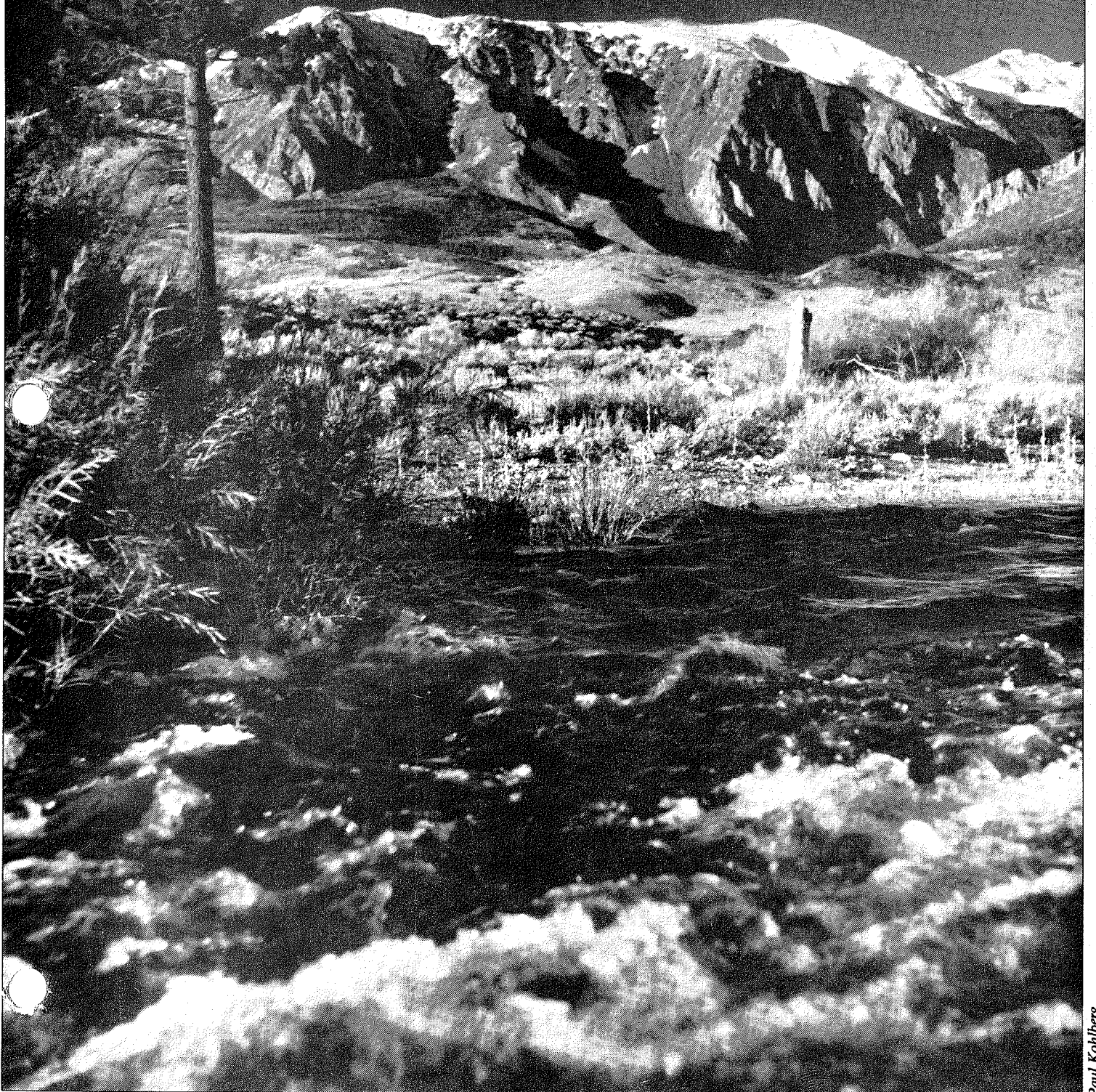


Fall 1989

Vol. 12, No. 2

# MONO<sup>the</sup> LAKE

## NEWSLETTER



## On The Cover

Thanks to a court-ordered preliminary injunction, Rush Creek is flowing at 90 cfs! CFS? That's cubic feet per second. Imagine 90 restaurant-size mayonnaise buckets (a little less than 8 gallons) lined up across the creek, and each bucket filling up once per second. That's how much water is in Rush Creek.

As water ways go, 90 cfs isn't much, but compared to the 19 cfs that has been in the creek for the past three years, it's a hearty increase. For more information on the preliminary injunction, turn to pages 4 and 6.

## Hewlett Packard Lends A Hand

We are pleased to thank Hewlett Packard for the generous donation of a LaserJet series II laser printer. Although the Committee has had its own desktop publishing system for years, we had to depend on the generosity of our friend Bob Jellison, and the folks at Laser's Edge in Oakland for laser printing services. This meant waiting for print outs in the mail or driving long distances before we could make a draft of what we'd created. At best this approach was inefficient, and at worst, it was extremely frustrating.

Now we can print out our typeset pages right away. The LaserJet is quiet, doesn't take up much office space and makes beautiful print outs! We are very grateful to the people at Hewlett Packard for helping us upgrade our publication system. We couldn't have done it without you.

## New Edition of Guidebook Out

The fourth edition of the *Mono Lake Guidebook* is hot off the presses. We have revised the biological and political information and redesigned the layout to bring the *Guidebook* up to date. Originally written in 1981 by David Gaines, the *Guidebook* delves into Mono's geology, wildlife and history, and the alternatives to its destruction. This edition has 35 photographs and many drawings and graphs that elucidate the text. For ordering information, see our catalog in the back of this newsletter.

**THE MONO LAKE COMMITTEE** is a non-profit citizen's group dedicated to saving Mono Lake from the excessive diversion of water from its tributary streams. We seek a compromise that will meet the real water needs of Los Angeles and leave our children a living, healthy and beautiful lake.

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This newsletter is partially funded by a grant from the *Mono Lake Foundation*, a non-profit, tax-exempt organization dedicated to studying and protecting the Mono Lake watershed. If you wish to make a tax deductible contribution to the effort to save Mono Lake, please write your check to the "Mono Lake Foundation."

## Lake Level Update:

### *Mono's Waters Still Low*

Mono Lake's elevation plummeted from its early August level of 6376 feet to 6375 during mid-September, two feet lower than this time last year and only 6 inches above the level at which the landbridge connects to Negit Island. Two moderate dust storms have already occurred this fall on the exposed landbridge, kicking up clouds of dust as high as 2000 feet. As noted in the summer newsletter, coyote tracks and scat were discovered on Negit in July. Dry sections of the landbridge provided stepping stones for predators.

This summer marked the Mono Basin's third dry year in a row, with precipitation below normal in July. The precipitation for August was above normal as a result of the severe storm on August 8 and 9 which caused flash floods in the Eastern Sierra towns of Benton and Olancha.

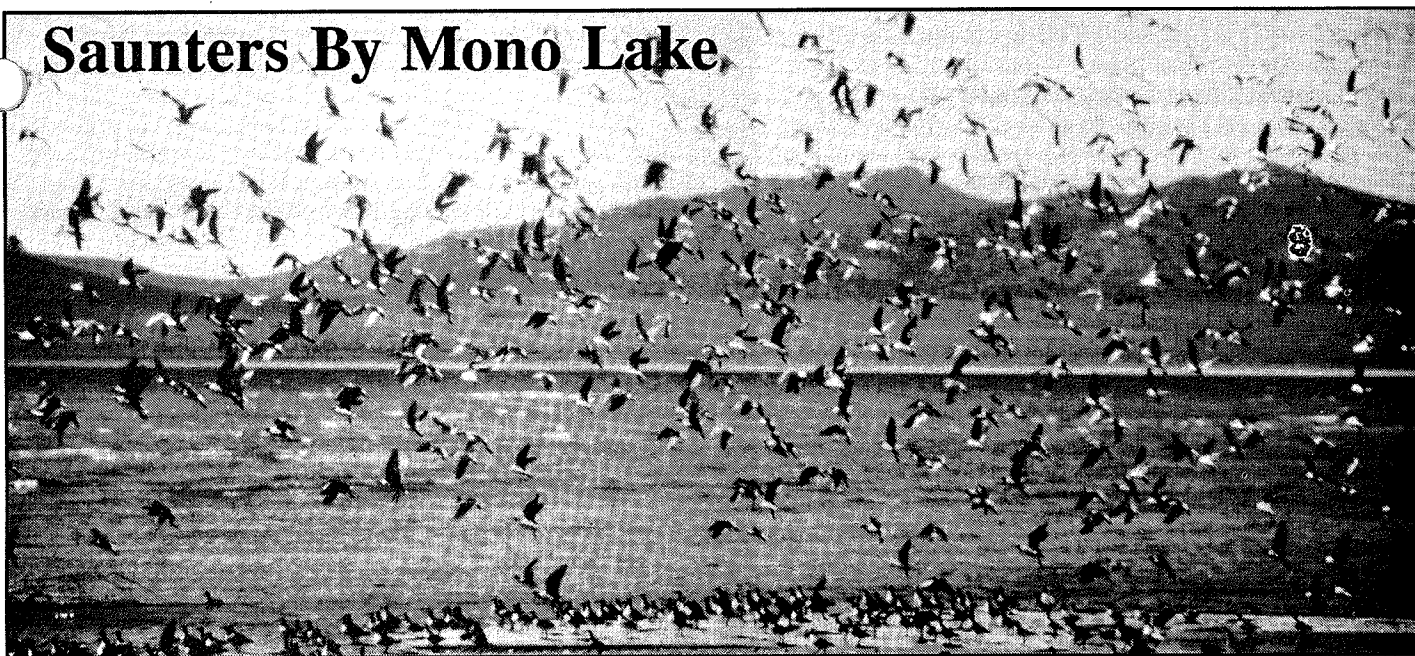
Although last summer Lee Vining Creek dried up before reaching Mono's shores, this summer it continued to trickle into the lake. Cooler than normal temperatures and the two-day storm in August may have been the cause of the higher flows. The additional flows down Rush Creek granted by the Preliminary Injunction (see article page 4) have yet to raise the lake level.

Karyn Helfrich

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# Saunters By Mono Lake



Joe Jehl

Not long ago, I happened to see an Audubon program called "Messages from the Birds." The documentary focused on what could be learned from migrating birds about the health of global ecosystems. Just as Mono Lake is involved in a struggle for survival, so are many other places which are essential stopovers for birds migrating from the Arctic across North America down to the rainforests and beaches of Central and South America. About halfway through the program, the camera swept into a huge flock of Wilson's phalaropes flying in standing waves over the shore of Mono Lake. The birds undulated back and forth, alternately flashing dark gray and brilliant white feathers against a backdrop of tufa spires and stark blue Sierra sky. I was awe-struck.

From the phalaropes, the camera shifted to MLC founder Dave Gaines with his broad canvas hat and sincere eyes. Since Dave had died in a winter car accident a year and a half ago, suddenly seeing and hearing him before me was a curious feeling. A flash flood of memories and thoughts hit me. How could film make people seem alive again? It was difficult to realize that when I returned to Mono Lake, the phalaropes would be there, but Dave, at least in the visible sense, wouldn't be. It was an especially difficult realization because my mother had just passed on a few weeks before and I was still wondering how to come to terms with this transition.

The camera left Dave and focused again on the phalaropes. The choreography of their flight was unspeakably beautiful and I silently thanked the film crew and script writers for letting this event stand on its own with no commentary. It's good to know when pure beauty is enough.

Coming back to Mono Lake, I went down to the shore, hoping the Wilson's phalaropes would still be there. Most of them were gone, headed for South America. As I drove home along the road I saw a flutter by the shoulder. I stopped to find a phalarope struggling with a

fractured wing. I picked the bird up, cradling it as though someone had just handed me a handful of blossoms. It was lighter than its size would suggest and smaller than I would have thought. The wing was intact. It might mend if the bird could just take it easy. I decided to put my friend in the care of the best nursemaid I could think of, Mono Lake. There the phalarope wouldn't have to fly, but could feed itself just by swimming. It was worth a try. I carried my wide-eyed passenger down to the water and gently let it float. After a minute, the sojourner paddled away looking like any phalarope and began to pick shrimp out of the water. Maybe this setback would only keep the bird here an extra week or so.

Watching my injured friend blend with a small flock of other phalaropes, I thought about their messages, not just as indicators, "miner's canaries" for planetary health, but as messengers of the spirit as well. The birds seemed so fragile and tiny. Hardly the sort of animal one would expect to be able to make a 3,000 mile non-stop journey across highways, through storms and beneath jet trails. What gave them the confidence to do such a thing? Or maybe it wasn't confidence, it was courage.

This sort of musing on birds seems almost cliché now, but as an eclipse teaches us to see the moon in an entirely different perspective, so the flurry of massive migrations teaches us to re-evaluate what seems possible. Courage or trust is the key. Maintaining the flyway, we maintain a silver thread not only between continents and hemispheres but between what we hope for in this life and all we know of the next. The standing waves are composed of "finite" individuals, yet the motion is constant, perhaps infinite.

Lauren Davis

*Note: "Messages From The Birds" can be ordered by calling WETA Educational Activities 1-800-445-9164.*



## Legal Update

### *Lake Granted Temporary Reprieve — But Not Out of Danger Yet*

Rush Creek is rushing into Mono Lake again thanks to a Preliminary Injunction granted by Superior Court Judge Terrence Finney of El Dorado County. On August 22, Judge Finney ruled that the water level in Mono Lake must be raised two feet from a current level of 6375 to 6377 feet.

The injunction is in effect until March 31, 1990 at which time we'll request an extension. This preliminary injunction represents the first water that has been won for Mono Lake itself based on our decade-old public trust case.

Finney had issued a temporary restraining order June 15 requiring the Department of Water Power (DWP) to store all water diverted from the Mono Lake Basin until he ruled on the request for the injunction. That water, which has been impounded in Grant Lake reservoir, is now being released to the lake.

Although 90 cubic feet/second (cfs) of water is flowing down Rush Creek at this time, it may not be enough to raise the lake level over the landbridge by spring. Unless we have an extremely wet winter, the Negit Island gull colony may face a grim nesting season confronted by predators from the mainland. The reason that Mono Lake may not reach the court ordered level of 6377 feet by spring is that DWP took about one-third of the water available from the Mono Basin before the court issued its June order halting all diversions. This, coupled with the dry year and additional delays in restoring flows to all Mono's streams, means that Mono Lake may only stand one half foot above the current 6376 foot level by the time the gulls are expected to return.

Even though the preliminary injunction applies to all four of Mono's streams that have been impacted by diversions, DWP has refused to release any water down Lee Vining, Walker or Parker creeks. The lake level could be raised much more efficiently if flows were restored to all four streams. DWP argues that it is beyond the authority of this court to set stream flows in the other creeks, but the Audubon and MLC argue to the contrary. Forcing all the water down Rush Creek could have adverse effects on that stream's fishery. Furthermore, the 3rd District Court of Appeals has ordered that DWP's licenses be modified to require flows below the dams to support fisheries. Increased flows will also be required in Lee Vining, Walker and Parker creeks in order to carry out the studies needed to determine permanent flow patterns. On September 29, Judge Finney held a reconsideration hearing in which these issues were brought up. He has yet to release any further decision.

Meanwhile, the public trust case involving Rush and Lee Vining creeks and Mono Lake has been put on hold for at least four years. On August 29, Judge Finney granted the State Attorney General's motion to turn the issue over to the State Water Resources Control Board. The Board will review DWP's Mono Basin water rights

and consider the public trust values upheld for Mono Lake nearly a decade ago by the California Supreme Court.

MLC and the National Audubon Society had argued that the case should stay in court where it could proceed more quickly and be free from political pressures. Although our request was turned down, the judge did make several stipulations to the Board that should keep the process moving along and subject to extensive court review. If the Board fails to complete its process by September, 1993, or reaches a decision that the judge doesn't consider justified, the case will return to the courtroom arena.

Lauren Davis

### *Judge's Decision Refutes DWP's "Mono Lake Plan"*

In June, the Los Angeles' Department of Water and Power (DWP), developed, what they called, a "constructive and responsible plan" for lowering Mono Lake down to 6370 feet. Supposedly, the "Mono Lake Trial Operation Plan", would provide a "factual, objective database" which the courts and other reviewing agencies could use to determine a reasonable lake level. DWP claimed that although the lake has been studied extensively, "knowledge about it remains incomplete."

On August 22, Judge Terrence Finney of El Dorado Superior Court rejected DWP's request to drop the lake level and granted a preliminary injunction to increase the flows into Mono Lake. Finney stated that it would be "dubious to assert that the state of knowledge concerning the ecosystem could at some point be 'complete'."

In his decision, Finney referred to four "comprehensive investigations"; the Interagency Task Force Report (1979), National Academy of Sciences study, (NAS) (1987), Community and Organization Research Institute (CORI) (1988) report, and Mono Basin National Forest Scenic Area Environmental Impact Statement (1988). Finney wrote that the state of knowledge concerning the Mono Basin ecosystem has been steadily augmented by these and other reports, thus further studies are not required. The CORI report found that Mono Lake's ecosystem is in immediate danger as a result of DWP's diversions and recommended a minimum lake level well above 6370 feet.

Judge Finney, responding to the above recommendations, granted the injunction to maintain the lake at 6377 until March 31, 1990. He focused his decision on "two distinct species of harm" that would occur in the absence of an injunction.

First, Finney acknowledged the negative consequences of lowering the lake level on Mono Lake's California gull population, stating that "the nesting grounds...will be adversely impacted." Currently the lake level is at 6375 feet. At this level, Negit Island is no longer an isolated nesting



site, as predators have already waded their way across the sandbridge to the island. Secondly, Finney pointed to the quality problems due to dust storms. He cited Mono Basin air quality studies, stating that "it is apparently undisputed that there is a higher than normal health risk associated with particulates carried in dust storms from the exposed playa. In concluding that an increase in the amount of playa exposed increases the amount of particulates carried by dust storms, available scientific data confirms common sense." The increasing frequency and severity of toxic dust storms has triggered action by the

Great Basin Unified Air Pollution Control District. They stepped up their Mono Basin air quality monitoring this spring (see Mono Lake Newsletter, Spring, 1989).

Judge Finney said it best when he wrote, "An ecosystem is more than the sum of its component parts, and the consequences discussed above are not the sole adverse results from continuing to lower the lake level. These two results are, however, certain to occur and will negatively impact the status quo while the merits of the public trust arguments are being decided."

Karyn Helfrich

### *What others have said of DWP's "Mono Lake Trial Operation Plan"*

*"DWP's is the only, lonely voice that insists there is no harm as the level drops. That is patently untrue. I've heard them say this is a constructive effort to resolve the problem, but they have the word wrong. It is destructive. You might as well propose to measure the effects of radiation by dropping a bomb on the city."*

**Martha Davis**

Executive Director of the Mono Lake Committee

*"DWP's preposterous proposal to lower the lake to 6370 to 'see what happens,'—akin to diagnosis by autopsy—is at least a concession that even DWP's consultants are unwilling to predict whether the Mono Lake ecosystem will survive at such an extreme...DWP would also urge that no irreparable injury is suffered if the Public Trust values are lost before the state determines whether it is feasible to protect those values."*

**Patrick Flinn**

An attorney for plaintiffs, Reply Memorandum in Support of Motion for Preliminary Injunction.

*"...an equally valid trial operation plan for Mono Lake would be to increase lake levels and monitor ecosystem changes. The LADWP plan appears to assume that no change would be expected if the lake level were higher, while ...experiments predict increased lake productivity as salinity is reduced to the pre-diversion level."*

**Dr. David Herbst**

Mono Lake Researcher, Declaration to the Court in Support of Motion for Preliminary Injunction.

## *Lake Legislation Becomes Law*

*"This is a big step in the water history of California...resolution of the Mono Lake problem would show it is possible to simultaneously protect the interests of growing California and not destroy the environment."*

Assemblyman Phil Isenberg

California's water wars may not be eternal after all. The state recently approved an innovative piece of legislation to help protect Mono Lake. The bill, A.B. 444, was sponsored by Assemblyman Phil Isenberg (D-Sacramento) and Assemblyman Bill Baker (R-Danville).

The landmark bill was signed into law on September 22 by Governor George Deukmejian who hailed it as a "win-win situation for all Californians." A.B. 444 creates a \$60 million Environmental Water Fund which has as a priority the funding of water and energy conservation in Los Angeles to help the city replace its Mono Basin water diversions.

The legislation does not, in itself, save Mono Lake. However, the bill creates a substantial economic incentive for Los Angeles to work with the Mono Lake Committee to develop alternatives which will lead to the permanent protection of Mono Lake. Before Los Angeles can receive money from the Environmental Fund, the city

must reach an agreement with the Committee on how the funds will be spent.

A.B. 444 was supported by an unusual political coalition, ranging from environmentalists to farmers and water industry officials. In addition, California Senator Pete Wilson not only offered his support for the measure, but also pledged to introduce federal legislation with Senator Alan Cranston next year. This legislation would make the federal government a "financial partner" with the State in securing final protection for Mono Lake. Work on the federal legislation has already begun.

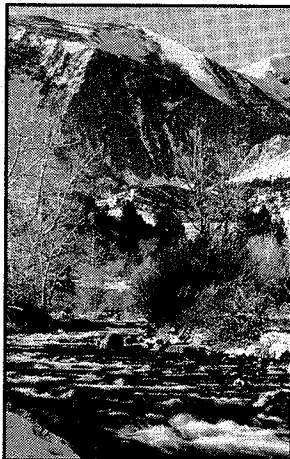
Approval for A.B. 444 could not have come at a better time. As Assemblyman Baker pointed out, "The City of Los Angeles has been losing lawsuits...but the courts may not rule soon enough to save the lake from irreversible damage." Isenberg concurred, saying, "We wanted to give some incentive to both sides to settle this issue and to save Mono Lake now, before it is too late." Thanks to the united efforts of Isenberg and Baker, we can move ahead on innovative solutions for Mono Lake.

We extend our deepest thanks to all of our members who wrote Governor Deukmejian in support of A.B. 444. We need your help now to join us in thanking Assemblymen Phil Isenberg and Bill Baker for their exceptional efforts on behalf of Mono Lake. (Their address is State Capitol, Sacramento, CA 95814.)

## Funds for Mono Stream Studies Approved

In the final hours of the legislative session, Governor Deukmejian signed a bill which included funding for instream flow studies of Mono Lake's tributaries and the Upper Owens River. The studies will be overseen by the California Department of Fish and Game.

Assembly Bill 1580 authorized the expenditure of several million dollars on a broad range of environmental projects. A substantial portion, (\$750,000) of these funds were earmarked for research on Mono's streams and fisheries, thanks to the leadership of senators John Garamendi (D-Walnut Grove) and Dan McCorquodale (D-San Jose) and Assemblyman Phil Isenberg (D-Sacramento).



Larry Ford

The stream studies are urgently needed to determine how best to manage these water resources for the good of the fisheries and other wildlife. The completion of this research will enable the State Water Resources Control Board to fulfill its legal mandate to restore and protect the streams and fisheries in the Mono Basin. As Senator Garamendi said, "The Los Angeles Department of Water and Power, the Department of Fish and Game and the Water Resources Control Board working in concert...can soon begin to reverse the decline which began almost a half century earlier."

Lauren Davis

## What Does All This Good News Mean Anyway?

Not even press calls could keep me away from Rush Creek. In late August, Judge Terrence Finney ordered the city of Los Angeles to restore Mono Lake to an elevation of 6377 feet, and DWP was complying by releasing water down Rush Creek. I walked to the stream to hear the water flow, in solitary celebration of our attorney's hard won victory.

The sound of that water has long haunted our imaginations. It was just over ten years ago that National Audubon Society and the Mono Lake Committee filed the public trust lawsuit protesting DWP's ruthless destruction of Mono's streams and ecosystem. As we struggled through the seemingly endless rounds of court hearings, we clung to a vision: a vision of water refilling empty stream beds and replenishing trees and vegetation; of water tumbling over rocks and inundating white alkali flats; of water restoring life to a dying lake.

Now, as I picked my way among the silver snags and stumps of Rush Creek's dead forest, I marveled at how far we have come in our efforts to protect Mono Lake. In truth, the court ordered flows are only one of several recent victories for Mono Lake. Earlier this year, the 3rd District Court of Appeals ruled that DWP never had the right to destroy Mono's streams and fisheries, and concluded that L.A.'s water diversion licenses are invalid. Last month, Governor Deukmejian signed legislation (A.B. 444) which offers Los Angeles substantial economic incentive for working with the Mono Lake Committee in developing innovative solutions to the Mono Lake problem. In the weeks ahead, California Senator Pete Wilson will introduce federal legislation to assist the State in developing a real solution for Mono Lake.

What does all this good news mean? Simply that we have much more work ahead of us if we are to transform these victories into permanent protection for Mono Lake.

Yes, A.B. 444 has generated many editorials and articles glowing with the promise that Mono Lake is all but saved. But for A.B. 444 to mean more than newspaper headlines, we must meet Los Angeles at the negotiation table and jointly develop workable projects which will contribute to the permanent protection of Mono Lake.

The same is true for the enforcement of the 3rd District Court of Appeals decision. The State Water Resources Control Board has started hearings to review DWP's licenses and consider how the public trust resources of Mono Lake will be preserved. These hearings will extend over the next four years, and will require enormous effort by the Mono Lake Committee and California's environmental community if we are to be successful in winning the protections Mono Lake has long been denied.

Even today, with the court ordered flows, Mono Lake is not yet out of danger. Between this year's drought and DWP's earlier diversions, there is not enough water to raise Mono Lake to the elevation ordered by the court. What will happen when Mono's gulls return to nest on Negit Island next year? The coyote tracks seen on the island earlier this summer are a worrisome sign. Further, the court order extends only through March 1990. We must return to court early next year to fight for Mono Lake's protection once again.

Yet, as I listened to the creek's new voice, I felt more optimistic about Mono Lake's future than ever before. True, I must still use my imagination to envision the dense forest of cottonwood, aspen, pines and willows along Rush Creek where parched sagebrush now stands. But the sound of the flowing water transforms the land. For a single moment, amid the shimmering heat devils, that sound blurs the past, present and future, and the empty flood plain fills once again with trees.

Martha Davis

## The Lake You Save May Be Your Own

### LA Promotes Water Conservation

New water conservation programs launched by the City of Los Angeles as well as the Mono Lake Committee aim at reducing the City's water use by ten percent. While Los Angeles's initial efforts have fallen short of the mark, the new programs may yield more promising results.

In April 1988, Mayor Tom Bradley and the LA City Council committed Los Angeles to a 10% reduction in water use to help ease the strain on the City's over-burdened sewer system and to respond to drought conditions. The Department of Water Power (DWP) distributed 1 million water conservation kits, consisting of a low-flow showerhead and a water displacement device for toilet tanks.

A systematic follow-up was not conducted and the distribution program has not succeeded as well as LA officials had hoped. DWP estimates that city residents and businesses have reduced water use by 4%, falling short of the goal. The 4% figure was reached by measuring municipal sewer flows. In the past 18 months, sewer flows have remained steady while LA's population has steadily increased. While precise figures are impossible to come by, DWP estimates that water conservation has only offset the population increases.

To meet the conservation goals, Mayor Bradley announced a \$1.8 million door-to-door water conservation program. Under this pilot project, 100,000 single-family homes will have free water conservation kits delivered to their homes. Free installation is also included. In launching the project, Mayor Bradley said, "Water conservation continues to be essential if we want to reduce sewage flows into Santa Monica Bay, or protect such treasures such as Mono Lake."

Responding to the City's need to achieve its water conservation goal, the Mono Lake Committee launched its own public service campaign in partnership with Heal the Bay, an environmental group working to protect Santa Monica Bay. At an August 2 press conference, Mayor Tom Bradley, LA Councilwoman Ruth Galanter, and TV star Joel Higgins joined representatives from both groups to promote the program.

At the press conference, MLC Associate Director Betsy Reifsnider explained, "By using water more wisely, each of us can play a part in restoring Santa Monica Bay, protecting Mono Lake, and saving money on our water bills at the same time."

Mayor Bradley expressed his appreciation by saying, "I am grateful for Heal the Bay's and the Mono Lake Committee's support of the City's efforts [to conserve water] and applaud their commitment to promote and increase water conservation by distributing water conservation kits through their own distribution program."

### Other LA Conservation Efforts

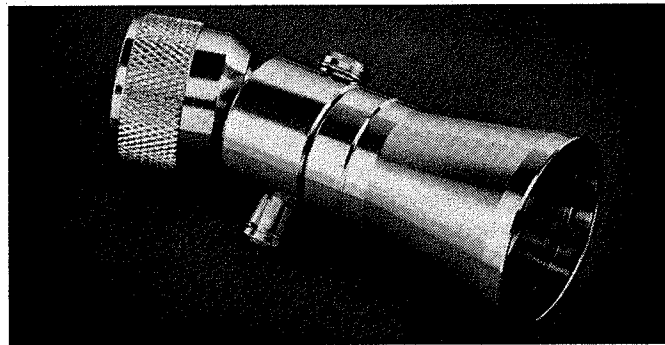
Also in August, the Los Angeles Board of Public Works created the Office of Water Reclamation. "We can no longer afford to use our precious water supplies just once, then throw them away," said Mayor Bradley. "Every day, 60 million gallons of reclaimed water are being dumped into the ocean instead of being reused." The city hopes to market that reclaimed water for use in landscaping, in commercial and residential developments, and in industry, and for groundwater recharge.

On July 1, Councilwoman Ruth Galanter's landmark water conservation ordinance became law. Galanter's new ordinance mandates that all new and/or replaced commercial, industrial, residential toilets must be of the ultra low-flush type. The ordinance is expected to save 476 million gallons of water in the first year.

"Every time you flush one of these ultra-low flush toilets instead of a regular toilet, you will be saving 1.5 gallons of water," said Galanter. "The toilet does all the work, and you, the City, and places like Mono Lake benefit."

Also this summer, the LA City Council passed and Mayor Bradley signed into law a motion creating a City Department of Environmental Affairs. Councilwoman Joan Milke-Flores, the motion's author, said the new department "will enable the City to better address environmental concerns...by its independent evaluation of environmental problems..." include a Water Resources office.

*Peggy Nicholson and Betsy Reifsnider*



Low-flow showerhead supplied by LA Dept. of Water and Power.

### Make the Connection!

*"What's the connection between Mono Lake and Santa Monica Bay? Give up?" You are!*

*LA takes water from Mono Lake...and pours pollution into Santa Monica Bay. Every drop you save can help the lake...and the bay...and save a bundle on your water bills."*

*— Mono Lake Committee/Heal the Bay  
public service announcement*

Los Angeles residents can really make the connection toward saving water, and saving Mono Lake. But



wherever you live, make the connection between you and the other end of your tap. Your water is coming from somewhere. Use this precious resource wisely! The water you save can help a special place like Mono Lake.

One person who installs a toilet dam and switches over to a low-flow showerhead can save 4,000 gallons and about \$40, including gas and heating costs, in a single year. Faucet aerators save 180 gallons of water for each person in your home. Encourage your friends, neighbors, and employees to make the connection, too. Distribute conservation kits at home and at work.

Los Angeles residents can participate in the Mono Lake Committee-Heal the Bay program by calling 1-800-654-6030. You will receive a brochure with water conservation tips and the opportunity to become a "triple saver", saving Mono Lake, Santa Monica Bay, and big bucks on your water bill. With a \$20 donation, you will receive a low-flow showerhead, two brass toilet dams, and a faucet aerator. You will also become a member of the Mono Lake Committee and Heal the Bay for one year.

The Los Angeles Department of Water and Power (DWP) also distributes a low-flow showerhead and toilet tank displacement device. To receive these free items, contact your local DWP office, or call their conservation hotline at (213) 481-5800.

You can become a "Mono Lake Saver" even if you don't live in LA. The Mono Lake Committee offers a high quality, low-cost conservation kit for just \$25.00. The kit includes a water saver showerhead, kitchen faucet aerator, bathroom tap aerator, two toilet dams, Mono Lake bumpersticker, and two Mono Lake postcards. These items may also be purchased separately. To order, please see page 7 of our catalog.

*Peggy Nicholson and Betsy Reifsnider*

## Thank You to Patagonia

The Mono Lake Committee would like to thank Yvon Chouinard and the staff of Patagonia for their generous gift of \$3000. This gift has made our new water conservation program possible.

We are very proud to be selected to receive this gift, and will continue our efforts to be what Patagonia calls "part of the good news" about the environment.

## Christmas Bird Counts

Beginning and advanced birders are welcomed on all Christmas Bird Counts. Unlike our Bird-a-thons in which only individual species are being counted, on these winter counts we keep track of sheer numbers of birds in each species.

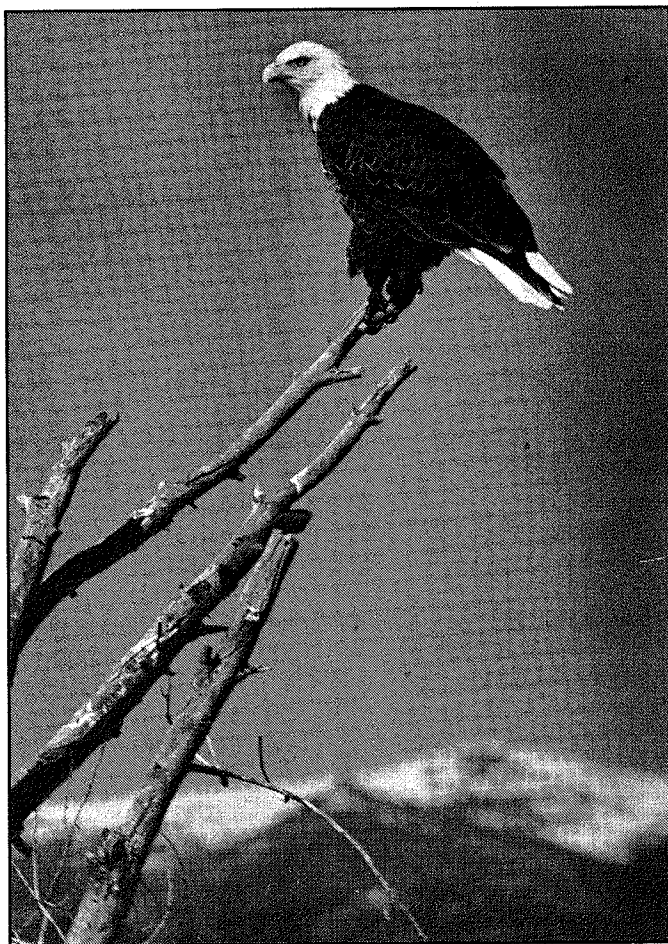
**Dec. 16—Mono Lake Christmas Bird Count.** Contact Tina Hargis (619) 647-6525 for information.

**Dec. 17—Bishop Christmas Bird Count.** Contact Earl Gann (619) 938-2916.

**Dec. 21—Death Valley Christmas Bird Count.** Contact Mike Prather (619) 876-5807.

**Dec. 23—Lone Pine Christmas Bird Count.** Contact Mike Prather (see above).

**Dec. (date to be decided)—Mammoth Christmas Bird Count.** Contact Margaret Gorski (619) 934-3621.



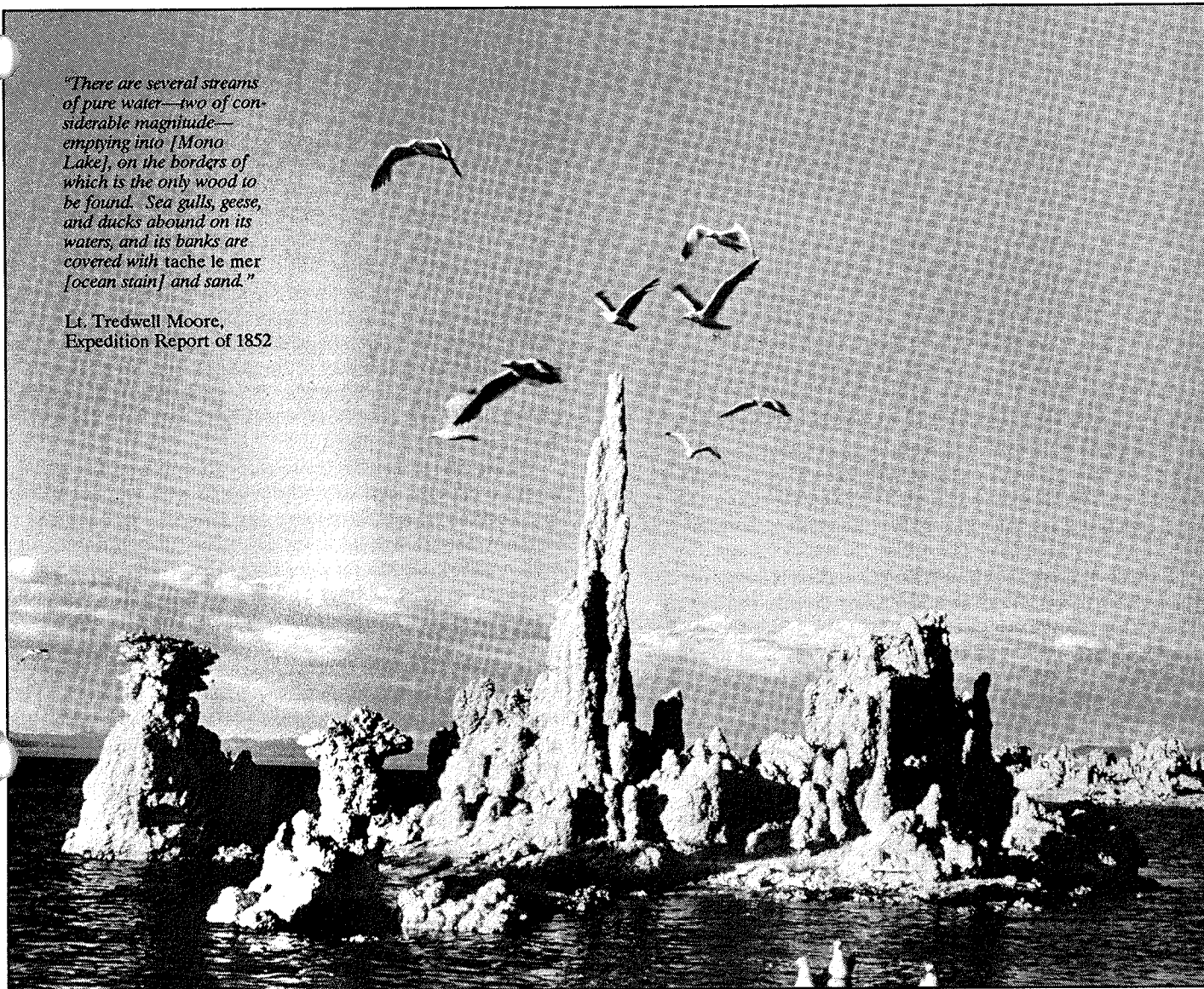
Bobbe Christopherson

## Mono's Historic Schoolhouse Dedicated

On August 19, alumni of the Mono Lake Schoolhouse gathered with well-wishers to dedicate the restored building as the new Mono Basin Historical Museum. The Schoolhouse served the Mono Basin's educational needs in the '20s and '30s when it was located on Dechambeau Creek. In Spring of 1988, the building was moved from its original location to Hess Park in the town of Lee Vining. With the loving help of dedicated volunteers the building has been completely restored. The Mono Basin Historical Society (P.O. Box 31, Lee Vining, CA 93541) is now accepting donations of historical artifacts for the museum. All historybuffs are welcome to join the society.

"There are several streams of pure water—two of considerable magnitude—emptying into [Mono Lake], on the borders of which is the only wood to be found. Sea gulls, geese, and ducks abound on its waters, and its banks are covered with *tache le mer* [ocean stain] and sand."

Lt. Tredwell Moore,  
Expedition Report of 1852



Liane Enkelis

## A Reasonable Compromise: Lake Elevation 6388'

### *Assessing the Damage/Preserving What Remains*

Since 1941, Mono Lake has dropped over 41 vertical feet due to water diversions by the City of Los Angeles. For over ten years, the Mono Lake Committee has worked for the preservation of the lake's threatened ecosystem. The Committee advocates a lake elevation of 6388 feet as a reasonable compromise between Mono's original (1941) elevation of 6417 feet and its current elevation of 6375 feet. Although 6388 feet is over 13 feet higher than Mono Lake's current elevation, it is 29 feet lower than the lake stood before diversions.

In September, Superior Court Judge Finney sent our public trust case to the State Water Resources Control Board (see article page 4). The Board is beginning to review the Los Angeles Department of Water and Power's (DWP's) water licenses. Part of the process involves determining how to protect the Mono Basin's public trust values, such as fisheries, wildlife habitat and air quality. A primary question is where to begin the evaluation of these resources. DWP would like to initiate the process using the current lake level rather than the level that existed when diversions started. But the damage that has already occurred to the public trust values of the Mono Basin ecosystem must not be overlooked. This article begins to document the harm that nearly 50 years of Los Angeles's water diversions have done to Mono Lake and its watershed.

We will never again be able to experience the Mono Lake that the Kuzedika Paiute or early explorers such as Tredwell Moore knew. We will never swim in Paoha Island's Heart Lake, witness brine fly bands six feet wide, or view flocks of ducks darkening Mono's shores. Since 1941, Mono Lake has halved in volume and doubled in salinity. The overall health of the Mono Basin's flora and fauna has declined noticeably with the deterioration of the habitat.

The only agency that disputes the decline of Mono Lake's health is the Los Angeles Department of Water and Power (DWP). It claims that the ecosystem is currently extremely productive and that no effects from diversions are yet discernible. Although Mono Lake still provides an abundant food supply for over a million birds traveling the Pacific Flyway, historical records indicate that the native wildlife population has been seriously impacted since diversions began.

### *Effects of Diversions on the Watershed:*

#### *Streamside Vegetation*

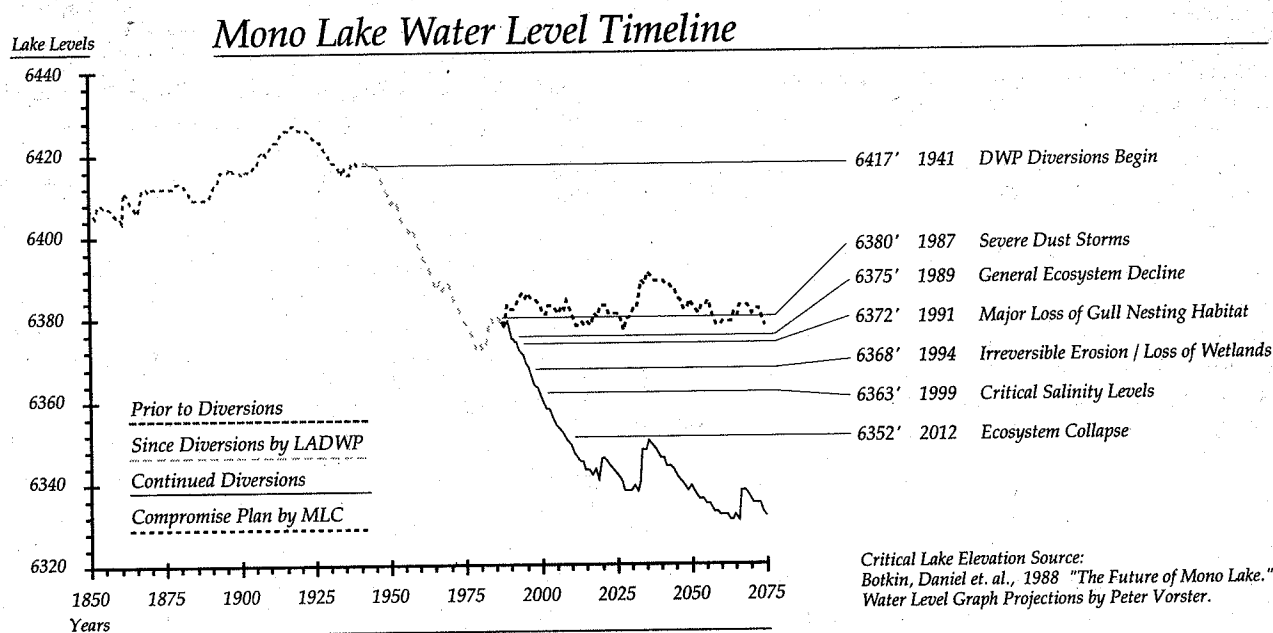
Before the large-scale diversions and dammings of Rush, Lee Vining, Walker and Parker creeks, the Mono Basin supported extensive stands of woodland, wet meadow and marsh vegetation. Dense groves of aspen, black cottonwood, willow, and Jeffrey pine formed riparian corridors all the way from the Sierra to Mono Lake. The land beneath Waugh Lake and Grant Lake reservoirs once supported 500 acres of wetlands providing nesting habitat for birds such as the now-rare Least Bittern. (Waugh Lake, on upper Rush Creek, was

created in 1925 by the Southern Sierra Power Company. In 1940, DWP greatly enlarged an existing irrigation dam on Grant Lake reservoir as part of their aqueduct system.) Creation of the two reservoirs caused immediate destruction of wetlands. The accompanying loss of downstream riparian habitat occurred more slowly (Stine, Gaines and Vorster, 1984).

According to Tom Felando, Forest Service hydrologist, 34 miles of riparian habitat in the Mono Basin have been lost or severely damaged by hydroelectric activities, DWP's water diversions and irrigation practices (Felando, 1984). This drying up of the streams caused many problems. Large trees and streamside vegetation died. Where there had once been ribbons of forest along the creeks almost all the way to the lake shore, there were now dead stumps and trunks. With no plant roots to hold the banks, occasional flood waters poured over the dams and eroded the channels.

Those few trees which survived when the creeks dried up have experienced severe growth reduction. According to a recent report (Stromberg and Patten, 1989), "Forty years of partial to total water diversion have had undeniable negative effects on the riparian vegetation at Rush Creek, as evidenced by the 30 to 50% reduction in tree growth detected by this study, and by other studies..." (1989(c), p. 16).

Jeffrey pines were the hardest hit by diversions and have suffered a "permanent loss of growth potential. The surviving pines no longer have the capacity for normal growth even under prediversion level flows. Growth could recover to higher levels than those presently occurring, but this would require decades of high flows, given the slow recovery rate of pines" (Stromberg and Patten,



LADWP: The Los Angeles Department of Water and Power

MLC: The Mono Lake Committee

Graphics by Stephen Johnson.



1989(c), p. 17).

"Another adverse pressure being exerted on the riparian vegetation is grazing/browsing by sheep," (Stromberg and Patten, 1989(a), p. 7). Given enough water, the streamside vegetation can withstand some grazing, but when sheep coincide with natural and/or manmade drought, their impact is significant.

Stromberg and Patten found that stream flows around 59,000 acre-feet/year (or 80 cubic feet/second, (cfs)) would be needed in Rush Creek to produce normal growth for cottonwoods. They point out that these flows "are nearly the same as those required to maintain Mono Lake within one recommended lake level range of 6377 to 6390 (Inyo National Forest 1988)" (1989(c), p. 17). Streamside vegetation studies have not been completed for Walker, Parker or Lee Vining creeks but the situation is much the same in these thirsty watersheds.

### *Wildlife*

The impact of stream desiccation was equally devastating on wildlife. According to researchers, the riparian plant community is critical habitat for "75% of Eastern Sierra wildlife and is essential to the health and productivity of fish and aquatic organisms" (Simon, 1986, p. 135). Excessive DWP water diversions killed fish and the aquatic insects they depended on for food. Not only were the streams turned into dry washes, but even when there was water in the channels, without the streamside vegetation to keep the creek waters cooler in summer and warmer in winter, the fish died from the temperature extremes. Much of the breeding and/or wintering habitat for riparian bird species, such as red-breasted sapsuckers, yellow and McGillivray's warblers, and song sparrows, was lost. There was also a decrease in habitat for many small mammals including raccoons, mountain beaver, Inyo shrew, as well as habitat for does and fawns. Wetland habitats (reeds, rushes, tules) also disappeared.

Several extremely rare mammal species depend on moist streamside habitats in the Mono Basin. One is the Inyo shrew which, according to the Mono Basin National Forest Scenic Area Plan, "is extremely uncommon and is known in California from only 15 specimens at 5 locations, one of which is lower Rush Creek." Another elusive mammal in the Mono Basin is the mountain beaver. The Mono Basin population of this nocturnal creature is currently listed as a candidate for endangered species status. According to researcher Dale Steele, "It appears that grazing and water diversions have greatly altered the riparian habitat available for mountain beaver" (Steele, 1989, p. 15).

### *Fisheries*

Rush Creek was once publicized as one of the country's top ten trout fishing streams by the California Department of Fish and Game. After diversions began, it was often a dry wash. A 1940s report by Fish and Game on the lower reaches of Mono Basin creeks indicates that

the potential use per mile of stream was 15 anglers/day for Rush Creek, 10 anglers/day each for Lee Vining and Parker creeks, and 4 anglers/day for Walker Creek (Inyo Register, 1947). At that time the value of the fisheries was estimated at \$10 per angler/day which would be \$233,860 per year in 1947 dollars, or a minimum of ten million dollars by 1989. Mono County was never reimbursed for this loss. DWP claims that it built the Hot Creek Fish Hatchery as compensation for the de-watering of Mono Basin Streams. However, the California 3rd District Court of Appeals, in its recent decision (1989), put to rest this assertion, ruling that DWP never had the right to take all the water and destroy the fisheries.

### *Meadow Habitat for Butterflies*

The Mono Basin is or once was home to several rare butterfly species. One of these, the Apache silverspot (*Speyeria nokomis apacheana*), is a striking butterfly with bright orange wings and silver spots. It depends on marshy meadows, where its larvae feed only on the bog violet. A 1978 survey failed to record any Silverspots in the extensive meadows of Bohler Canyon drainage, Walker Creek and Parker Creek. "This broad alluvial plain unquestionably once provided habitat for the Apache Silverspot but the artificial termination and impounding of water for Los Angeles has destroyed natural marshes, leaving this area green but certainly not suitable for this species" (Murphy, 1978, p. 9).

Another species, the Mono Checkerspot (*Euphydryas editha monoensis*), may be gone for good from the Mono Basin. The type specimen of this subspecies was collected from the Mono Basin in 1928, although the Checkerspot is also found elsewhere. Only a few Mono Checkerspots were sighted in the Mono Basin during Murphy's 1978 survey. "The status of the Mono Checkerspot, in a word, is bleak" (Murphy, 1978, p. 15). This butterfly is a candidate for endangered species listing. It occurs between 6,000 to 8,000 feet in pinon-juniper woodland and adjacent meadows. Its larvae is dependent on the small-flowered blue-eyed mary, a member of the snapdragon family.

The Basin also harbors a rare and previously unclassified subspecies of the Ox-Eyed or Large Satyr butterfly (*Cercyonis pegala*). Its southernmost distribution occurs in the Mono Basin and this population is concentrated at Conway Ranch (Dr. J. Emmel, Research associate, Natural History Museum of Los Angeles County, pers. comm.). As soon as this subspecies is officially recognized, it will also become a candidate on the federal endangered species list (Murphy, pers. comm.). It is completely dependent on wet meadows (Durham Guiliani, entomological consultant, pers. comm.).

### *Wetlands*

Wetlands or marshes provide vital wildlife habitat in the arid Mono Basin. Along the exposed shoreline, springs produce a green swathe of cattails, bullrush, gol-

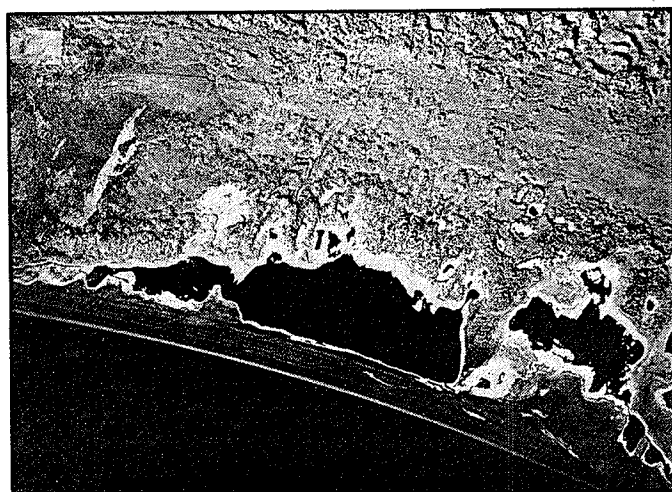
denrod and rein orchids. Birds such as snipe, yellow-headed blackbirds, and rails nest in Mono's wetlands and migratory deer and ducks frequent the marshy ponds and springs.

Hydroelectric development and other water diversions caused the loss of 800 acres of marsh, wet meadow and riparian woodland now flooded under Grant and Waugh Reservoirs or formerly present along lower Rush, Parker, Walker and Lee Vining Creeks (Stine et al, 1984). There has been an accompanying decrease in marsh dependent species. Least bitterns are one example. These birds no longer nest in the Mono Basin (Gaines, 1988) although there is good evidence to suggest that they formerly nested in marshes at the mouth of Rush Creek (Grinnell and Storer, 1924).

In contrast to the loss of fresh water wetlands in the upper basin, marshy areas along the shore of Mono Lake appear to have increased since diversions began. The drop in lake level has exposed gently sloping shelves which easily retain water (CORI subcontractors report, Stine, 1988). These new alkaline-soil marshes, however, support very different plant communities than the expansive upland meadows that were lost along Rush Creek and in the Waugh and Grant Lake depressions (NAS, 1987, and Mark Bagley, per. comm.).

Although a declining water table created some marshland around the lake, it also wiped out extensive shallow lagoons and ponds which once lined Mono's north shore (Stine, 1989), (see photo below). These brackish lagoons afforded excellent duck habitat (Don Banta, pers. comm.).

Even though the sinking lake level may have created wetlands, diversions will destroy these oases once the lake drops below the 6368 feet. This so-called "nick point" will expose very steep lakeshores, causing streams and springs to erode the banks and ultimately drain the marshes. "If the lake drops below the nick point erosion of tufa towers, marshlands, and stream beds will be irreversible" (CORI, p. 19).



Aerial photo of a few of the lagoons that lined Mono's north shore in 1930. Approximate scale: 1 inch equals 2,000 feet. Photo courtesy of Dr. Scott Stine.

## Effects of Diversions in the Lake:

### Rotifers

DWP stream diversions also impacted life in Mono Lake's waters. Reports, such as Mason's (1967), identify two species of common rotifers (microscopic animals that move via the beating of small cilia or hairs), in Mono Lake. Both of the species, (*Hexarthra jenkiniae*, and *Brachionus plicatilis*), were especially abundant in winter. "In mid-December 1959...there were 170,000 per cubic meter in the top three meters and about 40,000 per cubic meter uniformly distributed below this. The *Brachionus* comprised over 90% of this population" (Mason, 1967, p. 86). Both of these creatures can no longer be found in Mono Lake (D. Herbst, pers. comm.). It is too late now to study how these rotifers functioned in Mono's ecosystem or what effect their loss may have. Their extinction in Mono Lake probably can be attributed to increasing salinity based on their salt tolerance limits (Epp and Winston, 1977).

### Shrimp

What is known about the loss of productivity for Mono Lake since diversions began must be extrapolated from laboratory experiments on the effects of salinity. Dana and Lenz (1986) examined these effects on brine shrimp growth and reproduction for salinities no lower than 76 grams/liter (lake level approximately 6380'). Although experiments have not been done to estimate the shrimps' productivity at the 1941 lake level of 6417 feet, researchers discovered that at a salinity which was double Mono's original level, the number of offspring produced per female decreased. The researchers concluded that this correlation between higher salinities and lower reproductive rate "suggests that *A. monica* may already be growing non-optimally at the lowest salinity tested (76 g/l) in our experiments" (Dana and Lenz, 1986, p. 433). They found that growth rates, molting rates, brood size (number of eggs per laying), and percent cyst hatch decreased with increased salinity, and female mortality during reproduction and length of incubation necessary for cysts to hatch increased.

Due to the vulnerable status of their only home, Mono Lake's brine shrimp are currently a candidate for endangered species recognition.

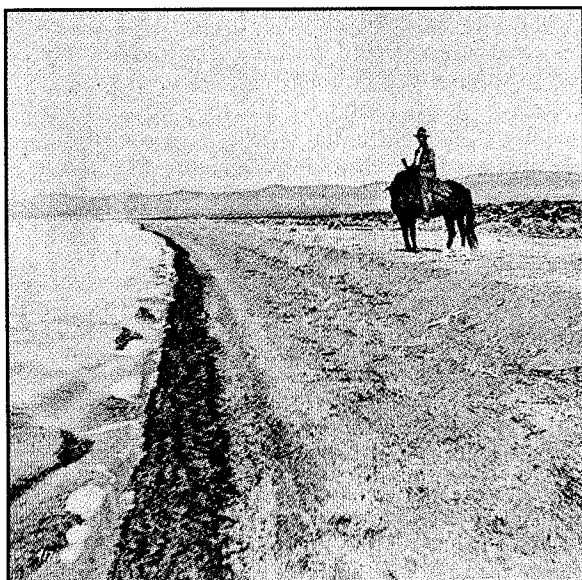
### Alkali Flies

Alkali flies have also suffered from the deadly salt build-up. A photograph (see next page) taken by C. Hart Merriam echoes Mark Twain's description of "a belt of flies one hundred miles long...an inch deep and six feet wide" (Twain, 1872, p. 244). Local Paiutes were still able to collect a food staple, tasty *kutsavi* (dried brine fly pupae), along Mono's shores until the 1950s, when the supply dwindled (Gaines, 1981).

Researcher David Herbst has compared the body size of flies from pre-diversion specimen collections to flies collected since 1976. These comparisons reveal that the

flies have become significantly smaller. The smaller size of the present-day flies matches the experimental prediction that increased salinity should result in reduced growth and size. The reduced body size of adults also results in lower reproductive success (Herbst, 1986).

Experimental studies show that the growth rates of the algal food sources of the alkali fly have also been reduced as salinity has become more concentrated in Mono Lake since diversions began (CORI report, appendix D; Herbst, 1988; and Herbst & Bradley, 1989). Food reductions, as well as salinity, also cause reduced larval survival and growth (Herbst, abstract, Southern California Academy of Sciences symposium on Mono Lake, May, 1989).



Alkali Flies blackening Mono's shore circa 1900. Such dense concentrations have not been observed since the 1950s. Photo by C. Hart Merriam, courtesy of the Bancroft Library.

### *Waterfowl and Shorebirds*

An investigation of historical accounts turns up startling findings regarding the vast numbers of birds that frequented Mono Lake. An 1852 newspaper article which contains the first mention of Mono Lake in print speaks of "wild ducks and gulls, in abundance..." (Alta California, 1852). Other accounts (e.g. Bridgeport Chronicle-Union, Dec. 23, 1905, Dec. 24, 1948) indicate that waterfowl were sometimes numerous in winter. "During the winter months the waters of the lake are literally covered with swans, geese, brant, ducks and smaller aquatic fowl. It is incredible the numbers of these birds that appear after the first rains. Sportsmen find it a laborious job to carry home their game. A regular gunning expedition in this region results in nothing short of wholesale slaughter" (Browne, 1865, p. 70). Mono Lake ducks were sold house to house in Bridgeport for 20 cents apiece (Cain, 1961).

"Oldtime residents, who recall taking two or three hundred ducks a day, lament the decline since diversions began. Increasing salinity—from a 1941 level of 48 grams/liter to a 1989 level of 92 grams/liter—is a plausible cause, for ducks, unlike gulls, shorebirds and grebes, lack well-developed salt glands" (Gaines, 1981, p. 4). The loss and changes of wetland habitat in the Mono Basin and elsewhere along the Pacific Flyway may also be a factor in the decline of waterfowl numbers (Shuford, pers. comm.)

According to researcher Joseph Jehl (1988), "...the abundance and composition of the Mono Lake avifauna [birdlife] prior to 1940, when salinity approximated 40% [of current levels], differed importantly from current conditions. Under a less saline regime the lake would have accommodated a greater diversity of birdlife...Changes are further suggested by accounts that former waterfowl numbers at Mono Lake greatly exceeded those that are currently realized" (p. 57).

Jehl reports that juvenile Wilson's phalaropes avoid Mono Lake, and instead frequent such places as Bridgeport Reservoir, which have a much lower salinity, (Jehl, 1988). This is probably due to the fact that young birds have only partially developed glands with which to filter salts and therefore are more sensitive to salty environments. Could juvenile Wilson's Phalaropes once have been able to utilize a less saline Mono Lake in high numbers?

Increasing salinity seems to have driven away other types of birds than just phalaropes and ducks. "Fisher (1902) saw many grebes, but identified no Eareds and collected only Horned and Westerns, a feat that would be virtually impossible today" (Jehl, p. 55). He also reported that in early autumn "thousands of ducks, grebes and gulls dotted the surface as far as eye [could] see," with "teal, shovellers, and redheads mingling together." That is no longer the case; indeed Redheads are rare, although they remain common at nearby lakes.

Mono Lake is essential to salt-lake-loving phalaropes and grebes during dry years. As lakes and wetlands along the interior Pacific flyway continue to dry up or become severely polluted, migrating and nesting birds have few other places to go except Mono Lake. (See discussion of Great Basin Lakes on page 16.) During the dry years of 1988 and 1989, it was observed that phalaropes came back earlier and in larger numbers than usual. Presumably, they failed to nest successfully during the drought, and used Mono Lake as a "health spa" in preparation for a better nesting season next year.

### *California Gulls*

Mono Lake's California gull colony, the second largest colony of this species in the world, has a traumatic history. In 1976, during one of the first official censuses, the Negit Island gull colony numbered at least 33,000 individuals. By 1979, the Negit Island colony was devastated when the island became connected to the mainland by a landbridge. The landbridge was exposed as the lake level dropped dramatically due to DWP's diversions of



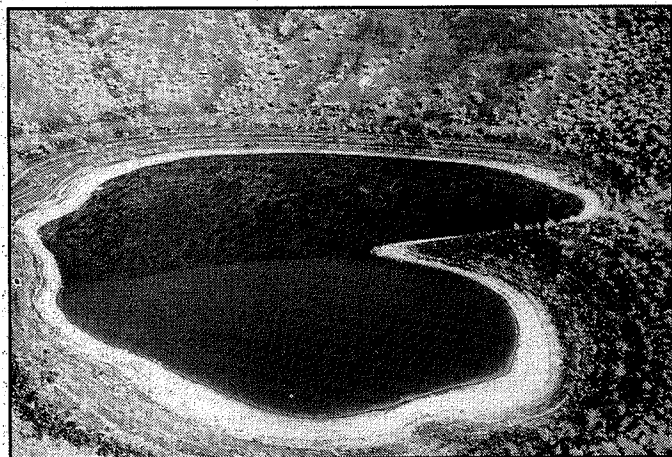
Mono's incoming streams. Coyotes crossed to the island, causing the Negit colony to be completely abandoned (Gaines, 1981).

By 1981, the gulls, who had relocated to nearby islets, not only had to contend with coyotes but also crowded, inferior nesting habitat, probable food shortages and excessive heat. The spring (first hatch of the year) brine shrimp population declined by 85-95 percent. Gull reproductive success plummeted to about 11,698 chicks from a recorded high of 35,530 (1976) before the landbridge formed. Fortunately, Mother Nature granted a reprieve: several extremely wet winters temporarily reversed Mono's decline. The extra runoff caused the lake to rise nine vertical feet, flooding the landbridge. Unfortunately, DWP's diversions continued, the lake dropped, and by 1989 coyotes again had access to Negit Island (Gaines, 1989).

Research presented in the state-sponsored Community Organization and Research Institute (CORI, 1988) report indicates that the gulls at Mono Lake are not reproducing well enough to maintain their population size without recruitment from distant colonies. According to gull researcher David Shuford, the reconnection of Negit to the landbridge will "totally undo the gradual revival over the past four years of Negit Island as a nesting place for the California Gull..." and "set in motion a chain of detrimental events, on a population already reproducing below self-sustaining rates, that will cause a substantial long-term decline of the population if not halted or reversed" (Shuford, 1989, p. 3,4).

### Heart Lake

Once there was a lake in the middle of Mono Lake. This was Heart Lake, a beautiful heart-shaped pond in the center of one of Paoha Island's craters. Tourist boats used to ferry passengers there for a swim. Heart Lake was dependent on the high water table provided by Mono Lake. Diversions dropped this table so low that the little lake dried up. David Gaines wrote "wholesale geographic offenses such as this should be punishable by a fine not less than reprinting of all maps thus outdated! Cartographers should voice protest" (Gaines, 1981, p. 4).



Heart Lake. Photo courtesy of Wallis McPherson.

## Strengths And Weaknesses Of Existing Data

In the search for management plans and a resolution to the Mono Lake problem, researchers and agencies have often focused on critical thresholds for Mono Lake organisms. At what salinity do the brine shrimp become extinct? At what lake level do the islands become accessible to predators? The National Academy of Sciences (NAS, 1987) and CORI (1988) reports, for example, concentrate on "lethal levels", when all or most of a particular life form would be eliminated from Mono Lake. Yet, the biological truth is that organisms rarely perish at one predictable time, place or environmental condition. In reality, there is a gradual decline in the health of many species which leads to a reduced population size or reproductive rate.

Measuring this loss is difficult because most data from Mono Lake not collected until the lake had already halved in volume and doubled in salinity. Although further study is always useful, we already know from historical accounts that substantial wildlife and plant losses have occurred since water diversions from the City of Los Angeles began.

## Conclusion

Early settlers had an impact on the Mono Basin particularly through hunting, irrigation and grazing practices, but they did not destroy the streams and lake on which their livelihood depended. DWP's excessive water diversion activities, on the other hand, have damaged Mono's ecosystem in ways from which it may never recover.

Though it is unrealistic to suggest returning Mono Lake to its pre-1941 level, it is important to realize that public trust values such as outstanding fisheries, super-abundant bird life and unspoiled vistas have been lost and may not be regained. What the courts refer to as "irreparable harm" has already occurred in the Mono Basin.

Achieving a stabilized Mono Lake is essential for preserving what remains of a once thriving biological and cultural community. Mono Lake must be returned to a level that ensures that the whole ecosystem will be sustainable, not just one fluctuating on the edge of survival.

The time to halt the damage is now, not at some future date when there may not be a living Mono Lake to preserve. Mono Lake and its watershed have already been compromised enough.

*Emilie Strauss and Lauren Davis*

*Note: This is the first article in a two-part series. The next part will focus on the losses experienced by the Mono Basin human community as a result of Los Angeles's water diversions. If you have information regarding Mono Basin biological or cultural history, please let us know.*

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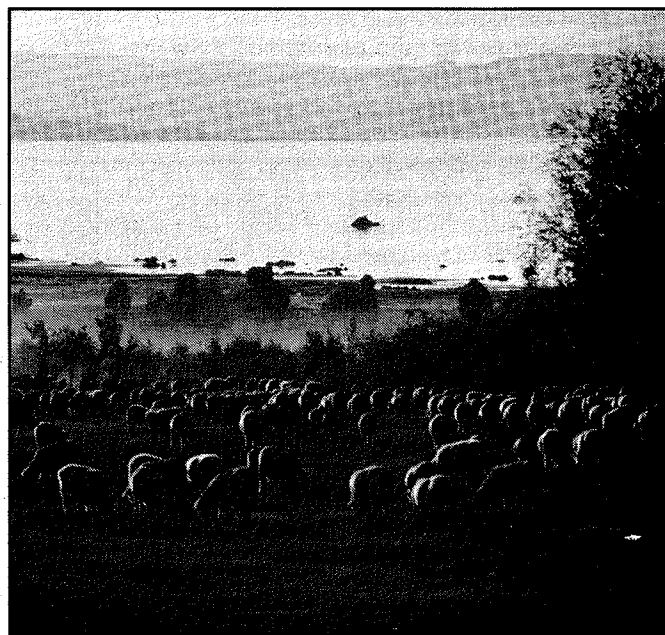
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## Historic Grazing Impacts in the Mono Basin

Although grazing may seem entirely unrelated to stream diversions, most of the grazing in the Mono Basin riparian areas is on property managed by the City of Los Angeles. Since the City condemned and bought nearly all the farms and ranches in the area to secure water rights, they also own most of the private land in the Basin. This land is generally well-watered and leased to sheep growers from out of the area. Historically, these range and meadow lands were overgrazed and DWP has continued this trend.

Grazing has changed the vegetation structure of a former grasslands community and destroyed the remnants of riparian vegetation along lower stream corridors. Effects of overgrazing are documented in *Paiute, Prospector, Pioneer*. Fletcher wrote, "Under pristine conditions, the sagebrush community which covers the lower slopes of the basin contained numerous perennial grasses, especially giant wild rye and Indian ricegrass. These grasses were not adapted to heavy grazing; the large native herbivores of the Great Basin, such as mule deer and pronghorn antelope, exerted little grazing pressure, preferring to browse on shrubs and forbs. The bunchgrasses were consumed by smaller species—sage grouse, rodents and insects—and the grass-seeds were harvested by the Kuzedika Paiute, but the effect was minimal" (pp. 87-88). John Muir and Israel Russell also document the extensive early overgrazing in the Basin.

Overuse of range and grasslands has probably added to the dramatic decline of the indigenous pronghorn populations in the Mono Basin. During John Muir's visit to Mono Lake in 1869 he remarked that "antelope used



Sheep grazing above the northwest shore of Mono Lake.

to be abundant on the desert at the base of the interior mountain-ranges." Although antelope have been reintroduced to the neighboring Bodie Hills and a few have occasionally been sighted along Mono's north shore, they have not permanently reclaimed their past territory. Although no research has focused on pronghorn in the Mono Basin, the California Wildlife/Habitat Relationships Program of the National Forest Service (Northeast Interior Zone, Vol. IV-Mammals), states that "sheep grazing may be harmful to pronghorn due to similarity of diet." The document also mentions that pronghorn require fresh water frequently—a limited resource in the Mono Basin since diversions began.

Sage Grouse populations have declined substantially in the Mono Basin (Gaines, 1988). The California Wildlife/Habitat Relationships Program, (Vol.III-Birds), remarks that grouse declines in the Northeast interior region of the state are "due to habitat loss and overgrazing" and that "meadows are important for summer foraging."

The City of Los Angeles' water diversions have lowered the water table in the Mono Basin by lowering the lake and cutting off surface flows that supplement underground flows. This dried-up many of the natural meadows and the overgrazing of sheep on the remaining wetland pastures has probably degraded and eliminated much of the sage grouse's former range.

Emilie Strauss and Lauren Davis

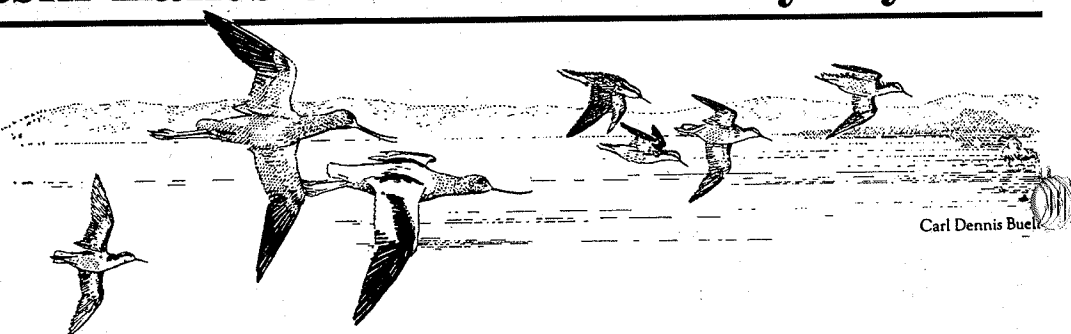
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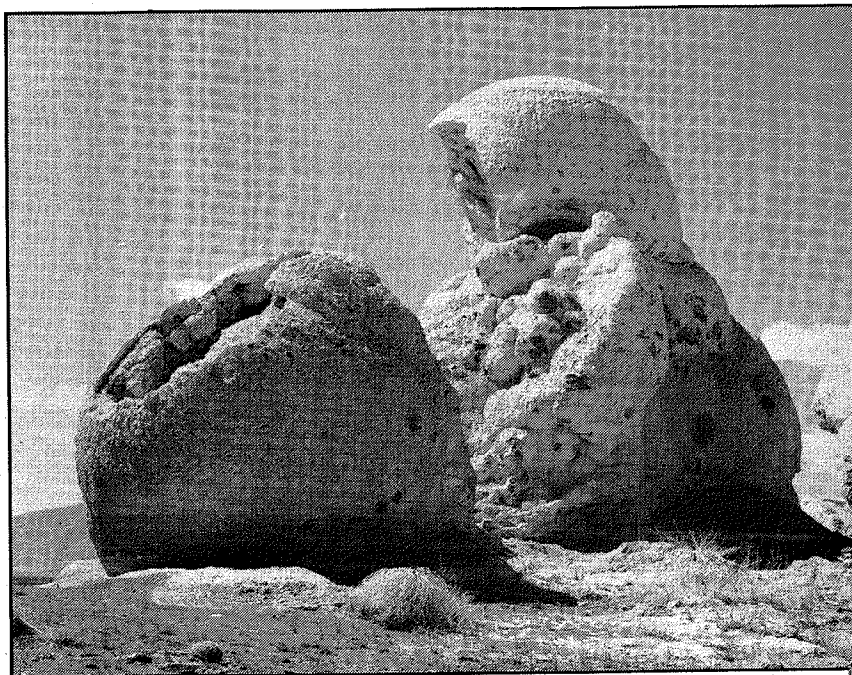
# The Great Basin Lakes of the Western Flyway

Mono Lake's importance to migrating birds must always be viewed in context with the loss of adjacent Great Basin habitat. During the last decade, Winnemucca and Owens Lake completely dried up and Stillwater-Carson Sink and Pyramid Lake areas have suffered losses from water diversion and pollution. When we consider Mono Lake as one of the last surviving lakes and wetlands on the interior route of the Western Flyway, its preservation becomes even more crucial.

We plan to have special reports on each of Mono's Great Basin sister lakes in future issues. We are pleased to begin this series with the following article on Pyramid Lake by Friends of Pyramid Lake president, Elmer Rusco.



Carl Dennis Buel



The Stone Mother tufa formation at Pyramid Lake. Photo from the Gus Bundy Collection in the Special Collections Department of the University of Nevada, Reno.



# A Gem In The Mountains: Pyramid Lake

by Elmer R. Rusco

Pyramid Lake was described by John C. Fremont, the first non-Indian to see it, as a "gem in the mountains." Since then, the stark beauty of this desert lake, 35 miles north of Reno, Nevada, has moved many visitors. Unlike Lake Tahoe, at the other end of the Truckee River, Pyramid Lake is not surrounded by forests. It is completely rimmed by mountains, and there are striking tufa formations at many places. The Pyramid, which rears its imposing bulk from the east side of the lake, is the most impressive of these tufa monuments and gave the lake its English name.

A unique feature of the lake is that it is within and part of an Indian reservation. Since time immemorial, it has been the primary resource and spiritual home of a Northern Paiute tribe, the Pyramid Lake Indians.

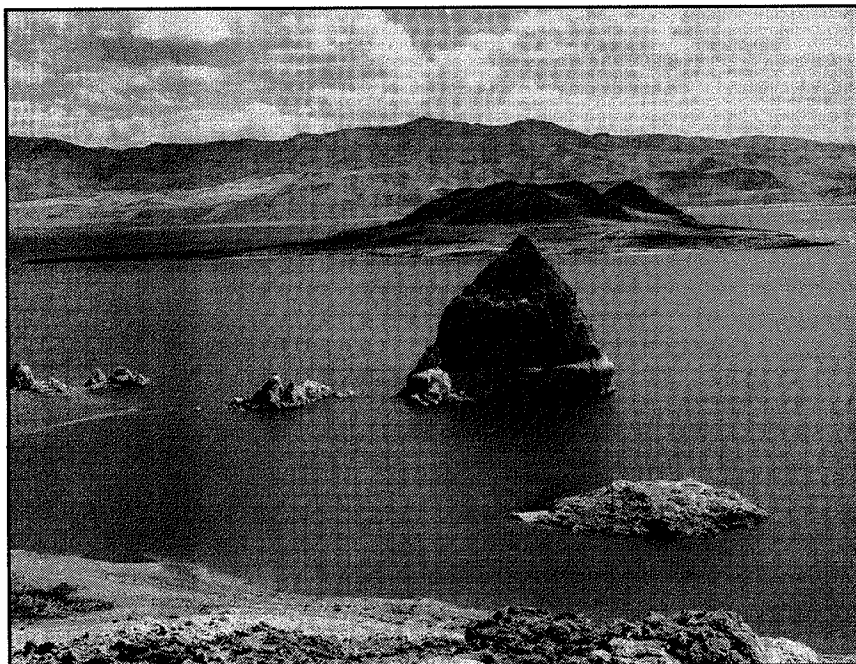
Although the Truckee River flows into Pyramid Lake, no water flows out. Evaporation has concentrated salts in the lake, yet it is still fresh enough to sustain an impressive fish population. Fremont wrote that the "salmon trout", today known as the Lahontan Cutthroat Trout, he was served at the lake in 1844 was the best tasting fish he had ever eaten. These fish provided remarkable trophy fishing; the largest recorded there weighed in at 41 pounds.

The modern history of Pyramid Lake is one of tragic waste of such priceless resources, however, chiefly because of water diversions since 1905. The trout became extinct by 1940. Although in recent decades a tribal fishery has restored the trout, this magnificent fish is still officially a threatened species.

The aboriginal owners of Pyramid Lake were known as the Cui-Ui Eaters, after a fish found only in this body of water. In spite of a lifespan as long as 40 years, the Cui-Ui is today an endangered species, and cannot be fished at all.

Pyramid's Anaho Island, a federal Wildlife Refuge, hosts thousands of birds, including the largest White Pelican nesting colony in North America. Watching the soaring flight of the pelicans, with sun flashing from their feathers, is an uplifting experience. But the pelicans too are in danger. The lake level, if it drops further, may expose a landbridge which would allow predators on the island. The more immediate danger is the drying up or poisoning of their principal feeding grounds, which are 50 miles away in the Lahontan Valley.

In brief, Pyramid Lake continues to be a beautiful and productive place, not only for its Native American caretakers but for all of us. But it is a legacy in dire



The Pyramid at Pyramid Lake. Photo from the Gus Bundy Collection, Special Collections of the University of Nevada, Reno.

danger of destruction. The principal problem is excessive diversion of water from the Truckee River before it can reach Pyramid Lake.

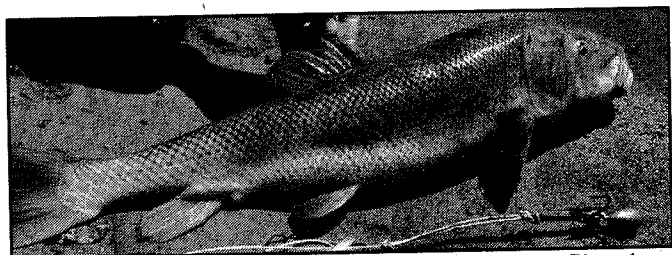
In 1905, Derby Dam was constructed across the river and diversions for agricultural uses at Fernley and Fallon began. These diversions took, on average, half the annual flow of the Truckee. Urban growth further upstream in the Reno-Sparks area has also reduced the water reaching the lake.

In recent decades, restriction of unauthorized or wasteful water use for agricultural purposes, plus three wet years, temporarily reversed the long-term trend of decline. Lake levels were raised somewhat. Although the Pyramid Tribe has firmly established legal rights to 30,000 acre-feet of water for irrigation, the lake itself has no water rights.

Added to the need for more water is the increasing problem of pollution. Even with sewage treatment plants, the wastes from several hundred thousand people living upstream could once again threaten survival of the fish population if nothing is done.

In short, in spite of some improvements lately, Pyramid Lake will surely die unless it is guaranteed more and cleaner water. Current negotiations between water users in Northwestern Nevada and Eastern California, led by United States Senator Harry Reed, may save the lake, but this is far from certain.

Friends of Pyramid Lake was founded in 1982 to provide a way to unite concerned citizens who do not wish to see this beautiful resource disappear. We produce a newsletter, the *Cui-Ui*, conduct an annual triathlon at the



Cui-ui, an endangered species, which is now illegal to catch. Photo by Gus Bundy, Special Collections, University of Nevada, Reno.

lake, organize forums and field trips on various topics, conduct an annual photography contest, and engage in a variety of other educational activities to let people know about Pyramid Lake.

Pyramid Lake resembles Mono Lake in several respects. Both are desert jewels at the end of streams being diverted for other uses, and the survival of both is threatened. Mono and Pyramid have spectacular tufa formations, and in both cases, important wildlife communities will disappear if the lake dies. We believe that defenders of Mono Lake will also be concerned about the preservation of a sister desert lake. If you would like more information, contact Friends of Pyramid Lake, P.O. Box 8947, Reno, NV 89507.

## The Giant Fish

From *The Myths of the Owens Valley Paiute*  
by J. H. Steward

A fish once lived in June lake, but he was so big that he could not stay there. The lake was too shallow for him. He traveled to Silver lake, but this would not do, either, and he went on to Havaka'tun. He got into this lake, which was held by a dam of large boulders.

At this time, Wolf was up Levining creek at Red Mountain, but Coyote was at Havaka'tun. Coyote opened the dam which Wolf had built to keep in the fish. When coyote did this, Wolf knew about it and ran down to the creek below the dam. He had a big flat rock with which to stop the water. But the fish was so big that he went right through the dam and on to Mono lake. Mono lake was fresh water at that time. It has become salty since then.

But Mono lake was too shallow for the fish. He rolled around on the bottom and scraped off some of his scales. These scales became cuza'vi, which the Indians eat today. From Mono lake, the fish went on to Walker lake, Nevada, but that was not deep enough, either, and he lost one of his spawns there. It hatched out and ever since these fish have lived there. They are very large, some of them weighing fifteen or sixteen pounds. Then the fish went on to Fallon lake, Nevada, but this lake was too shallow for him. He traveled on to Nixon lake, and Pyramid lake. then he followed the Truckee river and went to Lake Tahoe. He said, "This is the place where I ought to be." He whistled as he went into the water. He is in there today.

## Adventures of an Entomologist: The Desert Lake Journeys of J.M. Aldrich

By Dr. David Herbst

*"In the summer of 1911 I traveled about 5000 miles in a 62-day expedition having for its main objective the study of insects found in and about the western salt and alkaline lakes."*

So begins the collecting notes of one of the West's great experts on flies. J.M. Aldrich was a professor at the University of Idaho at the turn of the century, and was obsessed with flies of all kinds. In the western United States, exploration of the natural wonders of this remote area of the New World was still going on. The discovery and description of many new insect species would be the *terra incognita* into which Aldrich ventured.

Aldrich completed his trip through Utah, Nevada, and California by whatever means of public or private transportation was available, mostly by railroad. His excursions around the lakes and wetlands he visited were all on foot, in mid-summer heat. It is significant that in this age, before the advent of water diversion projects, dams, and reservoirs, Aldrich was able to visit many lakes which have since become extinct, and record the lifeforms that once thrived in these habitats.

A month into the trip, we pick up his trail in Wadsworth, Nevada:

*"The next day I returned eastward to Wadsworth and took the stage 20 miles north to the Nevada Indian School...The trip in was highly interesting to me, as I discovered a really garrulous Indian in the driver 'Fat Joe' and we struck up a warm friendship. The school is four miles from Pyramid Lake and eight from Winnemucca Lake, both of which I visited. They are moderately alkaline but contain large quantities of fish."*

Winnemucca Lake is now gone.

Journeying to Mono Lake was one of Aldrich's goals. How he got there, where he stayed, and what he saw, provide some interesting historical insights to the Mono Basin early in this century:

*"On July 19, I returned to Wadsworth and took the train to Hazen, where I took the Goldfield train next morning to the little freighting station of Thorne, close to the south end of Walker Lake. An automobile conveys the passengers seven miles across a very sandy desert to the county seat of Hawthorne, occupying a little oasis less than half a mile square. After dinner another auto stage runs to Bodie, California, climbing over the Walker Lake mountain range, crossing a valley and ascending almost exactly the summit of the next range, Bodie having an elevation of 8400 feet. The road was good and our speedometer indicated 35 miles an hour on one down grade stretch, with seven passengers and a heavy load of mail, express and baggage. Bodie is an old, decayed mining camp with a few hundred inhabitants."*

Next morning a horse stage driven by a Mexican took me to one of my main objective points, Mono Lake a distance of 22 miles. I stopped at the Mono Lake post-office and secured accommodations for a few days at the combined store saloon, hotel, blacksmith shop and feed mill of Jack Hammond, about a mile beyond. Here I devoted my first attention to the insects of the lake itself. It is a highly alkaline body of water and contains vast numbers of the larvae of *Ephydra hians*, used in the pupa stage as food by the Indians under the name of koo-tsabe. The specific identity of the fly had not been ascertained prior to my visit."

"My stay at Mono Lake was July 21-24, 1911, and I was informed that the collection of the fly for food would not begin until about September 1. None was left over from the previous year, so I was disappointed in seeing the material after preparation or the process of putting it up. However, I talked with both Indians and whites about it. There are only a few Indians who collect the material now, although it is known among all the older Indians of the tribe. The name of the food is better spelled koo-tsabe, accented on the first syllable, the last two letters forming an obscure syllable in which it is hard to distinguish whether the consonant is b or v. Fat Joe pronounced it for me many times and I listened very attentively: when I told him it had not been so recorded by earlier investigators, he chuckled and replied in his free and easy English, 'Well, you understand I'm giving you the real thing.' White people at the lake emphasized the amount of time required to free the little dried pupae from bits of puparium (the shell), dirt, etc., they thought it hardly worth while for anyone to work at whose time had any value."

"Most of the Pah-Ute Indians are now on reservations, one south of Pyramid Lake and one at the north end of Walker Lake, and only a few live near Mono Lake, where they eke out an existence on koo-tsabe, dried caterpillars and pine nuts adding a minimum of white man's groceries."

Aldrich was the first to provide detailed observation on the life cycle and habits of the alkali (brine) fly at Mono Lake. His work remained essentially the only source of information on this interesting and important species until I began studies at Mono Lake in 1976. Like other explorers before him, Aldrich was enchanted by Mono Lake's beauty:

"The loss of my camera with all my exposed film in it, while I was at Mono Lake, makes it impossible for me to give any illustration—much to my regret, for the lake and surroundings are very beautiful and picturesque. When I was there, the Sierras towering above were covered with great fields of snow and I never saw a more picturesque view than the one looking down on the lake and across it to the mountains, from the range near Bodie. Along the west side of the lake the shores rise abruptly into the Sierras, and there are numbers of rapid streams, large and small. The collecting is superb..."

The ritual of collection is part of the process of discovery and revelation that Aldrich and all entomologists practice. With attention focused down toward the dash and dance of insects at the water's edge, over and under the surface of pond and stream, the collector becomes absorbed into new worlds and dimensions. Creatures with arms like oars speed through the water and disappear beneath a carpet of green and red strands on the bottom of the pool. Flies in shining armor of metallic blue and green alight on the water surface and skate past a floating garden of silver air bubbles. A rush of wind comes from across the desert playa, bringing the smell of some ancient sea, and lifts my gaze again onto the horizons of the world above. I stand from where I've been crouched over a spring pool, feel dizzy, look around at this world that was seen before by Aldrich and think of those explorers who have come before me and now are gone. I feel how much I am at the edge of the past and the next moment's vision to come. We move on.

"...I continued my journey to Southern California by an unusual route, as it was necessary to include Owens Lake in the itinerary. I continued down the Goldfield railroad to Mina, where I changed to a narrow-gauge line that ends at Keeler, on the east side of Owens Lake. We reached Owenyo about midnight, several hours behind schedule, and were accommodated in a box car hotel, the single men occupying hard bunks in an undivided car. Next morning the mixed train on the branch took me as far as Olancho, which I had been informed would be a good point from which to inspect the west shore of the lake. It proved to be about five miles from the lake, so I put in most of the day collecting along a beautiful little mountain stream coming out of the Sierras and around some seepage near the lake. That evening I took up the train again to get to a point near the lake, and accepting advice again stopped off at Brier siding at 10 P.M., only to find that the ranch supposed to be there was at another siding and there was not a human being within miles except the Mexican boy who had driven down from the Los Angeles aqueduct camp to pick up any Slavs who might have drifted in to work on the ditch. The boy took me up to the camp and let me sleep on a few sacks on the ground. Next morning I secured breakfast with the laborers and walked to the lake, where I made what observations were necessary in time to leave again on the southbound train. The lake is densely alkaline and is full of the larvae of *Ephydra hians*."

That ditch soon took the flow of the Owens River, and Owens Lake also is now long gone.

Despite the exploration of desert waters begun by Aldrich, the sidetracks and many new species he found, the journey remains unfinished. Many endemic species of aquatic organisms have been found in isolated desert springs, saline lakes, hot springs, and marshlands. Like Winnemucca Lake and Owens Lake though, these places are disappearing. So many more desert waters besides Mono Lake are in need of discovery. And so much more to do we need to be looking.

# Kids For Mono Lake: A Special Tour

by Peggy Nicholson

Welcome to our very first children's page! First we'll visit Mono Lake and get to know the animals who live there. At the end of the tour, we'll meet some kids who are helping save Mono Lake, and learn about ways to save water.

## Stop #1

*This is my tour of Mono Lake. I hope you like my tour. I am Jessica Ikenberry, your tour guide.*



You can take this tour and never even leave home. Mono Lake is a very, very old lake. It's over 700,000 years old. Not many other lakes are that old.

Mono Lake is a very special place. Millions of birds come to feed and breed here. Lots of other critters depend on the lake to survive.

## Stop #2

*Mono Lake is a saltwater lake. It is fed by freshwater streams.*



Jessica's right. Mono Lake is a pretty salty. If you tasted the water, you'd spit it right out. Bleah! Some minerals in the water taste very bitter. The water also feels very slippery-slimy on your fingers because of these minerals.

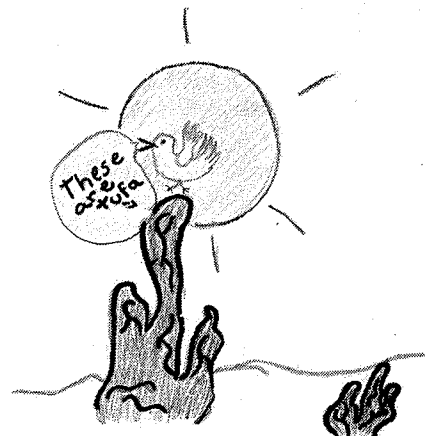
Mono Lake's water comes from streams that flow down from the mountains west of the lake. About 50 years ago, the people in charge of getting water for Los Angeles blocked off most of these streams.

Instead of flowing into Mono Lake, the stream water flows into a big pipe. This pipe is called an aqueduct. The water goes all the way to Los Angeles, over 350 miles away. Mono Lake gets lower and lower because the stream water doesn't go into it.

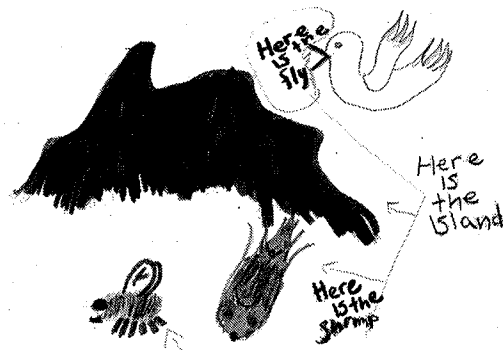
## Stop #3

*Here is a picture of Mono Lake. The funny-looking rocks are tufa.*

Tufa (say "say too-fah") is a white rock that grows at the lake. How can there be a rock that grows? Well, it doesn't grow like a plant.



Tufa forms near springs, natural fountains of water which flow into the lake. A mineral called calcium is in the spring water. Calcium is also in your bones and teeth. The calcium in the spring water mixes with the minerals in the lake water. They harden together. After many years, they form a tufa tower.



## Stop #4

*See the flies? See the brine shrimp? See the islands? Birds like to feed here. They are seagulls.*

The lake shore is a busy place. The first critters you might see are black flies, called brine flies or alkali flies. These flies are not like house flies. They eat algae, very, very tiny lake plants. That's why they leave us alone.

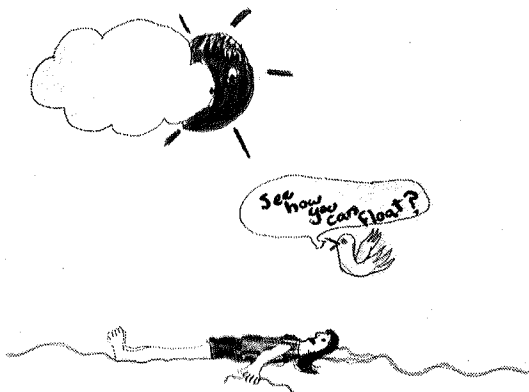
Another small critter here is called the brine shrimp. In summer, you can scoop these shrimp right out of the lake. These shrimp would not make a good dinner for you. They're only a half-inch long!

Birds come to the lake to eat the flies and the shrimp. Millions of birds stop here when they fly south for the winter. Mono Lake is a kind of bird gas station.



California gulls come to the lake each spring. They build their nests on the black island, Negit.

The island used to be a safe place for the gulls to raise their chicks. But now, when the lake drops very low, coyotes can wade out to the island and harm the gulls.



#### Stop #5

*You can float on Mono Lake because of the salt.*

Swimming in the lake is different from swimming in a pool. Float on your back and try to keep your feet underwater. They keep popping up! The lake is full of minerals so you can float very easily.

And look who's swimming with you...zillions of tiny, tickly brine shrimp. If the lake drops too low, it will be too salty for the brine shrimp and the flies to live in.

Be sure not to get water in your eyes, or in any cuts or scrapes. It stings!

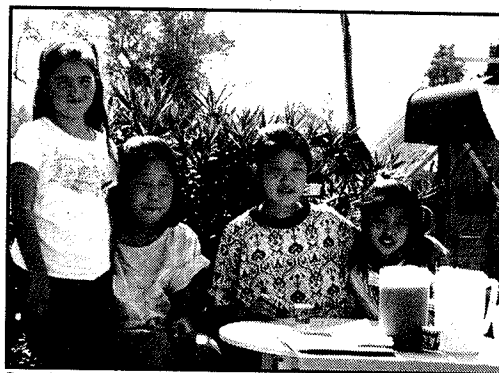
#### Stop #6

*Thank you for coming on my tour. Hope to see you at Mono Lake.*

Now you know why Mono Lake is such a special place. It's home for zillions of brine shrimp and flies. Gulls depend on the lake and Negit Island for a safe place to raise their chicks.

#### About The Author

Jessica Ikenberry is 10 years old. She lives in Sacramento. Jessica has been helping Mono Lake since she was four years old. Her mom used to work for the Mono Lake Committee. She showed the Mono Lake slide show and talked to people about the lake. Jessica used to go with her mom.



Jennifer, left, and friends at their bakesale table.

## Jennifer Helps the Lake

Jennifer Smith, age eight, is another one of Mono Lake's youngest helpers. Jennifer has held two bakesales to help raise money to save Mono Lake.

Her mom, Allison, also went to Jennifer's class. She talked to the kids there about Mono Lake. Jennifer's class wrote letters to ask U.S. Forest Service rangers to help the lake. A newspaper printed a story about her class. This spring, Jennifer wrote to tell us about it.

*Dear Mono Lake,*

*I've got great news!*

*I talked to Laura Brown of the Leader newspaper. They put an article on the front page and people in my class brought it in.*

*Now the DWP is going to be crushed. That's great news. Now maybe Mono Lake will be saved after all maybe. We had a fund raiser and made \$6.54. Me and my cousin did it. You know Mono Lake means so much to me in my heart.*

*Your friend,*

*Jennifer Smith and Elizabeth my cousin  
Save Mono Lake—The Right Choice*

## Water Ways: Water Conservation Tips

Natalie Chalabi of Sacramento sent us a beautiful Mono Lake display with tufa towers, gulls, and bright blue water. She also put in some water saving tips. We'd like to pass these on to you.

*Three minute shower—Yes!*

*Hose Driveway—No!*

*Only use the sprinklers in the evening or early morning hours.*

If you have ideas about ways to save water, please send them to us. We'll send you a free Mono Lake sticker. Send your ideas to: Kids' Page, The Mono Lake Committee, P.O. Box 29, Lee Vining, CA 93541.

# MLC NEWS AND ACTIVITIES

## *Mono Lake Adventure Travel*

Great hulking walruses! The next adventure for Mono Lake travelers is to Greenland and the Hudson Bay on board the *Society Explorer* in July 1990. First we will visit villages and fjords of southern Greenland, then cross Davis Strait to Baffin Island and northern Hudson Bay, ending in Churchill.

Emphasis will be on wildlife of the sea, air, and land. We will also see prehistoric sites as well as the present-day, but not modern, life in Inuit fishing villages along the way. Those who wish may stay an extra two days in Churchill to tour the southernmost polar bear habitat by tundra buggy, and go upriver to see the area's flora and fauna. The whole journey will be a showcase for birders, naturalists, and photographers alike.

The all-inclusive tour cost starts at \$5300, not including airfare or the optional Churchill extension. The cruise cost is a group rate below retail price, and 10% of the group fare is a tax-deductible donation to the Mono Lake Foundation. For details, send a self-addressed envelope to Mono Lake Travel, c/o M. Bennett, 2719 Marin Avenue, Berkeley, CA 94708. For questions, phone (415) 526-1260.

Mildred Bennett

## *Staff Hellos and Good-Byes*

A warm welcome to Rebecca Montañez-Flores who has joined our L.A. staff as bookkeeper. She writes, "I come from an agricultural area and grew up on a ranch. I know the importance of nature; earth, air and water. I am happy for the opportunity to join you all." Rebecca is helping to fill in the gap left by Jennifer Mandel who is leaving to return to school. Thanks for all your help and cheer Jennifer!

In the Lee Vining office we're sad to say "So Long" to Steve Holland and Daria Walsh. Steve has "graduated" from the Mono Lake Committee and is going on to new projects. (Rumor has it he's moving to the Foggy City to write the Great American Novel.) We'll miss him more than he'll ever know. Daria filled in as Programs Coordinator for us this year when we really needed a hand. Now she's moving to Portland to experience the opposite climatic extreme from the Mono Basin's crackle-dry air and blue skies. She hopes to visit the Farallon Islands soon to gain some biology field experience. This has been the second time Daria has returned to Mono Lake to work for the Committee, so who knows? Maybe we'll lure her back again.

## *Bucketwalk/Bike-a-thon*

About two hundred Bucketwalkers and Bike-a-thoners gathered on Mono's shores for a day of festivities on September 2. After a Rehydration Ceremony at Old Marina, Monophiles picnicked at the County Park and enjoyed music and dancing well into the evening. We'll have more about this Mono merriment in our next issue.

## *Attorney Appreciation*

We want to thank our legal council for all their help with our recent lawsuits. They have gone "beyond the call of duty" in supporting our efforts and those of the National Audubon Society to gain protection for Mono Lake. In particular, we appreciate the San Francisco legal firm of Morrison and Foerster, especially Bruce Dodge, Patrick Flinn and Bryan Wilson. In addition, Palmer Madden of McCutchen, Doyle, Brown and Enersen in Walnut Creek, has been invaluable in his continuing assistance. We want them to know we really appreciate their work.

## *MLC Job Opportunities*

### **Lee Vining: Associate Eastern Sierra Representative**

This full-time staff member assists the Eastern Sierra Representative in developing and implementing of Eastern Sierra political, legal, and media programs. Responsibilities include policy development, researching and preparing comments on local issues; and litigation assistance, including field research, data analysis, and report preparation. In addition, the Associate Representative will act as a media liaison and spokesperson at local, state, and legal proceedings. Experience in lobbying, environmental policy development, and public speaking necessary. Natural sciences background helpful. Willingness to travel to Sacramento and Bay Area essential. If interested, please contact Ilene in the Lee Vining office.

### **Lee Vining: Office Assistant**

This staff member will be responsible for working in the Visitor Center, providing membership services and assisting staff members on various projects. Must be reliable and like working as part of a team. This position offers an opportunity to receive training in a variety of office, management and interpretive skills, as well as medical surance, generous vacation and holidays, and an opportunity to live near Mono Lake. For more information, contact Sally in our Lee Vining office.

## Accolades

We're grateful for the herculean efforts of **Bob Stewart**, who raised over \$6000 for the David Gaines and Don Oberlin Memorial Fund to purchase the Mono Lake Visitor Center. Thanks also to Bob's 150-plus sponsors.

Thank you to **Barry Posner**, CPA, for advice, and for the use of your wonderful computer accounting system; to **Pam and Laura Jane** for letting us borrow Barry; **George "Procurement Department Extraordinaire" Howell** for donating lots of office supplies; to **Dan & Sally Gutierrez**, **Don Jackson**, and **Peter Vorster** helping us through many computer and communications dilemmas; and to **Akiko Sayama** for keeping an ever-watchful eye open for Mono Lake articles in the media. Special thanks to **Tree People** (California Conservation Project) for donating their photocopier (Margaret!).

The show must go on—the Mono Lake slide show, that is. We can continue public outreach thanks to **John Baker** and **Richard Nancarrow**, who donated slide projectors.

Back in Lee Vining, volunteer **Gary Nelson** is reorganizing our research library with **Arlene Reveal's** aid. **Marty & Beth Strelneck** donated flowers for the front flower boxes. Dust can't defeat us thanks to the vacuum cleaner generously donated by **Cole & Priscilla Hawkins**. **Wes & Patty Marquart** make us happy with avocados several times a year. **Cathy Price** earned a reputation for best conservation kit packing while visiting here. **Dale Johnson** volunteered many hours last winter before higher pursuits (skiing) called him away. Thanks to our dear supporters, **Pat & Jim Flynn**, whose enthusiastic visits are always a treat. *Mammoth Times* editor **Wally Hoffman** helped produce our summer activities flyer. The **Sierra Club of San Diego** visited the lake in June, and donated over \$600 from the trip's proceeds.

Our editorial staff (all two of us) thanks **Kevin Ahern**, **Guntram Jordan**, **Michael Painter** and **Dr. Marianne Smith** for revising our German guidebook. Guntram even faxed it to his sister, **Daniela Kõneman**, in Berlin for her comments! Thanks to all who offered their help. **Dave Marquart's** technical and moral support is much appreciated during the frenzied hours of newsletter production. Many photographers have also sent us black and white photos we hope to use for publicity and our newsletter. We appreciate it!

## Wish List

**Lee Vining Office:** A good quality, portable stereo to play demo tapes for customers and background music. (Our current model is held together by duct tape and paper clips). A nice picnic table for Visitor Center. An IBM-compatible computer and printer. File cabinets.

**Los Angeles:** Mail processing equipment (postage meter use), file cabinets, calculators, chairs, and telephones.

**Available:** Safeguard bookkeeping system. Contact Stacy in the LA office if interested.

## In Memory

**Richard M. Robbins**, **Stephen** and **Karen Underwood**, and **James** and **Geneva Rouse** made donations in memory of **Dick Riegelhuth**, Yosemite's Resources Management Chief. A gift in memory of **Elsie Enderlin** was made by **Elizabeth Brown**. **Charlotte Cooper** gave a gift in memory of Mono supporter **Dr. J. Ricardo Casorla**. Thank you to **Amelia** and **Richard Walter** for a donation in memory of **Carolyn Davis**. **Abigail A. King** made a memorial gift in honor of long-time Mono Lake advocate **Joan O'Melveny Mills**.

## Brad Schneider 1957-89

Local ski coach and restaurateur **Brad Schneider** was killed in a ski accident on March 24. Schneider, who founded **Nik-and-Willie's Pizza**, was an avid skier and had raced professionally. He was well-known throughout the Eastern Sierra for his generosity and community spirit. His caring and warmth will be greatly missed.

We express our deepest sympathy to our dear friends, **Kelly**, **Nik**, **Willie**, and **Lundy**, and to their family.

*We are grateful for contributions made in Brad's memory.*

Erica & Howard Smith  
Mark Manda  
Dick & Nancy Savage  
Leslie Jeane & Mark Rolfe  
Al & Ada Clausen  
Paul & Susan Mundy  
Trevor, Sheila, Craig, Brenda & Todd Barrett  
Helga Poloni  
Patricia, Joe and Jake Suppa  
Jean & John Rand  
Tom & Jean Holst  
Charles Baldridge  
Chris Garbarino  
Donald & Melody Ackerly  
Pinecrest Lake Resort  
Craig & Mary Ann Storek  
Connie & Ronald Lytle

Robert & Mary Kutz  
Ruth Gibson  
Mark Monasch  
Michael & Patricia Lannoy  
Gail Bliss Allen  
Ellen Schillig  
Steve Lannoy  
The Sedlacek Family  
Dick & Leslie Kowalczyk  
The Employees of the Tri-Dam Project  
Dorothy Kane-Roknic & Dave Roknic  
Pete Olding  
Jeff & Kathy Hansen  
John & Olga Morrison  
Alan Bonkowski & Susan Schillig-Bonkowski

## Jim Marotta-Jaenecke

Another defender of the environment and devoted family man has died. I didn't know him well, but he and his wife **Liz**, worked for the MLC in 1982, and lived here in Lee Vining with their two children, **Jasmine** and **Misha**. The high elevation affected his heart condition, and they moved to the Bay Area where Jim continued his environmental work under **David Brower**.

He radiated good nature, humor and love to everyone. Knowing that fate had foreshortened his lifespan encouraged him to live each day to its fullest. We only wish he could have had many more years on this earth. Our strength and love goes out to **Liz** and the kids to carry on.

*Sally Gaines*

*Membership Problems?*  
*Let Your Label Work For You!*

Attach Label(s) Here

...and check the appropriate boxes below:

**Change of address:**

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- ☐ **Renewals** — If you're receiving a renewal notice after paying yearly dues, your dues payment and the next renewal notice may have crossed in the mail. If you continue to receive notices, please contact us and we'll find out why.
- ☐ **Duplicate Mailings** — If you're receiving two copies of the Mono Lake Newsletter or other mailings, please attach both labels with different membership ID numbers (11-digit numbers above your name).
- ☐ **Missed Issues** — If you've missed issues of the Mono Lake Newsletter, attach a brief note to indicate which issues. The newsletter is published quarterly. Please note: The Postal Service will not forward magazines or third-class mail unless informed to do so on a Change of Address Card.
- ☐ **List Preference** — We occasionally make our membership list available to other environmentally conscious organizations. Please check here if you would prefer not to receive such mailings.
- ☐ **Other Questions or Problems** — Attach your label above and include a brief note.

**Mail to:**

The Princess of Postage  
(aka Sally Miller)  
Mono Lake Committee  
P.O. Box 29  
Lee Vining, CA 93541

Thanks to *Wilderness* magazine for this helpful form.

## *Intern Opportunities*

The Mono Lake Committee office in Lee Vining is seeking interns for our fall and winter seasons. Interns are a vital part of our efforts to save Mono Lake. For details on our intern/volunteer program, please contact our Lee Vining office.

# THE MONO LAKE COMMITTEE

## OFFICERS

Martha Davis ..... Executive Director  
Dave Phillips ..... Treasurer  
Helen Green ..... Secretary

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(619) 647-6595

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Melanie Findling ..... Visitor Center Manager  
Steve Holland ..... Visitor Center Assistant  
Sally Miller ..... Mail & Membership Coordinator  
Ilene Mandelbaum ..... Eastern Sierra Representative  
Peggy Nicholson ..... Assistant Editor  
Emilie Strauss ..... Staff Biologist  
Daria Walsh ..... Educational Programs Coordinator  
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Rebecca Montañez-Flores ..... Bookkeeper  
Amber Rae ..... Development Coordinator  
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(916) 448-1045 (message phone)

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145 South Washington St., Suite F  
Sonoma, CA 95370; (209) 533-2356

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# MONO LAKE CATALOG

T-shirts,  
Posters,  
Calendars,  
Books and  
More!



1990

## MONO LAKE



1 9 9 0

**ALL PROCEEDS BENEFIT THE  
SAVE MONO LAKE CAMPAIGN**



**NEW!! Brine Shrimp Pin** The beauty and quality of a Wm Spear Pin, featuring *Artemia Monica*, Mono's brine shrimp. Vibrant emerald and gold shrimp on a translucent blue background, "Mono Lake" on crimson. Shown actual size. \$8.00

**Mono Lake Calendar**  
The fifth year of our Mono Lake Calendar, and the most beautiful yet! Thirteen striking photographs from the magnificent Mono Basin. Introductory essay on the history of Mono Lake. \$9.95  
Special discounts for volume purchases: buy 2-5, pay only \$8.95 each; buy 6-10, pay \$7.95 each; buy 11 or more, pay only \$6.95 each.



**NEW!! Mono Lake Storm Poster** Stephen Johnson's newest poster captures the subtle beauty of Mono Lake on a stormy day. Color, 24 x 36". \$18.95

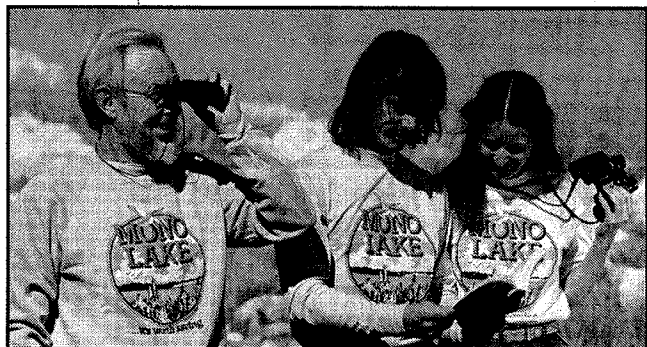
**Mono Lake Rubber Stamp** Easy to use and helps get the message out. Stamp on the outside of your water bills! Design donated by Mark Warner of Wild Bryde Jewelry. \$4.95



We thank Jim Stroup, Dave Marquart, Stephen Johnson, the *Mammoth Times*, and Pat Peigne for help with catalog production.

# MONO LAKE

## CATALOG 1990



### Mono Lake "It's Worth Saving" T-Shirts, Long-sleeved T-Shirts and Sweatshirts

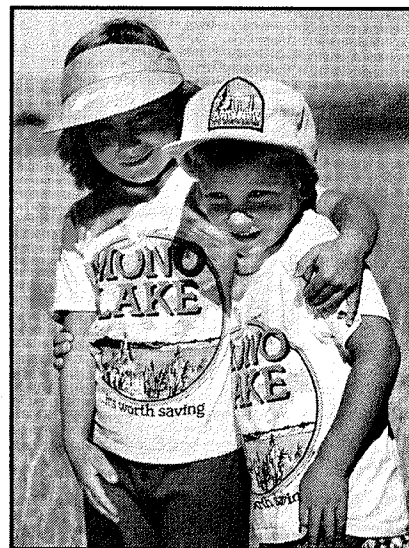
This brightly colored design shares the message.

Short-sleeved, 100% cotton, adult's crew in silver, aqua, mint, peach, pink, and light blue, sizes S,M,L,XL. **\$9.95**

Long-sleeved, 100% cotton, adult's t-shirt, in silver, aqua, mint, sizes S,M,L,XL. **\$14.95**

Sweatshirt, 50-50 poly/cotton, in turquoise and silver, sizes S,M,L,XL. **\$18.95**

Kid's crew, from photo at upper right, 50-50 poly-cotton, in pink and aqua, S(6-8) and M (10-12). **\$7.50**



**Mono Lake Caps and Visors** Attractive, quality headgear to adorn your head and protect from the sun. Sizes are adjustable, and fit everyone we know. Canvas caps come in forest green, red, navy, gray and tan. **\$7.50** Corduroy caps in navy, red, purple, gray and royal blue. **\$8.50** Visors in yellow, teal, blue, pink, lavender, purple, and aqua. **\$4.50**

**Mono Lake Patch** As seen on our hats, striking 5-color design by Rebecca Shearin, 3" across. **\$2.95**

*For kids' shirts, please see description at left.*

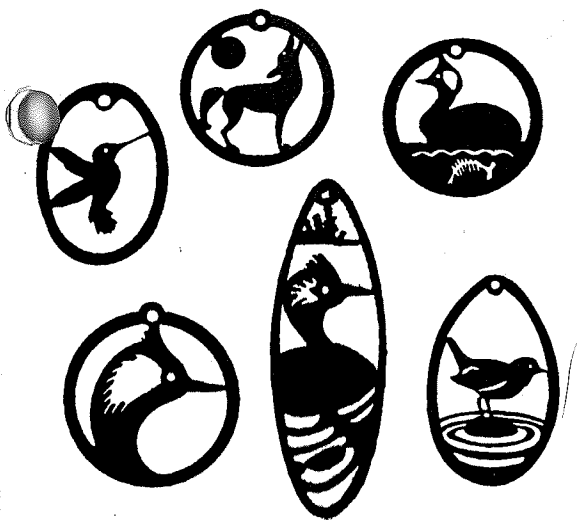
**Mono Lake Enamel Pin**  
Engraved with Rebecca Shearin's haunting, nocturnal scene in blues, silver and white. Shown actual size. **\$1.95**



**Toddler T-Shirts "Another Baby for Mono Lake"** designed by Rebecca Shearin, and "Shrimp for Mono Lake." Now, your favorite "shrimp" can help spread the word. Both available in pink and blue, sizes 2T and 3T in a 50-50 poly/cotton blend. **\$6.95 each.**



**Mono Lake Shorebird Pin** Delicate shorebird design, hand cut in silver or gold plate, by Wild Bryde Jewelry. Shown actual size. Please specify gold or silver when ordering. **\$24.00**



**Mono Lake Jewelry** Gold or silver plate earrings from hand cut, original designs by Wild Bryde Jewelry. Ear wires filled with respective pure metals. Shown actual size. When ordering, please specify gold or silver.

*Large Grebe with pearl, \$18.00*

*Eared Grebe Head. \$13.00*

*Grebe with Brine Shrimp. \$13.00*

*(Grebe earrings have "Save Mono Lake" engraved on back.)*

*Water ouzel (Dipper). \$16.00*

*Howling Coyote, Hummingbird. \$12.00*



**Mono Lake License Plate Holder** Sturdy metal design with white printing on blue background. \$3.95



**Mono Lake Key Fob** Enameled Mono Lake design on a leather backing. \$3.50

**Wm Spear Pins** Beautifully crafted and brightly colored enamel pins.

*Great Blue Heron, Loon. \$14.00*

*Brook Trout, Mallard. \$12.00*

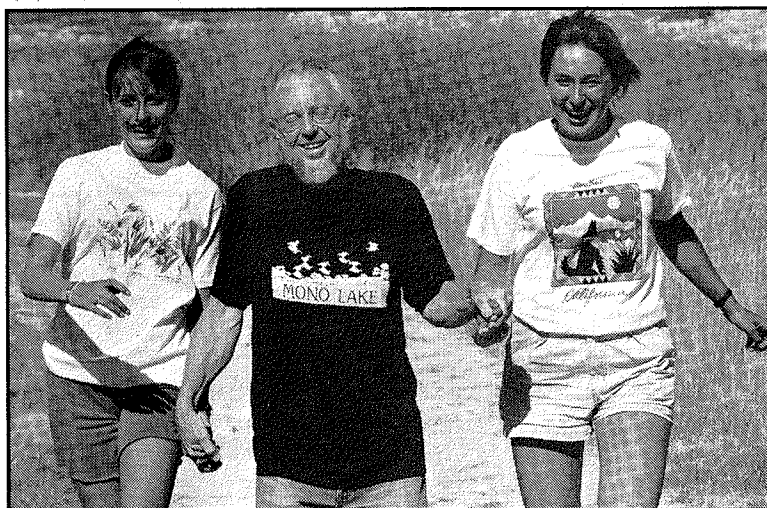
*Maggie, California Quail, Green-winged Teal. \$10.00*

*Red-Breasted Nuthatch, Allens*

*Hummingbird. \$9.00*

*Red-Winged Blackbird, Barn Swallow,*

*Chickadee. \$8.00*

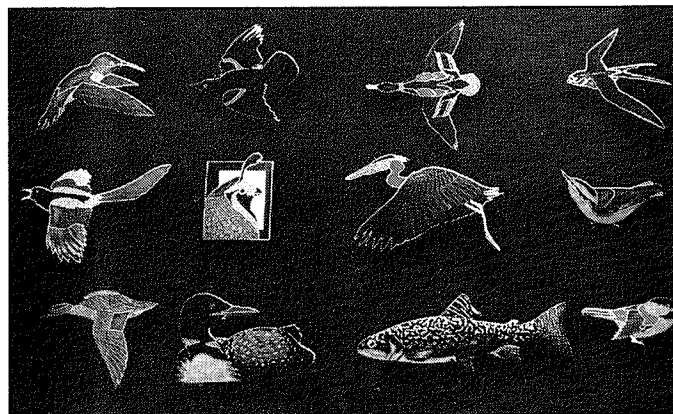
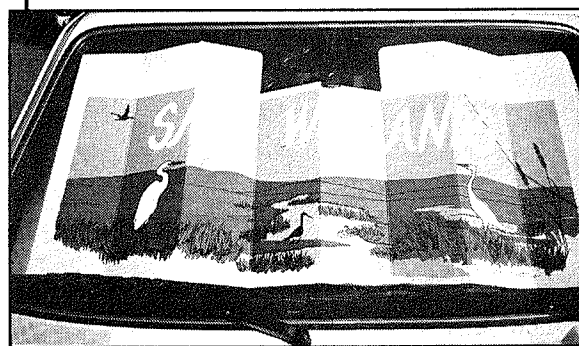


**Wildflower T-Shirt** This beautiful Sierra wildflower t-shirt is available in a 100% cotton, short-sleeved crew, in white and aqua, sizes S,M,L,XL. \$9.95

**Mono Lake Shorebird T-Shirts** The classic Mono Lake shorebird design, 100% cotton in black, turquoise, and coral. \$9.95

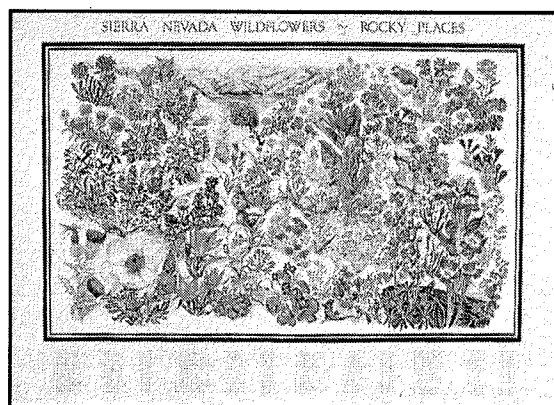
**Coyote T-Shirt** Awooooo! A chic Southwest design at an affordable price, our Mono Basin coyote is sure to please. Sizes S,M,L,XL, vibrant coyote design on white, 100% cotton, short-sleeved crew. \$9.95

**Auto Shades** From San Francisco's "Save the Wetlands" group, this colorfully printed shade keeps your car cool and prolongs the life of your dash and upholstery. Folds to 5-1/2" 20-1/2". Fits all passenger cars. \$7.50

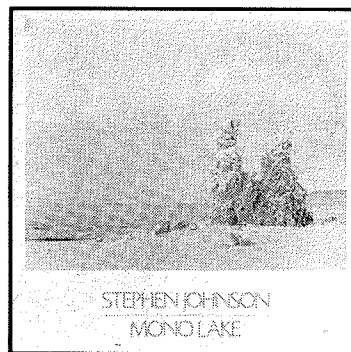


# MONO LAKE

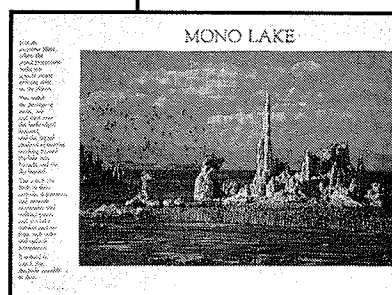
## CATALOG 1990



**Sierra Nevada Rocky Places Wildflower Poster**  
Vivid, full-color, 25" x 35" poster illustrates 60 Sierra wildflowers with marmots, lizards, and other critters hiding in the greenery. **\$7.95**



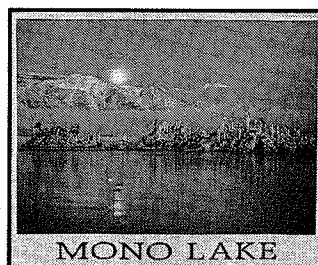
**NEW!! Dusk, South Shore.** Soft desert tones and snow-capped tufa in winter's fading light. By Stephen Johnson. Color, 22" x 25". **\$15.95**



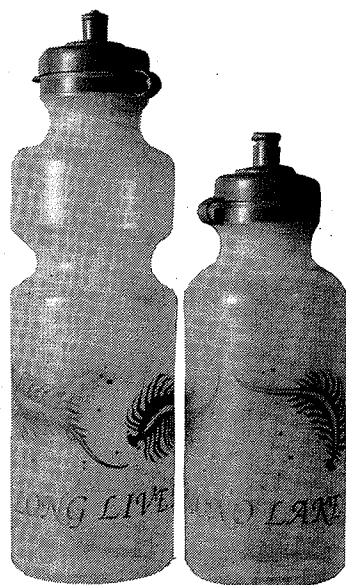
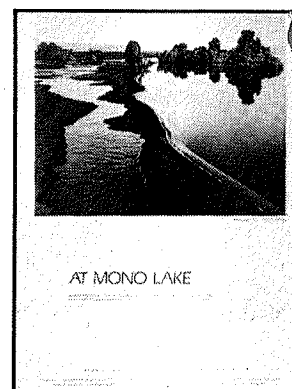
**Tim Snyder Poster**  
The classic Mono Lake photograph with tufa, birds, and clouds, accompanied by Gray Brechin's eloquent prose in a 18" x 24" full-color poster. **\$4.95**

### **Moonset Over Mono Lake**

The grandeur of a winter morning—snow-clad Sierra and spires of tufa, reflected in Mono's placid water—is beautifully reproduced on heavy 100 lb. cover stock. This 16" x 20" poster includes Gray Brechin's essay, "Elegy for a Dying Lake," reprinted on back. Photo by Anselm Spring. **\$4.95**



**Brett Weston Poster** Classic 1961 photograph of North shore tufa. This state-of-the-art, laser scan duotone reproduction is printed on 100-lb., varnished covered paper. Black and white, 18" x 24". **\$10.00**



**NEW!! Mono Lake Bike Bottles** Long live Mono Lake/brine shrimp design in turquoise on a translucent bottle. Small (21 oz.) **\$3.95**, Large (28 oz.) **\$4.95**



**Deluxe Mono Lake Decal.** Six vibrant colors capture the magic of a Mono Lake sunrise on a 4" translucent decal. Rebecca Shearin design. **\$2.50**

**Save Mono Lake Stickers** Spread the word with these eye-catching, blue on white, self-adhesive stickers. Shown half actual size. Roll of 50, **\$2.50**





## Mono Lake Slide Program

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 loan the program to groups and schools without charge, but ask that a \$35 refundable deposit be sent with each request. The show can also be purchased for \$50, discounted to \$40 for non-profit groups and schools (California residents please add tax). Allow three weeks for delivery.

**Mono Lake Slides** (not shown) Set of 25 color transparencies from the Mono Lake slide program. Includes tufa, craters, aerials, brine shrimp, birds, and more. **\$10.50**

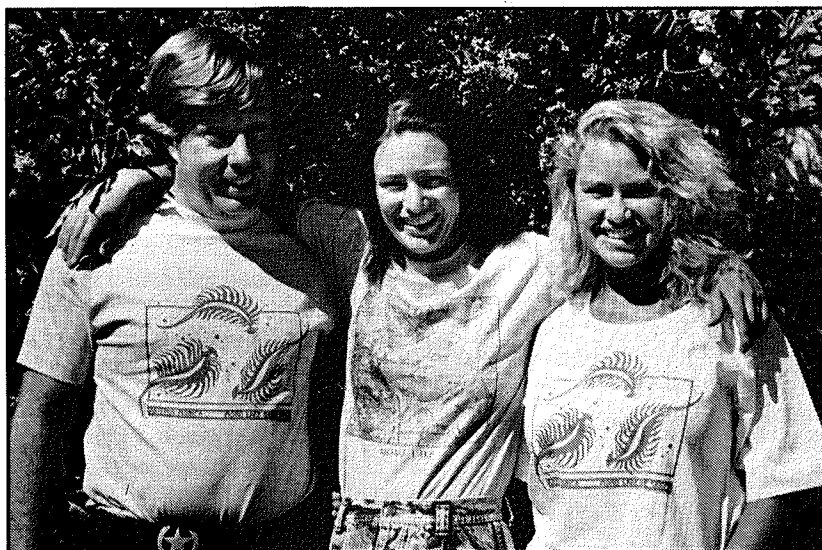
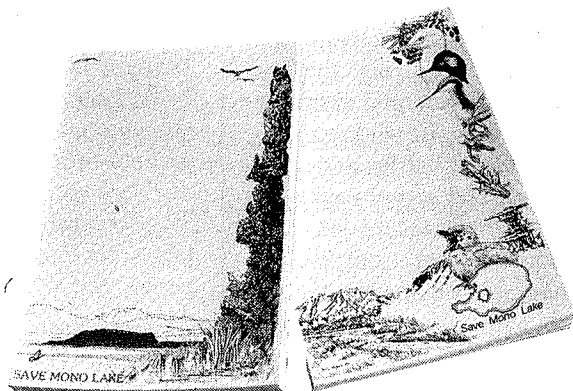
**Birdhouse Kits** All you need is a hammer to build these pre-cut, pre-drilled, cedar bird abodes. Both models meet Audubon specifications and have a removable bottom for easy cleaning. Specify for Bluebirds or Chickadees. **\$9.95**



**Mono Lake Refrigerator Magnet**  
Dave Gaines' classic Mono Lake photo reproduced as a 1½ x 2¼" magnet. **\$9.95**

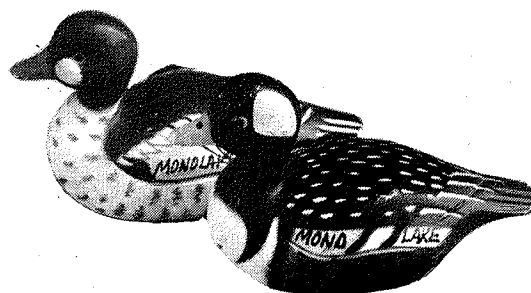
**Birdsaver** Birds fly into windows because they see a reflection of the sky in the glass. When placed on the outside of any glass, Birdsaver breaks the reflection. This silhouette of a diving Sparrow Hawk, a natural predator to small birds, will alert them to danger. **\$1.95**

**Mono Lake Stationery** Two beautiful pen and ink designs by Keith Hansen. Each package contains fifty 5½ x 8½" sheets plus matching envelopes.  
(1) "Tufa tower and Negit Island";  
(2) "Wildlife". **\$4.95 each**



**Brine Shrimp T-Shirt** Our own Lauren Davis designed this wonderful brine shrimp t-shirt. Available in short-sleeved, white, 100% cotton, "China" t-shirt, sizes S,M,L,XL (fits large) **\$12.95**, or light blue, 100% cotton, short-sleeved crew, sizes S,M,L,XL. **\$9.95**

**Mono Topo T-Shirts** Detailed topo map design of the Mono Basin. Available in royal, aqua, red, silver and navy, sizes S,M,L,XL, 100% cotton. **\$9.95**



**Duck Refrigerator Magnets**  
Assorted species, let us choose one for you. Painted plastic. **\$3.50**

# MONO LAKE CATALOG 1990

## Books

**Mono Lake Guidebook** 1989 edition. By David Gaines and the Mono Lake Committee. Our latest edition updates the legislation, litigation and scientific research surrounding the plight of Mono Lake. From tufa to volcanoes, brine shrimp to gulls, aqueducts to water conservation, this authoritative guidebook delves into Mono's geology, wildlife and history, and the alternatives to its destruction. Numerous photographs, drawings, figures and tables complement the 104 pages of text. \$8.95

**Mono Lake Color-and-Learn Book** By Rebecca Shearin, Michael Ross, David Gaines, and the Mono Lake Committee. A story and coloring book for children of all ages. A waylaid water droplet tells the story of Mono Lake's plight. Beautiful drawings and spirited text. "An outstanding accomplishment..." Huey P. Johnson, former California Secretary for Resources. \$1.95

**NEW!! The Sierra Nevada: A Mountain Journey** by Tim Palmer. A personal narrative of the Sierra, its wildness, conservation battles and people. The author expresses his love and concern for America's longest unbroken range. 339 pp., paper. \$14.95

**NEW!! Mammoth Lakes Sierra: A Handbook for Roadside and Trail** by Genny Smith. Just in, the 1989 edition is a brand-new book. This authoritative guide covers the Eastern Sierra's wild places and wild things between Sherwin and Conway Summits. Mono's history, wildlife and geology are included. 224 pp., paper. \$10.95

**NEW!! The Forever Land of Zanamontana** by Mavis Müller. A beguiling tale of the critters of Zanamontana who must save their magical wildland from destruction by the forces of evil. An inspirational tale for children and adults. Well illustrated. 16 pp., paper. \$5.00

**NEW!! The Big Outside: A Descriptive Inventory of the Big Wilderness Areas of the U.S.** by Dave Foreman and Howie Wolke. Two great friends of American wilderness describe 368 roadless areas—the ecology, acreage, endangered species, threats and preservation proposals. Their excellent introductory chapters examine what is an ecological wilderness, and why we need wilderness. A bold task done with a clear vision. 459 pp., paper. \$19.00

## Great Basin

**Present and Extinct Lakes of Nevada** by Israel C. Russell. Reprint of the 1885 classic by the Great Basin's greatest geologist. 36 pp., paper. \$2.25

**Trace of Desert Waters: The Great Basin Story** by Samuel G. Houghton. A well researched account of history, geology, archaeology and plant and animal life. Recently reprinted with color plates by Philip Hyde. 290 pp., paper. \$11.95

## History

**Up and Down California in 1860-1864** by William H. Brewer.

Classic Californiana. Includes a visit to Mono Lake, where he samples alkali (brine) fly soup. 538 pp., paper. \$13.95

**Pioneers of the Mono Basin** by Margaret Calhoun. First-hand history of Mono's early settlers, with 49 historical photos, numerous poems, and a wealth of fascinating information. 172 pp., paper. \$7.95

**Man from Mono** by Lily Mathieu La Braque. La Braque family memoir, as told by George La Braque Sr. to his daughter, Lily, covers half a century of living in the Mono Basin, from 1885 to 1935. George is a superb storyteller, whether narrating a close call on Mono's storm-blown waters or the trouble his passion for gambling got him into. 196 pp., paper. \$10.95

**Paiute, Prospector, and Pioneer** by Thomas C. Fletcher. A lucid history of the Bodie-Mono Lake area during the nineteenth century. Unlike other local histories, which abound in myths and exaggerations, Thomas C. Fletcher sifts facts from fancy, portraying the realities and hardships of life in a boom-and-bust economy. 123 pp., paper. \$9.50

**Roughing It** by Mark Twain. Autobiographical yarn including his near-fatal adventures at Mono Lake. 626 pp., paper. \$9.95

**The Story of Bodie** by Ella M. Cain. Firsthand accounts of life in the West's wildest boom town. 196 pp., paper. \$8.50

## Plants and Animals

**Birds of Yosemite** by David Gaines. Keith Hansen's cover painting and drawings are the perfect touch to Dave's glowing prose about the birds he loved so well. Even if you're not a serious birdwatcher, the amusing anecdotes and attentive natural history will cultivate your interest in the lives of the Sierra's winged denizens. 352 pp., paper. \$16.50

**NEW!! Wildflowers of the American West: A Photographic Celebration of Nature's Beauty** by Rose Houk. Opening this book is like coming over a rise of granite into an alpine meadow in full bloom. Colorful prose accompanies the stunning photographs and illustrations of coastal, desert, mountain, and prairie wildflowers. 108 pp., paper. \$16.95

**NEW!! The Birder's Handbook: A Field Guide to the Natural History of North American Birds** by Paul R. Ehrlich, David S. Dobkin, and Darryl Wheye. Get to know the birds behind the feathers! An excellent companion to your identification guide, this exhaustive guide describes the breeding,

displays, nesting, feeding, eggs, and particular habits of each species. Informational essays, compose half the volume. Extensive bibliography, illustrated. Invaluable to birders. 785 pp., paper. \$15.95

**NEW!! The Field Guide to the Habitats of the Western United States** by Janine M. Benyus. Wildlife have certain places they call home, and this beautiful nature guide shows you where the birds, mammals, reptiles and amphibians live and feed. Eighteen western habitats are explored and illustrated, from mountain meadows to sagebrush deserts. Praised by teachers and naturalists! 336 pp., paper. \$14.95

**Field Checklist of the Birds of Mono Basin** by Terry Hart and David Gaines. Includes all 295 species with bar graphs. 15 pp., paper. \$.75

**Distributional Checklist to North American Birds** by David De Sante and Peter Pyle. Most accurate, up-to-date information ever assembled on the status and abundance of birds north of Mexico, with space to keep regional lists. Indispensable to serious birders. 456 pp., hardbound. \$29.95

**National Geographic Society Field Guide to the Birds of North America** Hard to find and one of the best guides to field identification available. Second edition, 464 pp., paper. \$17.95

**The Distribution of the Birds of California** by Joseph Grinnell and Alden Miller. The definitive benchmark. For those seriously interested in California's birds. 617 pp., hardbound. \$25.00. Paper. \$18.00

## Geology

**Geologic Guide to Aspen Valley, Mono Lake, Mono**

**Craters and the Inyo Volcanic Chain, California** by Scott Stine and others. How volcanic ash layers can be used to trace the prehistoric fluctuations in Mono Lake. 8-1/2 x 11", velo-bound, 107 pp., paper. \$11.50

**Roadside Geology of the Eastern Sierra Region** by the Geologic Society of the Oregon Country. Includes Yosemite, Mono Lake, Devil's Postpile, White Mountains and more. 42 pp., paper. \$3.50

**NEW!! Geologic Map of the Long Valley Caldera, Mono-Inyo Craters and Vicinity** by Roy A. Bailey. Just published, this excellent geologic map includes two large map sheets, plus an 11-page descriptive text. \$6.20.

## Mono Lake

**An Ecological Study of Mono Lake** ed. by David Winkler. Technical but fascinating information of geology, hydrology and biology. Includes update. 190 pp., paper. \$9.50

**The Mono Basin Ecosystem: Effects of Changing Lake Level** The 1987 National Academy of Sciences (NAS) report. Examines the hydrology, biology, and physical and chemical systems of the lake and basin, and predicts the effects of changes. An excellent resource for anyone interested in understanding the complex workings of Mono Lake's ecosystem. 272 pp., paper. \$22.50

**The Future of Mono Lake 1988** This report provides the most up-to-date and comprehensive scientific analysis of Mono's complex ecosystem and the consequences of shrinking lake levels. Essential for understanding the impacts of diversions on Mono's ecosystem. 74 pp., paper. \$6.95

**A Trip to Bodie Bluff and the Dead Sea of the West (Mono Lake) in 1863** by J. Ross Browne. Vivid early account of the Mono Lake Region. 77 pp., paper. \$3.95

**The Mono Lake "Public Trust" Decision of the California Supreme Court, Feb. 17, 1983** An eloquent, inspiring document destined to become a classic of environmental

law. Reprinted by the Mono Lake Committee. \$3.00 donation.

**Quaternary History of the Mono Valley, California** by Israel C. Russell. Published in 1888, this remains the outstanding study of Mono's geography and geology. With original engravings and maps. 192 pp., paper. \$9.95

## Water Politics

**Water and Power** by William L. Kahrl. The definitive account of L.A.'s water imperialism, detailed and vividly written. 583 pp., paper. \$13.95

**Cadillac Desert** by Marc Reisner. The best history to date of the American West's

## CONSERVATION KITS

Become a "Mono Lake Saver!" Save water for Mono Lake, and save \$\$ on your water, energy, and sewage bills. We've tested many different water conservation products, and these win our highest ratings. The kits also make thoughtful and unusual holiday gifts. Our Mono Lake Saver Kit includes:

☞ **Water Saver Showerhead.** The finest quality chrome-plated brass showerhead (with turn-off valve) that gives the best shower ever. Cuts consumption by up to 50% (24,800 gallons/year for a family of four!) and reduces annual heating bills by \$100-\$200. Easy to install.

☞ **Water Saver Kitchen Faucet Aerator.** Swivel head for spray or stream, uses 2-3 times less water than normal aerators. Dual inside-outside thread design will fit most faucets.

☞ **Water Saver Bathroom Tap Aerator.** Cuts consumption by up to 50% on your bathroom tap. Dual thread design makes this aerator easy to install on standard faucets.

☞ **Water Saver Toilet Dams.** Two high quality brass dams will fit in your toilet, saving 2 gallons per flush — up to 20,000 gallons per year for a family of four! Comes with 5-year guarantee. Easy to install.

☞ **"I Save Water For Mono Lake" Bumpersticker.** Join the proud people who are saving water for Mono Lake by proclaiming your support on your car.

☞ **Two Mono Lake Postcards.** As soon as you install your water conservation kit, write Governor Deukmejian and Los Angeles Mayor Bradley and urge them to save Mono Lake.

☞ **Buy the Mono Lake Saver Kit at \$25.00 and save \$5.30.** Each piece may be purchased individually: Showerhead: \$14.95; Kitchen Aerator: \$6.95; Bathroom Aerator: \$1.95; Toilet Dams: \$5.95; Sticker and cards: \$ .50

## CATALOG ORDERS

Sales from this catalog support the Mono Lake Committee, an 18,000 member, non-profit citizen group. Your purchase, donation or membership will help save Mono Lake, one of America's priceless natural resources.

Won't you join us? Or, if you are already a member, give a friend a membership. We keep all MLC contributors informed, through our quarterly newsletter and action alerts, of what's happening and how you can help.

### MEMBERSHIPS

☐ \$20 Regular Member

☐ \$100 Patron

☐ MASTERCARD

☐ VISA

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☐ \$30 Sponsor

☐ \$500 Monophile

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☐ \$50 Advocate

☐ \$1,000 Monomaniac

CARD NO: \_\_\_\_\_

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**MAKE CHECKS PAYABLE TO THE MONO LAKE COMMITTEE**

For information or to order by phone, call (619) 647-6595. When ordering by phone, please have your credit card ready and your order form filled out!

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County \_\_\_\_\_

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QUANTITY	DESCRIPTION	SIZE	1st COLOR	2nd	UNIT PRICE	TOTAL


#### California Sales Tax Chart

Alameda, Contra Costa, San Diego, San Mateo, Santa Clara..... 7%  
 Fresno, Inyo, Los Angeles, Sacramento, San Benito, San Francisco,  
 Santa Cruz..... 6 1/2%  
 All other counties..... 6 %

#### Shipping Rates

up to \$10.....\$2.50  
 \$10-\$25.....\$3.00  
 \$25-\$50.....\$4.00  
 over \$50.....\$5.00

SUBTOTAL

CA RESIDENTS ADD SALES TAX (see chart)

SHIPPING (see chart)

DONATIONS AND MEMBERSHIP (no tax)

AMOUNT ENCLOSED (not tax deductible)

*Prices may be subject to change.*

*For speedier T-shirt delivery, please send a second color choice.*



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MONO LAKE  
COMMITTEE**

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