies:

The national Outing Committee appreciates the concern of the Lone Star Chapter about the use of vehicles on outings. In planning outings we try to achieve a balance between the safety and comfort of the participants and allowing them to enjoy a variety of natural and wild areas, while using the best techniques of travel and camping appropriate to the area visited. This balance is not easy to achieve, and honest differences about how well it is achieved are understandable.

The national Outing Committee has taken the lead over many years in developing new types of outings and in working with our leaders and concessionaires to minimize the impact of our outings on the areas they visit. We have sponsored academic research on the impacts of outings. A major report on this subject was published in June 1978. We are concerned with both physical and psychological impact. Therefore, we have reduced the size of our outings and dispersed them into many different areas. Conservation, education and cleanup are a part of every national outing to some degree.

The specific trips you mention constitute less than 2% of our outings. These are not the only national outings into either Baja California or Hawaii. Particular attention has been directed, as you know, to verifying that these outings use techniques appropriate to these areas and that vehicle use is confined to point-to-point transportation on regularly used roads. We feel that these are appropriate outings for our less physically capable members and for those with limited time who want a wide sampling of these outstanding natural areas.

We continue to review all of the national outing program to ensure that it meets the needs of a wide spectrum of our members and is consistent with the purposes and policies of the Sierra Club. We are glad to receive comments that will assist us in that review.

Some Good News to Spread



Some of the Carter Administration's new inflation fighters have adopted the theme that environmental programs cost too much. These advisers have called for a slowdown of EPA's cleanup programs and a speedup of Forest Service timber sales.

While these moves were undoubtedly prompted by interested industries, they reflect the all-too-

common misconception that environmentalism is incompatible with economic efficiency. We need to take pains to point out that this is not at all the case.

Many environmental programs add positive values to the economy. Some cut operating costs; some improve technical efficiency; some raise levels of public health and cut worker absenteeism and turnover rates. Some sustain levels of productivity in the natural resource base; and others promote new businesses and jobs.

Examples can be drawn from almost every area of environmental activity.

Energy:

- The push for more fuel-efficient autos reduces oil consumption, cuts driving costs and reduces air pollution.
- Insulating and weatherizing homes cuts utility costs and reduces energy consumption.
- By pursuing soft-energy paths, capital costs may be cut by two-thirds or more, thus reducing inflationary pressures.

Transportation:

- Mass transit reduces commuting costs and encourages more fuel-efficient transport.
- More bicycle paths and places for running and walking will promote exercise and reduce the rate of heart attacks, thus holding down medical expenses.

Urban Design:

- More compact urban design with less sprawl saves residents money; multifamily housing costs less, commuting costs are reduced, and less land, water and energy are needed to develop such housing.
- Rehabilitating older dwellings reduces both construction costs and pressure on natural resources for new materials.

Agriculture:

 Preserving prime farmland and preventing soil erosion hold down prices because agriculture is not forced onto less productive sites.

Pollution:

- Many pollution control programs are expensive, but there is sufficient reason to believe that the economic benefits of these programs as a whole exceed their costs. More than one million new jobs and hundreds of new businesses have been created by these programs.
- Air quality has improved by about 30% around the country since 1970 as a result of federally mandated programs; thousands of illnesses and deaths have been avoided. Medical expenses have been reduced, and there is less absenteeism and turnover in the work force.
- Further success in programs to discourage smoking and to remove toxic substances from food and other products will also reduce medical expenses and help maintain the health and productivity of the work force.

Wild Rivers:

 Most of the economically justifiable sites for water projects have already been developed. In opposing new dams with marginal benefit-cost ratios, we are preventing wasteful allocation of economic resources. We may also be saving wild rivers that are worth more in their natural state.

Forestry:

- In urging sustained yield, we are trying to maintain the economic base of many timbering communities and to prevent "cut and get out" tactics. Increasing the cut in the national forests will only rob the future while ruining the environment.
- Environmentalists have pointed out that many timbering sites are actually too marginal to sustain forestry. They would never produce an adequate rate of return for a business and ought to be removed from the timber base.

The list could go on and on. Indeed, many environmentalists have argued that greater economic rigor in government policies will promote better protection of the environment. They have urged an end to subsidies (which will reduce the tax burden) and less regulation in the fields of energy and transportation.

It would not be accurate to argue that environmentalism, as such, is designed to promote economic efficiency. But coincidentally much of contemporary environmentalism moves in that direction; crippling environmental protection will not curb inflation.

Indeed, we need to do more to make sure that Americans understand that their paychecks are likely to go farther as a result of environmental programs. Even with the problems of inflation, we have some really good news to spread.

-Michael McCloskey

Alaska in the House How They Voted

STAFF REPORT

On May 19, the House of Representatives passed H.R. 39—the Alaska National Interest Lands Conservation Act, which could preserve more than 100 million acres in a variety of national conservation systems. The vote was impressive: 277 to 31, or a ratio of 9 to 1 on final passage. The Meeds amendment, which would have cut half of the 66 million acres of wilderness acreage, was defeated by a vote of 119 to 240.

The following table includes the full House votes on the critical issues during the House debate. These were—as was stressed to each House member—"the land and wildlife conservation votes of the century."

Now it is time to follow up on these important votes. We urge that Club members make a special effort to thank House members who consistently voted for a strong Alaska bill. Individual thank-you notes, chapter or group resolutions of appreciation (with local press coverage) would all be appropriate ways of showing conservation supporters in Congress that their efforts are noticed—and appreciated.

The Votes

- 1 The "rule" to allow the House to consider H.R. 39. Approved on May 17 by a vote of 354 to 42.
- 2 The Young amendment to delete 4.5 million acres of key areas from proposed parks and refuges. Defeated on May 18 by a vote of 141 to 251.
- 3 The Meeds amendment to cut H.R. 39's total wilderness designation in half, from 66 million to 33 million acres and to eliminate wilderness designation of all areas in the Tongass National Forest. Defeated on May 18 by a vote of 119 to 240.
- 4 The Young motion to recommit (return) the bill to committee with mandatory instructions to send back the much weaker

- "Meeds substitute" in its place. Defeated on May 19 by a vote of 67 to 242.
- 5 Final passage of H.R. 39. Approved on May 19 by vote of 277 to 31 (126 members were absent owing to the Friday session).

Legend

- + vote for conservation
- vote against conservation
- * cosponsor of H. R. 39
- a absent (not present or didn't vote)
- a* absent, but has publicly indicated a conservationist position on the vote
- a⁻ absent, but has publicly indicated an anticonservationist position on the vote.

	i	2	3	4	5
Alābama					
Bevill	a	+	+	8	18
Buchanan	+	+	+	+	+
Dickinson		-	-	-	4
Edwards	+	+	-	-	+
Flippo	+	#	+	+	+
Flowers	+	+	+	+	+
Nichols	:#3		-	*	*
Alaska	Ħ			=	T
Young	540	*		-	-
Arizona					
Rhodes		-			+
Rudd	-	9	120	2	6
Stump	1	-	-	-	1
≙Uda11	+	*	+	+	
Arkansas					
Alexander	+	+		+	*
Hammer schmidt	+	-	-	*	+
Thornton	a	a	a	a	ā
Tucker	a	a	a	a	a
California	H			i	
Anderson	+	+	+	+	+
Badham	-	а	a	a	a
Beilenson	+	+	a'	a°	a
Brown	+	+	+	+	+
Burke	a	a	a	a	0
Burgener	+	-	-	+	+
Burton, J.	+	+	+	+	+
*Burton, P.	14	+	+	+	+

1 2 3 4 5 Clausen Clawson *Corman #Dellums *Edwards Goldwater # Hawkins Ketchum Lagomarsino Leggett Lloyd McCloskey McFall Miller Mineta Moorhead Moss *Panetta Patterson Pettis Rousselot Roybal Sisk *Stark *Van Deerlin Wiggins Wilson, B. Wilson, C. Colorado Armstrong

1 2 3 4 5 Johnson Connecticut Cotter Glamo *McKinney Delaware + + + + + Florida Bafalis Burke Chappell Fascell Frey Gibbons Kelly. a. Pepper Young Georgia Barnard + + + + +

1 2 3 4 5 Brinkley Flynt Fowler Ginn Jenkins Levitas McDonald Mathis Hawaii Akaka Idaho Symms Illinois "Anderson Annunzio Corcoran Derwinski Erlenborn Fary Findley Hyde McClory Madigan Metcalfe Michel Mikva Murphy Price

The Atchafalaya Basin

Swamp Treasure

Text and Photos by CHARLES FRYLING, JR.

eep in the heart of Louisiana lies one of the great natural resources of the South, the Atchafalava Basin. The Atchafalaya River is the principal distributary of the Mississippi-water flows out of the Mississippi and into the Atchafalaya River. Short, deep and fast, the Atchafalaya begins near the confluence of the Red, Old and Mississippi Rivers near Simmesport, Louisiana, and on its way to the Gulf of Mexico, about 140 miles away, forms the nation's largest river-basin swamp-13,400,000 acres of wetlands, bottomlands, cypress swamp, lakes and bayous. Seventeen miles wide at its narrowest point, the Atchafalaya Basin is the only major outlet for the Mississippi's flood waters to overflow; Baton Rouge, New Orleans and the entire lower Mississippi Valley depend on the floodway in times of high water. Drainage, leading to development growth in the Basin (which has already occurred in some areas), seriously threatens the effectiveness of the floodway in times of emergency.

The Atchafalaya Basin is also an important economic and recreational resource: it is rich in oil, gas and timber. Acre for acre, pound for pound, the Achafalaya produces more fish-both game and commercial-than any other natural water system in the U.S. and is rich in other wildlife-alligators, fur-bearing animals and birds.

Will the Atchafalaya stay wet and wild, or will it be dredged and drained? After years of controversy surrounding its channelizing and dredging projects, the Army Corps of Engineers suspended its destructive activities in 1971 and restudied the situation. Now there is a plan to keep the great swamp the way it is, the Multi-Purpose Plan, developed jointly by state and federal agencies (including the Army Corps of Engineers!) and citizen groups. The Club supports this plan, which has come under attack by landowners who want to make a profit at the public expense of channelizing and draining the Basin. This fall the Corps will hold hearings on the future of the Basin-and environmentalists expect private interests to exert pressure on the Corps to revive its old "drain the basin" plan. The Multi-purpose Plan must have citizen support-your support-if it is to succeed.

Charles Fryling, Jr. represents the Louisiana State University School of Environmental Design on the Atchafalaya Environmental Impact Statement Steering Committee, and is a member of the Club's Land Use Committee.





Left: A common egret feeding in a shallow marsh. More than 300 species of birds use the basin at some time during the year

Right: Each spring, nutrient-rich waters flood the Atchafalaya Basin; in the summer and fall, the swamp "de-waters" -the flood waters run out of the swamp and back into the watercourses that lace the basin. This cycle ensures the high fertility of the marsh ecosystem, while sediments gradually form a rich new delta.

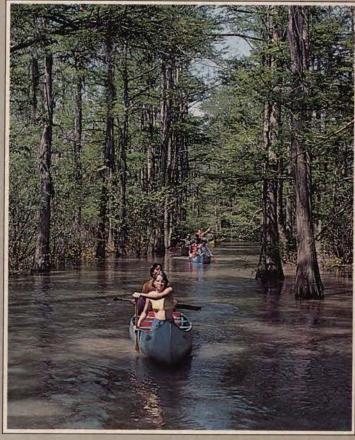
Far Right: The high-water line on this Baldcypress trunk is vivid evidence that the Atchafalaya is the most important floodway in Louisiana, diverting Mississippi spring floods before they would reach Baton Rouge and New Orleans.



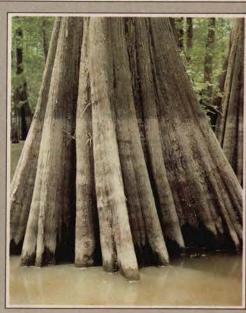
Right: The Atchafalaya Basin is Cajun country, where crawfish are very important. The red swamp crawfish (procambarus clarki) is the main ingredient in "crawfish boil"—one of the epicurean highlights of the good life in southern Louisiana. The basin yields an annual average of 23.5 million pounds of the crustaceans.

Center Left: If the Multi-purpose Plan is implemented, the important backwater lakes-such as this one, near Bayou Sorrel—will still be nourished and replenished by high water but will not be rapidly filled with waterborne silt or drained by channelization of the Atchafalaya River. Below: The Atchafalaya Basin is within an hour's drive of two million Louisianians; this recreation resource is valued at \$36 million annually. Here, a party of canoeists enjoy Cannon Bayou.









Fluorocarbon Controversy Who Has the Burden of Proof?

The scientific controversy over fluorocarbons and spray cans is not over, but it is now widely accepted that fluorocarbons (actually chlorofluorocarbons; also known as Freon) used as propellants in spray cans gradually rise to the stratosphere, where they are broken down by the sun to produce chlorine. The chlorine, in turn, causes a reduction in the stratospheric ozone shield that protects the earth from harmful levels of ultraviolet radiation. The potential consequences of increased radiation are grim: a variety of biological effects in food chains and crop vields, climatic changes and increases in the incidence of some types of skin cancer.

A National Academy of Sciences report, issued in 1976, stated that emissions from aerosol and industrial uses of some fluorocarbons were causing a reduction in stratospheric ozone. And in early 1978, the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA) announced regulations that would ban almost all manufacture of aerosol products that use fluorocarbons as propellants. This sweeping ban will not, however, have a drastic economic effect since most companies manufacturing fluorocarbon-propelled spray cans, seeing the handwriting on the wall, have already cut back dras-

But there is more to this controversy than science or economics. The following article examines the philosophical basis and implications of the ban on fluorocarbons-and the sometimes tenuous relationship between scientific innovation and the health of society. -The Editor

LYDIA DOTTO and HAROLD SCHIFF

Excerpted from The Ozone War, by Lydia Dotto and Harold Schiff (\$\sigma 1978), to be published by Doubleday & Co., Inc., in September. All rights reserved.

THE FLUOROCARBON controversy was more than just a dispute over whether certain kinds of chemicals should be L used as spray can propellants. It was a particularly illuminating example of an increasingly common dilemma that faces society today—how do we cope with threats to the environment whose effects we cannot predict with certainty, but whose consequences may be extremely serious? There would be little problem if we could be certain of the consequences, but science cannot give us a simple yes-or-no answer—on the fluorocarbon problem or on any number of equally complex social problems resulting from our reliance on technology.

Of course, lack of certainty cannot be translated into lack of action—not anymore. Maintaining the status quo is doing something. It is a decision by default, but a decision nonetheless. So, if we must decide in the face of substantial scientific uncertainty, we can turn to a method we understand-one that has served us well. The trial.

The environmental trial is still in nascent form. The rules of the game have not been entirely worked out, and the process is not totally formalized as it is in a court of law. The roles of judge, jury and attorneys—and who should play them—have not been clearly spelled out. Nevertheless, the fluorocarbon debate had many elements of such a trial, and there was none so pervasive as the question of burden of proof. Here again is a question that applied to a much broader range of issues, but the fluorocarbon debate provides an enlightening case study.

When you ask which side has the burden of proof, you are really asking whose job it is to persuade a judge that one side is correct. In the fluorocarbon case, the question can be put thus: Should industry be allowed to continue producing fluorocarbons until it is proved that the chemicals are, in fact, destroying ozone? Or should production and use of the chemicals be banned until industry can prove they are not destroying ozone? The issue is more than mere philosophical debate; should the balance scales turn out to be very nearly even-should neither side be able to gain a clear victory—then the one who has the burden of proof loses.

Industry spokesmen have been fond of comparing the "trial" of fluorocarbons to that of a person in a criminal trial. They point out that in a criminal trial the accused is considered "innocent until proven guilty" and protest, often in tones of righteous indignation, that the rules should be no different for fluorocarbons. "Innocent until proven guilty," they assert is a fundamental principle of our legal system, and they sometimes act as though the underpinnings of justice are being menaced and even subverted by the suggestion that perhaps it is up to them to provide some reasonable assurances that the chemicals they manufacture are not harming the ozone layer that belongs to us all.

The analogy with the criminal trial is questionable. The fluorocarbon dispute can be more appropriately likened to a civil trial where the premise "innocent until proven guilty" does not unfailingly apply. But even allowing the analogy with the criminal trial, one can question whether the underpinnings of justice are indeed being menaced by the suggestion that the burden of proof rests with industry. It is surprising to discover that the underlying principle in the criminal trial is not "innocent until proven guilty." This premise is the result of recognition that the law is an imperfect, uncertain instrument—that mistakes can be made. So the basic question is: If we make a mistake, which error would have the most serious consequences-which would carry the greater risk for society? Specifically, would it be a greater error to allow a guilty person to go free or to convict an innocent person? As a society, we have made the judgment that the greater risk and the most serious consequences would result from convicting an innocent person. Hence the concept: "Better to let [ten] guilty men go free than to convict one innocent man." The result is that the state bears the burden of proving guilt, and the accused is therefore presumed innocent until proven guilty.

When we apply this same reasoning to the fluorocarbon case,

Regulatory officials concerned with the fluorocarbon issue very clearly adopted the position that the burden of proof rests with industry,

we find there are two types of errors that could be made. The first is that we might judge the ozone layer to be in danger when in fact it is not. The other is that we might judge the ozone layer not in danger when in fact it is. Which of these errors poses the greater risk for society as a whole? Clearly, the second. And this, of course, is precisely the error we risk making if we adopt industry's wait-and-see position. Thus, the burden of proof should rest with industry; it must show that the chemicals are not harming the atmosphere.

Having arrived at that conclusion, we must then ask what standard of proof should be required. In a criminal trial, because the consequences are so serious and because criminal sanctions will apply, the state must prove its case beyond a reasonable doubt. In civil cases, the consequences are usually considered less serious, and the standard is lower—it is the preponderance of evidence or the balance of probability. Since the procedures of an environmental trial have not yet been precisely formalized, it is not clear which standard would apply. Of course, in an environmental trial, no criminal sanctions are applied, so the less stringent standard of the civil trial seems more appropriate.

Regulatory officials concerned with the fluorocarbon issue very clearly adopted the position that the burden of proof rests with industry. For example, Wilson Talley, assistant administrator of the Environmental Protection Agency, said just two days after the release of the National Academy of Sciences fluorocarbon report that it is not acceptable to postpone decisions indefinitely while waiting for better data to come in. Demanding scientific certainty before acting would mean waiting for actual "body counts" to prove that a danger exists. Mr. Talley concluded, "I am convinced that the public interest demands precautionary environmental regulations, based on the best data available, early enough to assure that no such 'body counts' are ever needed."

There were two other aspects of the fluorocarbon issue that made the regulatory problems even more difficult. They are not unique to this controversy, but, again, the fluorocarbon case provides a good illustration. The first problem has to do with regulating activities whose harmful effects may not become apparent for a considerable period of time; the second, a related issue, is the problem of obtaining informed consent from those who must assume the risks.

The total effects of ozone depletion by fluorocarbons already in the atmosphere have not yet occurred. The impact to date is below measurable limits. Moreover, once the impact does become measurable, the situation will necessarily get worse for some considerable time thereafter. Thus, said Russell Peterson, former head of the Council on Environmental Quality, "the decision-maker must—as soon as he has reasonable assurance that the predicted effects will occur—consider the potential future effects as if they were taking place in the present The decision-maker may not be able to wait for a measurement of the effects."

The issue of informed consent is problematic in this context.

The concept arose first in connection with scientific and medical

experiments involving human subjects. Such experiments are now rigorously controlled, and researchers must demonstrate that the proposed use of human subjects is essential to the experiment and must then fully inform subjects of the risks they face and the possible benefits that might accrue to themselves or society as a result of their participation in the experiments. This requirement is grounded in the philosophy that those who are at risk must understand the nature of the risk and voluntarily assume it. It is this principle that the aerosol industry so blithely ignored in arguing that a .5% ozone depletion entailed no greater risk than moving 35 miles nearer the equator. Moving 35 miles nearer the equator would be a voluntarily assumed risk; living with a .5% global reduction in ozone would be a condition imposed without choice.

Science can help us to understand the nature of the risks we face, but it cannot tell us whether or not we should assume them. This is a value judgment, and it depends critically on the extent to which we are gamblers, both individually and collectively. It is certainly true that we live every day with risks that we have not voluntarily assumed. It is also true that we cannot have a zero-risk world. But it is clear, in this country at least, that people are increasingly concerned about their right to assess the nature and degree of risks that they are forced to accept—particularly when only a small number of those who bear the risks stand to profit from them. A reader of *Business Week*, L. A. Freeman, once put it this way: "... no one expects to live a life completely free of risk. But we all have a right to expect protection against being involuntarily used to generate private gains for others at the unknowing risk of our lives."

And what of the informed consent of those not yet born? The full environmental effects of fluorocarbons may not be felt for decades and may continue for a century or more. Thus, many of those who will be affected cannot choose to take the risk, as people can today by choosing to use spray cans containing fluorocarbons. (The problem of storing long-lived radioactive wastes confronts us with a similar ethical dilemma.)

Some industry spokesmen chose not to express the burdenof-proof question in "innocent until proven guilty" terms. They put the issue this way: Rowland and Molina-scientists who theorized that fluorocarbons were dangerous—have presented a scientific hypothesis. The burden of proof is theirs to show the validity of their hypothesis, using the normal scientific method. This was indeed a legitimate point. Who could argue that Rowland and Molina—and, by extension, the entire scientific community—did not have a responsibility to verify the theory? Certainly, Sherry Rowland accepted this, although he did point out that industry's contention was "just hypothesis too. They have the hypothesis that it is safe to release fluorocarbons, but no data to back up their position. We have a hypothesis that it is unsafe, but we do have some scientific data and are coming up with more." Nevertheless it would be unfair to allow mere accusation to shut down an entire industry. There are always environmental extremists who are simply anti-industry, but responsible participants in the fluorocarbon debate who felt that

It is surprising to discover that the underlying principle in the criminal trial is not "innocent until proven guilty."

the burden of proof ultimately rested with industry were not calling for lynch mob tactics—conviction and execution without trial—they were simply contending that if the trial did not prove fluorocarbons innocent, then the chemicals had to be banned.

All of this poses a problem: If the best current knowledge indicates that a certain technology will cause an environmental threat, should scientists "blow the whistle" on it, even if their knowledge is not complete? If uncertainties remain, should scientists suggest that a project such as the advanced SST be aborted, or that a commercial enterprise such as the manufacture of spray cans with fluorocarbon propellants be abolished?

This is never an easy decision, but it should always be remembered that the uncertainties can cut both ways. One must not jump to the conclusion that resolving the uncertainties will cause a problem to go away and that scientists are therefore alarmists if they call attention to a problem before those uncertainties are resolved. It is also possible that, when the uncertainties are narrowed by further research, the problem will turn out to be greater than originally predicted.

In one respect, the ozone controversy provided an excellent illustration of this concept. Remember that, in mid-1977, new measurements and calculations resulted in a significant reduction in the predicted impact of SSTs, but also resulted in a significant increase in the predicted impact of fluorocarbons. The fluorocarbon case alone is a classic example. New measurements carried the estimates back and forth several times, and this may continue in the future.

These new calculations provoked a chorus of I-told-you-so's from SST proponents. It can be argued, of course, that pronouncing the SST safe before the problem is studied is quite a different matter from doing so afterwards, but a certain touch of defensiveness is understandable when having to explain why the early predictions were, apparently, so wrong. Since that explanation may be difficult for the nonscientist to accept, it would not be surprising if scientists increasingly were tempted to duck the responsibility of giving political advice on issues like the

In the Future . . .

espite the United States ban on fluorocarbonpropelled spray cans, the threat of ozone depletion remains significant. Foreign manufacturers produce 55% to 60% of chlorofluorocarbons worldwide. Moreover, other nonaerosol uses of chlorofluorocarbons in the U.S. are still unregulated; there are no rules regarding the recycling or recovery of closed-cycle uses of these chemicals. The EPA will, however, propose regulations regarding these other uses by August 1979. Meanwhile, research continues into other possible causes of ozone depletion, such as nitrogen oxides, methyl chloroform and bromofluorocarbons.

ozone controversy. But their advice—however tentative it may have to be—is needed and will probably be demanded by society. It would appear that scientists really have no choice but to offer that advice on the basis of the best information available at the time, with all the pitfalls entailed.

The fluorocarbon issue has been frequently mentioned as a possible case to be tried by a formal science court. In its most recent incarnation this familiar concept has been vigorously pushed by Arthur Kantrowitz, chairman of Avco Everett Research Laboratory Inc. In 1976, Kantrowitz headed a task force of a presidential advisory group that studied the science court idea.

According to the task force report, the science court would work like this: Once the issue was defined, "case managers"—people scientifically qualified to argue opposite sides of the case—would be chosen. Essentially, they would be prosecuting and defense attorneys. Judges would be chosen from a list of "unusually capable scientists having no obvious connection to the disputed issue." The judges would have to be accepted as qualified and impartial by both case managers. In addition, a referee would ensure that proper procedures were followed in the trial. The two case managers would each prepare statements of scientific fact about the issue; speculation and "iffy" statements would be forbidden. These statements would then be exchanged, and each side could challenge the other's statement. Challenged statements would be subject to an adversary procedure; the case managers would cross-examine each other before the judges. The judges would then issue an opinion on the validity of the disputed statements, outlining the margins of error if necessary. This opinion, together with undisputed statements of fact, would constitute the court's report. The court would deal only with questions of scientific fact; it would not consider social, political or economic factors, and it would not make value judgments or recommend what society should do about the problem. In other words, the court would do what the National Academy of Sciences panel did in assessing the scientific data and uncertainties (although the panel went a step further and did a lot of independent work on the problem), but the court would not do what the academy committee did-recommend a delay in regulations.

One fundamental question is whether the adversary process, in its legal sense, is appropriate to the resolution of scientific issues. As National Academy of Sciences president Philip Handler remarked in a New York Times Magazine article, a science court must be "absolutely free of the chance of some Perry Mason-like figure getting a chemical 'off the hook.'" A related question is whether courtroom procedures would be acceptable to scientists. In some trials, particularly civil ones, a lawyer will, if he can, prevent information damaging to the client from coming to light; the lawyer will certainly not volunteer such information. It seems clear that scientists would never sanction an adversary procedure that condones suppression of scientific data as a means of convincing a jury.

A second question is whether the judge and jury in a science

And what of the informed consent of those not yet born? The full environmental effects of fluorocarbons may not be felt for decades. . . .

court should be composed of scientists who have "no obvious connection to the disputed issue." While this is clearly imperative in, say, a murder trial, it is not obvious that this would be the best course to follow in an environmental trial. It would, of course, be necessary to avoid choosing scientists with obvious vested interests, but totally uninvolved scientists might not have the requisite expertise. Scientists with no direct involvement in or knowledge of the relevant fields of science would be reduced to sifting through the arguments of adversaries; their judgments might be based in large part on the persuasive rhetoric and debating skills of the adversaries, rather than on the scientific facts.

In choosing its fluorocarbon panel, the National Academy adopted a moderate strategy. Half the members were scientists who were respected in their own fields but whose work had not been directly related to stratospheric chemistry or the ozone problem. The other half were scientists whose previous research was directly related to the ozone problem, but who had not publicly committed themselves to a political position regarding

the regulation of fluorocarbons. This is a model that a future science court might well emulate.

Perhaps the most fundamental question regarding the science court is whether it is even needed. Do we really need another, inevitably bureaucratic, institution to help us solve these problems? Will the congressional hearings and the National Academy studies—not to mention those done by other scientific organizations and the regulatory agencies—suffice? If not, can existing institutions be modified or changed to meet this need more effectively?

We do not have the answers to these questions. What is clear, however, is that as a society, we must begin to question whether our existing social and political institutions can cope with the new breed of environmental dilemma. The fluorocarbon problem is just one example; others—genetic engineering, nuclear power-already abound, and there seems little doubt that the future holds many more. How will we decide which way to proceed when confronted with uncertain hazards? How much are we willing to gamble?





Influencing the Public Works and Transportation Committee

SAMUEL H. SAGE

THE SIERRA CLUB has, over the years, focused a good deal of its Washington effort on the Interior Committee of the House of Representatives. Partly as a result of intense lobbying efforts, this committee has switched from general antagonism toward environmentalism to greater support for environmental protection. In the current Congress, the Interior Committee, chaired by Representative Morris Udall of Arizona, is taking the lead on many important issues.

An increasing share of legislation on the Sierra Club priority list falls, however, under the jurisdiction of another House committee-the Committee on Public Works and Transportation, currently chaired by Representative Harold "Biz" Johnson of California. This is the committee where most pork barrel projects originate. This is the committee that deals with mass transit and the Highway Trust Fund.

Specific measures of Club concern that have gone through the House Public Works and Transportation Committee include the Urban Mass Transit Act, the Federal Highway Act, the Federal Water Pollution Control Act and the Public Works Employment Act.

The public works committee's domain became famous this year, when President Carter suddenly asked Congress to cancel a number of major water projects and to take a closer look at some 320 others. These projects have all been questioned because of their environmental impact, their high costs and low benefits, and their safety—remember the Teton Dam?

A few environmentalists have launched a campaign for a comprehensive environmental works program as an alternative to the water boondoggles. Such a program could provide environmentally positive alternatives to the dams and could fund other beneficial public works programs in other fields. We hope this new program will provide a politically workable alternative to the business-as-usual dam construction projects.

Most environmentally beneficial legislation has a tough time in the House Public Works and Transportation Committee—it

usually faces outright opposition. More importantly, the committee is often the source of much legislation that is detrimental to environmental quality. Environmentalists have relied on the Senate to pass better bills with the hope that what emerges from the House-Senate conference will be acceptable.

There is something you can do about this committee. The current membership is listed below. If your representative is a member, we urge you to join us in the continuing campaigns involving this committee's jurisdiction. If you are interested in the issue-areas covered by this important committee, please drop us a note telling us which you would like to work on. Write to: Campaign Desk, The Sierra Club, 530 Bush Street, San Francisco, CA 94108.

Samuel H. Sage co-chairs the Club's Water Quality Task Force.

Jurisdiction of the House Committee on Public Works and Transportation

- 1. Flood control and improvement of rivers and harbors
- 2. Public works for the benefit of navigation, including bridges and dams
- 3. Water power
- 4. Oil and other pollution of navigable waters
- 5. Public reservations and parks within the District of Columbia including Rock Creek Park and the Zoo
- 6. Measures relating to the construction and maintenance of roads and post roads, other than appropriations

Subcommittees: Economic Development Investigations and Review, Public Buildings and Grounds, Surface Transportation, Water Resources, Aviation

House Committee on Public Works and Transportation

Democrat

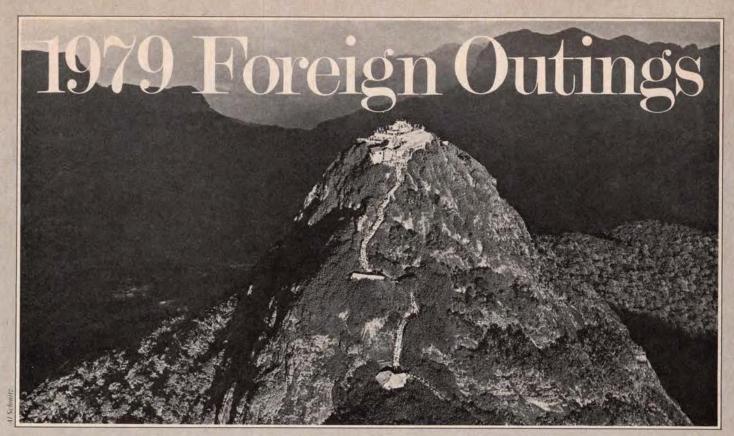
Harold T. Johnson, California, Chairperson Ray Roberts, Texasa James J. Howard, New Jersey^b Glenn M. Anderson, California^c Robert A. Roe, New Jerseyd Teno Roncalio, Wyoming Mike McCormack, Washington John B. Breaux, Louisiana Bo Ginn, Georgiae Dale Milford, Texas Norman Y. Mineta, California Elliott H. Levitas, Georgia James L. Oberstar, Minnesota Jerome A. Ambro, New York Henry J. Nowak, New York Robert W. Edgar, Pennsylvania Marilyn Lloyd, Tennessee John G. Fary, Illinois Ted Risenhoover, Oklahoma W. G. Hefner, North Carolina David L. Cornwell, Indiana Robert A. Young, Missouri David E. Bonior, Michigan Allen E. Ertel, Pennsylvania Bill Lee Evans, Georgia Ronnie G. Flippo, Alabama

Nick Joe Rahall II, West Virginia Bob Stump, Arizona Douglas Applegate, Ohio

Republican

William H. Harsha, Ohio James C. Cleveland, New Hampshire Don H. Clausen, California Gene Snyder, Kentucky John P. Hammerschmidt, Arkansas Bud Shuster, Pennsylvania William F. Walsh, New York Thad Cochran, Mississippi James Abdnor, South Dakota Gene Taylor, Missouri Barry M. Goldwater, Jr., California Tom Hagedorn, Minnesota Gary A. Myers, Pennsylvania Arlan Stangeland, Minnesota Robert L. Livingston, Louisiana

- a Chairperson, water resources subcommittee
- h Chairperson, surface transportation subcommittee
 c Chairperson, aviation subcommittee
- d Chairperson, economic development subcommittee
- Chairperson, investigations and review subcommittee
- f Chairperson, public buildings and grounds subcommittee



For seventeen years the Sierra Club has used modern travel's speed and economy to offer members a chance to have the same sort of out-of-doors experience in foreign lands that we find so rewarding here at home. Trips try to stay close to the land—camping and walking whenever possible.

(905) Indian Wildlife Sanctuaries—January 4-29. Leader, Robin Brooks, 818 Dartshire Way, Sunnyvale, CA 94087.

A Sierra Club first! India's cool, dry winter is ideal for touring four spectacular wildlife sanctuaries safeguarding near-extinct species such as the Bengal tiger, one-horned rhino and wild buffalo, as well as deer and waterbirds. En route we visit historic Jaipur and Benares and the Taj Mahal—by moonlight. We also meet Indian conservationists and government officials in Bombay, Calcutta and New Delhi. Travel by air, coach and elephant; housing in rustic forest lodges, hotels and a maharaja's palace. Approximate cost: \$1050.

(900) Baja Driving-Hiking Adventure— January 15-26. Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941.

Starting in San Diego, we will loop through the coastal areas of both the Sea of Cortez and the Pacific in four-wheel drive vehicles, camping and exploring as we go. Visits are planned to the whale breeding grounds at Scanmon Lagoon, old Spanish missions, ruins of old English and Russian settlements, mines and local villages. Hot springs, hikes and superb swimming and snorkeling. Experienced guides. Approximate cost: \$695.

(910) East Africa: Arabian Dhow and Game-Viewing Safari, Kenya—January 29-February 22. Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941.

For hundreds of years the Arabian dhows have traveled the Indian Ocean. On this trip we will set sail from the island of Lamu, explore the archipelago and sail south to Mombasa. We will visit coastal villages and towns seldom seen by travelers. To round out the trip we will camp and make game drives in the Tsavo West National Park. This outing requires good physical condition and a spirit of adventure. Approximate cost: \$1900.

(912) Sri Lanka (Ceylon)—February 9-28. Leader, Al Schmitz, 2901 Holyrood Dr., Oakland, CA 94611.

A natural history outing in a tropic island, visiting national parks, archaeological and historical sites, hot beaches and cool mountaintops. We'll get acquainted with local conservation people and problems. Approximate cost: \$825.

(918) Spring Trek in Nepal—March 3-25. Leader, Al Schmitz, 2901 Holyrood Dr., Oakland, CA 94611.

Sixteen days of hiking the "Ghorka Trek" in west-central Nepal at rhododendron-blooming time. Highest camp at 10,200 feet in Lamjung Himal. Approximate cost: \$875.

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

We will be guided by members of the Norwegian hiking club (DNT), who will also teach Norwegian touring techniques. We will base camp at DNT huts or lodges in at least three areas: at Finse (on Oslo-Bergen railroad); Rondvassbu, hidden in Rondana Park; and Gjendesheim, a touring center in the famous Jotunheimen mountains. Optional ski tour with backpack or dogsled is being considered. Leader approval required. Approximate cost: \$780.

(922) Galapagos Islands, Ecuador-March

26-April 13. Leader, c/o Ray Des Camp, 510 Tyndall St., Los Altos, CA 94022.

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

Living for more than two weeks aboard small sailing vessels, we tour the islands accompanied by an English-speaking naturalist-guide. Activities beyond visiting and enjoying the several islands and their unique endemic wildlife may include an overnight on a volcano, swimming, snorkeling or fishing, and, of course, photographing it all. The June trip may readily be combined with trip #935. Approximate cost: \$1795.

(925) Hiking in Scotland—May 20-June 6. Leader, John Ricker, 2950 North 7th St., Phoenix, AZ 85014.

Our trip will be somewhat different from previous Scottish Highland treks. There will be more hiking and less bus travel. We will use public transportation and, on many occasions, will hike from one place to another. It will still be a moderate trip, but somewhat more strenuous than in 1977. The National Trust for Scotland will again supply guides and guidance as we travel to Glen Coe, Ben Nevis, Isle of Rhum, Torridon and the Cairngorms. This trip can easily be combined with trip #930. Leader approval required. Approximate cost: \$800.

(930) Wales and Southern Ireland—June 8-24. Leaders, Lori and Chris Loosley, 22 Westbury Rd., New Malden, Surrey KT3 5BE, U.K.

After hiking in Wales' Pembrokeshire Coast Park, we will board a ferry to County Cork and County Kerry in southern Ireland. We will be in the finest walking and scrambling areas of Ireland in the Macgillycuddy's Reeks, the Dingle and Beara peninsulas, and the Connemara Mountains of County Galway. Then it is back to Wales to walk in the beautiful and remote upland area of mid-Wales. Accommodations will be inns and farmhouses. Hiking is moder-

The Art of Nature.



Photograph © 1978 by John Blaus

The world is a beautiful place, and the Sierra Club works to keep it that way.

Since 1892 we have been working to preserve the nation's scenic places—and our environment—through educational and legislative programs, as well as giving our members the opportunity to appreciate the world's natural wonders through our many trips and outings.

The Sierra Club is the most effective lobbying environmental organization in the world, primarily because we have over 180,000 active, responsive, involved members, and a dedicated staff supported by their dues. With more members, the Sierra Club will be even more effective.

If you are not already a member, just fill in the membership form (attached at right) and send it to us. If you are already a part of the Club's work, perhaps you know someone else who would like to join in our conservation efforts.

Sierra Club

A way for all of us
to help.

To explore,
enjoy, and preserve
the nation's forests,
waters, wildlife
and wilderness.



MEMBERSHIP FORM ANNUAL MEMBERSHIPS

Categories	Individual Dues	With Spouse	Categories	Individual Dues	With Spouse
Regular		□ \$30.00	Senior (60 and over)		□ 15.00
Supporting		□ 50.00	Junior (through 14)		
Contributing		□ 110.00	Andrew Commencer of the		n
Spouse of Life Member.	□ 10.00	_	. LIFE ME	MBERSHI	P
Student	□ 10.00	□ 15.00	Per person	🗆 750.00	
	l be announ	ced by a special	RRA (\$3.00) and chapter p gift card in your name. E ext year.		
Enclosed is \$		Please enter a	membership in the cate	egory checked	d above for:
Name					1
Address					
			7	Zip	
GIFT MEMBERSHIPS: I	f you are givi	ing this members	hip as a gift, please enter yo	our name and a	ddress below:
Name		PLAN.			
Address					
				Zip	

Mail to:

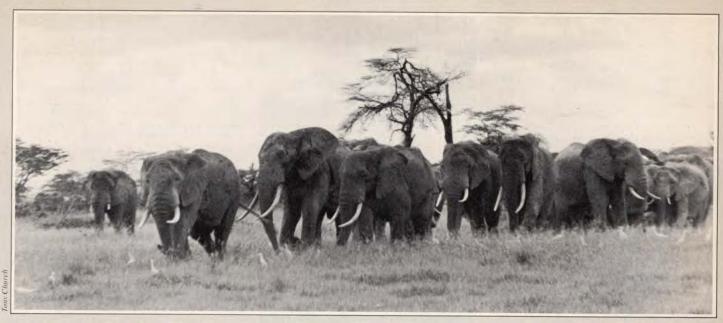
Sierra Club DEPARTMENT 9
P.O. BOX 7959 RINCON ANNEX
SAN FRANCISCO, CA 94120

MEMBERSHIP FORM

Categories	Individual Dues	With Spouse	Categories	Individual Dues	With Spouse
Regular	\$20.00	□ \$30.00	Senior (60 and over)	□ 10.00	□ 15.00
Supporting			Junior (through 14)		_
Contributing Spouse of Life Member .		□ 110.00	LIFE MEM	BERSHI	P
Student		□ 15.00	Per person		
Dues include subscription GIFT MEMBERSHIPS will like to be billed for renew	be announ	ced by a special	RRA (\$3.00) and chapter puiling gift card in your name.	Check here	.00). if you would
Enclosed is \$		Please enter a	membership in the categ	ory checke	d above for:
Name	Y				
Address					
			Z	ip	
GIFT MEMBERSHIPS: I	you are give	ing this member	ship as a gift, please enter you	r name and a	ddress below:
Name					
Address					
			Zi	ip	

Mail to:

Sierra Club DEPARTMENT 9
P.O. BOX 7959 RINCON ANNEX
SAN FRANCISCO, CA 94120



ate. This trip can easily be combined with trip #925. Approximate cost: \$930.

(938) Picos de Europa, Spain—June 21-July 15. Leaders, Lewis Clark, 1349 Bay St., Alameda, CA 94501; and Aurora Dorado, 757 Sutter St., #100, San Francisco, CA 94104.

Starting in Madrid, we will spend 25 days riding in chartered vehicles and walking. Traveling through Old Castille, we will visit the Central Sierra, Gredos and Guadarrama. Then we proceed northward through Burgos and enter Picos de Europa. Nearby we will visit the Cuevas de Altamira, then eastward through Victoria-Pamplona to the central Pyrenees. Walking distances four to eight miles. We stay in hotels, monasteries and mountain refugios. Approximate cost: \$915.

(940) Hindu Kush-Hindu Raj Himalaya Trek, Pakistan—June 23-July 25. Leader, Peter Owens, c/o Doug McClellan, 88 Ridge Rd., Fairfax, CA 94930.

This five-week trip will feature trekking, exciting jeep rides and busing through a Moslem area rich in history. Beginning in Chitral, we will jeep to Khost, where we begin a 21-day trek up the Yarkhun Valley. Our route will take us over Shah Janali Pass (15,300) and Thui An Pass (14,760) as we visit several valleys near the Afghan border. From Gilgit we will take a week's trip to fabled Hunza quite near the Chinese border. Leader approval required. Approximate cost; \$1150.

(932) Norway Yacht Trip—June-July (14 days). Leader, H. Stewart Kimball, 19 Owl Hill Rd., Orinda, CA 94563.

This is a new adventure for Sierra Club outings: a yacht trip along the south coast of Norway. Our plan is to charter boats of 10 meters, which comfortably berth five persons. Each boat will be on its own—crewing and messing, but sailing as a group along the coast. Leader approval required. This trip may readily be combined with trip #942. Approximate cost: \$645.

(935) Ecuador — June-July (23 days). Leader, Rosemary Stevens, 421 Richmond Dr., #102, Millbrae, CA 94030.

From Quito we'll travel to Guayaquil, and to Ingapirca, Ecuador's major Inca ruin. We'll see Andean highlands from Cuenca to Ibarra and tropical western lowlands from Esmeraldas to Guayaquil. Transport will be a combination of plane, autocarril

and bus, with accommodations varying from modest hotels to camping out. Suitable for anyone in good physical condition with the patience to enjoy the uncertainties of Latin American travel. Approximate cost: \$1450.

(955) Indonesia-Land Below the Wind— June-July (28 days). Leaders, Lynne and Ray Simpson, 1300 Carter Rd., Sacramento, CA 95825.

Visit an isolated jungle island on the western tip of Java for snorkeling and animal viewing. We will have a second week in the deep valleys of Sulawesi among the Toradjanese people. A mid-trip choice will be five days by canoe on the Mahakan River of Borneo or similar time exploring Borobudur and other areas of Central Java. An end-of-trip visit to Bali will be optional. Leader approval required. Approximate cost: \$2635.

(942) Walking in Norway's Jotunheimen Mountains—Early July (9 days). Leader, Betty Osborn, 515 Shasta Way, Mill Valley, CA 94941.

Hiking moss-covered trails and cairned paths through the beauty and grandeur of Norway's scenic Jotunheimen mountains, spending comfortable nights in picturesque huts and lodges and enjoying hearty Norwegian cooking are the highlights of this trip. We will visit small villages while traveling by train and bus, and perhaps a fjord ferry. Our trip will be a moderate hiking adventure, with full daypacks, for enthusiastic walkers in good hiking condition. Leader approval required. Approximate cost: \$570.

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

The snow-capped peaks of the Cordillera Real hang above the old Spanish city of La Paz. We will warm up with Cerro Charquini, go on to Condoriri, and end with Illimani at 21,201 feet. The climbing is not technically difficult, but facility with crampons, ice axe and ropes is necessary. The pace will be moderate with scenic high camps. Time between climbs will be ample to explore and enjoy cosmopolitan La Paz. Leader approval required. Approximate cost: \$1170.

(950) Kashmir Mountain Trek, India—July 7-31. Leader, Robin Brooks, 818 Dartshire Way, Sunnyvale, CA 94087.

Fabled Kashmir! "If there be a Paradise on earth

it is here, it is here, it is here," wrote a Moghul poet four centuries ago. Beginning and ending on a houseboat in Srinagar, we spend 19 days walking on trails while ponies carry our gear. Our trek will stay mostly above 10,000 feet, crossing two 13,000-foot passes to visit alpine lakes, streams and meadows, and to approach two mighty 17,000-foot peaks. Approximate cost: \$1075.

(945) Yugoslavia: Mountains and Sea Coast—July 9-31. Leader, Ross Miles, P.O. Box 866, Ashland, OR 97520.

Small villages and friendly, hospitable people, alpine scenery and interesting seacoast make this one of the most enjoyable of European trips. We hike from hut to hut in the Slovenian Alps, then visit Plitvicka Jezera on our way to the Dalmatian Coast. At Split we take a steamer to the island of Hvar, then through the islands to Dubrovnik. From Dubrovnik we journey to a base camp in the rugged mountains of Montenegro. This trip requires good physical condition. Approximate cost: \$895.

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

Our African adventure will be an unforgettable hiking, camping and photographic safari in search of wildlife. We will explore on foot the game trails and grasslands of the beautiful, wooded Loita Hills overlooking the Great Rift Valley, and, later, the wild and scenic upper slopes of Mount Kenya National Park. Hiking will be moderate, and the trip is suitable for anyone in good physical condition. Approximate cost: \$1965.

(965) Colombia—July-August (24 days). Leader, Rosemary Stevens, 421 Richmond Dr., #102, Millbrae, CA 94030.

Wander through the colonial towns of Leiva and Popayan. Speculate about the pre-Columbian Indian life at San Augustin and Tierradentro while observing the contemporary lifestyle. See what tantalized the Spaniards at the Gold Museum in Bogota. We will travel by bus and stay in small hotels or camp on their grounds. Suitable for anyone in good physical condition and readily combined with the trip to Ecuador, which immediately precedes it. Approximate cost: \$1850.

(975) Hiking in Norway-August 5-28 (ap-

proximate). Leader, Dolph Amster, P.O. Box 1106, Ridgecrest, CA 93555.

This modest three-week trip to Jotunheimen (Home of the Giants) will take us through an enormous expanse of mile-high mountains, glaciers, lakes and waterfalls. Relying primarily upon the well-developed hut system and its associated conviviality, we will also explore regions which will, perhaps, utilize more of our wilderness skills. Some backpacking experience and leader approval required. Minimum age 18 (15 if accompanied by an adult). Approximate cost: \$900.

(980) Walking and Camping in Kenya and Botswana—August 5-September 1. Leader, Ross Miles, P.O. Box 866, Ashland, OR 97520.

We will walk and camp in some of the finest game-viewing and scenic areas of each country. In Kenya we will visit the Masai Mara Game Reserve, the Loita Hills and the Samburu-Isiolo Game Reserve along with other areas. In Botswana we will visit Chobe National Park in the north and then travel south to explore the Okavango Delta. Hiking distances will be moderate. This trip is suitable for anyone in good physical condition. Approximate cost: \$2330.

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

Bernese Oberland brings to mind peaks, the Jungfrau, Eiger and Wetterhorn, passes and lakes. Three distinct mountain areas will reward you with postcard scenery, hiking trails and the natural history of the Alps. Easy walking will provide outdoor meeting locations with resident naturalists. Transportation



by trains, accommodations at local inns. A stop-over in Berne will allow talks with environmental officials as well as historic views. Our return to Zurich completes the trip. Leader approval required. Approximate cost: \$880.

(502) India, The Nanda Devi Sanctuary-

September (31 days). Leaders, Lynne and Doug McClellan, 88 Ridge Rd., Fairfax, CA 94930.

This area lies in the Garhwal section of India, which contains the headwaters of the Ganges. From New Delhi, three days of bus and jeep take us to our roadhead. Our hiking is mostly cross-country, through splendid forests and alpine meadows to cross Dharansi Pass at 14,500 feet. Days will be long, and what trails are used are quite exposed and may require roping-up, depending upon weather conditions. Leader approval required. Approximate cost: \$1650.

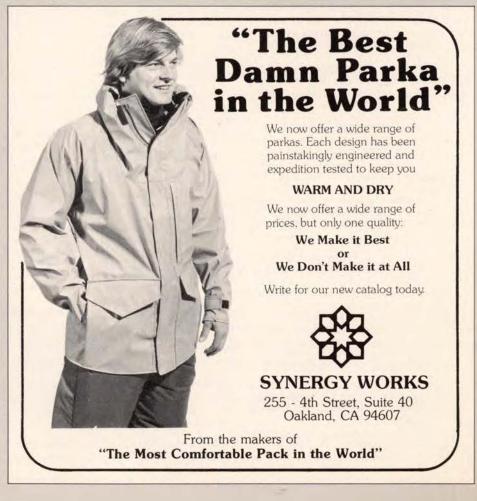
(995) La Belle France—From Caveman to Ecologist—September 15-30. Leaders, Ivan de Tarnowsky, 57 Post St., San Francisco, CA 94104; and Elaine Adamson, 806 Dolores St., San Francisco, CA 94110.

We will visit one of the most beautiful sections of France—the Dordogne, go through caves with 10,000-year-old paintings and visit the greatest concentration of prehistoric findings in the world. We will spend two nights in caves where troglodytes lived a thousand years ago, and the daring will enjoy rafting or canoeing on the lovely Dordogne River. Approximate cost: \$1080.

(500) Scotland's Countryside—September 16-October 3. Leader, Tony Look, 411 Los Niños Way, Los Altos, CA 94022.

The Highlands of Scotland will be showing fall colors as we visit the lochs and hike into the glens. Walking days can be as moderate or strenuous as you desire. We travel by train and microbus from Edinburgh to the Cairngorms, West and Northwest Highlands, spending three to four days in each. Historic buildings and name-places as well as scenery will kindle your interest as we travel across the Highlands





accompanied by our naturalist guide. Approximate cost: \$785.

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

To acclimatize, we will spend 12 to 15 days in the Trisuli watershed visiting the proposed Langtang Valley National Park, experience the 15,000-foot Laurebind Pass lake country and observe the Bhotia, Sherpa, Thamang and Chetri societies of the area. Then we trek for three marvelous weeks in Sherpa country—the valleys and villages at the foot of Mt. Everest—observing the Tibetan-influenced customs, agriculture, dances and religion of the Sherpas and experiencing the mellow highs of the highest Himalaya. Leader approval required. Approximate cost: \$1875.

(515) Mexico—November 10-December 7. Leader, Bob Kroger, 3568 Elmwood Ct., Riverside, CA 92506.

We will spend most of the first week in Mexico City and tour by bus the states of Mexico, Puebla, Oaxaca, Chiapas, Tabasco, Campeche, Yucatan, Quintana Roo and Veracruz. We will visit Indian markets, colonial and modern cities, and many archaeological sites. We will also see tropical beaches at the Gulf of Tehuantepec and Cancun, where we will spend several days on the shores of the Caribbean Sea. Approximate cost: \$1010.

(520) Omo River Expedition, Ethiopia— November 26-December 23. Leader, Al Schmitz, 2901 Holyrood Dr., Oakland, CA 94611.

\$1.80 prepaid.

The float trip down the Omo, one of Ethiopia's

most remote rivers, will be conducted under the experienced guidance of Sobek Expeditions' personnel. For about 22 days we will explore the side canyons, visit far-off villages and study the profusion of wildlife. Leader approval required. Approximate cost: \$2125.

Boat Trips in Mexico

(421) River of Ruins by Raft, Mexico—February 20—March 2. Leader, John Garcia, 124 Romero Cir., Alamo, CA 94507.

After visiting the ruins of Bonampak, we will raft down the River of Ruins (Rio Usumacinta), visiting Maya ruins of Yaxachilan and Piedras Negras, exploring tropical jungles and having fun in the back country of Mexico. We'll swim in the beautiful pools near the Rio Budsilja waterfall, see colorful tropical birds and butterflies and hear the calls of the small howler monkeys. Trip members should be in excellent health to visit this remote area, although the trip is not particularly arduous. Approximate cost: \$850.

(422) Whale-Watching, Leisure Trip, West Coast of Baja California—February 24-March 2. Leader, Martin Friedman, 353 Montford Ave., Mill Valley, CA 94941.

Only from a small boat in the stillness of San Ignacio Lagoon can you expect the thrill of close watching and being watched by 40-foot, 40-ton California gray whales. Often they approach to get acquainted—sometimes too close for the best pictures! We observe, photograph, savor, but avoid disturbing the "friendlies." Absorb this best-of-Baja scene: its mangroves with boundless birdlife, unending beaches, starry nights and peace. Sleep in com-

fortable tents to soft "whoosh, whoosh" of breathing whales. Seven-day round trip from San Diego. Approximate cost: \$745.

(423) Sea of Cortez Leisure Boat Trip, Mexico—April 14-22. Leader, Ruth Dyche, 2747 Kring Dr., San Jose, CA 95125.

(424) Sea of Cortez Leisure Boat Trip, Mexico—April 22-30. Leader, Mary Miles, 2140 Santa Cruz Ave., #B-203, Menlo Park, CA 94025.

These cruises are adventures in sea life, designed to meet the requirements of both the physically active and the more sedentary. These coastal trips along the east coast of Baja California pass between La Paz and San Felipe. We will visit exotic islands and observe the abundant sea life of whales, dolphins, sea lions, frigate birds, boobies and pelicans as they go about their undisturbed way. Approximate cost: \$725.

Ski

(275) Adirondack Ski Touring, New York—January 21-27. Leader, Walter Blank, Omi Rd., W. Ghent, NY 12075.

Trips will be run daily for all levels of skiers. Take this chance to upgrade the level of your skiing and visit remote areas of the Adirondack Park in mid-winter. The first five nights will be spent at a delightful farmhouse with homecooked meals; lunches will be on the trail. The sixth night we will ski into two remote cabins heated by wood stoves. Packs and sleeping bags are required for the last night. Skis may be rented. Leader approval required. Cost: \$210.



Send orders to: THE CUP, [™] Sierra Club, P.O. Box 7959, Rincon Annex, San Francisco, CA 94120. Please include full payment with your order. We cannot process charge or COD requests. Add applicable sales tax: CA 6%; CA BART Counties 6½%; NJ 5%. Discounts available for groups and chapters.

THE MOST COMFORTABLE PACK IN THE WORLD!

The Jenson Pack absolutely minimizes distortion of your center of gravity. No other pack achieves such form fitting closeness. The load becomes part of you. Unexcelled for skiing, mountaineering and back country walking. Three models to choose from.

Find out why this is the most imitated pack of the decade. Send for our free catalog of Packs, Gore-Tex Gear, Tent and much more!

me your catalog gns.
ZIP



P.O. Box 198 Victor, Idaho 83455

. . We started the revolution.

The first American to climb Mount Everest and his photographer-wife talk with Sierra's editor

A Conversation With Jim Whittaker and Dianne Roberts

FRANCES GENDLIN

Fran Gendlin: You're about to take off for a second try for the summit of K-2. What can you tell us about this expedition?

Jim Whittaker: We're leaving on June 13th to meet our liaison officer in Rawalpindi, Pakistan, on June 15th. We'll go to New York for a sort of send-off with the American Alpine Club, and then fly to Rawalpindi by way of Karachi. We spend four or five days there and get briefed by the Pakistan Government about rules and regulations.

Dianne Roberts: But of course by the time this is published, Fran, we hope to have reached the summit.

Fran: You're going to be meeting with Chris Bonington, who's also climbing K-2?

Jim: Yes. He'll be there a month ahead of us, climbing on the West Ridge with a team of British climbers. Both his route and ours are unclimbed. We have given him one of our radios to use, so that we'll be able to communicate from base camp to base camp. And so things are moving ahead. We shipped 232 porter loads, compared with 417 in 1975. We've done everything we can to pare our expedition down to a small porter load, so we can move more efficiently, and it will cost us less than the \$50,000 we paid for porters in 1975.

Fran: Will the fact that there will be fewer people, fewer porters, mean there will be less ecological impact?

Jim: Yes. Although it's difficult to prevent the porters from gathering firewood; they need fuel to stay warm, and until we get above timberline, that fuel is branches and twigs.

Dianne: We are required by the Pakistan government to provide fuel for all the porters, which we will do.

Jim: They'll have kerosene stoves.

Dianne: Nonetheless, they do tend to gather firewood anyway, just by tradition. **Jim:** They're aware of the impact of gathering wood, so we will provide



Jim Whittaker, Dianne Roberts and Fran Gendlin

kerosene stoves, fuel and clothing—boots and so forth—to the low altitude porters. This was never required for the Mt. Everest porters.

Fran: Do you pack out almost everything you bring in?

Jim: Yes. We don't want to leave on K-2 the kind of mess that was left on Everest, or on the polar expeditions. We just didn't know better back in 1963. But now we will do it right, although the cost will be high. Each porter charges about 60 rupees—that's \$6.00—per day. If you have 100 porters, that's \$600, and if you hire them for 10 days, that's \$6000. And it's a 20 day carry with 232 porter loads, so it'll cost us money. But we feel we want to stick to the ethic of "taking only pictures, leaving only footprints and killing nothing but time."

Fran: Dianne, what role do you play in these expeditions?

Dianne: On this one I'm going primarily as expedition photographer; I'm much more valuable in that way than as a climber. So, since it's photographs that wind up paying for the expedition, I think

my role is important. Also, it frees the climbers to do what they do best, which is climbing.

Fran: But you climb, too. How high do you go?

Dianne: I don't intend to stop if I'm still able to go on, but I don't view my role primarily as a climber. On the other hand, in order to get some good photographs of the climb, obviously I have to do some climbing.

Fran: I'd like to talk about women and climbing. Do you think there's a difference between a woman's motivation and a man's?

Dianne: That's a hard question. Different climbers have different motivations, and I'm not sure I would break it down along sex lines. It's hard to say, anyway, because I don't know many women climbers. There will be three on this trip, which is going to be exciting. Maybe it will give me a chance to find out more in answer to that question.

Fran: Do you think there are more women climbers these days?

Dianne: Oh ves. Definitely.

Jim: There's an entire women's climbing expedition going to Annapurna.

Dianne: I don't think there's any reason why women can't be just as good if not better expedition climbers than men. I can't think of any physical or mental reason that would prevent it.

Fran: Do you think, in general, that mountain climbing is an outdoor experience more people are trying now? Does it seem to be more popular?

Jim: Sales of outdoor, backpacking and mountaineering equipment have increased, but I'm not sure how much that reflects the number of people who actually climb. It's hard to say specifically that they're climbing, because there are so many more people today who have the bent toward the outdoor type of life. I do believe there are more climbers; there certainly seems to be a good interest in climbing. But I don't know if it's an increase in the population of that age group, or just what it is. I do know that there are only about 1000 climbers in the American Alpine Club, and there are 200,000 in the Japanese Alpine Club. So our country is still behind all the other countries that I can think of that have any mountain regions, including Russia.

Fran: When you go backpacking and hiking, you can do what suits how physically fit you are. If you've been a backpacker or hiker, do you have to be more fit if you want to try mountain climbing?

Jim: No, and that's the beauty of it. Some climbs are even easier than backpacking. Americans need to get back on their feet. There's a difference between walking a mile and walking ten miles. There's also a difference between climbing a high mountain and climbing a lower one, or one that has a gradual slope instead of a steep slope. But it's all a slow process, and you can work gradually up through it. That's how it should be done, because then you know what you can do. You've measured yourself, so you can avoid getting into situations that present any danger.

Fran: How does one get started?

Jim: The best way is to get into a climbing course. You begin by reading about people who do these things. There are books of instruction and courses taught in colleges. in outfits like the Sierra Club and others. The company I work for, Recreational Equipment Incorporated Co-op, has a basic climbing school, where people can learn to balance walk and pretty soon to balance climb and then to rope climb. It can be taught and learned so easily, but of course you must go to the people who have



had experience. Walking on a glacier is much the same as walking on a street, except that you're roped and you must know about crevasses. Walking up the steepest slope you learn to lock your legs; you do that, too, in climbing; it's a necessary technique. And keeping your foot slack against the terrain on a mossy slope is a natural thing, but in climbing you'd better do it with crampons, or you'll peel off. So there are all those basic things, and it's just a case of learning the technical aspects.

Fran: Do you need to buy a lot of equipment at first? Or can you try it without making a large investment?

Jim: Day climbing needs no investment, and most shops rent equipment, except ropes. You can make a relatively easy day climb without much cost.

Dianne: If you get involved with a group like the Mountaineers, they will help you by lending equipment to use at the beginning, which is an easy way to do it. If you find you don't like it, you don't have to go out and buy a lot.

Jim: The good thing about it is that there are phases you can work through. "Viewfinders" are just backpackers who kind of walk up to a view-they go up on the peaks and have a view. Then there are the basic climbers, and the intermediates, and finally advanced, and the technical. You can step out any time you want. But any time you put a rope on steep terrain, you're a mountain climber.

Fran: I imagine that most people think mountain climbing is dangerous. Is it? After all, whenever I see pictures in books, I see a vertical mountain and a perpendicular climber.

Jim: Oh, but that's the ultimate! That's like the four-minute mile. Those pictures show what you can reach. We want to show what incredible things can be done, and so we show feats like that. It doesn't show the beauty of the mountains, of being in nature. And that's what the good thing about it is. And that's why people should climb, I think. That's why we're going on a four-month expedition. I don't want to shuffle paper in my office for four months, when I can be out climbing a mountain.

Fran: Yes, that's what I want to ask you. Do you do this because it's fun, or do you climb because it's a challenge?

Jim: It's fun, yes, and it's a challenge too.

Fran: And for you, Dianne?

Dianne: Yes, yes! I think my reasons may be different than Jim's. Some of them coincide, though. Many of the challenges for me on an expedition like K-2 have to do with photography. The challenges and the opportunities. I would say that one of my main motivations for going is the opportunity to photograph and to be in some of the most incredible mountain country in the world. Not many people get a chance to do that.

Jim: And in a way we're curious about the things we love, so we want to know in detail the aspects of that particular, individual mountain. It's frightening when you climb a mountain you haven't climbed before, and it has a certain magic about it. When you look at the mountain to begin with, it has a great impact, and it's stunning. After you climb it, and you come back and look at the mountain, it's changed. And the change is that now you see the route of the thing, the detail of it, and you know that mountain more. Has it lost anything? Not really. In a sense it has become part of you and you a part of it. So you've learned the landscape. You've learned the mountain.

Fran: Well, you got part way up K-2 in 1975, and now you're tackling it again. So some of it you know already from the perspective of having been there, and then some of it, of course, is still the new part to be learned.

Jim: Yes, so now we come back a little bit leaner and a little bit meaner and a little bit more determined because we've been thwarted. Our feeling is that the mountain is tough, and we're glad it's tough, but we think we're tough, too, and we're going to find out how tough we are. It's a beautiful thing, and we'd like to get up on top.

Dianne: I don't think any climber goes climbing with the idea of getting killed or injured. But the element of risk definitely makes it attractive to certain people. And I think risk is a very important thing in life. It's only through tackling something risky and succeeding that you learn what you are and what you can do. Without that, I think, you vegetate. Many adults have had that



Tinahas never had a Teddy Bear.

A mother's love. A doll to cuddle. Tina knows nothing of these things. But she does know fear, rejection, and hunger.

For just \$15 a month, you can help save a child like Tina.

Through our "adoption" program you can help provide a child with a better diet, clothes, medical attention, school. And even a toy or two.

But don't wait. There are so many. And somewhere, right now, a child is dving from starvation and neglect.

	I wish to "adopt" a boy ☐, girl ☐, in ☐ Asia,☐ Latin America,☐ Middle East ☐ Africa, ☐ USA, ☐ Greatest Need.
	I will pay \$15 a month (\$180 a year). Enclosed is my gift for a full year □, the first month □. Please sendme the child's name, story, address and picture. I can't "adopt," but will help \$
	Please send me further information. If for a group, please specify.
	Church, Class, Club, School, Business, etc.
NAS	NE .
ADI	DRESS
CIT	Y STATE ZIP U.S. gifts are fully tax deductible. Annual financial statements are available on request.

element of risk socialized out of them. But risk is not necessarily something to be shied away from.

Fran: But it can't be all fun and a challenge. There must be stuff that's frustrating and annoying.

Dianne: Organizing the damn thing . . . Jim: I find there are lots of frustrations, but overcoming the difficult things gives you the most enjoyment. Success is sweetest to those who have known defeat.

Fran: Loren Eiseley wrote that the frame of mind that pits people against nature, that thinks of nature as something to be conquered, is one of the main obstacles in the way of our journey towards environmental health.

Jim: Loren Eiseley was an intellect, and he was very effective in his writings, but he was a passive person. I think the concept of battling nature, of fighting nature, turns out not really to be destructive. People like the Indians, they fought the elements as well, and they certainly can't be considered as people who struggled against nature. And when you talk to farmers and ask them about the land they're on, they're not fighting that land. They love that land. Human beings come from Mother Earth. When we struggled across the country to the West and when we struggled in the swamps, cutting down trees, we were on an economic base, trying to survive. It wasn't to demolish wilderness. It was to establish farms and food.

Dianne: I think those who write about climbing have made it appear that climbers have more of an attitude of conquest than they really do. Probably the general public has that attitude more than people who really climb. I don't think that sort of conquest, of subduing a mountain, is accurate. It's more like Pogo's attitude: "We have seen the enemy and they is us." That we vanquished an enemy, none but ourselves.

Jim: On the expedition on Everest, for instance, there were some of us who were comfortable in that environment and who really felt a part of it, and there were some who were afraid. When you're afraid of something, you react in a different manner than if you are aren't afraid. And if you are afraid of people you'll react against them, too, but if you aren't, there is a harmony, and that is nice. So I believe that fearing the mountain, a person might consider it more of a challenge. But those who climb a lot have an empathy with the mountain and a feeling for it. Good, qualified climbers love those mountains. They wouldn't attack them. When you hear a climber say "Okay, that tops the bastard off," it's not being said in a vicious way. We're saying

it's a beautiful mountain, we're participating in nature's laws, and we're lucky to be

Dianne: When Sir Edmund Hillary made that statement, it was more the way you would say it of an old friend than of an enemy. It was a touch of irony.

Jim: There is a battleground, though, but it is mostly in ourselves. We're not exactly battling nature, but trying to fit in with it, so it'll let us sneak up by whatever route feasible to spend a minute on the highest points.

Fran: Is mountain climbing an end in itself? If it were possible, would you do it all the time, every day?

Jim: Nothing is an end in itself. There's no end.

Fran: Is it part of another career?

Jim: Everything relates to everything else, so I don't see an end in anything. It's all got to be tied together. Nothing will stop; there is no end. I feel that it's all part of growing. If people stop with mountains, then it's too bad. They've got to grow and continue to expand in all things.

Fran: So for you there was Everest and now the summit of K-2. How are you still growing?

Jim: I'm not—because K-2 is the second highest and I'm really stepping down! No, actually, I'm growing because I'm pushing myself to an extreme that I'm curious about. I was 34 when I climbed Everest. Now I'm 49. It will be interesting to see how high I can get and what my body can do. I'll be pleased to experiment to see what there is in the makeup of the person I am now, and what our team can do and how we interact, and what the mountain has, and what the people of the country have, and how the porters work and how the rivers will flow. You know, there are so many things to see and so much to do.

Fran: So it's an enriching mental experience as well. What do you think about when you're climbing? What goes through your mind?

Jim: Everything you could possibly imagine. Everything.

Fran: Does it become a meditative experience?

Jim: If you're in pain, it's like any athlete who is really pushing frontiers. If you can get your mind somewhat off what you're doing, it will make it a little bit easier. So your mind goes everywhere, and you push your mind out of the pain region and into the pleasure system. You reflect on the good things past and the good things future.

Dianne: Very often for me, or at least almost always when I am physically pushing



myself, it's a kind of mentally clarifying experience, in the sense that you can go about your daily life and find problems and confusions building up in your mind, and there often seem no solutions. But you go for a ten-mile walk, or go on a climb, or sail in a gale, and somehow all that stuff just seems to fall into place naturally

Jim: And seems insignificant in a way.

Dianne: Yes, insignificant, but at the same time it resolves itself, almost.

Jim: It's as they say, "Climb the mountains and get their good tidings..."

Dianne: Yes, right, John Muir's famous statement.

Jim: "... and the winds will bring you their freshness, the storms their energy and peace . . .

Dianne: ". . . and cares will fall away like the autumn leaves." That's a really nice phrase to read, but when you actually go out and do it, you begin to understand in an entirely different way what it means. I find that all the time, and the funny part is that when I'm sitting in the city, doing the everyday things people have to do, I forget, and then when I get out there I say, "Oh God, what took me so long?" And then everything seems to come so easily. You seem to become so much more attuned to the surroundings, and at the same time what's inside your mind seems to calm down, and problems seem to solve themselves. I think a long period of time is important. I don't think you'd get the same feelings doing something for a very short time. You go through different phases, you know. First you're sore, and you think you won't be able to do it; then you pass into another phase, and you get your second wind and then your third wind. I think the same things happen mentally as well as physically.

Fran: What is the one thing you learn from mountain climbing, from putting yourself in situations you don't usually find yourself in?

Jim: "Testing yourself against nature" is the best way of putting it.

Dianne: Exactly. I think there's a two-fold gain. One is the experience itself, every-day experiences. One thing I've learned from K-2, something that will last the rest of my life, is that I no longer take civilization for granted. One of the first things I did when I got back to Seattle was to run around the house turning on all the water faucets, just watching the miracle of water coming out. After having to melt snow for water to drink, and not being able to take a real bath, these things are truly miraculous. All the normal, everyday pleasures are much more appreciated after you've been without them for a long time.

Fran: Do you ever go back to the mountains you've climbed, or is it always to the new one that you go?

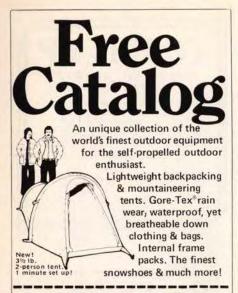
Jim: No, Rainier's an old favorite that I climb. There's a rock peak up at Snoqualmie Pass, too. The thing is, there's so much country to see that it's nice to broaden, too, but it certainly doesn't mean that the country you've seen is any less attractive. I used to spend a lot of time in the Olympic Mountains, but now our home is on the waterfront, and we look across at them, and it makes me want to get back to them. And there are some beautiful areas I'd like to take Dianne into, where there are elk, areas a lot of people still don't know about. And the private, secret places no one has yet written about. I'd like to go to those places and see them

Dianne: The mountains to me are like the sea, constantly changing, and even if









Early Winters, Ltd.

Prefontaine Pl. S., Seattle, WA 98104 For fast, easy service call - (206) 622-5203

Please send me your free color catalog of unique outdoor equipment just off the press and loaded with new & exciting items, most of which simply can't be seen or purchased anywhere else in the world.

Name			
Address		-	

City/State/Zip



The 1979 Sol Feinstone **Environmental Awards**

Recognizing significant individual contribution to improving the environment through outstanding voluntary action.

Five \$1,000 Prizes

Nomination Deadline Dec. 31, 1978

For information: State University of New York College of Environmental Science and Forestry Syracuse, New York 13210

1978 Winners: Alice Berkner, San Francisco; Dorothy Erskine, San Francisco; Edward C. Fritz, Dallas; Anna Laura Myers, Santa Barbara; and Hazel A. Wolf, Seattle.

you've been to a mountain once, it's never the same the second time.

Jim: And now you get back into the essence of nature and why it's what people need. And I think the Sierra Club is doing well getting people involved in the outdoors. It's also what I'm trying to do with my company. I believe that's where people are at their best. People are of an animal nature as well as a mental one, so that if they're not doing natural things, they're going to do unnatural things. And unnatural things will have their effect. So, when we're part of nature, not battling it, we're training ourselves in nature. Believe me, nature is the best trainer there is. Nature is fair; it has no hidden political reason for doing something adverse or oppressive to you. Nature has laws; those laws are the same now as they will always be, and that is the one thing that is constant. So we measure ourselves against this and grow in it. How can we be fighting something we love as much as that?

Fran: It's not only an individual experience, though; I gather that the relationship between climbers is almost as important as the relationship between the climber and the mountain. Is there a great camaraderie that develops?

Jim: Definitely.

Dianne: Sometimes. And sometimes there isn't. It doesn't always happen, but when it does, it's wonderful. It's kind of "gravy." There are bound to be times, as there are in any relationship, when you're with such a small group of people for such an extended time that you're going to run the gamut of human emotions. And in climbing, those emotions are often inten-

Jim: I only worry about interaction when it begins to affect the success of a climb. But alone or in a group, you can measure yourself, gain confidence in yourself, and that's why you can walk through the valleys of problems, knowing what you are, confident in what you've done.

Dianne: Whenever we get into discussions like this, I'm reminded of Carlos Castaneda's early Don Juan books and his phrases about facing death, not in a morbid way, but accepting that it's always there, because none of us is immortal. None of us can have that feeling all the time, but when you do things that remind you of it every so often, it makes you much more appreciative of what's going on in your life all the time.

Fran: You talk about nature as the best teacher, Jim. But you must have had people you looked up to, idols. Who do you think has been the greatest mountain climber of our times? Somebody you think of as having inspired you?

Jim: Well, as a child I got inspiration from Odell, Mallory and Irvine, who disappeared on the shoulder of Everest. That was a long time ago. Recently, I've gotten inspiration from a man younger than myself, Leif Patterson, who has a joy and love of mountains that is hard to match. Young people come up to me after lectures and say things like, "You're carrying our desires and thoughts to the second highest mountain in the world. Good luck! Go for it!" I get a lot of inspiration from that.

Dianne: How about people like Reinhold Meissner and Peter Habeler?

Jim: Yes, they're on Everest right now, And there's Rafer Johnson, who's a friend of mine. He's the Olympic decathlon man. He's tested himself in ten events. That guy walks down the street, and he's got it together. You just meet the man, and there's an obvious sense of confidence and power, but he's humble. He knows who he is. His bearing says that he has done something. and it's because he has controlled his mind and his body and done these things.

Dianne: So it's not just climbers. There are a lot of people we've read about or know about who somehow have done something to just push the limits of their endurance-

Jim: —human endurance to the highest frontier. Backpacking, for instance, isn't all pleasure. Sometimes you just have to sit down and rest the old feet. But when you come off a twenty-mile trail, God, isn't life sweet? And you take off those shoes and you dip the feet into that cold water, and you think, "I did that thing. I did it!" And you know it was something that lots of people couldn't have done.

Dianne: And you go back to your everyday activities with a kind of renewed vigor,

Jim: Yes, the physical animal in you is healthy again. And you have to admire somebody who's got it together, who moves ahead. I don't care who it is. Anyone who really takes pride in what he or she is doing.

Dianne: I know what you're saying. Sometimes if you go ahead and do something difficult that is clearly defined and yet a reachable goal, when you do reach it, it gives you the strength to come back and tackle the things that aren't so clearly defined.

Fran: Well, for the next few months your goal is clearly defined; the summit of K-2. We'll be looking forward to hearing of your progress in the climb. Thank you both for talking with Sierra.

Important Notice to Members:

We want you to know that we have changed our policies:

- 1. In the past, Sierra Club Books has paid full postage and handling on your orders. With this last postal increase, we can no longer afford to do so. We now ask you to pay a minimal postage and handling charge as listed on the reverse side of this notice.
- 2. We have raised the Sierra Club member discount from 10 to 20% off the retail price. The prices listed on the reverse side now reflect the higher discount.

We appreciate your continuing support.

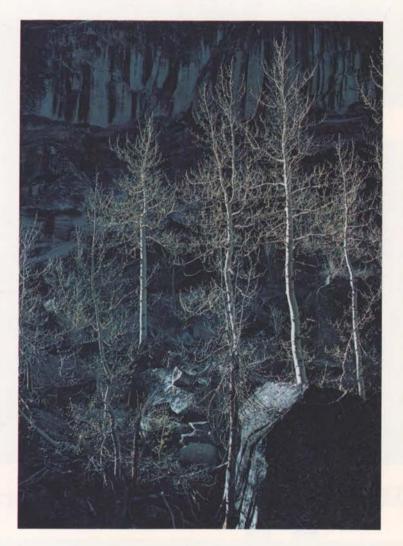
Sierra Club Books

Order your 1979 Sierra Club Calendars by using this handy order form...

Sierra Club Books	QTY. SIERRA CLUB CALENDARS AMT	Postage & handling per order to EACH shipping address:
Box 3886 Rincon Annex San Francisco, CA 94121	222-7 1979 Engagement Calendar \$3.95	75¢—first item
Please send check or money order. Prices indicated include a 20% member discount. PLEASE PRINT	221-9	50¢ for each additional item on 2 to 9 items No charge on any order totalling 10 or more items to each shipping address
Name	218-9 1979 Calendar and Almanac for Young People \$3.95	Please allow from 3 to 6 weeks for delivery.
Address	total quantity ordered	total amount of order \$ + sales tax (if any) \$
City	Sales tax rates for deliveries to the following areas, California—add 6% (Bart Counties—add 6½%). New Jersey—add 5%.	
StateZip	TOS:2 8/78	total amount enclosed \$

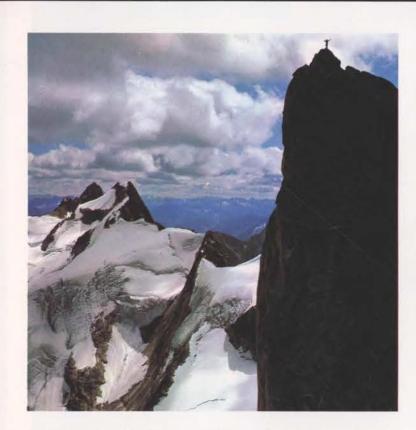
1979 Sierra Club Calendars are ready!

Wilderness 1979 Sierra Club Engagement Calendar



AWEEK-BY-WEEK TRIBUTE to the natural glory of our continent. Fifty-nine full-color photographs of wilderness and wild creatures by Steve Crouch, Keith Gunnar, Philip Hyde, David Muench, Laura Riley and other eminent photographers of the natural world. Space for appointments, and extra pages for names and addresses in an ever-popular desk calendar. Spiral bound; self-shipping carton. A Sierra Club/Scribner Calendar 61/4" X 91/4"

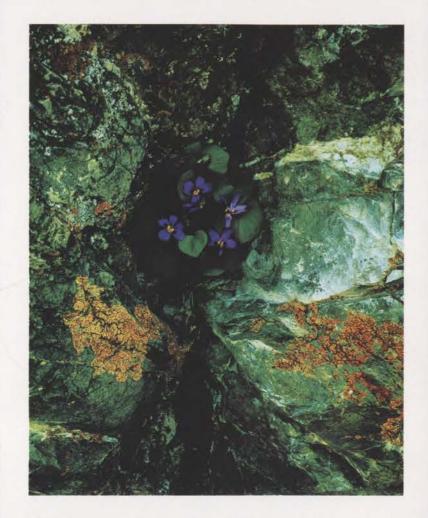
1979 Sierra Club Calendars



Sierra Club Trail Calendar 1979



Sierra Club Wildlife Calendar 1979



Wilderness Calendar 1979

Sierra Club

THE OUTDOOR LIFE, from the Himalayas to
New Zealand and Cornwall, England to Kauai,
is celebrated in fourteen full-color action photographs of rock and ice climbing, ski touring,
river running, and backpacking, by Galen Rowell,
John Blaustein, John Cleare, and others.
Line illustrations and selections from the literature
of the trail. Introduction by Anne LaBastille.
Spiral-bound; self-shipping carton.
A Sierra Club/Scribner Calendar 10¼" X 11½"

14 FULL-COLOR PHOTOGRAPHS of beautiful, often rare species of wildlife taken in their natural habitats all over the world, by outstanding wildlife photographers such as John Cleare, A.C. Kelley, and Jeff Foott. Introduction by Sally Carrighar. Spiral-bound; self-shipping carton. A Sierra Club/Scribner Calendar 10¹/₄" X 8¹/₄"

THE NATURAL BEAUTY of North America's wilderness depicted in full-color photos by photographers such as William Bake, Wendell Metzen, David Muench, James Randklev, and Galen Rowell, month by month, in this perennially best-selling wall calendar. Quotes from literature and natural history, significant holidays, phases of the moon, generous space for daily notes. Introduction by Roderick Nash. Spiral-bound; self-shipping carton.

A Sierra Club/Scribner Calendar 10½" X 13½"

1979 Sierra Club Calendar & Almanac for Young People



THE LIFE AND WORLD of native American children is the theme of this unique calendar for young people. The legacy of the early peoples of North and South America and their close relationship to the natural world is recreated by stories and legends, artifacts, poetry, and song, with a different selection for each day of the year. Native American motifs and portraits, and numerous images of wild creatures and plants illustrate 52 pages representing the weeks of the year. Twelve full-color photographs. Activity pages show how to make and enjoy native American crafts and games.

A Sierra Club/Scribner Calendar 101/4" X 101/4"

A Picture of Our Annual Meeting

This year the Club's annual meeting and awards banquet took place over the weekend of May 4 and 5. At the board meeting, the newly elected officers and directors assumed their duties and set to work. The officers are Theodore Snyder (president), Joseph Fontaine (vice-president), Ellen Winchester (secretary), Denny Shaffer (treasurer) and Richard A. Cellarius (fifth officer). Phillip Berry was reelected. Newly elected directors are Richard Fiddler, Marty J. Fluharty, Nicholas A. Robinson and Denny Shaffer. The following photoessay shows Club leaders both working and relaxing.



Photos by Ron Sugiyama



Dave Brower, president of Friends of the Earth and former executive director of the Sierra Club, talks with Sierra Editor Fran Gendlin. A year ago, the Club presented Dave with its John Muir Award.



Sandy Tepfer chats with Nick Robinson during a coffee break at the board meeting.

Denny Wilcher, left, of the membership development office, and Pat Scharlin of the international office, are briefed by Paul Swatek, associate conservation director.



Jon Beckmann, director of Sierra Club Books.

Becky Evans, manager of the Club's San Francisco bookstore, chats with John Higgins, General Services Manager at national headquarters.

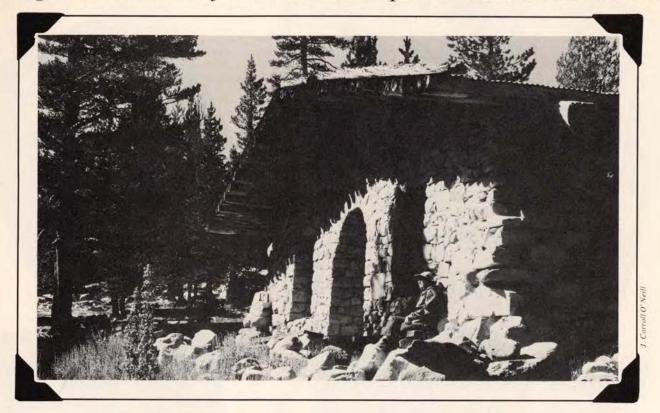






environment."

A lodge named for an early Club leader is now part of Yosemite National Park.



Edward Taylor Parsons Memorial Lodge

ELIZABETH S. O'NEILL

TUOLUMNE Meadows. There's nothing like it in the length and breadth of the Sierra. There's nothing like it anywhere. John Muir, who first visited the Tuolumne as a shepherd in 1869, later described it as "a beautiful spacious flowery lawn four or five miles long, surrounded by magnificent mountains." There is a spring in the meadows, Soda Springs, "pungent and delightful to the taste," that has long been a center of activity in the area. Near this spring stands the Edward Taylor Parsons Memorial Lodge, a simple building whose graceful proportions and seemingly organic relationship to its surroundings have pleased generations of visitors. Parsons Lodge has for years served as a gathering place for Sierra Club members and others who come like pilgrims to the mountains.

The lodge and the land on which it is built have a curious history. Initially the Tuolumne Meadows was not part of the Yosemite grant that first became a state park and then, in 1890, a national park. It was simply government land, open to homesteading and sheepherding. In 1885 John Baptiste Lembert, "the hospitable hermit of Tuolumne Meadows," built a homestead at Soda Springs. He was a strange, fanciful character who, William Colby later recalled, wrote long poems about the mountains and their grandeur. He lived alone in a rough, one-room cabin, and in his loneliness the old man constructed an entire mythology, naming the mountains and the natural features around him. As Colby writes:

"In his fancy, he was king and ruler of all the Tuolumne Meadows region. He told me of a young woman whom in real life he had vainly courted but whom in his dream world he had wedded and who had shared his throne in the meadows. However, she fell into disfavor and he turned her into a tree (pinus albicaulis) which had the shape of a hen. This he said was because he had been a henpecked husband."

A government scientific expedition that journeyed through the meadows interested Lembert in collecting plants and insects for profit, and he did a great deal of this, sending specimens all over the world. There is even said to be a moth named after him. He earned a modest income from his collecting, and robbery may have been the motive for his murder in the winter of 1896.

After Lembert's death, his homestead passed to his brother Jacob, who sold it in 1898 to John McCauley, proprietor of a hotel at Glacier Point, and McCauley's brother. The McCauleys built a cabin there—the same cabin that still stands and that has served as home to the caretakers of the lodge and campground for many years. The cabin must have been built by 1904, as this date is carved on one of the logs.

When the McCauley heirs put the Soda Springs property on the market in 1912, William Colby, then secretary of the Club, took an option on the land. He and other leaders of the Club feared it would "fall into improper hands." A year later, the entire purchase price had been raised from contributions by individual members' subscriptions. Thereafter it was used for several years as a site for excursions and camping trips.

The Soda Springs property in the Tuolumne was an especially appropriate site for a memorial to Edward Parsons. The meadows are emblematic of the values that led to the founding of the Sierra Club, and it was to the Tuolumne that Colby and Parsons conducted the first High Trip in 1901.

Edward Parsons (1861–1914) was one of the most active of the early Club leaders. Originally from New York, he was a businessman who fell in love with the western mountains. He joined a mountaineering club, the Mazamas of Portland, Oregon, in 1896—with them he climbed Mount Rainier in 1897, Mount Shasta in 1899 and Mount Jefferson in 1900. He was also an active member and officer of the Mountaineers of Seattle and the American Alpine Club; the latter at that time was centered in Philadelphia.

In the summer of 1900 he visited Yosemite Valley and heard of the Sierra Club. He promptly joined. When William Colby discovered that Parsons had already had much experience organizing group outings for the Mazamas, he made him his chief assistant on the Outing Committee. Parsons served on the Outing Committee for thirteen years, and for nine of those years he was a director of the Club.

Parsons was that rare combination of the warmth of enthusiasm and the coolness of the expert organizer and stickler for safety. Muir pictured this strong-willed, gentle person "patiently at work in camp or on the trail, stretching and cobbling shoes, reinforcing thin soles, sharing his blanket with some unfortunate whose dunnage bag had gone astray." He and his wife, Marion Randall, were fine photographers, and many of their pictures can be found in early *Bulletins*, along with Mrs. Parsons' frequent and perceptive book reviews and accounts of trips.

Along with John Muir and many others Parsons threw himself into the fight to save Hetch Hetchy, and it overwhelmed him. All those who had fought were tired; some were tired unto death. Sick at heart himself, Muir took up his tireless pen and wrote a memorial for his friend: "For his unflagging devotion to the lost cause of Hetch Hetchy, he paid a heavy price in strength and health as well as in time and money. After a very short illness he passed

away on May 22, 1914."

The summer after Parsons' death it was proposed that a lodge be built in his memory on Sierra Club land in the Tuolumne Meadows. A substantial memorial fund had already been collected. The lodge was to be a single room containing a large fireplace and was to "serve as a permanent club headquarters and meeting place in the region." It was also intended from the beginning to be a reading room and a library.

The Edward Taylor Parsons Memorial Lodge was built in 1915, mostly of native stone. The other materials, hardware and cement and the galvanized iron for the roof, were either packed in by mule or brought in by truck when the road opened. The roofing was intended to be better looking—but to this day the handsome roof beams support a utilitarian galvanized iron roof. The total cost of the lodge was about \$3000.

When the lodge was opened, a custodian spent the season at the McCauley cabin. Many Club members formed the habit of camping nearby, some for the entire summer. Others stayed only briefly to restage for bolder forays into the back country and then returned to tell their exploits around the evening campfire in the lodge.

By the mid-sixties, times had changed. Running the Soda Springs campground became difficult. The lodge was limited to members and friends, but many others tended to ignore this and wore out their welcome. It was no longer easy to uphold the traditions of sanitation, decorum and mutual respect among campers that had been taken for granted by earlier generations. Nonetheless, the Parsons Lodge continued to exert a positive influence and to expound the conservation ethic through educational displays and its library of mountaineering materials. Many young people responded favorably and joined the Club.

During this same period, the philosophy of the Club changed radically regarding the ownership of Soda Springs. When the land was purchased, apparently the Club intended to keep it indefinitely. In the Sierra Club's role of defender of the national park, neither the Club nor the Park Service saw any anomaly in its maintenance of private property as an enclave surrounded by parkland. However, after World War II, the Park Service became more dedicated to buying up inholdings in the national parks, and the Sierra Club encouraged it to do so. Club leaders gradually came to feel that it was inconsistent for the Club to hold the Soda Springs property apart from this trend and began to foresee the time when the land would be turned

over to the Park Service. Implicit in this commitment was an expectation that the campground, lodge and cabin would continue to serve a similar function under the aegis of the Park Service as they had under the Sierra Club. In 1973 the Sierra Club Foundation, which had held the property in trust since 1971, sold the 160 acres and the buildings to the Park Service for \$208,000.

For three years the Park Service operated Soda Springs as a walk-in campground with a ranger living at the McCauley cabin. He had other duties during the day and was unable to supervise the lodge as the Sierra Club custodians had done. The lodge was left open only part of the time, and the materials in it continued to be used as an informal source of information.

Continued studies of the area's ecology showed that human impact did not decrease significantly when automobiles were excluded from the campground. Aerial surveys and photographs revealed a series of paths converging on the bridge from all sections of the meadow; they approached Soda Springs like the spokes of a wheel. Signs were put up to discourage indiscriminate meadow travel, but it seemed impossible to control traffic as long as the campground remained open. Thus, in the spring of 1976, it was decided to close the walk-in campground. After more than 60 years as a gathering spot for Sierra Club members and other lovers of the high places, the Edward Taylor Parsons Memorial Lodge was shuttered and padlocked.

Fortunately, its history does not end there. In the fall of 1975, the lodge was nominated for status as a national historic site. And in the summer of 1977, the Yosemite Natural History Association reopened the lodge and began conducting specialized day-long classes in the natural and human history of the area, led by naturalist Michael Ross. The association is also reassembling as much of the old mountaineering library as possible for the use of students and visitors to the lodge. In doing these things the association is using the lodge in a manner appropriate to its past and true to the traditions laid down by, among others, Edward T. Parsons, the long-departed mountaineer whom it commemorates.

Elizabeth S. O' Neill is a Sierra Club member of long standing and a freelance writer. For the past 30 years she has spent part of each summer in Tuolumne Meadows.

The Boston Harbor Islands State Park

Revival of a Wasteland

LEANNE COWLEY

ASTLE, SPECTACLE, MOON, GALLOPS, BUMPKIN, HANGMAN and GRAPE have one thing in common. They are all names of islands in Massachusetts' Boston Harbor. For many years subject to exploitation and abuse, the islands have now become a state park, a natural resource valuable for both recreation and conservation. Much work, however, remains to be done.

Boston's 50-square-mile harbor contains more than 30 islands, with a total area of approximately 1200 acres. In keeping with the tradition that islands are convenient places to isolate what society wishes to sequester, the Boston Harbor Islands have housed such facilities as quarantine hospitals, poorhouses, houses of correction, homes for unwed mothers, garbage dumps and even a glue factory that recycled the city's dead horses. Before the late 1800s, the islands were used for farms, gambling resorts and military outposts.

This diversity lives on in some forts, a prison, a sewage treatment plant and a chronic-disease hospital. By World War II, most of the islands had been abandoned and retired to barren wasteland, a sad change from what had been described in 1614 by Captain John Smith as "many isles all planted in corn, groves, mulberries, savage gardens, and good harbors."

Were it not for the efforts, starting in the late 1960s, of concerned citizens and politicians, these islands might have continued as victims of erosion, vandalism

and neglect. A group that was instrumental in bringing the issue to successful progress was the New England Chapter of the Sierra Club.

The plight of the Harbor Islands first received extensive public attention in 1969, when private citizens working for a Boston Expo proposed filling in and developing parts of the harbor in 1976. The plan ignored both environmental and social problems and was protested by the Sierra Club. Although the plan for a Boston world's fair died, the Eastern New England Group launched a fight against haphazard development of the harbor area.

In 1968, then-State Senator (and now Congressman) John Moakley and two others had sponsored a bill for state acquisition of the islands, the first stage in establishing a Boston Harbor Islands State Park. Because of heavy opposition and a lack of organized support to fight for it, the bill lost. To many town, city and state agencies and authorities, the plan threatened infringement of their power as well as loss of valuable real estate. There were also questions about who would operate the park, who would benefit from it and who would pay for it.

The bill was reintroduced in 1970; it named the Department of Natural Resources (now the Department of Environmental Management: DEM) as the operating agency, with funding of \$3.5 million to be provided by a bond issue. This time, the Sierra Club's Boston Harbor Task Force campaigned to heighten public awareness, to survey the environmental problems in the harbor, and to analyze and advise on

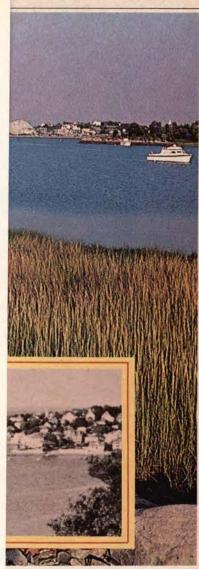
To explore,
enjoy, and preserve
the nation's forests,
waters, wildlife
and wilderness.



involved, a phone net was established, other organizations took part and legislators from towns bordering Boston's outer harbor were lobbied for support. Interest in saving the Harbor Islands from overdevelopment was promoted by harbor tours, clean-up projects and other public education programs. And, according to a task force member, a certain amount of skullduggery took place. A student project in advanced architecture became instrumental in getting the bill passed.

BRA stationery, to come into the possession of certain important legislators. The BRA was none too popular at the time, having been responsible for a number of inhumane and destructive developments, and this plan appeared to herald its next project. Partly in reaction to this appalling student proposal, as well as on its own widely perceived merits, the Boston Harbor Islands Acquisition Act of 1970 was passed.

After helping Moakley pass his parks



beach amusement park; stasket.

the Sierra Club's next task was to encreation of a feasible plan for both rving the islands' natural resources providing public recreation. The Metitan Area Planning Council (MAPC) nired by DEM to conduct research and e proposals. Early in the spring foling passage of the bill, the Club orted a series of onsite visits for the C planners and other public officials

and, with the help of a number of public agencies and community groups, conducted an "Adopt an Island" program that turned a couple of the islands into a day camp for children from Boston's urban neighborhoods. With the aid of a project advisory committee composed of both government and citizen representatives, the MAPC produced in 1972 a Boston Harbor Islands Comprehensive Plan. The plan was generally approved by the Boston Harbor Island Task Force as a "good job,

The B

tation and abuse come a state per able for both respectively. Much work, he Boston's 50 tains more than of approximate with the tradite nient places to to sequester, have housed se hospitals, poor tion, homes for dumps and e

recycled the ci late 1800s, the gambling resor

MEMBERSHIP FORM

Categories	Individual Dues	With Spouse	Categories	Individual Dues	With Spouse
Regular	2 \$20.00	□ \$30.00	Senior (60 and over).	🗆 10.00	□ 15.00
Supporting	40.00	□ 50.00	Junior (through 14).	□ 10.00	_
Contributing □ 100.00 Spouse of Life Member . □ 10.00		□ 110.00	LIFE MEMBERSHIP		
Student		□ 15.00	Per person	750.00	
	IPS will be announ	ced by a special	RRA (\$3.00) and chapter p gift card in your name. I next year.		
Enclosed is \$		Please enter a	membership in the cat	egory checke	d above for:
Name					
Address		3331		- 101	
				Zip	
GIFT MEMBERSH	HIPS: If you are givi	ing this member	ship as a gift, please enter y	our name and a	ddress below:
Name					
Address			S.F.E.L. INS. I.	C. P.	

Mail to:

Categories

Sierra Club

DEPARTMENT 9 P.O. BOX 7959 RINCON ANNEX SAN FRANCISCO, CA 94120

With

MEMBERSHIP FORM ANNUAL MEMBERSHIPS Individual With Spouse Categories Individual Dues

Regular 3	20.00 🗆 \$30	.00 Senior (60 and over) 10.00 15.00
Supporting		[17] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1
Contributing 1		00
Spouse of Life Member.	10.00 —	LIFE MEMBERSHIP
Student	10.00 🗆 15	.00 Per person
	announced by a s	e, SIERRA (\$3.00) and chapter publications (\$1.00). pecial gift card in your name. Check here if you would ship next year.
Enclosed is \$	Please e	nter a membership in the category checked above for:
Name	1	
Address		
	Marie M.	Zip
GIFT MEMBERSHIPS: If you	are giving this me	embership as a gift, please enter your name and address below:
Name		
Address		
		Zip

Mail to:

Sierra Club

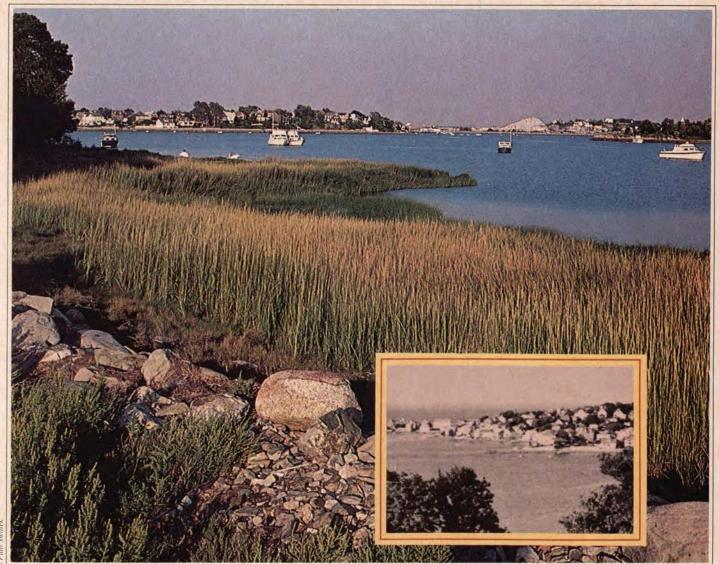
DEPARTMENT 9
P.O. BOX 7959 RINCON ANNEX
SAN FRANCISCO, CA 94120

This diversity rives on in some rorts, a prison, a sewage treatment plant and a chronic-disease hospital. By World War II, most of the islands had been abandoned and retired to barren wasteland, a sad change from what had been described in 1614 by Captain John Smith as "many isles all planted in corn, groves, mulberries, savage gardens, and good harbors."

Were it not for the efforts, starting in the late 1960s, of concerned citizens and politicians, these islands might have continued as victims of erosion, vandalism

who would benefit from it and who would pay for it.

The bill was reintroduced in 1970; it named the Department of Natural Resources (now the Department of Environmental Management: DEM) as the operating agency, with funding of \$3.5 million to be provided by a bond issue. This time, the Sierra Club's Boston Harbor Task Force campaigned to heighten public awareness, to survey the environmental problems in the harbor, and to analyze and advise on



Looking across part of the Boston Harbor from Lands End Marsh. In the distance is Nantasket beach amusement park; the roller coaster is barely visible. Inset: looking toward Hull, just west of Nantasket.

legislation. The Sierra Club's attitude was that "valid approaches to the future of Boston Harbor necessarily must take into account the commercial, transportation, housing, recreation, and open space needs of the metropolitan region Planners should work with nature, not overwhelm it."

In lobbying for Moakley's bill the second time around, more of the public was involved, a phone net was established, other organizations took part and legislators from towns bordering Boston's outer harbor were lobbied for support. Interest in saving the Harbor Islands from overdevelopment was promoted by harbor tours, clean-up projects and other public education programs. And, according to a task force member, a certain amount of skullduggery took place. A student project in advanced architecture became instrumental in getting the bill passed.

The student assignment, to be completed in association with the Boston Redevelopment Authority (BRA), was to consider Boston Harbor's potential for development. The final report was a horror of proposed filling, poldering, ditching, draining, bridges and ten-story buildings. Task force members saw their opportunity and arranged for copies of this elaborate development plan, which was printed on BRA stationery, to come into the possession of certain important legislators. The BRA was none too popular at the time, having been responsible for a number of inhumane and destructive developments, and this plan appeared to herald its next project. Partly in reaction to this appalling student proposal, as well as on its own widely perceived merits, the Boston Harbor Islands Acquisition Act of 1970 was passed.

After helping Moakley pass his parks

bill, the Sierra Club's next task was to ensure creation of a feasible plan for both preserving the islands' natural resources and providing public recreation. The Metropolitan Area Planning Council (MAPC) was hired by DEM to conduct research and devise proposals. Early in the spring following passage of the bill, the Club organized a series of onsite visits for the MAPC planners and other public officials and, with the help of a number of public agencies and community groups, conducted an "Adopt an Island" program that turned a couple of the islands into a day camp for children from Boston's urban neighborhoods. With the aid of a project advisory committee composed of both government and citizen representatives, the MAPC produced in 1972 a Boston Harbor Islands Comprehensive Plan. The plan was generally approved by the Boston Harbor Island Task Force as a "good job,

Vivid photographic studies of the Canadian wilderness.



THE OKANAGAN Hugo Redivo

Introduction by Eric D. Sismey. For nearly thirty years, Hugo Redivo's camera has been recording the flowers. animals, cities, festivals, and people of the breathtaking Okanagan Valley in British Columbia. With 88 full-color photos, this book is a testament to Redivo's great skill. It is meant to record the Okanagan for those who live there. those who visit and hope to return, and those who have yet to discover this golden land. \$9.95

OXFORD UNIVERSITY PRESS

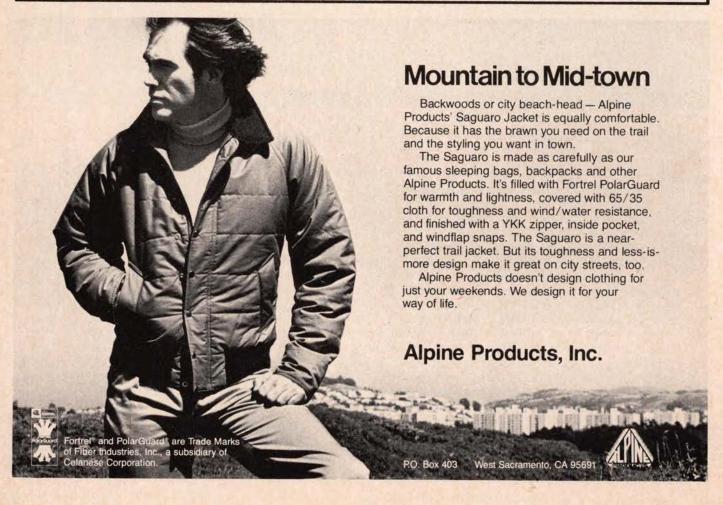


GREAT DAYS IN THE ROCKIES

The Photographs of Byron Harmon 1906-1934 Edited by Carole Harmon and the Peter Whyte Foundation Biography by Bart Robinson. Appreciation by Jon Whyte. Mountains, glaciers, muletrains, teepees on an island in a vast, still lake. These are just a few of the splendid scenes captured by Byron Harmon in this superbly beautiful volume—a unique pictorial record of the opening of the

Canadian Rockies in the first decade of this century. With 84 duotones. \$15.95

200 Madison Avenue, New York, N.Y. 10016 Publishers of Fine Books for Five Centuries





Burning garbage barges—seen here from Greater Brewster Island—became a symbol to environmentalists of general mistreatment of the Boston Harbor.

with necessarily very large amounts of information logically, clearly and sensitively presented." It gives a history and description of each island, with detailed maps of natural and constructed features, then outlines a plan for each, including replanting, recreation uses and the restoration of historic remains.

The comprehensive plan has now been in effect for five years, and most of the islands have been purchased or transferred for management by DEM. Three more are being appraised for possible transfer from the city of Boston. One of the few problems in completing the park has been with Peddocks, the largest of the islands, which was previously owned by real-estate developers. The island has 46 homes whose leases have two years to run and whose occupants are now requesting life residency. Peddocks is important to the completion of the park, since it would accommodate the large groups and heavy use that the other islands could not support.

For the most part, the New England Chapter's Boston Harbor Task Force commends the work of DEM in carrying out the B. H. I. Comprehensive Plan. But, with most of the work on the islands themselves nearing completion, there are still a few problem areas. One of these is the designation and preparation of a central wharf terminal for all harbor traffic, one that will be conveniently accessible to most people. The debate centers around

Sierra Club Songbook

Full of favorite songs and music for campfire singing. Bound with a waterproof cover, 4" × 7", 96 pages, 2 oz. \$2.50 includes postage and handling. Californians add 13¢ tax. Proceeds will be used to further environmental projects of the California/Nevada Regional Conservation Committees of the Sierra Club.

First Edition - October 1977.

Send order to

SONGBOOK Sierra Club 1176 Emerson Palo Alto, California 94301

Please send me	Songbooks.
I enclose \$	
Name	
Address	
City	
State	Zip

Boston's Waterfront Park

A walk through the modern architecture of Government Center and under the dirty iron pillars of the elevated expressway leads to Boston's waterfront. By the 1960s the wharf area, settled before the nations's independence, had begun to show its age. Deteriorating buildings and worn piers, an eyesore in the heart of Boston, made the waterfront a prime target for urban renewal.

The first plan, drawn up by the Boston Redevelopment Authority in 1964, proposed the usual conglomeration of high-rise buildings and parking garages and a quarter-acre park in the shadow of a 60-story building. The Sierra Club's Greater Boston Group had different ideas for the city's waterfront. Realizing the need for urban recreation space, Club activists created a comprehensive plan for the area that included the "Great Cove Commons," an eight-acre park, pedestrian malls, renovation instead of destruction of old, historic buildings and a scale-down of a proposed seven-lane road. The Great Cove was planned to become a focal point for such diverse activities as community boating, picnicking, harbor excursions and fishing, with cafes, fresh-fish markets, clusters of trees and open space. Copies of the Sierra Club proposal were sent to government agencies, legislators, community groups and a number of concerned individuals.

And the results of their efforts?

Now a walk through Government Center and under the highway to the waterfront reveals a different scene. No longer does one see broken-down, abandoned buildings. Instead, a quaint, lush park with monkey bars and slides, with trees, grass and benches surrounds the renovated buildings, with cafes and the blue Atlantic waters. But improvements are not complete. Still within view of the park is an elevated expressway; local Sierra Club members are working to relocate the highway underground, in a tunnel, and in the process complete a missing railroad link that will improve Boston's commuter rail service.—Marsha Rockefeller

Marsha Rockefeller is the New England Chapter's Alaska campaign coordinator and office manager.



Dept. OSR, Third & Virginia, Seattle, WA 98124



the downtown waterfront's Long Wharf, the most obvious and attractive location, but one disapproved of by BRA for reasons unfathomable and unstated. Another problem has been the lack of a strong coastal zone management program for the harbor, without which it's difficult to preserve public access and to keep views open on the waterfront.

The plan is good. The problems crop up in implementation, when small decisions become major policies. Environmentalists must participate in making these small decisions, to make sure that people-oriented management of the islands is emphasized.

he islands have been developed to preserve their openness and accessibility. Restriction of public movement by concrete and fences has been kept to a minimum: planners do not want a mystique of forbidden territory that will invite trouble. Proper policing is important, but a successful, nonthreatening solution has been found: summer resident-managers have been hired for each island, a plan modeled after the Appalachian Mountain Club's hut-caretaker program. Vandalism has dropped from "substantial" to zero.

On the whole, then, the program is thriving. Restoration of Fort Warren, which dates back to the Revolutionary War, is progressing, as is landscape restoration and creation of hiking trails on several islands. Plans are in the making by the Metropolitan District Commissionalbeit with much confusion-for improving the sewage treatment plant.

More funding is definitely needed, according to DEM's Meg Ackerman, coordinator for the Harbor Islands State Park. DEM has requested an additional \$1.5 million for 1979 to continue its acquisition and development program. Other possible

sources include federal funding made available by legislation introduced last year by Senator Edward Kennedy and Representative Moakley that would make the Boston Harbor Islands a national

recreation area.

Boston Harbor Islands State Park is the happy conclusion to a debate over land use, in which conservation and development were pitted against each other as incompatible alternatives. Instead, natural and constructed resources coexist beautifully here. Boston's islands have gone from a derelict wasteland in 1940 to a natural asset in 1978.

Leanne Cowley writes about environmental issues and has been an assistant editor of the New England Chapter newsletter, the New England Sierran.

In the dark, they all look alike.



But, there's one critical distinction -PolarGuard and down behave differently in sleeping bags. That's why Alpine Products has chosen to create PolarGuard bags exclusively. We believe in PolarGuard's superiority as an insulating material - and we don't cancel out its advantages by constructing our bags like down ones.

Our "differential layering" (pat. pend.) construction is designed specifically to maximize PolarGuard's advantages. Compare our #3 to one of our competitor's bags and you'll see how we've optimized PolarGuard's superiority as an insulator. 97% of the air-space in our bag is filled with dense full-cut batts of PolarGuard vs. 85% in our competitor's overlapped construction. The result? Our bag traps and regulates heat far more effectively.

> Our competitor has been building fine down bags for years; if it's down you want, see him. But if you want a PolarGuard bag because of what PolarGuard can do, buy the state-of-the-art bag from designers who work with PolarGuard exclusively: us. Alpine Products.

ALPINE PRODUCTS #3

Wt. Fill 4 lb. 1 oz. Total Wt. 5 lb. 3 oz. 8" Fits Persons to



NORTHFACE BIGFOOT

4 lb. 1 oz.

5 lb. 2 oz.

5'10"

Wt. Fill

Total Wt.

Fits Persons to

Fortrel* and PolarGuard* are Trade Marks of Fiber Industries, Inc., a subsidiary of Celanese Corporation.

Alpine Products, Inc. P.O. Box 403 West Sacramento, CA 95691





Optimistic View of High Court's Nuclear Decision

The U.S. Supreme Court's unanimous decision removing obstacles to the construction of two nuclear power plants was proclaimed by the press and the nuclear industry as a severe setback for environmentalists. "The Supreme Court," The Wall Street Journal reported, "sharply limited the ability of environmentalists to get help from the federal courts in their attempts to block nuclear power plants." Many environmentalists, however, are taking a different, more optimistic view of the decision. Anthony Roisman, attorney for the Natural Resources Defense Council (NRDC), which represented the Club and other environmental groups in the case, called the press interpretations "groundless," adding, "the decision does more to strengthen the attacks on nuclear power than it does to bolster the nuclear program."

The court reversed earlier decisions in the case, saying the lower courts had exceeded their authority in ordering the Nuclear Regulatory Commission (NRC) to reconsider the granting of a construction permit for Consumer Power Company and an operating permit for Vermont Yankee Power Corporation. The high court held that courts may not prescribe procedures for regulatory agencies; they may only monitor whether agencies are following their procedures properly.

The decision by the court does not clear the way for the operation of the two power plants; the case goes back to the federal Court of Appeals to determine if the NRC had complied with its legally mandated procedures. The court, however, did rule on the issue of nuclear-waste disposal, agreeing that wastes present "a most severe potential health hazard" that constitutes "adverse environmental impacts which cannot be avoided." They concluded that nuclear wastes must be considered in the environmental impact statements for the reactors.

Omnibus Parks Bill Passes House

Legislation providing \$1.4 billion and protecting 2.5 million acres of parkland in the United States sailed through the House of Representatives last July. The Omnibus Parks Bill, drafted by Representative Phillip Burton (D-California) will, if adopted by the Senate, put to rest long-standing controversies over several park areas in the country. It provides funding for 33 parks, historical sites and seashores, creates eleven new national parks, adds areas of seven rivers to the wild and scenic rivers class and designates five new national trails. Nearly 1 million acres and \$221 million were deleted from the bill before it was finally adopted by a 341-to-61 House vote. At this writing, the bill is awaiting Senate action.

■ Political Education in the Sierra Club

As the November elections approach, there is growing interest in political education. The Sierra Club Committee on Political Education (SCCOPE) is helping chapters throughout the country organize political education programs. SCCOPE is particularly familiar with many of the complicated procedural questions raised by such activities. If chapters or groups are setting up candidate forums, distributing questionnaires, publishing voting records, profiling local candidates, or mailing information on political candidates, the SCCOPE guidelines should be consulted. These may be obtained, and additional questions answered, by contacting SCCOPE at the Club's National Office.

RARE II: Time for Comment

The long-anticipated RARE II (Roadless Area Review & Evaluation) draft environmental impact statement (dEIS) has been released by the Forest Service for public comment. Initial comments from environmentalists have been very negative.

The dEIS is a major step in the massive RARE II study (see Sierra, July/August 1978). RARE II was originally planned as a decisive, impartial effort to classify potential wilderness areas within the U.S. national forests and grasslands; the study takes in nearly 70 million acres. However, environmentalists assert that, under industry pressure, the program has been moving off track.

The just-released dEIS has been proclaimed as "less a wilderness program than a nonwilderness program" by the Sierra Club and The Wilderness Society. "There are fundamental biases in the whole RARE II process which have gone uncorrected because speed has had priority over quality. There is a serious anti-wilderness slant in the 'range' of alternatives offered for public review."

RARE II offers ten "alternative" allocation plans for the government lands; each employs different definitions and purposes. Only one of the ten alternatives proposes primarily wilderness allocations.

The RARE II process is in the midst of a three-month public comment period on the dEIS. Copies of the dEIS and its twenty regional supplements may be obtained upon request at National Forest Service regional offices. The Sierra Club and The Wilderness Society have prepared a new fact sheet on RARE II to aid people in reviewing the national dEIS and its supplements. It may be acquired from Information Services at the Sierra Club's San Francisco Office.

News

■ Nuclear Liability Limit Upheld

The U.S. Supreme Court recently upheld a 1957 law that limits the financial liability of a nuclear power plant for a catastrophic accident. In this case. environmentalists had challenged the construction of two power plants near Charlotte, North Carolina, asserting that the "arbitrary nature" of the statute's liability ceiling violated the equal-protection and due-process guarantees of the Fifth Amendment. The law, known as the Price-Anderson Act, was adopted in 1957 after private nuclear-energy producers complained that the actual potential liability from nuclear accidents far exceeded the financial resources of the industry and its insurance companies. Justice Warren Burger, writing the main opinion for the court, declared that the statutory limit on financial liability is "an acceptable method for Congress to utilize in encouraging the private development of electrical energy by atomic power." He implied that the liability ceiling, which stands at about \$560 million, may be increased by special congressional action. He said this is "a fair and reasonable substitute for the uncertain recovery of damages." Justice Potter Stewart told environmentalists, "there has never been such [a nuclear] accident and it is sheer speculation that one will ever occur."

■ Little Fish Makes Big Splash in Washington

The wake of a three-inch fish in Tennessee has been causing a flood of controversy in Washington. The Supreme Court decision halting the construction of the Tellico Dam to protect the snail darter, an endangered species, gave impetus to efforts in Congress to amend the Endangered Species Act. The court had stated that the congressional "intention" of the 1973 act, which forbids funding for projects likely to destroy any endangered species, was "abundantly clear," and that if the work on the dam is to continue, Congress, not the courts, must make the decision.

Movement began immediately in Congress to loosen the tight environmental restriction of the law. Eloquent and emotional debate raged on the floor of the Senate over proposed amendments to reauthorization of the act. Senator Scott (R-Virginia) quoted from the Bible, asserting God gave humans dominion "over every creeping thing that creepeth upon the earth." Senator Garn (R-Utah) stated that there is "no justification" for calling the acts of humans unnatural, adding that "beavers build dams, too."

The Senate finally adopted an amendment introduced by senators Culver (D-Iowa) and Baker (R-Tennessee) that would create a special cabinet-level review committee to consider cases where public works projects threaten the existence of a species.

Meanwhile, the Tellico Dam remains nearly completed and the snail darter still spawns in the Little Tennessee River. The fates of both await the action of the House and the President, and possibly the appointment and action of the new environmental review committee.

■ LCV House Voting Chart Available

The national League of Conservation Voters chart of environmental votes by members of the House of Representatives in 1977 is now available. A copy can be purchased for \$2 from LCV, 317 Pennsylvania Ave., SE, Washington, D. C. 20003.

■ Water Water Water . . .

President Carter has announced his long-awaited national water policy, making conservation the keystone of his plan, and environmentalists praised the proposal. The main features of the Carter plan include: the creation of a cost-sharing formula to guide water-project funding by states and the federal government; the requirement of stricter cost-benefit analyses of water projects; the creation of a project review board to monitor the environmental effects of water projects; and a request for \$50 million from Congress to fund state water plans and conservation programs.

The plan met with approval by environmentalists, although many expressed disappointment that the President didn't deal with existing, damaging water projects. But, Brock Evans, director of the Club's Washington office, said, "Its mitigation and water-conservation measures especially constitute a long step in the right direction."

Taking a conspicuous step in the opposite direction, the House of Representatives dealt a blow to environmentalists by rejecting two amendments to the Public Works Appropriations bill that would have killed funds for eight and thirteen detrimental projects respectively. Both amendments were resoundingly defeated by greater than two-to-one margins.

In addition to the millions of dollars of environmental damage, these projects would collectively cost taxpayers some \$564 million. The groups' representatives pointed to the contradiction between these House votes and the growing concern about high taxes evidenced in California by the passage of Proposition 13. Club spokesman Carl Pope said, "Twenty-eight of the 36 California representatives voted to retain the water projects in the bill. That is, less than two weeks after California voters cast their ballots against waste in government, these 28 voted for waste in the public works bill."

Why I'm a Snake-Lover

BARBARA BRENNER

hat's so special about snakes?" A kid asked me that today in school. I was so surprised that anyone would ask such a question that I was stumped for a minute, and before I could recover he went away. I hope I

see him tomorrow because I've thought of some good answers. First I'm going to tell him that there are about 6000 species of reptiles, including 2700 kinds of snakes.

And I wonder if he knows that snakes have been



The yellow chicken snake lives in the southeastern United States and is equally at home on the ground or in trees.

around for about a million years. It seems to me that anything with a family tree *that* old is worth a closer look.

I'll get his curiosity aroused by telling him about the mystery surrounding the evolution of snakes. Sci-

entists know that the earliest reptiles evolved from amphibians. They think that snakes may have come from a group of reptiles that lived under the ground, lost their legs, nearly lost their eyes and hearing, and then, much later, adapted again to a life above ground. But there the trail gets cold, because no one seems to know exactly why the snake took the shape it did. The only thing we do know is that snakes once had legs and then lost them. In fact, some of the most primitive snakes, like the Boa Constrictor, still have a leftover, or *vestigial* leg.

I'll bring up that vestigial leg as the



The San Francisco garter snake is both beautiful and rare; it lives only in a small area on the California coast south of San Francisco.

... or, leftover legs and skin



The eastern ringneck snake lives in moist areas. It spends its days under rocks and logs and comes out only at night.

final touch. Mom is the only member of the family who still doesn't entirely appreciate my snake. She says she's not afraid of snakes any more, she just doesn't think they're very interesting.

"They're so dumb," she said the other day.

"Compared to what?" I snapped back.

"Well, for instance, a dog," she said. "Dogs are so much smarter."

The fact is, I love Shalom, and I wouldn't trade him for any animal. But a snake is unusual, and I think that's what appeals to me.

I said to her, "How many dogs do you know that can walk without legs, can eat something twice as big as they are, can hunt and find their food in the dark, can take care of themselves from the minute they are born, and," I said for a clincher, "can shed their skins every few months.

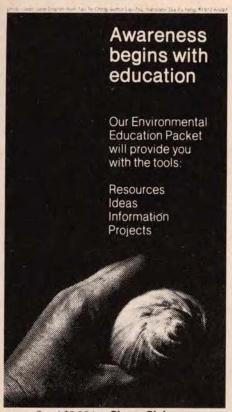
"Besides," I added, "if people chose their pets on the basis of intelligence, everyone would keep a chimpanzee. And look how many people keep tropical fish. They're no Einsteins either, if you come right down to it."

Mom laughed. "O.K., O.K., you win," she said. "Snakes have charisma." I looked up the word charisma in the dictionary. It means having a special power to attract people. That's just what snakes have. For me, anyway.

Reprinted from A Snake-Lover's Diary, a Young Scott Book by Barbara Brenner, © 1970, with permission of the Addison-Wesley Publishing Company, Inc.

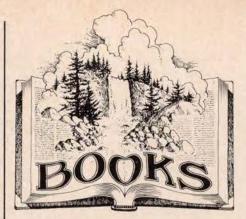


Kingsnakes are common, but this one-the scarlet kingsnake-is very rare and is found only in the Great Smoky Mountains. Kingsnakes are harmless, but they do closely resemble the poisonous coral snake.



Send \$3.00 to: Sierra Club Information Services 530 Bush Street San Francisco, CA 94108





Brief Reports

STAFF REPORT

The African Buffalo, A Study of Limitations of Population, by A. R. E. Sinclair; University of Chicago Press, Chicago, 1977. Cloth, \$20.

IN 1965 THE author participated in an aerial photographic census of the African, or Cape Buffalo (Syncerus caffer). The count was 35,000, a number that seemed surprisingly high to the game hunters of Africa. The author, however, wondered why there weren't more. This book is the result of that inquiry, and its conclusions apply to animal populations worldwide and are not irrelevant to studies of human population.

After debunking the myths of the animal's viciousness, Sinclair proceeds directly to the central question of the book—what determines the size of an animal population? His answer involves regional factors, resource requirements, social behavior, reproduction and the relationship of density to mortality. For the scholar.

Taken by the Wind, Vanishing Architecture of the West, by Ronald Woodall and T. H. Watkins; New York Graphic Society, New York, 1977. Cloth, \$29.95.

R ON WOODALL is not a professional photographer, as he readily admits. He is an artist who paints pictures, mostly of old buildings. In his frequent travels around the West, he accumulated more than 15,000 photographs of abandoned buildings to use as models for a book of paintings to be called *Magnificent Derelicts*. A wide-awake editor seized wisely on the photos themselves.

The book is an elegy to haunting remains; it features 431 color photos of abandoned churches, farmhouses, mines, saloons, gas stations and other buildings from the Yukon to New Mexico. Although the photography is technically mediocre, the vision is impeccable, painterly; it will

remind you of Wyeth, of elegant skeletons slowly succumbing to the prairie, to wind and sun and snow. These are the buildings, impossible to rescue now, that have not been turned into museums, antique stores and quaint little restaurants. More monuments to the spirit than examples of architectural note, they were functional, very plain, yet they testified to the bravery of settlers who set up these boxes of sticks against the forces of a continent. They illuminate the relationship of previous generations to nature. A slight but witty and entertaining text by T. H. Watkins (coauthor of Mirror of the Dream: An Illustrated History of San Francisco) accompanies the photos.

The California Quail, by A. Starker Leopold; University of California Press, Berkeley, 1977. Cloth, \$14.95.

A SCHOLARLY and exhaustive study of the California state bird. Dr. Leopold's work includes an account of this bird in California history, its species and subspecies distinctions, its ranges, habitat (natural and man-made), natural history, covey territoriality, seasonal movement, nesting, brooding and mortality and a concluding section on quail management. The chapters are replete with graphic and tabular data. A model of organization and thoroughness, this is not a book for the lay reader.

Wildlife Watcher's Handbook: How Hunters, Birders, Naturalists and Photographers Can Get Close to Wild Animals and Birds, by Frank T. Hanenkrat; Winchester Press, New York, 1977. Cloth, \$10.

THOUGH THEIR goals and motives dif-I fer, hunters, naturalists and wildlife photographers have much in common. They all use the same techniques to trail and observe wildlife. Though this book was written by a hunter-and the photographs depict mostly hunters-anyone concerned with wildlife will find it interesting and useful. Hanenkrat begins with concise and fascinating discussions of how animals perceive the world and how they avoid detection and danger. His advice is both practical and humane; there is little in the book that would offend wildlife enthusiasts, and his descriptions of the various techniques of stalking (and simply standing still) are particularly lucid and useful. Quiet and patience, it seems, are the most valuable attributes of the successful wildlife watcher. Hanenkrat also includes a series of exercises for sharpening perceptual acuity.

Mountain Monarchs, Wild Sheep and Goats of the Himalaya, by George B.

Schaller; University of Chicago Press, Chicago, 1977. Cloth, \$25.

Y EORGE SCHALLER has formed the en-G viable habit of writing definitive books. In 1972 he won the National Book Award for science for The Serengeti Lion. His latest work, compiled from 37 months of research in the field, is a comprehensive study of 26 species of the subfamily Caprinae. Mountain Monarchs includes essays on taxonomy, distribution, population dynamics, natural history and the relation of social behavior and ecology. Like Schaller's previous works, this book is academically impeccable, yet not pedantic. He has included journal entriesmany of which are as fresh as narrative fiction. There is a section of rather dull black-and-white photographs and statistical tables and bibliographical references aplenty.

The Great Betrayal, Arctic Canada Now, by Farley Mowat; Little, Brown, Boston, 1976. Cloth, \$5.95.

RARLEY MOWAT was introduced to the Arctic by an ornithologist uncle in 1935. Inspired by the country and its wildlife, Mowat established his career as a writer with such books as People of the Deer, Never Cry Wolf and The Siberians—all of which are set in the Arctic.

The present book is a sharp indictment of the Canadian government's refusal to protect its northern wilderness. The land has been ransacked for the profits of mineral development (90% of Canada's northern resources are owned by foreign companies); the native cultures are dissolving under the influences these developments bring. A biting and often angry book—here is an eloquent plea to save what is left of these unique cultures and ecosystems. Highly recommended.

A Bat Is Born, by Randall Jarrell, illustrated by John Schoenherr; Doubleday, New York, 1978. Cloth, \$5.95.

In 1964, two years after Randall Jarrell won the National Book Award for fiction, he wrote a novel for children, *The Bat-Poet*. In that novel is the poem, "A Bat Is Born," the text of the present book. Often maligned and too much feared, bats are something special and dear in the hands of Jarrell.

A bat is born

Naked and blind and pale His mother makes a pocket of her tail

And catches him . . .

We are caught too by this beautiful book. The jacket says it's for nine-yearolds, but the poetry is for all of us.

"Equal in importance to Rachel Carson's The Silent Spring"*

We may be the generation that sees the world's coastlines come to disaster. Or we may come to our senses. Ecologist author Anne Simon offers help and hope—along with her razor-sharp words of warning.

"Anne Simon writes with passion ... and her reason is not scenery but survival."

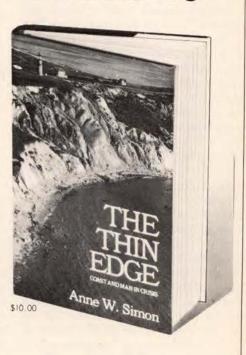
The New Yorker

"[An] elegant little book...a tocsin that cannot be sounded often enough."

*The Chronicle of Higher Education

To order, send name, address, check or money order for \$10.00 to Harper & Row, Mail Order Dept. 7425A. 10 East 53rd Street, New York, NY 10022. (Please add 75c for postage and handling and sales tax where applicable.)





The International Committee of the Sierra Club Announces:

A comprehensive trip to New Guinea and the Islands of the South Pacific.

The trip is scheduled for July/August 1979 when the weather is at its best. Fiji, New Caledonia, New Hebrides, Solomon Islands and New Guinea will all be visited. Many are newly independent and share the problems of development and need of guidelines for environmental control.

While the focus of the trip is on the new position of these exotic lands in the world today, there will be ample time to enjoy the natural beauty of each area. In Fiji you will sail to the offshore Yasawa group of islands. The active volcano on Tanna Island will be a feature of your visit to the New Hebrides. Villagers still make and use shellmoney on Malaita Island in the Solomons. Both the Highlands and the Sepik River areas of New Guinea will be included.

For complete information call or write, enclosing your name and address:

SIEMER & HAND, LTD. PHONE: 415-788-7186 One Embarcadero Center, San Francisco, California 94111

The Hiker's Hut

CLUB CHAPTERS DREAM about having a mountain lodge or forest retreat for their members. It could be a headquarter for outings or nature study, a place for environmental workshops, a center for people to meet. For nearly ten years, members of northern California's Loma Prieta Chapter—urged by Olive "Ollie" Mayer—worked for such a cabin. And finally, last November, supporters and celebrants gathered atop an oak-dotted coastal-range ridge to dedicate the first new chapter lodge in a quarter of a century—the Sierra Club Hiker's Hut.

"Hut" is actually a misnomer; it is really a chalet with a spacious living-dining room, an upstairs loft, a kitchen, a bathroom with shower and toilet, and a separate caretaker's room. It had arrived complete with appliances and furniture in a containerized kit from Denmark. Simple and clean, the structure is typical of hiking hostels Ollie Mayer had admired in Scandinavia. In the summer of 1975, when enough money had been raised and the time was ripe, her son had purchased the prefab kit in Denmark and shipped it to California.

Why, with strong community support and the hut available as a unit package, had the project taken ten years to complete? There's a story in that. Establishing a lodge (and preserving the trail network around it) required many more patient steps in the 1970s than did establishing the other two Club chapter lodges in 1930 and 1953 near Los Angeles and San Diego.

The Sierra Club becomes the legal owner of all real estate purchases, but the local chapters are responsible for maintenance. In this case, the Loma Prieta Chapter has nonmembers on its Hiker's Hut Committee, so, in effect, the local community manages the hut.

Acquiring and erecting the hut was only the second half of Ollie Mayer's project. First came the task of permanently establishing the network of trails in San Mateo County's rugged back country, which stretches along the coast some 30 miles south from San Francisco. The hills and peaks of the coastal range, rising some 2000 feet, have long been crisscrossed with trails—hundreds of miles of old logging roads, Indian routes and fire and game trails. With increased development of the area, some of those trails could be permanently lost to hikers.

Ollie Mayer and a handful of other local activists organized an informal weekday hiking group (the participants now number



ROBERT A. IRWIN

in the hundreds). The hikers, mostly women and not all Club members, had two purposes: to introduce groups of schoolchildren and teenagers to the trails and to hiking, and to seek out routes that would best tie together the scattered state and county parks and reserves in a scenic trail network. The group's plan was to either obtain easements (that is, rights of way) on the critical pieces of trail or to purchase them outright—a simple, straightforward approach involving little government red tape, or so they thought. But no landowner would grant an easement. Yes, owners would sell, but only parcels of hundreds or thousands of acres. By 1971, it was obvious that easements could not be privately obtained.

Earlier, in 1969, the chapter had formed the Coast Range Hike and Hut Section to support the trail and hut campaign and Ollie Mayer's fund-raising efforts. That action marked the beginning of the chapter's involvement in the Hiker's Hut. As both the informal hiking group and the Hike and Hut Section involved the community's use of the trails, a pro-trail political power base began building in the area. With this momentum, the trail people developed another plan: to use funds made available by the state's recreational trail legislation for county acquisition of trails. That tactic also stalled, however-chiefly because the legislation does not provide the power of eminent domain (the right of government to appropriate private land for public use). As support for the trails became more evident, a special bill was introduced and passed in the legislature to authorize expenditure of \$500,000 to purchase trails in San Mateo County.

With a trail system assured, time, money and effort could be directed to the hut itself. From the earliest days of the campaign, the money that Ollie and her supporters raised for the trails was chan-

neled through the Sierra Club Foundation. (None of that money was used in the push for special legislation, of course, since the Club's foundation can fund only nonlegislative activities.) Ollie credits much of the fund-raising success to the cooperation and guidance of the foundation's thenexecutive secretary, Colburn Wilbur, and its administrator, Steven Stevick. She also helped speed realization of her dream of a hiker's hut by contributing the salary of fund-raiser John Gilliland, who, in turn, found more donors. Grants totaling \$9000 were received from the San Mateo Foundation, the Packard Foundation and the Hewlett Foundation.

By the summer of 1975, total contributions were still short of the \$60,000 needed to purchase and assemble the hut. Ollie Mayer and Bob Coppock (who chaired the hut committee) eventually put up the rest of the money themselves, and before Christmas of that year the unassembled Hiker's Hut and all its parts were safely stored in a local warehouse. In the meantime, Coppock and Brant Calkin, then president of the Club, negotiated a renewable lease for a county parkland site for the hut at a cost of \$1 a year.

Even with the lease in hand, dedication day was another year away. Coppock spent hours with county officials reconciling the Danish prefab with the local building code and working out problems with the hut's water and septic systems. A foundation was laid. Volunteers wrestled pieces of the hut to the site a mile and a half uphill from the nearest road. In November 1976, two carpenters from Denmark assembled the hut in three weeks under the direction of its designer, Erik Carlsen—a service included in the purchase price.

Still there were delays. Water for the hut is brought in by truck, so a storage tank was assembled by volunteers. Next, a septic tank and leach lines were installedmore volunteer labor and time. With those jobs done, the hut still could not be opened; one flush toilet was not enough, and there wasn't enough water for more. An aerobic toilet would solve the problem-and demonstrate that aerobicdecay toilets, which don't require water or septic tanks, could work as well in the U.S. as in Europe, where they are common. So Danish-built, aerobic privies were installed outside, on the deck-but first the deck had to be constructed. In the fall of 1977 all was ready, and at last the dedication was held on the oak ridge overlooking the Pacific.

The hut won't be in full use as a hostel until the trail system is completed. For now, it serves as a rustic gathering spot for



Ollie Mayer stands with Chris O' Brien, a temporary caretaker of the Loma Prieta Chapter's Hiker's Hut, on the porch of the completed structure.

Sierra Club groups and committees and for other community groups. A permanent caretaker is on duty to keep the hut open every day from 4 p. m. to 10 a. m. for overnight hikers. Overnight use fees are \$3 for Club members and \$3.50 for others. For information about reservations phone (415) 326-5939.

There is still work to be done at the hut, and the chapter welcomes visiting volunteers. Two pending construction projects are a large rear deck and a raised walkway. Anyone who would like to join a work party may contact Bob Coppock, 2104 Lexington Avenue, San Mateo, California 94402; telephone (415) 341-3810.

Two other chapters—both in California—maintain lodges. The Angeles Chapter has operated its Harwood Lodge since 1930, and the San Diego Chapter its Sierra Club Lodge since 1953. Harwood Lodge was financed and built by a devoted band of chapter volunteers as a memorial to the Club's only woman president, Aurelia S. Harwood, who was long active in the Angeles Chapter. The San Diego Chapter received a lodge as a gift only five years after it was organized.

Day-to-day procedures at the two Southern California lodges are very much alike; bunks or beds are provided, but not sleeping bags, bedding or towels. Everyone shares in chores and maintenance. Each lodge sets aside "open weekends" when it is used by individuals or families, who bring and prepare their own food. On other weekends, groups can use the lodge by advance reservation. Groups also must use a central commissary for their meals. On most weekends there are volunteer hosts or overseers (there are no paid employees) on duty at the lodge. Use fees are the only source of lodge income.

Perched on the shoulder of Mount Baldy in San Bernardino National Forest, Harwood Lodge is a large, handsome, twostory stone structure with two fireplaces, a kitchen that can feed more than 100 people, and dormitories that sleep 58. The lodge is fifteen miles north of Claremont—only an hour's drive from downtown Los Angeles. Because of its popularity, especially in winter, use of the lodge is restricted to Sierra Club members, each of whom may bring as many as two guests. Members pay 50¢ for day use and \$3 for overnight; the fee for children under 12 is 25¢. Guest fees are \$1 per day, \$4 overnight and \$1.50 for children.

For years, Harwood Lodge has been entirely self-supporting. The chief annual expenses are the \$275 rent to the U.S. Forest Service, \$1500 for county taxes and \$1900 for liability and fire insurance. Great community spirit has grown among both the lodge's users and the volunteers who operate it—for example, the lodge committee once organized a work party to benefit a long-time lodge user, 72-year-old Cleo Coons, who was startled to see an army of his friends armed with brushes and buckets march down his street, one day, turn into his yard and set about painting his entire house.

The San Diego Chapter's experience differs from that of its neighbor. First of all, the San Diego Chapter has only about 5000 members to support its lodge—the Angeles Chapter has 22,000. (The Loma Prieta Chapter, too, is larger—a total of 13,000 members.) Further, San Diego's Sierra Club Lodge was a gift, so the chapter could not count on a dedicated cadre of founders with a personal stake in the lodge's success. There were times, says Jean Teater, who chairs the lodge committee, when interest in the lodge lagged, and there were too few people running it. When the burden seemed too heavy, there was even talk of selling the lodge. Now, however, there is an active host-training program under way, and use-along with fee revenue—has increased. Deficits had

Two Sierra Indexes

REGON STATE UNIVERSITY Press has recently published a 26 year index to the articles in the Sierra Club Bulletin, covering the years 1950-1976. Compiled by Edward Brazee, reference librarian at the university, the index is arranged both by author and subject and also contains a section on book and journal reviews. This index should be extremely helpful for those who use Bulletin articles for references and also for those interested in keeping up-to-date on conservation issues covered in the magazine. The index can be obtained from OSU Press, 101 Waldo. Corvallis, OR 97331, and costs \$4.00. In addition, there exists at Club headquarters a limited supply of indexes to the first 57 years of the Bulletin (1893-1949). Originally \$3.75, these are now being sold by the Sierra Club for \$2.50 each. Please write Sierra, 530 Bush St., San Francisco, CA 94108.



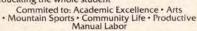
AUTHORS WANTED BY N. Y. PUBLISHER

A well-known New York book publisher is searching for manuscripts worthy of publication. Fiction, non-fiction, poetry, juveniles, travel, scientific, specialized and even controversial subjects will be considered. If you have a book-length manuscript ready for publication (or are still working on it), and would like more information and a free booklet, please write:

VANTAGE PRESS, DEPT. PK 516 W. 34th St., New York, N. Y. 10001

CONSIDER COLORADO ROCKY MOUNTAIN SCHOOL

A college preparatory experience educating the whole student



The Colorado Rocky Mountain School Carbondale, Colorado 81623, Phone 303-963-2562



Where students explore, test and create environmental options for the future. Undergraduate, Independent. Residential. Liberal Arts. Box 3060-S, San Rafael, CA 94902 (415).

WHALES

San Ignacio Lagoon & offshore islands, Baja—January 13:21. Magdalena Bay, Baja—beach camping, February 24-March 3. Hawaii—humpback whales—April 7:15. Sea of Cortez, Baja—April 15:22.

ADVENTURES INTERNATIONAL Dept. S, 4421 Albert St. • Oakland, CA 94619 (415) 531-6564



NEW ZEALAND Natural History

Enjoy the dramatic beauty and unique wildlife of this unspoiled island country. Overnight hikes with local guides in National Parks and wilderness areas. Escorted.

PACIFIC EXPLORATION CO. Box 3042-C, Santa Barbara, Calif. 93105

BLACK HILLS LAND

Wanted environmentalists for neighbors!

4 to 28 acre lots available in beautiful Black Hills. Views unsurpassed; covenants; land owners association for buyers protection. 10% down; 10 years balance. Write for details and folder

Flying "T" Sky Ranch Hot Springs, S.D. 57747 . 605-745-4294



MOUNTAIN

OF YOUR CHOICE Hiking & canoeing guides to mountains, rivers canyons, deserts, shores • Field guides • Wilderness sagas • Wilderness reflections • 1978 catalog \$1.00, redeemable TRAILS, P.O. Box 94, Collegeville, PA 19426

How to Argue and Win!

Here is a clear simply written basic guide to logical thinking, showing how to spot the fallacies, the prejudices and emotionalism, the inappropriate analogies, etc., in the other fellow's argument and how to watch for and avoid the irrational in your own judgments. The author makes plain not only how but also why people resist facing the truth. A tool for clear thinking as well as convincing others, ORDER, NOW, THE ART OF ARGUMENT, By Giles St. Aubyn \$6.95, plus 75c. handling, 10-Day Money-Back Guarantee.



Mind Tickling Brain Teasers

By Eric Emmet

For the novice who finds fun and satisfaction in solving problems of logic. This is a marvefous book to entrap the beginner in the life-long pleasures of problem solving. It provides exercise for the mind, develops the ability to think logically and reason effectively. As the book progresses the degree of difficulty increases. No special knowledge of mathematics is required. Answers and full explanations to each puzzle are provided at the end of the book. Humorous illustrations and a colorful cast of characters and to the fun

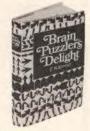
\$7.95 plus 75¢ handling



Brain Puzzler's Delight

By E. R. Emmet

A treasury of unique mind stretching puzzles that can be solved by straight logical thinking and reasoning No specialized math. Offers the pleasures of discovering solutions through use of ingenuity, imagination, insight, and logic. Stimulates and refreshes the mind. Fascinating, entertaining puzzles, arranged in order of difficulty, with (some amazing) solutions and full explanations at end of book. ILLUSTRATED. ORDER NOWI \$7.95 plus 75c handling, 10-Day Money Back Guarantee.



Fix Clocks and Watches

FOR FUN & PROFITI Fascinating handbook by craffsman H G Harris gives you the knowledge skilled watchmakers learn OVER 200 ILLUSTRATIONS show how to install hands, dials, crystals, mainsprings, stems rehouse old movements cure

many troubles by demagnetizing or cleaning, etc.
INSTRUCTIONS COVER every popular watch and
clock, chimes, grandfathers, cuckoo, alarmand
electric clocks. Tells you where to buy
parts... where to send overflow work
for repair at wholesale prices!
Friends gladly pay S5 to S50
for restoring cherished time.

Friends gladly pay \$5 to \$50 for restoring cherished timepieces. Try the HANDBOOK OF WATCH AND CLOCK REPAIRS.

\$6.95 plus 75¢ handling

10-DAY MONEY-BACK GUARANTEE-ORDER NOW

- THE ART OF ARGUMENT \$6.95 BRAIN PUZZLER'S DELIGHT \$7.95 HANDBOOK OF WATCH AND CLOCK REPAIR \$6.95
- EMERSON BOOKS, Inc. Dept. 799-D Buchanan, New York 10511

-MIND TICKLING BRAIN TEASERS

been small but chronic; last fall, however, the lodge operated in the black. Work parties and donations from the chapter's various groups, especially from the enthusiastic Sierra Singles Section, have helped ease the budgetary strain, and an upswing in bookings by non-Club groups has brought in extra money. (The San Diego Chapter's policy differs from that of the Angeles Chapter in allowing nonmember use, and this helps pay the bills.)

The Sierra Club Lodge is 70 miles east of San Diego at 6000 feet, near the summit of Laguna Mountain and overlooking the desert to the east. The California Crest Trail passes nearby. The lodge consists of two redwood cabins situated on one acre of Cleveland National Forest land that rents for \$440 annually. The larger cabin has a little more than 1000 square feet of floor space and a large stone fireplace; the smaller structure is about half that size. Together, they can accommodate as many as 60 overnight guests. Each cabin has kitchen facilities and inside toilets. Member fees are 75¢ for day use and \$1.50 overnight; for children (6 to 12), fees are 50¢ and \$1, respectively. Nonmember adult guest fees are \$1.50 for day use and \$2.50 overnight, and for children (6 to 12), 75¢ and \$1.50.

Both chapters welcome all Club members to their lodges. Visitors may telephone the chapter offices on weekdays for information and directions—call Los Angeles (10 a. m. to 6 p. m.) at (213) 387-4287 and San Diego (11 a. m. to 5 p. m.) at (714) 233-7144.

Anyone seriously thinking of establishing a lodge may wish to write to the heads of the two lodge committees: (Angeles) Rick Smith, 420 N. Maryland Street, Glendale, CA 91206 and (San Diego) Jean Teater, 1312 Hawk Lane, El Cajon, CA 92020.

Support for SCCOPE Needed

ONATIONS ARE needed to support the D Sierra Club's political education activities in this year's elections. Under government regulations, the activities of the Club aimed at educating people about the records and positions of candidates for public office cannot be funded by regular Club funds without incurring tax liability. SCCOPE, the Sierra Club Committee on Political Education, is a separate funding source for political education. Environmental issues ought to be key factors in many elections this fall-but they won't be unless the Club can get the word out. If you want to help voters cast intelligent and informed votes this fall, send a contribution to SCCOPE, the Sierra Club, 530 Bush Street, San Francisco, CA 94108.



Our wilderness was fashioned with care.







So are VIBRAM soles

Nature carefully designed each wilderness area with unique characteristics. Genuine VIBRAM* soles are designed in the same manner. There are styles uniquely patterned to meet the needs of your outdoor activities and the terrain you travel.

When you select footwear, look for the type of

VIBRAM sole that fits your requirements best. The name in the octagonal label is your guarantee of getting the world-famous quality that's fashioned into every style.

Write for a free brochure on VIBRAM soles and/or send 25¢ with a stamped, self-addressed envelope for a miniature VIBRAM sole key chain.



Performance proven.....every step of the way.



P.O. Box 155M, North Brookfield, Mass. 01535 Exclusive U.S. licensee for VIBRAM soles and heels.



Dr. Peter Hackett (wearing the Gore-Tex rainwear) is an authority on the rigors of weather and altitude in the Himalayas. Dr. Hackett is a United States volunteer for the Himalayan Rescue Association in the village of Pheriche, Nepal. In its remote location, the HRA provides a variety of medical and rescue services to the Everest region. It also endeavors to educate visitors to this region regarding survival and illness in this hostile, high altitude environment.

Proper equipment, particularly clothing, is very important for protection, comfort, and in some instances even survival. In the varied weather conditions of this remote region, versatile equipment can be a real advantage. Raingear of Gore-Tex Laminates can do double duty in protecting you against wind and cold, while providing comfort comparable to uncoated fabrics. Equipment of Gore-Tex Laminates allows the maximum functionality and versatility needed for unpredictable weather conditions, wherever your travels take you.

Look for this tag.
Write for further information to:



Att. Dept. S.C.B. W.L. Gore & Associates P.O. Box 1220 Elkton, MD. 21921