

THE MONO LAKE NEWSLETTER

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The Mono Lake Newsletter

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The quarterly *Mono Lake Newsletter* features updates on the latest developments affecting Mono's future as well as articles on the natural, geological and human history of Mono and other Great Basin lakes, reviews of current research and recent publications, and announcements of field trips and talks. We invite your comments and contributions. The newsletter is edited by the Mono Lake Committee in cooperation with the Mono Lake Coalition.

The Mono Lake Committee

HEADQUARTERS

P.O. Box 29, Lee Vining, CA 93541; (714) 647-6386

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Michael Dressler Media Director
David Gaines Chairperson
Sally Judy Corporate Secretary
Joseph Marek Treasurer/Administrative Director
Barbara Takemoto-Weerts Business Manager
David Takemoto-Weerts Information Officer

LOS ANGELES OFFICE

1355 Westwood Blvd, Suite 212, Los Angeles, CA 90024; (213) 477-8229

Thomas Beckett Interim Coordinator
Joanne Fleischer Assistant Coordinator

REGIONAL REPRESENTATIVES

Bay Area Coordinator: Chris Swarth

6850 Snake Rd., Oakland, CA 94611 (415) 339-9671 or 792-0222

Ventura County: Jean Dale

825 Teague Dr., Santa Paula, CA 93060; (805) 525-9296

Santa Barbara: Jim Sayer

6517 El Greco #5, Isla Vista, CA 93017; (805) 968-0941

San Luis Obispo: Fay & Richard Potashin

1314 Palm St., Apt. 3-C, San Luis Obispo, CA 93401 (805) 543-2340

San Joaquin Valley: Robert A. Barnes

P.O. Box 269, Porterville, CA 93527; (209) 598-5846

Tulare County: Cindee Wachner

P.O. Box 4217, Visalia CA 93278; (209) 732-7336

Sacramento Valley: Dean Jue

1513 Tulane Drive, Davis, CA 95616; (916) 756-3849

Santa Cruz: Susan Fox

Box 361, College 8, UCSC, Santa Cruz CA 95064

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c/o Friends of the Earth*

124 Spear Street, San Francisco, CA 94105; (415) 495-4770

September 2, 1981

Mono Lake Committee,

There is a check of
\$10. Sorry but I can't
afford more. I hope
it helps. I hope
we win!

Yours Truly,
Miss Marla Garmire

We hope we win too! Most of our mail reads, "Good luck, I hope you win," but Marla knows the truth: responsibility for saving Mono Lake (and a green living earth) rests on all of us. It's your lake too, folks!

We *can* win, but only with your help. It's not dollars we need the most. It's people who care enough to tithe a few hours or days each month saving Mono Lake and leaving our children a liveable planet.

Become a grass-root! Fill out the questionnaire on page 16 and let us know you'd like to help. You'll be glad you did.

National Geographic Articles Needed

We would be most grateful for additional copies of the October National Geographic articles on Mono Lake. We will be putting these articles to use on Mono's behalf.

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Mono



Lake Watch

Michael Dreaser

Another Gull Disaster

During the past 12 months, the level of Mono Lake has fallen another 18 vertical inches to its lowest historical elevation—6372.0 feet. In places the water has receded more than 100 yards.¹ Salinity is up by another two percent.

Time is running out, especially for the California Gulls. The colonies look like a war zone. By mid July approximately 25,000 gull chicks had died—about 95 percent of this year's hatch. In the subsequent weeks many of the surviving fledglings perished as well. The nesting season was an unmitigated disaster. What went wrong?

According to University of California biologist David Winkler, there simply wasn't enough food.

Where Have All The Brine Shrimp (and Flies) Gone?

By the summer solstice we knew something was amiss. The lake, usually clear and swarming with brine shrimp by June, was still green and choked with algae. There were not enough shrimp to graze the algae away.

Mono's California Gulls depend on the millions of first generation brine shrimp that hatch during late winter and early spring from overwintering eggs (cysts), and mature in late May and June. Censuses conducted by University of California biologist Petra Lenz confirmed an alarming crash in shrimp numbers. In the early 1960s and in 1976, 1978 and 1979, the years for which published data is available, June brine shrimp numbers were approximately 15,000 individuals per square meter of lake surface.² In 1980, numbers fell to approximately 7,500. This year there were only about 1,500—an estimated 85 to 95 percent reduction in the shrimp population. This unprecedented paucity of shrimp came at a time when the rapidly growing gull chicks were clamoring for food.

Fortunately, by mid July, the year's second hatch of brine shrimp brought numbers up to and possibly above normal, assuring food for the hundreds of thousands of migratory water birds that rest and feed at Mono Lake in the summer and fall. Unlike the first generation, the summer shrimp hatch within the females' bodies (for more on brine shrimp life history, see page 10). The Los Angeles Department of Water and Power alleges that July brine shrimp numbers were twice that of last year. For the gulls, however, it was already too late.

Brine flies, another critical avian food, were exceptionally scarce as well. In past summers, swarms of these small, harmless insects thickened Mono's shores for mile after mile. This year there were scarcely any swarms; in most areas there were few flies.³

What has happened to Mono's flies and shrimp? Nobody knows for sure. Scientists suspect that the lake's increasing salinity and other physical and chemical changes are responsible. Salinity in the spring of 1980, however, when brine shrimp numbers were down by approximately 50 percent, was just as high as this spring, when shrimp were

down by 85 to 95 percent. Salinity, therefore, is probably not the only factor.

It has been suggested that the unusually warm spring was to blame, but the weather cannot be solely responsible either. The spring of 1976 was just as warm, yet shrimp (and gulls) thrived. Perhaps salinity and temperature both played a role, since living things are more vulnerable to salt stress at higher temperatures.

DWP: When The Heat's On, Blame The Heat

Have the thousands of moribund gull chicks fazed the Los Angeles Department of Water and Power (DWP)? Will they admit that water diversions might, just might, be harming Mono Lake? "I don't think there is any connection," Chief Aqueduct Engineer Duane Georgeson told reporters.⁴

DWP reacted to the gull calamity by pretending it hadn't really happened. Without even discussing the situation with Winkler, they immediately labeled his report "very misleading." At first they even denied that most of the chicks died. Headlines in the Los Angeles Times tell the story:

July 22, 1981 — Nearly All Of Baby Gulls At Mono Lake Have Died
July 24, 1981 — DWP Disputes Report On Death Of Sea Gull Chicks
July 28, 1981 — DWP Agrees On Gull Death Count

In the last article, a DWP biologist finally admitted that "the [gull chick] deaths are way up, probably at least 90 percent."

DWP's reaction to the dearth of first generation brine shrimp was even more deceptive. "The number of brine shrimp at the lake is actually substantially higher this year than last year," DWP's Bruce Kuebler told reporters.⁴ Maybe, but only after mid July when the second generation of shrimp were maturing. In June and early July, when gull chicks were begging for food, the numbers of shrimp were only five to 15 percent of past years.

"It was the unusual heat that caused the gull deaths," DWP's Paul Lane told the Los Angeles Times.⁵ In fact, maximum temperatures averaged in the 90s—hotter than average, but no hotter than past years when gulls nested successfully. According to Winkler, heat probably took a toll only because the sparse food supply forced adult gulls to spend more time away from their chicks. Those chicks who were shaded by their parents showed no striking inability to cope with high temperatures. But the DWP are interested, not in the truth, but in shifting the blame away from their water diversions.

A Troubled Future

What will happen next year? Will the spring shrimp population recover, assuring the gulls a surplus of food? It's possible, especially if this winter's snowmelt is permitted to replenish the lake. But another famine is much more likely.

Even if shrimp are abundant, the gulls will still be threatened by their old nemesis—mainland predators. Twain and Java islets, where about 40 percent of the remaining gulls nest, are connected to the

mainland. In August a pack of 12 coyotes was prowling along the Negit Island fence. They have colonized Paoha Island. A repeat of the 1979 Negit Island tragedy, when coyotes invaded the colonies, routed the gulls and preyed on their eggs and chicks, is all too probable in 1982.

Moreover, gulls are only the tip of the tufa. As an ecosystem nears collapse, unpredictable fluctuations in the seasonal abundance of its member organisms are an early distress signal. The crash of spring brine shrimp and the alleged superabundance of summer shrimp are **both** warnings that Mono Lake is in trouble.

NOTES

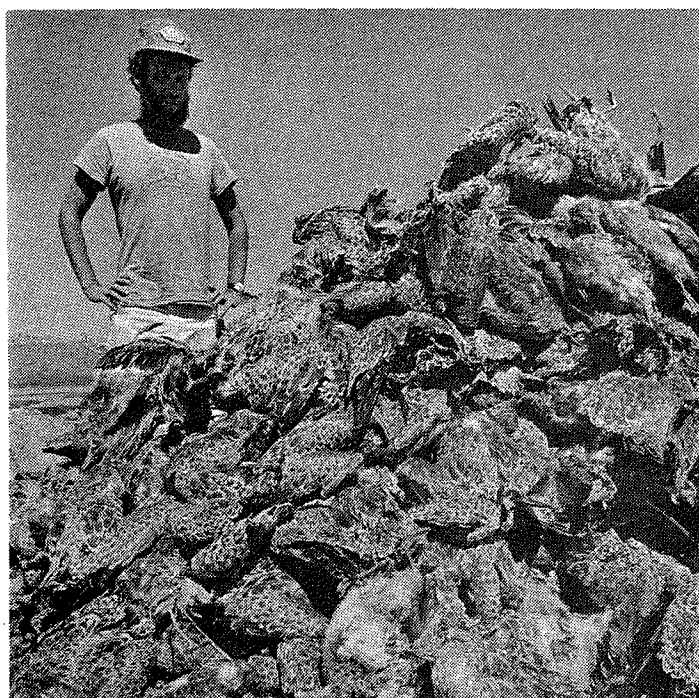
Chris Swarth, who has been studying the Snowy Plover along Mono's northeastern shore, reports that the lake receded "at least 100 meters" between June 1 and September 1, 1981.

Quantitative data on brine shrimp population densities and phenology have been published by David T. Mason (1967, Univ. of Calif. Publ. Zool. 83), Gayle Dana, David B. Herbst et al. (1977, Univ. Calif. Davis Inst. Ecol. Publ. 12), and Petra Lenz (1980, *The Brine Shrimp Artemia*, Vol. 2). Unpublished data for 1980 and 1981 were provided by Petra Lenz (Dept. of Biol. Science, Univ. of Calif., Santa Barbara).

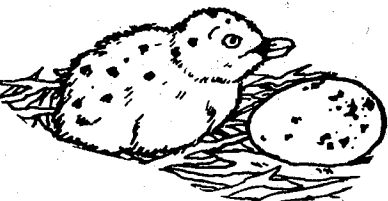
Although there is no quantitative data on historical brine fly densities, descriptive evidence amply documents a major decline. Most historic accounts reinforce Mark Twain's description of "a belt of flies one hundred miles long...an inch deep and six feet wide" (*Roughing It*). Scientists working at the lake this summer concur that brine flies were much scarcer than they were in 1980.

Sierra Daily News, 7/23/81.

Los Angeles Times, 9/2/81.



David Gaines surveys the carnage—1,121 dead chicks gathered from Mono Lake's gull colonies in less than an hour. We could have made another 20 piles!



WHAT YOU CAN DO: Write letters! Advocate a moratorium on Los Angeles water diversions, at least until the brine shrimp recover and the gulls are again able to successfully rear their young. Point to the 25,000 dead gull chicks as justification for immediate, emergency action. Mono Lake may not have much time! Please send letters to:

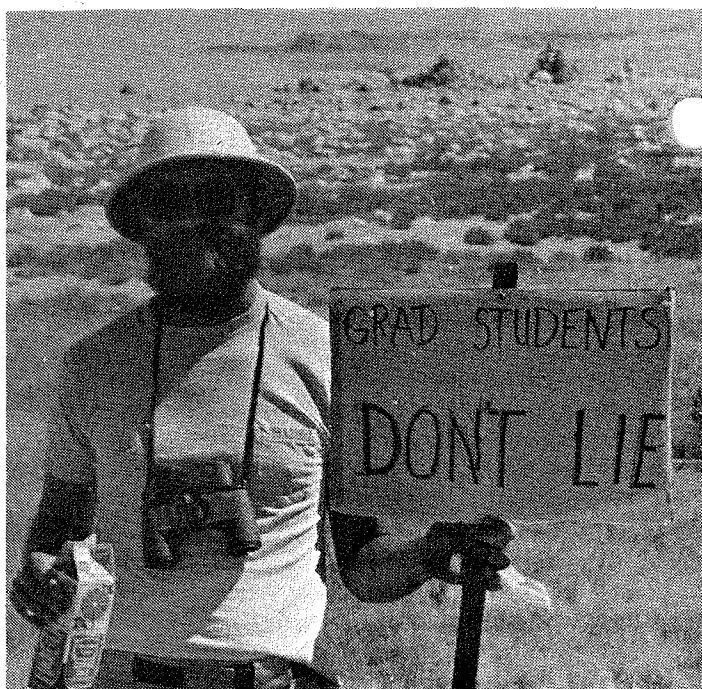
Mayor Tom Bradley
City Hall
Los Angeles, CA 90012

Governor Edmund G. Brown Jr.
State Capitol
Sacramento, CA 95814

Your State Senator
State Capitol
Sacramento, CA 95814

Your State Assemblyman
State Capitol
Sacramento, CA 95814

Your local newspapers



Biologist David Winkler, whose report on gull deaths was labelled "very misleading" by the DWP.

In The Gull Colonies

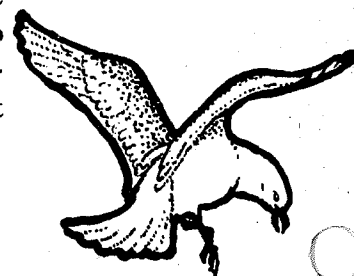
An excerpt from the journal of David Gaines, August 2, 1981

Awoke at dawn and boated across Mono Lake with Michael Dressler to the nesting colonies. I'm seated on Spot Rock, a small islet northeast of what used to be Negit Island. It's a quiet morning. Too quiet.

On a moonlit night six weeks past I walked this same rock helping David Winkler, Virginia Norris and Mike Green band and weigh gull chicks. The islet was dancing with screaming gulls. We had to be exceedingly cautious, lest we step on the fluffy chicks. To minimize disturbance, we worked at night. Even so, the gulls swooped by our heads, complaining bitterly.

Today it's deathly still. The islets are littered with the bodies of chicks—thousands of them.

We spent an hour gathering corpses into a pile and shot a few funereal photographs. These islets, once so full of life, have become graveyards.



Rebecca Shearin

Report On The 1981 Gull Census and Chick Mortality At Mono Lake

by David W. Winkler,

Museum of Vertebrate Zoology, University of California

Note: This is an abridged version of a progress report submitted to the California Department of Fish and Game

The California Gull colony at Mono Lake is one of the two largest in the world. In this report I discuss the results of the July 6 census of the gulls' chicks. In addition I present data that show gull chick mortality in 1981 to be greater than ever previously reported at Mono Lake.

Annual Gull Census

On July 6, 1981, I conducted a census in conjunction with the Los Angeles Department of Water and Power. We censused all the islets used by nesting gulls with methods used in past years. Only 15 chicks could be found on Negit Island, and the estimated 11,698 chicks found on the Negit and Paoha islets were less than half the numbers found in 1980. The conclusion is inescapable that chick production was extremely low.

Patterns of Chick Mortality

Chick mortality was very high. Most of the chicks censused on July 6 subsequently died.

The chick survival data for 132 chicks on my Spot Rock study area and 43 chicks on my Little Tahiti study area are summarized in the graph. On the same graph I have also included data on last year's survival and data on survival for another gull species, the Herring Gull. The mortality rates were similar in 1980 and 1981 until about the third week of the chicks' development, at which time the 1981 chicks displayed steadily increasing mortality up to the time of fledging. Ninety-four percent of the Little Tahiti chicks and 97 percent of the Spot Rock chicks ultimately perished.

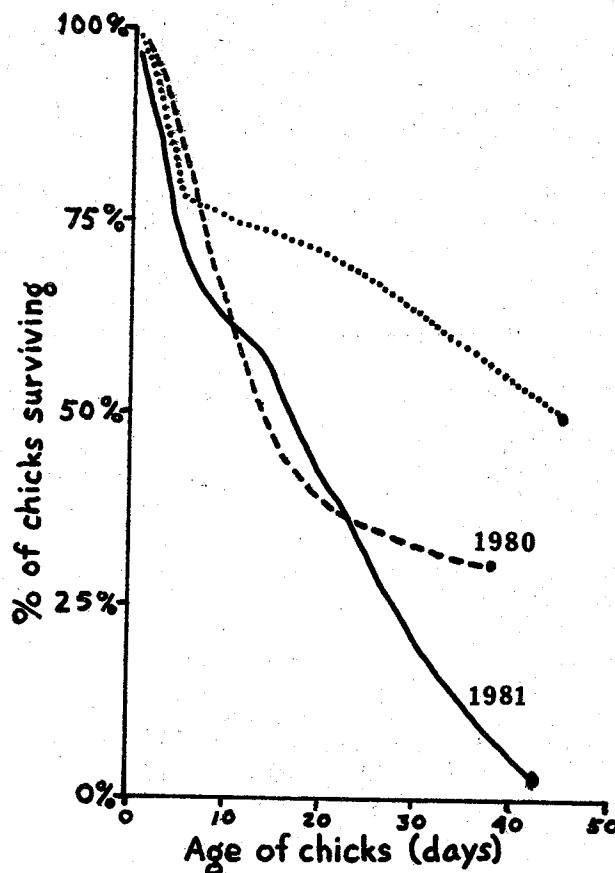
Causes of Chick Mortality

There is no evidence that the high chick mortality was the result of research-associated disturbance.* The causes must be sought in ecological conditions. The Mono Lake ecosystem displayed two unusual characteristics during this breeding season. Spring weather was unusually mild, and unusually hot weather struck in June. Second, adult brine shrimp densities were approximately eight percent of normal through late June, the period during which the shrimp comprise a critical food source for the nesting gulls and their chicks.

The increased chick mortality is probably due to the collapse of the early season food supply. The mortality rate in 1981 was higher than 1980 only for the second half of the chicks' development, suggesting that mortality increased strongly at a time when metabolic demands of the chicks finally outstripped the abilities of the adults to bring them food.

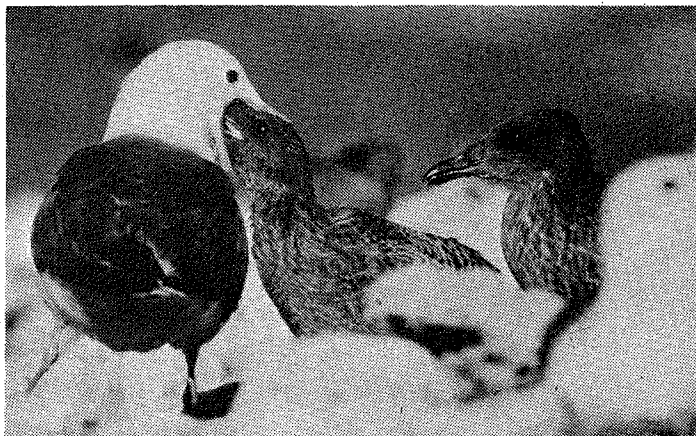
The unseasonably hot weather certainly exacerbated a situation made bad already by the reduced food supply. Chicks left unattended by their parents began panting furiously and walking about the colony looking for shade. Some of these chicks were attacked and killed by other gulls; others perished of heat prostration. The factor ultimately responsible, however, was food rather than heat. Those chicks shaded by their parents showed no striking inability to cope with 1981's high temperatures. Probably the season's low food supply forced adult gulls to spend considerable time away from the colony looking for food, thus leaving their young vulnerable to the heat.

*In the unabridged report, Winkler presents data proving that disturbance of the colonies did not significantly increase mortality.



Percentage of gull chicks surviving in 1981 _____
 1980 _____ and in a Herring Gull colony
 Mortality may have been unusually high in 1980 as well as 1981.

Many of the older chicks were still dying in early July at a time when brine shrimp had recovered to normal densities. These birds may have been succumbing to infection by parasites or pathogens as an indirect result of starvation. Alternatively, their parents may have been so exhausted that they were no longer able to bring the chicks to fledging. Regardless of whether the late deaths were due to parental exhaustion or infestation by pathogens, the reduced food supply must be viewed as the factor ultimately responsible for the mortality. In animal populations very few animals die of direct starvation. Usually, reduced amounts of food sap animals' vigor and increase their susceptibility to heat stress, pathogens or predators.



In happier days: A California Gull regurgitates a meal to its hungry chick, June 1980.

Mono Lake Tufa State Reserve A Reality

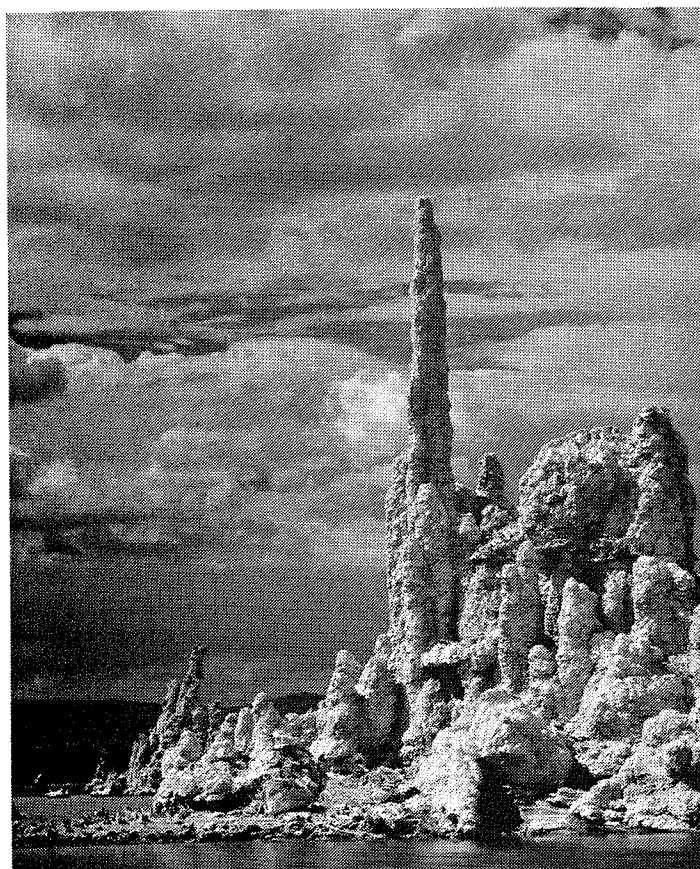
On September 25, Governor Brown signed Senator John Garamendi's SB 83, creating the Mono Lake Tufa State Reserve. SB 83 had passed the State Assembly by a vote of 55 to 3 on September 11.

The Mono Lake Tufa State Reserve will consist of the state-owned portions of the Mono Lake bed lying at or below an elevation of 6,417 feet. Included are the most spectacular and delicate tufa formations. The reserve, a unit of the state park system, will be managed primarily for the purpose of protecting the tufa. In fact, SB 83 makes it a misdemeanor "to disturb, deface, displace or interfere" with any tufa whether within or outside the boundaries of the reserve.

SB 83 appropriates \$140,000 from the California Environmental License Plate Fund for expenditure between January 1, 1982 and June 30, 1983 for the development, operation and maintenance of the reserve. According to State Parks Area Manager Robert Macomber, the state will be entering into a cooperative agreement with BLM to manage the reserve until the land ownership question is arbitrated. Both the state and federal governments claim ownership to lands below the 6,417-foot elevation. There will be one full-time state park ranger assigned to the reserve, with additional personnel during the summer. Funds will also be expended on signs, brochures and public accessways and trails.

Unfortunately, the Mono Lake Tufa State Reserve will not stabilize Mono Lake or have any impact on how much water is diverted from its tributary streams. However, it will focus more public attention on Mono's plight.

Our heartfelt thanks to Senator John Garamendi and his hard-working staff, in particular legislative aide Michael Magliari, for bringing the Mono Lake Tufa State Reserve to fruition.



Mono's mysterious tufa formations will be protected by the Mono Lake Tufa State Reserve and the proposed Mono Lake National Monument.

Mono Lake National Monument Still Alive

On June 26, 1981, Congressman Norman Shumway (R-Stockton) introduced HR 4057, a bill to establish a Mono Lake National Monument. While the monument would not affect DWP's water rights or operations, it would protect tufa formations, volcanoes and shoreline features, and focus public attention on Mono Lake's plight. In addition to establishing the monument, the bill authorizes a comprehensive study of alternative water management practices to conserve water and reduce the need for Mono water diversions. It also funds scientific monitoring of the impact of water diversions on the Mono Lake ecosystem.

The boundaries of the proposed Mono Lake Monument have been tailored to exclude private property and active mining claims (see map). The Mono Craters, which were included in the original proposal, have been deleted to avoid a showdown with the United States Pumice Company and local residents. The present bill enjoys overwhelming local support.

Los Angeles Department of Water and Power heavyweights, however, have been in Washington, D.C. lobbying against the monument. They are arguing that "although HR 4057 purports to protect the Los Angeles' water supply, the clear intent is to deprive the city of the Mono Basin water." In fact, HR 4057 merely authorizes a study of alternatives to the Mono Basin diversions. Why is DWP afraid of a study? Because they fear what it will uncover: Mono Lake is being destroyed by greed, not need.

During the latter half of July, MLC vice-chairperson Tom Cassidy stalked the halls of Congress in support of the Mono Lake National Monument. Thanks to his efforts and numerous letters and telegrams to legislators, HR 4057 is still alive and now has 21 cosponsors.* But if the bill is to move, we need to keep on pushing for hearings.

*David Bonior (D-Michigan), Ron Dellums (D-California), Mervyn Dymally (D-California), Bob Edgar (D-Pennsylvania), Arlen Erdahl (R-Minnesota), Vic Fazio (D-California), Millicent Fenwick (R-New Jersey), Hamilton Fish (R-New York), Edwin Forsythe (R-New Jersey), Barney Frank (D-Massachusetts), Henry Hyde (R-Illinois), Jim Jeffords (R-Vermont), Tom Lantos (D-California), Bill Lehman (D-Florida), Mike Lowry (D-Washington), Edward Markey (D-Massachusetts), Robert Matsui (D-California), Richard Ottinger (D-New York), Bill Thomas (R-California), Larry Winn (R-Kansas), Don Young (R-Alaska).

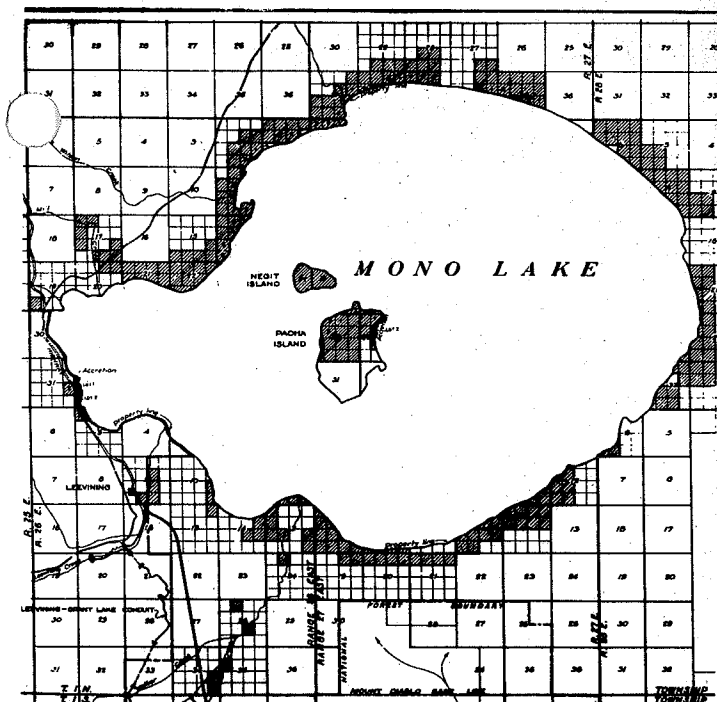
HR 4056 Would Block DWP Land Grab

Congressman Norman Shumway has introduced a bill (HR 4056) that would repeal a 1936 law that authorizes the Secretary of the Interior to sell federal land in Mono County to Los Angeles for \$1.25 an acre. This bill would block DWP's attempt to acquire every parcel of federal land, including islands, contiguous to Mono Lake (see map).

On May 28, 1981, DWP asked Secretary James Watt to sell 23,850 acres of federal land in the Mono Basin under the provisions of the Congressional Act of June 23, 1936. The lands DWP wants to purchase are (1) contiguous to Mono Lake, (2) around Grant Lake, (3) around West Portal, (4) just south of Lee Vining and (5) scattered along streams elsewhere in the watershed.

If successful, DWP would control most of Mono's lakeshore and both of its major islands. A national park or monument would be practically impossible. The Sierra Club lawsuit, which is based on federal ownership of lakefront property, would no longer have standing.

The Mono Lake Committee, Mono County Board of Supervisors, Senator John Garamendi and the California Resources Agency joined Congressman Shumway in opposing DWP's land grab. The decision, however, rests with the Secretary of the Interior. To date Secretary Watt has not taken action.



Cross-hatching shows federal (mostly BLM) land that DWP wants to purchase for \$1.25 an acre.

DWP-Backed Bill Could Seal Mono's Fate

Orange County Congressman Jerry Patterson is carrying a DWP-backed bill that could be Mono Lake's death warrant. HR 4403 consents to DWP's rights to divert water from the Mono Basin regardless of impact on federal land or Mono Lake. The bill would also grant Los Angeles rights-of-way for aqueduct facilities constructed across federal land. The bill is co-sponsored by nine Los Angeles congressmen.*

While similar bills have died in recent years, we cannot afford to ignore HR 4403. Its passage could be devastating.

*Glenn M. Anderson, Julian Dixon, Mervyn Dymally, Bobbi Fiedler, Augustus Hawkins, Carlos J. Moorhead, Edward R. Roybal, Henry A. Waxman.

DWP Aiming To Scuttle Mono Basin ACEC

The Los Angeles Department of Water and Power (DWP) has loudly and effectively blasted the US Bureau of Land Management's (BLM) proposal to designate public lands in the Mono Basin an Area of Critical Environmental Concern (ACEC). The proposal, endorsed by the Mono Lake Committee, would have required "special management attention" to Mono's extraordinary ecological and scenic values.

BLM circulated the ACEC proposal last May and asked for public comment. The California Resources Agency, several congressmen, state legislators and numerous citizens expressed their support. About 150 letters favored the ACEC; less than five opposed. Public hearings were expected in October.

But DWP took their opposition to Washington, D.C. and BLM Director Robert Burford. "The proposed action," they argued, "fails to recognize specific congressional withdrawal of these lands to protect Los Angeles' water supply."

As a result the ACEC project team in BLM's Bakersfield office has been directed to prepare an Environmental Assessment of the ACEC designation that includes an examination of alternative actions. In

What You Can Do:

1. Contact your congressman (House Office Building, Washington, D.C. 20515). Urge him to support HR 4057 (Mono Lake National Monument) and HR 4056 (repeal of the 1936 "land grab" act). Be sure he opposes HR 4403, the DWP-backed bill that would sanction the devastation of Mono Basin and Mono Lake.
2. Write to Congressman John Seiberling, Chairman, House Interior Subcommittee on Public Lands and National Parks. Urge him to hold hearings on HR 4057 as soon as possible.
3. If your congressman is one of the following members of Seiberling's subcommittee, please do everything possible to deluge him with letters, telegrams and phone calls:

Jonathan B. Bingham (D-New York)
 Hank Brown (R-Colorado)
 Phillip Burton (D-California)
 Beverly B. Byron (D-Maryland)
 Richard P. Cheney (R-Wyoming)
 Don H. Clausen (R-California)
 Judd Gregg (R-New Hampshire)
 James V. Hansen (R-Utah)
 Bill Hendon (R-North Carolina)
 Robert W. Kastenmeier (D-Wisconsin)
 Abraham Kazen, Jr. (D-Texas)
 Dale E. Kildee (D-Michigan)
 Ray Kogovsek (D-Colorado)
 Robert J. Lagomarsino (R-California)
 Ron de Lugo (D-Virgin Islands)
 Ron Marlenee (R-Montana)
 Charles Pashayan, Jr. (R-California)
 Jim Santini (D-Nevada)
 Bruce F. Vento (D-Minnesota)
 James Weaver (D-Oregon)
 Pat Williams (D-Montana)
 Antonio B. Won Pat (D-Guam)

other words, DWP has succeeded in scuttling hearings and bogging down the process in time-consuming and possibly fatal paperwork.

So, once again, we must take pen in hand and defend the original ACEC proposal. The Environmental Assessment will be sent to everyone who commented on the original plan, probably by late October.

WHAT YOU CAN DO: If you did not comment on the ACEC last June, let BLM know you wish to do so now. Write to: Mr. Louis A. Boll, District Manager, Bureau of Land Management, 800 Truxton Ave., Room 302, Bakersfield, CA 93301.

Mono Lake Lawsuit Decision To Be Appealed

The Audubon-Mono Lake Committee-Friends of the Earth Mono Lake lawsuit suffered a setback September 8, when Alpine County Superior Court Judge Hilary Cook announced his intention of ruling against the plaintiffs. The final decision will probably be handed down by the California Supreme Court within the next six months.

Judge Cook ruled against Audubon on two points. He agreed with the State of California that (1) Audubon had not exhausted administrative remedies by appealing to the State Water Resources

Control Board (WRCB), and (2) the Public Trust Doctrine is subsumed within the California water rights system as administered by the WRCB. Both of these points will be appealed.

If Audubon's appeal fails to reverse the decision on the first point, we will have to petition the WRCB to reconsider DWP's licenses to divert Mono Basin water. The WRCB will almost certainly reaffirm their 1974 decision granting the licenses. At this point we can appeal to the courts once again...after squandering valuable time and limited funds.

The second point is even more critical, as the Public Trust Doctrine is the crux of Audubon's suit. In essence Audubon is arguing that the unrestricted diversions of Mono Lake's tributary streams violates the public trust—a doctrine that has traditionally been used to protect navigable waters for commerce and fishing. In recent years the California Supreme Court has extended the public trust to preservation of tidelands as "ecological units for scientific study, as open space, and as environments which provide food and habitat for marine life, and which favorably affect the scenery and climate of the area" (Marks vs Whitney 1971). Hence we have reason to hope that the public trust can be used to protect Mono Lake. If appeals fail to reverse Judge Cook's decision subsuming the Public Trust Doctrine under the California water rights system, however, the case would be substantially weakened.

Provided the California Supreme Court rules in Audubon's favor, the long-term prospects still look favorable. We would then return to federal court for trial. But it may be years before the case is finally settled. Mono Lake may not have that much time.

Significant Victory for Inyo County

On September 30 the State Court of Appeals stated that Los Angeles Department of Water and Power (DWP) must go back to the drawing boards and prepare a third Environmental Impact Report (EIR) on their ground water pumping project in the Owens Valley. The court, in their long-awaited decision, upheld Inyo County's claim that Los Angeles' second EIR was inadequate because it did not consider the interrelationship of surface and ground water in the Owens Valley. The eight-year-old lawsuit has pitted Inyo County—claiming that the ground water pumping is damaging the vegetation in the Owens Valley—against Los Angeles DWP, who increased the ground water pumping as well as Mono diversions in 1970 to fill the second barrel of the Los Angeles aqueduct. Los Angeles DWP's previous EIRs, done only after forced to by the court, justified the ground water pumping. The court, however, rejected the first EIR—and now the second EIR—as being inadequate. The decision is significant because it recognizes that DWP's water gathering activities are all interrelated; hopefully, DWP will include the Mono diversions in their next EIR.

Cloud-seeding The Eastern Sierra!?!

In June the Los Angeles Department of Water and Power (DWP) proposed a cloud-seeding program to augment precipitation over the eastern Sierra. Cloud-seeding, claims DWP, could increase inflow into Mono Lake by direct precipitation. In fact, if seeding works at all, it will mostly increase inflow into the aqueduct, since the Sierra, not Mono Lake, will be targeted.

Moreover, cloud seeding, like any technological fix, may have deleterious long-term ecological consequences. It would be safer to mend our water-wasteful ways.

For the Mono Lake Committee to support the DWP's cloud-seeding proposal, the following conditions would have to be met:

1. Presentation of solid scientific evidence that cloud-seeding will not adversely affect other watersheds and ecosystems.
2. Commitment by DWP to preserve the biological health and scenic values of Mono Lake.

Enough for Everyone's Need, But Not for Everyone's Greed

The following letter was sent to Paul H. Lane, Chief Engineer, Angeles Department of Water and Power, in response to DWP's proposed eastern Sierra cloud-seeding program.

Dear Mr. Lane:

Not having any scientific background, I can only offer some philosophical and ethical observations—ethical in the sense that I think men have a moral obligation to exercise wise and caring stewardship of the earth. I have thought about this a great deal, but always come back to my original feeling that the cloud-seeding program is another attempt to manipulate Nature without regard to future consequences.

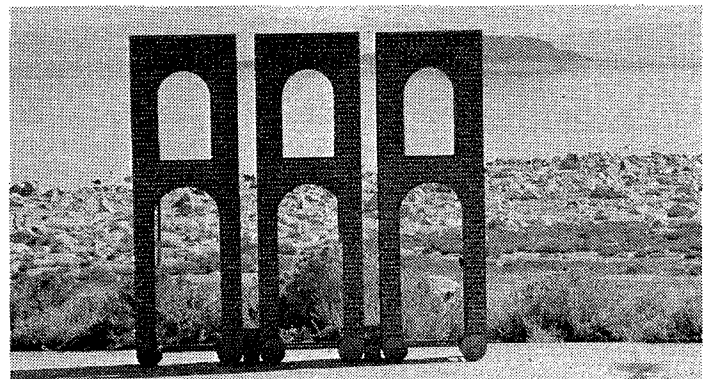
Nature is a delicately balanced whole. It is self-controlled and self-balancing. Our present disasters with increasing soil erosion, desertification of the land, pollution of air, water and land, and now the Mediterranean fruit fly, all illustrate the fact that "science" knows next to nothing about balance and of how to live with Nature's laws. Nature knows much better than we how to manage her domain. We aren't intelligent enough to take over her job. It is my belief that if we live rightly and cooperatively, we will have as a gift from Nature all we need. There's "enough for everyone's need, but not for everyone's greed" (Ghandi).

The seven "benefits" you list for the cloud-seeding program seem, on the surface, to be a solution to our water problems. I think it will lead to other problems for the reason that not only will we have not taken Nature into the plan, but also because we will not have mended our profligate ways.

No doubt these comments will be ignored as irrelevant. But "science" is turning out some pretty frightening horrors these days. Unless science can develop a sense of caring for the earth along with its expertise in how to utilize Nature's resources, we have a bleak future ahead. The great Gobi and Sahara were once scenes of teeming cities.

Sincerely yours,
Mrs. Dorothy R. Corsentino
Los Angeles

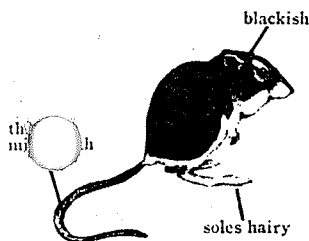
Aqueduct Sculpture



David Srebnick

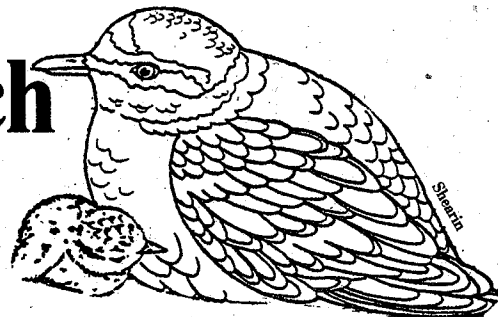
As the bucket walkers approached Mono Lake this Labor Day, they were greeted by an improbable sculpture of a Roman aqueduct with the cryptic inscription, "Los Angeles Aqueduct: To reassert the memory is to court danger..."

"The sculpture," explains San Diego artist Deborah Small, "is constructed to resemble a stage set to reflect a perspective where occupies the center stage, where the landscape is the fragile theater where he performs his unbalancing acts. The mise en scene is the contemporary landscape: riparian forests without trees, riverbeds without streams, lakebeds without water. This landscape is filled with man's props—aqueducts, siphons, reservoirs, dams—props to support the illusion that growth can be unlimited."



Ongoing Research

Dark Kangaroo Mouse (from Ingles, *Mammals of the Pacific States*)



Snowy Plover with newly hatched chick

Brine Flies

Brine fly research is proceeding on several fronts, although hampered by lack of funds. Studies on the rearing of all life stages have established the number and durations of larval instars (molt-stages). Population censuses of brine fly larvae and pupae have been collected for the first time. Comparative estimates may now be made of future changes in brine fly abundance. Distribution and habitat requirements of shore flies are also being studied.

David Herbst
Oregon State University

Insect Ecology

The sand flats of the southeastern Mono Basin offer a unique natural laboratory for studying competition between different organisms. Each is an ecological island, harboring a few easily recognized flowering plants and their native insect visitors. In an experiment, I placed several hives of honey bees near a sand flat, observing the behavior of flower-visiting insects before, during and after the introduction. This year's data show that when swamped with a sudden influx of honey bees, native bees and flies decrease in number.

I have also observed that larger insects tend to physically interrupt smaller bees as they forage on flowers, forcing them to exploit regions of less dense resources.

I am also assembling an insect collection for the Mono Lake region, studying the effects of grazing and fire on insect communities, and searching for arthropods endemic to Paoha Island. I have also been studying the pollination ecology of the sand-flat lupine *Lupinus Duranii*, a rare species found only in the Mono Basin.

Evan Sugden
University of California at Davis

Kangaroo Mouse (And A Tale Of A Tail)

This year I have continued a study of the Dark Kangaroo Mouse. This diminutive desert mouse (12 grams) inhabits the dunes on the northeast side of Mono Lake and, in smaller numbers, sandy soil throughout the basin. The mice subsist on a diet of beetles, spiders, camel crickets and other arthropods as well as seeds, primarily rice grass.

Unlike the familiar kangaroo rats, kangaroo mice have tails which are thickest halfway between the base and the tip. Naturalists have long supposed that this thickening, which contains fat cells, is a site for fat storage. I have discovered that the tails of Mono's kangaroo mice do become fatter during the summer, reaching a maximum in October. Moreover, mice which have fat tails in the fall are more likely than mice with thin tails to reappear on my study area the following spring. The fat-tails, therefore, are probably better able to survive the winter.

John Harris
University of California at Davis

Snowy Plovers

During the summer of 1981, Point Reyes Bird Observatory biologists Gary Page and Lynne Stenzel completed their fourth season of research into the breeding biology of the Snowy Plover—a small, little-known shorebird that nests on Mono's alkali flats. Every season many adults and chicks are marked with colored leg bands in order to

follow their activities. By sighting these color-banded plovers on Pacific beaches and elsewhere, we hope to discover where Mono's birds spend the non-breeding months.

In early August, we were startled by an unexpected visitor. A color-banded female Snowy Plover that had been followed through the summer by observers at Monterey Bay appeared at Mono Lake. Before she left the coast, this plover had produced two sets of young. After her second clutch hatched she left the foggy beaches and flew east over the Sierra Nevada to Mono's shores!

For the second summer I studied the feeding ecology of Mono's plovers. Their diet consists of the many small beetles and flies that are abundant along the shore. Analysis of fecal pellets has aided in discerning the relative importance of different insect species.

Chris Swarth
California State University, Hayward

Other Studies

In addition to the above, the following studies were pursued along Mono's shores this summer:

1. Scott Stine (University of California) continued to trace recent fluctuations in the level of Mono Lake.
2. Petra Lenz (University of California at Santa Barbara) continued her doctoral research on the demography and ecology of Mono Lake's brine shrimp.
3. Joseph R. Jehl Jr. (Hubbs Sea World Research Institute, San Diego) studied the lake's water bird populations, with emphasis on Wilson's Phalaropes and Eared Grebes.
4. David Winkler (University of California) continued his investigation of the breeding biology of the California Gulls.
5. David Winkler and Scott Cooper (University of California at Santa Barbara) began a study of the Eared Grebes.
6. Dean Taylor (Mono Basin Research Group, P.O. Box 194, Lee Vining, CA 93541) continued his research on the effects of alkali dust on vegetation.

Mono Lake Plant Checklist Available

A Mono Basin Plant Checklist, compiled by Dean Taylor, has been published by the Mono Basin Research Group. This technical list is arranged by families and identifies plants by Latin name only. Brief notes on habitat preference and distribution are included. The checklist is available for \$1.15 postpaid from the Mono Lake Committee (California residents please add 6¢ sales tax).

The Mono Basin Naturalist

By August the hot, dry summer weather had coaxed the rabbit-brush into full bloom around Mono Lake—almost a month earlier than last year. For weeks temperatures soared into the 90s. The few summer thunderstorms brought scant relief from the prevailing dry conditions.

August was the month of the hummingbird in Lee Vining and along Mono's spring-watered northwestern shore. They were thicker than bees at townspeople's feeders and around the fiery red paint-brush at the county park. At least five species were humming about—hundreds of Rufous (and Allens?), and a few Annas, Black-chinneds (Costas?), Calliopes and Broad-taileds.

Tens of thousands of Wilson's Phalaropes descended on Mono Lake in July. They stayed for several weeks, fattening on brine shrimp in preparation for the long flight ahead. Biologists believe that these two-ounce puffs of feathers wing nonstop to their wintering areas in Bolivia and Argentina 2,500 miles away!

On September 8, the Point Reyes Bird Observatory conducted an Eared Grebe census. Counters spent hours scoping the lake and arduously tallying hundreds of thousands of birds. While the results are still being analyzed, we do know that grebe numbers approached half a million. Among the thousands were several striking albinos. So, despite the gull disaster, the migratory birds still enjoyed a good year.

As usual there were a variety of *rara aves*—a Blackpoll Warbler and Rose-breasted Grosbeak at the county park, and Wandering Tattler, Sabine's Gull and, most extraordinary of all, Marbled Murrelet on the lake. The murrelet is a north Pacific seabird that has appeared only once before in the interior of North America. Amazingly the Mono Lake bird, which was picked up freshly dead, belongs to the Asian subspecies!

By the way, the White Pelican egg found in the gull colonies last May was abandoned by the gulls and did not hatch.

Marbled murrelet



A very lost Marbled Murrelet, a seabird belonging to the Auk family, reached Mono Lake's shore in August (drawing from *The Audubon Society Encyclopedia of North American Birds*).

Life History of the Mono Lake Brine Shrimp

(adapted from the *Mono Lake Guidebook*, by David Gaines)

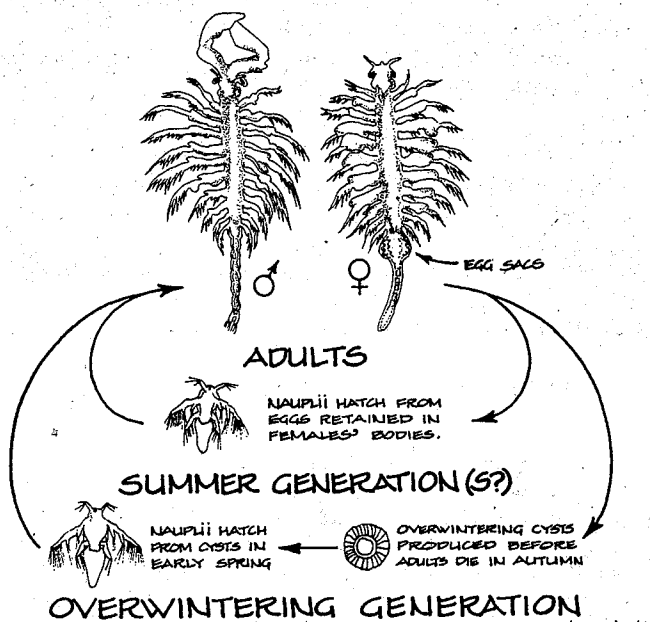
Mark Twain characterized Mono's brine shrimp as "white feathery worms, one-half inch long, which look like bits of thread frayed at the sides." Their bodies are colorful, ranging in hue from ochre to turquoise. Elongate, tapering trunks are fringed with eleven pairs of feathery appendages which continually scull the water. This graceful, symmetrical motion propels the shrimp while they gather food. As they swim, water is forced towards their trunks, where algae are filtered out and swept forward into their mouths.

Mono's brine shrimp have adapted genetically to a lake unlike any other on earth. They are so attuned osmotically to Mono's chemistry, for instance, that they perish in most other brine shrimp habitats. Conversely, brine shrimp from Great Salt Lake, San Francisco Bay and other localities cannot survive in Mono's waters. Unlike other brine shrimp, the Mono variety produce eggs that are permeable, absorb lake water, sink to the bottom and hatch at low temperatures (about 40° F). Other populations produce impermeable, floating eggs that hatch in relatively warm water. For these and other reasons, most biologists consider Mono's shrimp a separate species, *Artemia monica*.

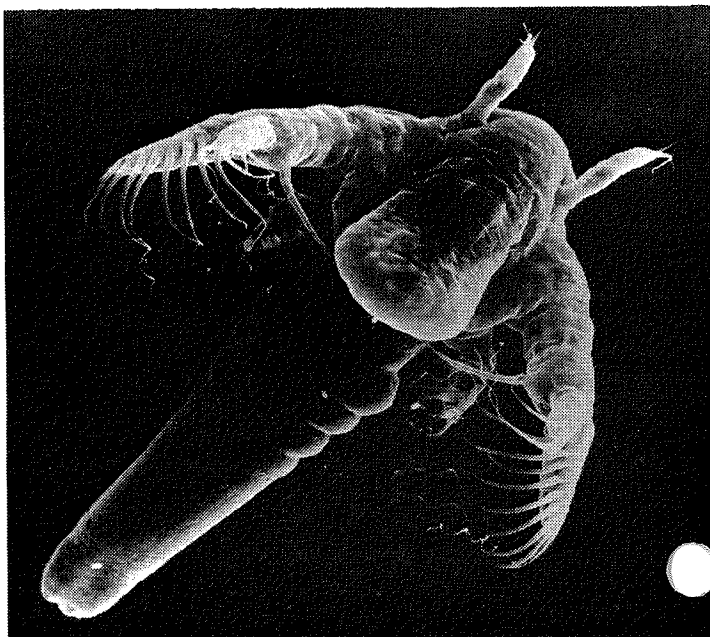
The brine shrimp spawn at least two generations a year: a first hatched from overwintering eggs, called cysts, in March, and a second in late May and June (there may be a third in late summer). The females either retain the fertilized eggs within their bodies until they hatch or release them as cysts. From July through September, trillions of cysts rain into Mono's bottom muck (see figure).

During early fall, as Mono's waters chill, most of the adult shrimp die or are eaten by grebes. While icy winds whip across the lake, algae grow and multiply. With no shrimp grazing them, the algal "bloom" turns the lake pea-soup green. Then, in March, the cysts hatch into miniature shrimp, called *nauplii* (singular: *nauplius*), and swarm the surface. Development is slow in the gradually warming, but still frigid water. Eight to 12 weeks and 14 molts later, the nauplii reach shrimphood and begin spawning a second generation.

By June, herds of brine shrimp have grazed away the algae. Visibility, two to three feet in winter, increases tenfold. Swimmers delight in the lake's clarity. [Note: this year this didn't happen until mid July.]



Brine shrimp nauplius, 48 hours old, magnified 75 times.



Life cycle of Mono Lake's brine shrimp. Eggs hatch into miniatures, called *nauplii*, which reach shrimphood in 8-12 weeks. Most adults die in autumn, but not before producing eggs, called cysts, which hatch into nauplii the following spring.

Book Reviews

Vision or Villainy—Origins of the Owens Valley-Angeloes Water Controversy

by Abraham Hoffman, Texas A & M University Press,
308 pp. \$18.50

Vision or Villainy is a scholarly review of the conflict and controversy that has dogged the Los Angeles Aqueduct since its construction 75 years ago. Much of the aqueduct's history, argues Professor Hoffman, "has been incompletely or imperfectly reported...this book redresses the balance in a record that too often has been oversimplified, usually at the expense of the city and often in terms of heroes and villains."

In fact, while *Vision or Villainy* offers a wealth of new detail, it does not substantively revise *The Water Seekers* published by Remi Nadeau two decades ago. On all important points, Hoffman agrees with Nadeau's presentation and interpretation of the facts. But Nadeau, being a newspaperman, did not provide the scholarly underpinning that Hoffman has culled from a thorough review of unpublished correspondence, reports and manuscripts. *Vision or Villainy* is the most in-depth history of the aqueduct controversy to date.

It's a lucid book as well. Hoffman writes in a concise, yet lively manner that makes *Vision or Villainy* a pleasure to read.

Yet, despite its title, *Vision or Villainy* does not consider the ethical questions raised by the Los Angeles Aqueduct controversy. The reader is left to judge whether one region (Los Angeles) should prosper at the expense of another (Owens Valley, Mono Basin)...whether the end justifies the means.

If *Vision or Villainy* does have a fault, it is Hoffman's aversion to intangibles such as "love of the land." Referring to the people of the Owens Valley, for instance, he speaks of the wide gap "between the farmer who willingly sold his property to the city for a fair price and the stubborn militants who expressed their opposition by resorting to dynamite." Some of these "militants" were farmers who refused to sell their land, not because they were stubborn, but because they had roots in the Owens Valley soil. Keeping a home meant more than any amount of money. Their tragedy is vividly portrayed by Marie Louise and Will C. Parcher in their little book *Dry Ditches*, a volume which Hoffman hardly mentions.

Similarly, in his brief paragraphs on Mono Lake, Hoffman ignores the impact of water diversions on an extraordinary natural landscape. *Vision or Villainy* leaves the impression the lake's only value is to brine shrimp and migratory birds. No mention is made of its intangible worth...its beauty...its power to uplift the human spirit...yet these are the values that are inspiring people to rally to Mono's defense. By ignoring love of place as a potent force both in the Owens Valley and Mono Lake controversies, Hoffman misses the heart of the issue and appears, at times, to be an apologist for Los Angeles' singleminded water policies.

The strength of *Vision or Villainy* rests on its exhaustive scholarship, lucid presentation of facts and correction of fallacies perpetrated by previous writers. It remains for future historians, however, to evaluate the Los Angeles-Owens Valley-Mono Lake conflict in the broad contexts of rural versus urban values, utilitarian versus environmental ethics and long-term resource stewardship.



"Bring Back The Water" Bikeathoners Make It To Mono

On September 1, 11 hardy bicyclists departed from the Los Angeles Department of Water and Power's downtown skyscraper and vanished in the Hope Street traffic. Carrying vials of water scooped from DWP's moat-like reflecting pool, the riders headed north. Six days and 350 miles later, they returned the water to its natural destination—Mono Lake.

Over 50 Southern California monophiles convened at DWP headquarters to bid the cyclists bon voyage. Bikeathon organizer David Heine, MLC chairperson David Gaines and "General Hospital" television personalities Lieux Dressler, Renee Anderson and Rick Anderson eloquently explained Mono's plight to reporters. "A very small effort by each Angeleno," said Heine, "would be enough to save Mono Lake—a brick in every toilet, installation of low-flow shower heads, and a letter to DWP telling them to return the water saved to Mono Lake." Coverage was excellent—the bikeathon made the news on three L.A. television stations.

Thanks to the riders' own efforts, the Mono Lake Bikeathon made news all the way to the lake. At each town, the indomitable cyclists knocked on the doors of newspaper offices and radio stations, announcing, "Here we are, would you like an interview?" The hordes of Labor Day vacationers learned of the bikeathon from car radios and waved support as they sped past.

The bikeathon also raised \$5,000 in desperately needed funds. Our thanks to everyone who contributed...and especially to the intrepid cyclists themselves: Gove Celio, Paul Ennis, Mike Green, Navid Mohammed Haghdon, Terry Hart, David Heine, Sally Judy, Bill Mendoza, Charlie Otto, Gerald Porter and Miriam Stomblor. Lastly a big tufa cheer to Michael Dressler and his dog, Sierra, for piloting the sag wagon and keeping up everyone's high spirits.



Kathy Barrett

General Hospital television actor Rick Anderson explains the bikeathon to reporters at our downtown "bring back the water" press conference; to his right are fellow stars Lieux Dressler and Renee Anderson.

Mono Lake Slide Programs

Our 80-slide program vividly conveys the beauty and importance of Mono Lake and the water conservation alternative to its destruction. A cassette tape commentary and script accompany the slides. We'll loan it to groups and schools for up to two weeks without charge. It may also be purchased for \$100 (\$80 to nonprofit groups and schools). It is possible to make arrangements for a speaker to present the program to groups of 30 or more people...provided you contact us a month or two in advance. Drop us a card or call us in Lee Vining or Los Angeles.

MLC News and Activities

A Busy, Successful Summer

About 30,000 visitors streamed through our Mono Lake Information Center this summer. Over 800 attended our 26 free weekend field trips. With the help of our dedicated volunteers and interns, we were able to staff the center 12 hours a day seven days a week—and present Mono Lake slide shows every night. We also manned booths at fairs in Bishop, Mammoth Lakes and Bridgeport. As a result Mono Lake has new friends and supporters across the nation and in many foreign countries...and MLC has hundreds of new, letter-writing members.

Are we ever grateful to our monomaniacal volunteers and interns! A million grebes worth of thanks to volunteers Edith and Mort Gaines, Mike Green, Freddi and Jay Hetler, Debby Jewett, Suzie Morse, Rich and Fay Potashin and Chris Swarth, and to interns Lisa Baugh, Chris Gavin, Joe Marek and Lora Shank. Please come back next year!

Bucket Walk, Meeting and Picnic

Carrying buckets, canteens and bottles of water, about 200 marchers filed down the highway and across the alkali toward Mono's receding shore. For the third Labor Day in three years, the buckets (filled above the Lee Vining Creek diversion dam) were emptied into the lake. Signs were waved at passing motorists: "Don't Owensize Mono," "DWP-Waste Not Want Not," "Is LA For The Birds?"

In the afternoon the walkers gathered at Mono Lake County Park for an update on the state-of-the-lake and a picnic supper. Spirits were lifted by comradery and good food. Steve Hickman's evocative painting of a Mono Lake gull was raffled to Mono's old friend Roger McGehee...all proceeds benefitting the lake (thank you, Steve!). As the sun set behind the Sierra, David Barrett entranced the gathered tribe with coyote stories.

Staff Goodbyes and Hellos

Kathleen Teare, our capable treasurer and bookkeeper, has left to work for Inyo National Forest. Dean Taylor is now devoting his energies to the nonprofit Mono Basin Research Group, which he and other scientists organized. Emily Hart, our 1980 intern who stayed on for 16 months, is relaxing on a long vacation before terrorizing the job market. We wish them all the best in their new endeavors!

Four highly motivated monophiles have joined MLC stalwarts David Gaines and Sally Judy in our Lee Vining staff—Michael Dressler, Joe Marek, David (Willy) Takemoto-Weerts and Barbara Takemoto-Weerts.

As media director and photographer extraordinaire, Michael Dressler will be sparking press coverage, preparing slide programs, displays and lobbying packets, and recording Mono's beauty on film. Michael is a freelance photographer whose work has appeared in Time Magazine, The New York Times, The Washington Post, Business Week Magazine, National Geographic, The MLC Newsletter and most every major publication in the United States. Since his first visit to Mono Lake two years ago, he has been an ex officio staffer, donating hundreds of magnificent photographs and giving freely of his time and expertise.

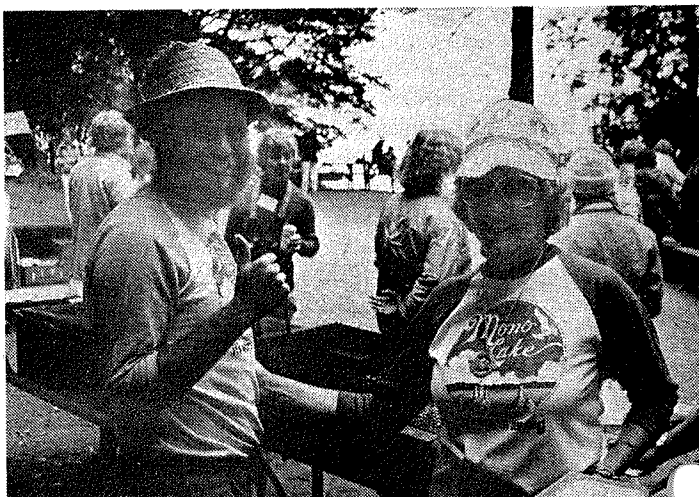
Joe Marek brings financial acumen and irrepressible high spirits to his dual role as treasurer and administrative director. He is responsible for carrying out our political and educational activities in a smooth-running fashion—and seeing to it that we have the needed funds. Not the least of his duties is energizing a statewide organization of active volunteer monophiles. Joe also coordinates our efforts with our friends in other groups. "Teamwork is the keynote," he says, "and I am proud of the team we are building."

When you call the Lee Vining office, odds are you'll be greeted by David (Willy) Takemoto-Weerts. As information officer, Willy will

make sure everybody gets the news and keeps in touch. A 1980 summer intern, Willy has a B.A. in anthropology and is completing another in environmental planning and policy.

Barbara Takemoto-Weerts, our new business manager, brings extensive experience in office management and order-processing. Under her leadership we will be expanding our poster, book and T-shirt business statewide. Fortune 500 here we come!

Tom Cassidy has left our Los Angeles office to coordinate Mono Lake legislative activities from a base in Sacramento. Two new part-time staffers, Tom Beckett and Joanne Fleischer, will be "holding the fort" in L.A. while we plan a more vigorous campaign. They will continue disbursing information, distributing literature, presenting slide programs and organizing volunteers. Give them a call if you can lend a hand (213/477-8229).



David Gaines and host Grace de Laet enjoy themselves at the Angel Island picnic.

Angel Island Picnic A Fun(d)raising Success

High spirits prevailed at the Angel Island Mono Lake fund raiser. Over 400 people enjoyed the brisk sail across San Francisco Bay and the gourmet repast of marinated chicken, stuffed artichokes, salad and wine. Best of all, over \$11,000 were raised for Mono's defense!

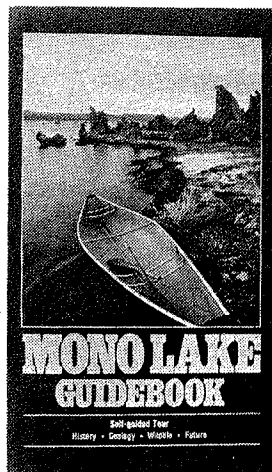
The gala picnic was hosted by two of Mono's very best friends—Grace and Ric de Laet. What a job they did organizing the million and one details the picnic entailed! Moreover, thanks to their efforts, virtually all the yachts, food and wine were donated! And Grace even picked up the tab for hundreds of dollars in incidental expenses!!

Still Grace and Ric couldn't have done it alone. The Bay Area Yachtsmen provided 37 boats and the Oceanic Society eight boats and crews to transport the picnickers across the bay. The Point Reyes Bird Observatory and Audubon's Richardson Bay Wildlife Sanctuary ferried people from the yachts to and from the island and helped with organization and clean-up. Mono Lake Coalition volunteers worked from sunup to sundown on the sundry tasks. Monophiles Elizabeth Ortega and Delphine Zeuli spent long hours addressing and typing hundred of pieces of mail, and Kathy Emerson contributed inspired artistry.

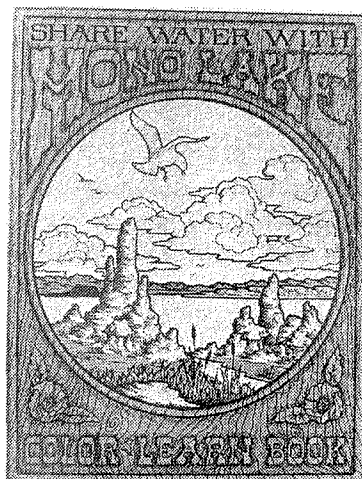
As for food, drink and paraphernalia, a hearty thanks to the following generous merchants: Monogram of California Paper, Sebast. Vineyards, Sterling Vineyards, James Blumen Imports, Ernie's Wines, Marie Victoire Imports, Bercut-Vandervoort, Baggiatto Artichokes of Castroville, Safeway Stores and Foster Farms Chickens. Last but not least, a bow to G. Patrick Noakes and his Banjo Band for foot-tapping music and to Chef Paul of the San Francisco French Club for culinary excellence.

THE MONO LAKE CATALOGUE

T-shirts, Posters, Postcards, Books, Watersaving Kits,
Bumper Stickers and Leaflets
Order early for Christmas...and help raise the lake in the new year!
All proceeds benefit the Mono Lake campaign.



MONO LAKE GUIDEBOOK. From tufa to volcanoes, the shrimp to gulls, aqueducts to water conservation, this lively, authoritative guidebook delves into Mono's geology, wildlife and history, and the alternatives to its destruction. Sixty-eight photographs and numerous drawings, figures and tables complement 113 pages of text. By David Gaines and the Mono Lake Committee. **\$4.95**



MONO LAKE COLOR-AND-LEARN BOOK. An ecological story and coloring book for children of all ages. A waylaid droplet tells the story of Mono Lake's plight. Beautiful drawings and spirited text. "An outstanding accomplishment"... Huey P. Johnson, California Secretary for Resources. By Becky Shearin, Michael Ross, David Gaines and the Mono Lake Committee **\$1.95**

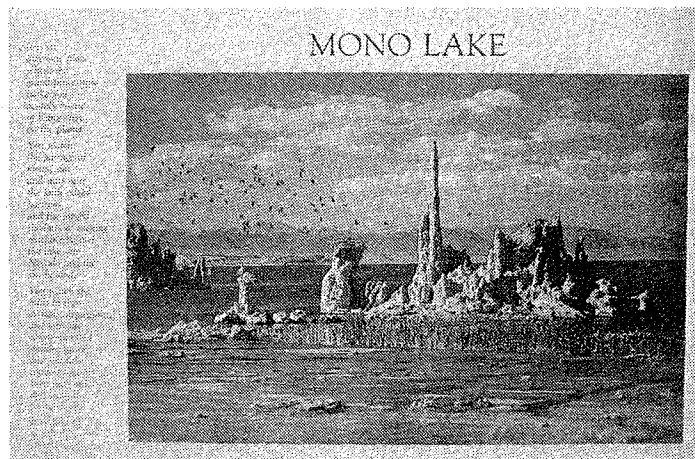


MONO LAKE T-SHIRTS. High quality shirts silk-screened with an evocative and colorful design.
Sizes s, m, l, xl.

Short sleeved kid's in blue or beige	\$5.75
Short sleeved men's in blue or beige	\$6.75
Women's French cut in blue or beige	\$7.75
Baseball jersey style with red, yellow, powder blue or navy sleeves	\$7.75



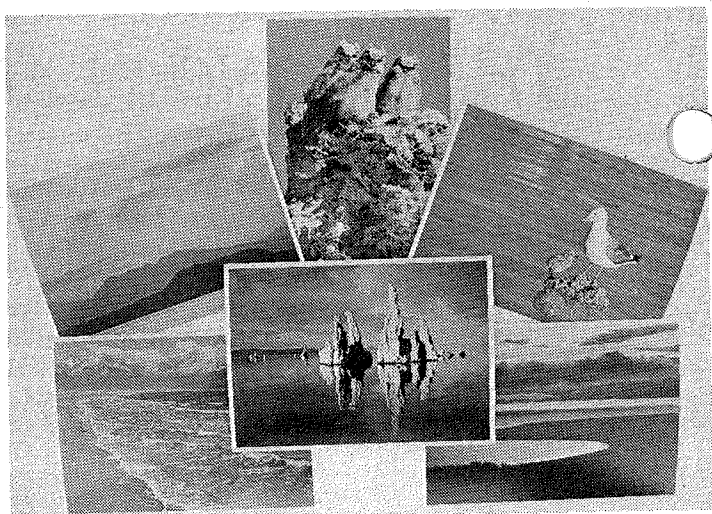
BLACK AND WHITE POSTER. Looking west from 1000 feet toward Yosemite National Park, the Coast Ranges and the Pacific Ocean. Mono's ice-age shorelines, the Grand Canyon of the Tuolumne, Half Dome, Monterey Bay and most everything inbetween are clearly visible. Commentary discusses volcanoes, peaks and other geological features. **\$1.95**



MONO LAKE COLOR POSTER. A striking 15" by 22" color reproduction of shorebirds swooping among tufa spires. **\$3.77**



WATER-SAVER SHOWER HEAD. Finest quality chrome-plated brass shower fixture mixes air and water for truly luxuriant showers. Cuts water consumption by up to 75% and pays for itself in lower water-heating bills. Easy to install. **\$13**



DELUXE POSTCARDS. Seven spectacular photographs beautifully reproduced on 5" by 7" postcards. A brief text explains Mono's plights. Scenes are: *Gull Chick, Beach, Tufa and Gulls, Tufa Reflections, Negit Island Sunrise, Shoreline Sunrise* and *Owls on Tufa*. Ideal Christmas cards. Set of 7 - **\$3**, or 50¢ each.

INEXPENSIVE POSTCARDS. Good quality 4" by 6" postcards with a brief text on Mono's plight. Set of 7 scenes - **\$1.25**

WATER GUARD WATER CONSERVATION KIT. Simple cures for inefficient, water-wasteful toilets and showers. Kit includes toilet dams, shower flow restrictor, leak detector dye and complete instructions. **\$3**

Books

We also offer the following selection of classic and hard-to-find books on the natural and unnatural history of Mono Lake, the Great Basin, the Sierra Nevada and the Los Angeles Aqueduct. All are paperbacks unless otherwise noted.

Mono Lake and the Eastern Sierra

An Ecological Study of Mono Lake, ed. by David Winkler. A 185-page report packed with technical but fascinating information on Mono's geology, hydrology and biology. Includes update. **\$7.50**

Mammoth Lakes Sierra—A Handbook for Roadside and Trail, ed. by Genny Smith. Outstanding general guide that includes Mono Basin. **\$7.95**

History

Roughing It, by Mark Twain. Includes near-fatal adventures at Mono Lake. **\$3.95**

Up and Down California in 1860-1864, by William H. Brewer. Classic Californiana, including visit to Mono Lake (he sampled brine fly soup!). **\$10.95**

History of the Sierra Nevada, by Francis P. Farquhar. Lively and scholarly. **\$4.95**

100 Years in Yosemite, by Carl P. Russell. Great history. **\$4.95**

Mono Diggings, by Frank S. Wedertz. Early Mono County, great photographs, ho-hum text. **\$10.95**

Bodie 1859-1900, by Frank S. Wedertz. Best Bodie book to date. **\$8.95**

Los Angeles Aqueduct

The Water Seekers, by Remi A. Nadeau. Drama and intrigue objectively told. Best on subject. **\$9.95**

Vision or Villainy—Origins of the Los Angeles-Owens Valley Water Controversy, by Abraham A. Hoffman. Scholarly and packed with details. Hardbound **\$18.50**

The Story of Inyo, by W.A. Chalfant. Bishop newspaperman tells aqueduct story from Owens Valley perspective. **\$12.50**

Dry Ditches, by Marie Louise and Will C. Parcher. Poignant human vignettes from the "Owens Valley water war." **\$2.50**

Great Basin

A Trace of Desert Waters—The Great Basin Story, by Samuel G. Houghton. A lucid, well-researched account of history and geology. Hardbound **\$10.95**

Basin and Range, by John McPhee. Geology, skillfully told. Hardbound. **\$10.95**

Present and Extinct Lakes of Nevada, by Israel C. Russell. Reprint of 1885 classic by the Great Basin's greatest geologist. **\$2.25**

Sierra Nevada

Sierra Nevada Natural History, by Tracy I. Storer and Robert L. Usinger. Everything from rocks and trees to bugs and bears. \$6.95
Logy of the Sierra Nevada, by Mary Hill. Lucid, lively. \$5.95

Yosemite National Park—A Natural History Guide to Yosemite and its Trails, by Jeffrey P. Schaffer. \$9.95

The Incomparable Valley—A Geologic Interpretation of the Yosemite, by Francois E. Matthes. By far the best on subject. \$6.95

Earth Housekeeping and Water Conservation

Progress As If Survival Mattered, by Friends of the Earth. There's hope, folks! This book tells why and how. \$6.95

Water and Power—The Peripheral Canal and Its Alternatives, by Harry Dennis. Solid research, reasonable alternatives. \$4.95

Goodbye to the Flush Toilet—Water-saving Alternatives, ed. by Carol Hupping Stoner. The nitty-gritty on do-it-yourself water conservation. \$6.95

Cycles and What Makes Everything Go?, by Michael Ross. Ecology for children of all ages by the author of our Mono Lake Coloring Book. \$2.95 each

Plants and Animals

Discovering Sierra Trees, by Stephen F. Arno. Wonderful illustrations. \$1.95

Yosemite Wildflower Trails, by Dana C. Morgenson. Color illustrations. \$3.50

Discovering Sierra Reptiles and Amphibians, by Harold E. Basey. Outstanding account, with great color photos. \$2.50

Birds of the Yosemite Sierra, by David Gaines. Habitat and distribution. Includes Mono Lake. \$6.00

Discovering Sierra Mammals, by Russ Grater. \$4.95

BUMPER STICKERS AND LEAFLETS. Free to good homes. Three bumper stickers to choose from: *Save Mono Lake*, *Long Live Mono Lake* and *I Save Water For Mono Lake*. Two leaflets: (1) a large-format, four-page newsprint leaflet titled *The Destruction of Mono Lake Is Right on Schedule*, and (2) a compact, folded one-page leaflet titled *Mono Lake—An Oasis in Danger*. Let us know how many you can put to use on Mono's behalf.

QUAN.	ITEM	SIZE	COLOR		UNIT PRICE	AMOUNT
			1st	2nd		



Please include check or money order or credit card information

Minimum credit card orders, \$15

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We thank the following people for supporting the 1981 bike riders:

John Alcorn, Lori Arango, Ashisha, Paul Atkinson, Mr. and Mrs. Bartshe, Sue Beereboom, Marge Best, J.E. Bishop, Frank Bonaventura, Berta Bollinger, Aida Brenneis, Marianne Brettell, Kim Breyer, Tom Buckles, Penny Byars, Evelyn Burger, Robert Carpenter, Dr. Evelyn Case, Jo Celio, Doug and Gail Cheeseman, Helen Chism, Marge Crain, Marie Culwell, Carol Curtis, Jack Daniel, Tom Dargan, Mary and Paul DeDecker, Irene Desonie, Fred Drewe, Jan and Don Dunn, Michael Dunn, Arthur Earle, Bud and Dorothy Ennis, Diane Fetterby, C.L. Fisher, Jim Flake, Susie Formenti, Doris Fredenhall, Mort and Edith Gaines, Bob and Diane Garcia, Melvin Gautier, Steve Grattan, Scott Grover, Dorothy Hagen, Diane Harris, Carlyle Hart, Mary Hart, Dennis Hass, Mimi Herme, Samuel Hopkins, Clara House, Alice Q. Howard, Owen K. Hughes, James G. Hupp, Ken Huskins, P.J. Jones, Bill Kelley, Gert and Abigail King, Jessica Klopp, Jean Kovner, Mrs. H.T. Lelouarn, Alan Lentzer, Rose Lernberg, Jim and Sue Liskovec, Tom Lubben, Mike Marie Mans, Mr. and Mrs. Robert MacCullum, Dennis Manchester, Mardi and Buzz, Lily Mathieu, Ann Matteson, Glennys McClelen, Rich and Sharon McEwan, Doug Menke, L. Montero, Bruce Moorad, David Moore, Frank Moses, Richard Moulton, Debi Meeker, Natural Valley Health Foods, Michael Newcomer, Goldie Otters, Rick Palmer, Richard Palmieri, Jeff Pepper, George Peyton Jr., Jeanne Pond, Mark Ponder, Harriet Powell, James Poss, Jennie Rall, Jack Regan, Nancy Reid, Tony Rossman, Robert Roadcap, Frank Ross, Karon Rule, Bill and Camilla Ryland, Al Sattler, Susan Schaefer, Robert Scudder, Mike Shannon, Lew Sitzer, Chris Smith, Stephen Smith, Larry Soga, Sports Anyone?, Rich Stallcup, Anne Stephenson, Jim Switz, Lynn Thomas, Paul Travis, Dave and Jane Trux, Cindy Vasek, Frank and Maxine Vasek, Claudia Vetesky, Wagner, Wendy Wagner, Milo Walters, Cheryl Weeks, Sharon Whisler, Dave Willis, Anne Wilson, James D. Wilson, Jon Winter, Georgia Yocum, Elizabeth Zall.

Mono Lake Committee "Become a Grassroot" Questionnaire

Name _____
Address _____
Telephone: Home _____ Business _____
Best time to reach you _____
Are you willing to write letters? _____ Help stuff envelopes? _____
Visit legislators? _____ Call other people and urge them to contact legislators? _____ Distribute leaflets and bumper stickers? _____
Arrange Mono Lake displays? _____ Arrange slide programs? _____
Present slide programs and answer questions before business, church, social or environmental groups? _____ Canvass your neighborhood on Mono's behalf? _____ Spend a week or more helping out in Lee Vining? _____ in Los Angeles? _____
Would you help us fund raise through selling Mono Lake Guidebooks, Posters, T-shirts, etc. to businesses or individuals? _____
Manning booths at fairs? _____ Organizing or helping to organize benefit events, such as wine tastings, concerts, etc.? _____
Do you have any special skills or facilities? _____
Any ideas or suggestions? _____

Please send to: Mono Lake Committee, P.O. Box 29, Lee Vining, CA 93541.
Thanks..., and we'll get in touch with you soon!

Tuolumne River—More Water Profiteering

The last 28 miles of wilderness canyon on the Tuolumne River have been slated by the City of San Francisco Public Utilities Commission for at least ten new dam and water diversion projects. These projects could seriously affect the ecology of the Tuolumne, affecting the homes of two migratory deer herds, river otters, ring-tailed cats, spotted owls and the river's natural fishery.

The Tuolumne River Coalition is asking Congressman Norman Shumway to submit a bill protecting the Tuolumne River through legislation—either wild and scenic status or an extension of the present moratorium on dams and diversions for another 10 to 20 years. A bill submitted soon would have ample chance to pass Congress before the November 1982 moratorium expires.

For more information, please contact the Tuolumne River Coalition (P.O. Box 161, Tuolumne, Ca 95379) or Jeff Jones ([209] 533-1017.)

Debby Jewett
Tuolumne River Visitors Center, Groveland

Mailing List Computerized

Our mailing list has been transferred from typed cards to a computer. With over 3,000 members (hooray!), the paperwork has become overwhelming. The new system not only saves hours of typing and sorting, it also facilitates mailings to specific groups of members, e.g., constituents of key congressmen. We regret you are now "a number in a computer," but still love you nonetheless.

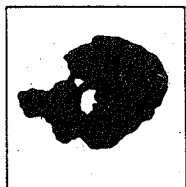
Please check your mailing label carefully and let us know if there are any errors. Computers goof up too!

Renewals

We are now asking all our members and subscribers to renew once a year. If a renewal letter and remittance envelope are enclosed in this newsletter, and you have not renewed since September 1, please send us an additional contribution or let us know you are willing to volunteer. Or, if we blundered, let us know when you last contributed (sorry!). Unless we hear from you, you will no longer receive our newsletters and action alerts.

SOLICITATION OR SALE FOR CHARITABLE PURPOSES DISCLOSURE AS REQUIRED BY AB 1839, 1980

1. Mono Lake Committee, P.O. Box 29, Lee Vining, CA 93541
2. One hundred percent of your donation payable to the Mono Lake Committee goes to the Mono Lake Committee
3. Approximately ten percent of our total expenditures are spent on fund raising, e.g. printing, stamps, staff time, etc.
4. Thirty to forty percent of the purchase price of merchandise goes directly to the Mono Lake Committee; sixty to seventy percent is for the cost of the goods.
5. Contributions to the Mono Lake Committee are not tax-deductible.



**The
Mono Lake
Committee**

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