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MONO ^{the} LAKE

NEWS LETTER



NAS PREDICTS DEMISE OF MONO LAKE ECOSYSTEM

DWP SEEKS TO DRY UP LEE VINING CREEK

ON THE COVER

Of all Mono Lake's tufa towers, the massive monoliths near the Old Marina are seen by the greatest number of people. They distinguish the lakescape as viewed from U.S. 395, and will be the only towers visible from the Forest Service's new, multi-million dollar visitor center, scheduled for completion in 1989. Rising from their reflections, with the islands as backdrops, they can be revelatory, especially at sunrise or sunset.

But if Mono Lake drops below approximately 6376 feet, the Old Marina tufa will be engulfed by alkali and muck, as they were in 1978. Negit Island will become an alkali-rimmed peninsula. These changes maim the lakescape, and sap its power to infuse and inspire our lives.

As counterpoint to the recently released National Academy of Science's Mono Lake study, which examines the effects of changing lake levels on the lake's ecosystem (p. 4), we focus on the threat to aesthetic values, particularly tufa towers and islands (p. 9).

JAMES TAYLOR CONCERT!

A rare opportunity to hear James Taylor in concert and help us save Mono Lake. See page 16.

Catalog Catalog ??

This year you'll receive our Mono Lake Catalog twice—once as a separate mailing, and now as the last eight pages of this newsletter.. While this may seem superfluous, marketing experts assure us it will vastly increase our sales. We shall see.

For the second year, Brian Day and Kimberley J. Fisher of Fisher and Day have donated their services to design the catalog. Fisher and Day are professional graphic designers specializing in newsletters, magazines, catalogs and desktop publishing. We are deeply grateful for their help, and urge you to think of them if you need graphic design assistance (2791 Greenwich St. #6, San Francisco, CA 94123; 415 931-4381).

The Mono Lake Committee is a non-profit citizen's group seeking a compromise that will meet the real water needs of Los Angeles and leave our children a living, healthy and beautiful Mono Lake.

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Don Jackson

Bicyclists, Walkers Water Lake

Over 100 bucket walkers whooped and hollered as 75 Los Angeles to Mono Lake bike-a-thoners swooped down to Mono Lake Sept. 5. For the better part of a week, the bicyclists had battled gravity, heat and smoke-filled air to bring water from Los Angeles to its natural destination. Joined by bucketeers, the exuberant gathering meandered to the shore and poured buckets and vials into the lake.

Afterwards, the tribe migrated to the park to eat and drink, talk strategy, and laugh and cry to the heartfelt songs of Dakota Sid. Tapes of Dakota's wonderful minstrelsy are available through the Mono Lake Catalog at the back of this newsletter.

IN THIS ISSUE

NAS Study: Conclusions and Critique	4
DWP Seeks To Dry Up Lee Vining Creek	7
Lake Level Falling	7
FS, County Join MLC-LA Talks	7
Interview: Mono Co. Sup. Glenn Thompson	8
Protecting Aesthetic Values	9
Life Of A Gull Biologist	11
Gull Numbers Double on Negit	13
Forest Service Visitor Center	13
MLC Activities	14
Financial Report	15
Book Reviews	16
James Taylor Concert	16

Mono Lake Watch



Lauren Davis

"It is not half so important to know as to feel."

—Rachel Carson

In July, a television crew arrived unexpectedly. Nobody else was around, so I was drafted to show them the sights. From preparing handouts for a birdwatching class I was wrenched into the role of chauffeur and raconteur. As we bounced down the road toward South Tufa, I thought of the tasks I had left unfinished.

The TV folks were tired. They had spent a hot morning touring the Los Angeles Aqueduct with Department of Water and Power officials. As dutiful reporters, they thought they should hear "the other side." But they were looking forward to a couple of beers back at the motel.

Ten thousand phalaropes, a bird the reporters had never heard of, welcomed us to Mono's dominion. As the cameraman filmed, the birds exploded into flight, veering and diving as a Prairie Falcon cut through their midst.

That burst of wings and talons immersed us in a drama more vivid and real than anything on television or in a book. For a moment, we were caught in the glory and travail of creation. We could not speak. In some ineluctable way, the grace of those shorebirds, the power of that falcon, overpowered our chattering, preoccupied brains. No longer merely observers, we were swept by the flow of this living planet.

A week later, I found myself among the cherubs and chandeliers of the Biltmore Hotel in downtown Los Angeles. In the florid, rococco excess of the Tiffany Room, the National Academy of Science's Mono Basin Ecosystem Study Committee unveiled their prognoses for the lake's future. The next day the Los Angeles Times ran a front-page story headlined, "Scientists See Stark Future for Mono Lake."

The NAS study, to be sure, confirms the toxins we have been sounding for almost a decade: unless diversions are curtailed, Mono Lake will become a virtually sterile, chemical sump. Yet, recalling those flocks of phalaropes, I thirsted for more than "unbiased scientific analysis." I longed for the power and passion of the living lake.

While the NAS study is useful and important, it did not attend or try to address what we, for the lack of anything better, call aesthetic and spiritual values. To complete the picture, we need to integrate the scientists' left-brained analysis with our own intuitive sensitivity to the beauty and

integrity of the Mono Lake landscape. We need to see the lake with our hearts as well as minds, to let it speak to us of where we have come and where we are going, of three-and-a-half billion years of shared evolutionary travel, of our place on this planet. While facts are important, we need to feel as well as to know.

As I pen these thoughts, the phalaropes—minus the few that foddered falcons—are winging across the globe to South America. Without stopping to rest or feed, they fly from Mono over 3,000 miles to saline lakes high in the Andes of Bolivia, Peru and northern Argentina, where they spend the austral summer cavorting with flamingos. The paths they travel, while beyond human design, are parallel with our own. They have as much right to be here as we do—not because they are useful or beautiful, but because they are kin.

The birds and animals, trees and grasses, rocks, water and wind are our allies. They waken our senses, rouse our passions, renew our spirits and fill us with vision, courage and joy. As Dave Foreman says, "the oceans of the Earth course through my veins, the winds of the sky fill my lungs, the very bedrock of the planet makes my bones... I am the land, the land is me." We are Mono Lake.

Dave Gaines

Wildlife, Coastal and Park Land Initiative

The Mono Lake Committee supports this statewide campaign to preserve California's wildlife habitat, coast, parks and open space. If passed by the voters, the Wildlife, Coastal and Park Land Initiative will provide \$776 million to acquire and permanently preserve endangered land and open space throughout the state. To qualify for the June, 1988 ballot, 375,000 valid signatures must be gathered by November 15. For more information or to help, please contact: Californians for Parks and Wildlife, 909 12th St., Suite 203, Sacramento, CA 95814; (916) 448-1786.

NAS Predicts Demise of Mono's Ecosystem

DWP Resists Out-of-court Solution

Continued, uncurtailed diversion of water from Mono Lake's tributary streams will likely result in "drastic population reductions" of aquatic organisms and "acute...adverse affects" on birds, according to a report of the National Academy of Sciences released Aug. 4.

The 272-page report culminates a two-year review of existing data by 11 eminent scientists from around the country. Congressman Richard H. Lehman (D-Sanger), whose 1984 legislation created the Mono Basin National Forest Scenic Area and authorized the study, hailed the report as confirmation "that Los Angeles' future plans to reduce Mono Lake to 6330 feet would decimate almost every life form in the lake."

The report, which is packed with charts, graphs and scientific jargon, concludes that impacts on birds which feed primarily on brine flies, such as phalaropes and other shorebirds, would "become apparent at 6370 feet and would be acute at 6360 feet." Impacts on birds which feed primarily on brine shrimp, such as grebes and gulls, would occur at slightly higher salinities and hence lower levels, but would still become "acute" before the lake drops below 6350 feet.

The report also stressed the need for a "buffer" above a minimum lake level to provide insurance against uncontrollable drops during droughts. During an Aug. 4 press conference, the chairman of the NAS study committee, Duncan Patten, recommended at least 10 feet.

Patten also emphasized the uncertainties in the report's prognoses. "The best experiment would be to let [the lake] go all the way [down] to see if we're right," he said, "but you can say the same thing about the consequences of nuclear war."

In the Mono Lake Committee's press release, MLC Chairman David Gaines argued that Mono Lake needs to be "higher than it is today to prudently protect the ecosystem." The lake currently lies at 6379 feet, 38 feet below its level when diversions began in 1941. Assuming present diversion rates and average climatic conditions, it would fall to 6370 feet in six to seven years. During a prolonged drought, it could drop that low in four years.

Not only is a higher lake needed as a buffer, but also to alleviate toxic dust storms, protect aesthetic values and maintain the integrity of Negit Island and the Negit islets. At 6376 feet, Negit Island is connected to the mainland. At 6373 feet, we lose Java and Twain islets, where over half of Mono's gulls are currently nesting.

"It is high time," Gaines concluded, "the Los Angeles Department of Water and Power recognize the devastating

impacts of its Mono Basin diversions, and share water with this ancient, hauntingly beautiful lake."

DWP Assistant Manager Duane Georgeson, however, maintained that the report showed that Mono Lake's ecosystem was in "no immediate danger," and that "there is adequate time to conduct additional research."

DWP's press materials ignored the report's long-range projections, maintaining instead that "the Mono Lake ecosystem is currently healthy and productive" and that "important ecological values...will be maintained even at lower lake levels resulting from Los Angeles' water diversions." DWP stressed the importance of recognizing "the value of water resources to the people of Los Angeles as well as to the ecosystem."

DWP also said it would not curtail water diversions until the courts ordered it to do so, no matter how conclusive the studies or obvious the harm. Moreover DWP would demand full compensation. "If that court process results in reduction of Los Angeles water supply," said Georgeson, "we believe city residents should be reimbursed with a replacement water supply."

The Los Angeles City Council and the mayor, however, may be more amenable to an out-of-court solution. After the NAS press conference, MLC Executive Director Martha Davis and Mono County Supervisor Andrea Lawrence made the rounds at City Hall. Most councilmembers or their staffs conceded, not only the reality of Mono Lake's plight, but the interest of their constituencies in resolving the problem. The new Deputy Mayor, Mike Gage, expressed interest in working with MLC to identify solutions.

In its coverage of the NAS study, the L.A.-based political newsletter *CALPEEK* observed that DWP's insistence on battling in the courts is in "direct conflict with past statements made by [Los Angeles] Mayor Bradley that he wants to save Mono Lake. What will Mayor Bradley do? Will he get his Water and Power commissioners to order DWP to comply? Will he fire those commissioners who won't follow his instructions? Will he do nothing?"

Dave Gaines

Summary of NAS Findings

excerpted from a statement by Duncan T. Patten, Chairman, Mono Basin Ecosystem Study Committee

I am pleased to tell you about our committee's study of the effects of changing water levels on the one-half-million-year-old Mono Lake Basin.^[1]

Our committee included experts in hydrology, aquatic biology, ecology, water chemistry, meteorology, and plant and animal biology. Over a period of two years, our full committee met six times and in smaller groups at other times. We visited the Mono Lake area, collected all the relevant research available on its hydrology and ecology, and critically reviewed these data.

The committee looked at expected ecosystem effects for changes in water level at 10-foot intervals from 6330 to 6430 feet, close to the lake's historic high. We examined impacts for the

continued on p. 13

The NAS Study: A Critical Review

by David Gaines

Overall the National Academy of Science's Mono Basin study echoes the warning we sounded in the first Mono Lake newsletter in Spring, 1978: "Unless diversions are curtailed, Mono Lake will become a birdless chemical broth." In terms of specifics, however, it is sometimes at variance with our prognoses. In this article, I compare the NAS's conclusions on brine shrimp, brine flies, birds and riparian ecosystems with the viewpoints we have promulgated in newsletters and position papers. Since I focus on areas where we differ, my tone may sound critical. In fact the NAS study and the MLC are in agreement on most major points.

BRINE SHRIMP

The NAS study supports a projection made in our Summer, 1978 newsletter: "Within the next 20 years increasing concentrations of dissolved ions will probably overtake the shrimp's ability to keep its internal salts below toxic levels." Had precipitation and runoff remained average, Mono Lake would have dropped to levels at which the NAS predicts shrimp will be "severely affected."¹ During the past decade, however, a spate of wet winters has raised the lake level, postponing, perhaps, this day of reckoning.

The NAS study discounts, however, the precipitous, statistically significant decline in first (spring) generation brine shrimp that occurred at Mono Lake's historic low ebb. In 1980, 1981 and 1982, as the lake dipped to 6372 feet, first generation brine shrimp declined by approximately 90 percent. In our Autumn, 1982 newsletter, we called this decline "a warning signal we cannot ignore." Yet the NAS study does just that, projecting "unimpaired" brine shrimp populations at a lake level of 6370 feet, and a "slight impairment of hatch" at a lake level of 6360 feet.²

The NAS study notes the decline in first generation brine shrimp in 1980-82, but does not mention that it occurred at the lake's low ebb. The report says salinity is "not indicated as a cause,"³ but fails to address the germinal issue: is this decline, which reversed as the lake rose, related to changes in lake level?

This is a crucial point. Either the decline in spring brine shrimp is a coincidental anomaly which might happen at any lake elevation. Or the decline is related to lake level, and will recur if and when Mono declines below 6374 feet. In the latter case, the NAS conclusions are off the mark, and brine shrimp—and probably birds as well—will be adversely affected at higher lake levels.

BRINE FLIES

In our Autumn, 1982 newsletter, when the lake stood near its low ebb of 6372 feet, we noted that "brine flies, which once darkened Mono's shores for mile after mile, have become relatively scarce, reducing the amount of food available to birds." At this elevation, the NAS study

predicts declining brine fly populations would "become apparent" due to loss of habitat; "the hard substrate required for larval grazing on benthic algae would be reduced dramatically if the lake level dropped below 6380 feet."⁴

Since our inception, we have warned that increasing salinities would endanger brine flies as well as brine shrimp. The NAS study concurs, noting that increasing salinities will "result in severe reductions in the growth and development of brine fly larval and adult populations" and ultimately "loss of populations except for small populations located at shorelines where fresh water is present."⁵

BIRDS IN GENERAL

In our original 1978 Position Paper, we argued that without brine shrimp and brine flies, "Mono will become a birdless lake." The NAS study comes to a similar conclusion; below 6370 feet, birds will not stay as long at the lake, while below 6350 feet, grebes and phalaropes would not come at all, and few gulls would attempt to breed.⁶

In our 1978 Position Paper, we also predicted that increasing salinities would "stress [the birds'] already taxed capacities to secrete salts." The NAS study rejects this concern, stating that "changes in the salinity of Mono Lake are expected to have little or no direct physiological effect on birds." We continue to question this conclusion; even at present salinities, as the NAS report acknowledges, gulls "need access to fresh water,"⁸ and that for Wilson's phalaropes, "the availability of fresh water for two weeks prior to migration from the lake may be important for coping with excess salts ingested during the period of heavy foraging associated with fat accumulation."⁹

In our 1979 Position Paper, we argued that "most of Mono's birds have nowhere else to go," and that "if Mono Lake dies, bird populations will be substantially diminished." The NAS study is noncommittal: "birds currently using Mono Lake as a staging area, or even as a migratory stopover, may be able to shift to alternative sites, such as the Salton Sea or San Francisco Bay, provided such appropriate habitats continue to exist. However, the committee does not know whether these sites can sustain such a major influx of new individuals and the long-term implications of such a shift..."¹⁰

CALIFORNIA GULLS

On gulls, the Mono Lake Committee differs with the NAS study, which does not project severe impacts until the lake drops below 6360 feet.¹¹

Since our inception, the Mono Lake Committee has maintained that the loss of Negit Island at 6376 feet, and of Twain and Java islets at 6373 feet, will reduce the lake's population of nesting gulls. We argued that large numbers would probably not colonize Paoha Island, the only large island remaining at lower lake levels. In our Spring 1978 newsletter, we suggested that Paoha's sandy soil, which blows around in high winds, would preclude gulls from nesting on most of the island.

The NAS study, however, assumes that Paoha suits nesting gulls as well as any other island in the lake. Until Paoha is linked to the mainland, the study concludes, gulls will have a surfeit of nesting habitat; "if the lake level fell to the level that would significantly decrease island area

[below 6350 feet], most gulls would likely have already deserted Mono Lake because of lack of food."¹²

The NAS study does not discuss Paoha Island's suitability for nesting gulls, saying only that it is "harder to predict...possible changes in the habitat quality of the available nesting area."¹³ Nor does it support its contention that "Paoha Island has been an important nesting area in the past"; the only positive reports date from 1916 and 1919, when approximately 1000 pairs were nesting "near the water's edge" in an typical volcanic area on the north end of the island.¹⁴ There is no evidence that Paoha Island ever supported the numbers of gulls that nested on Negit Island prior to 1979 (approximately 16,000 pairs), or the number that currently nest on Twain Islet (approximately 12,000 pairs).

This is not to say it isn't possible that Mono's 50,000 nesting gulls would all nest on Paoha, if that was the only major island remaining in the lake. But it's far from certain. The NAS report should have discussed and assessed the impacts of losing Negit Island and Twain and Java islets, where 60 percent of the gull population nested this year; unless most of these gulls colonize Paoha, the loss of Negit and Twain will likely reduce the nesting population as the lake dips below 6376 feet.

Moreover the NAS study predicts that food will not be a problem for gulls until the lake drops below 6360 feet. Yet the decline in first generation brine shrimp that occurred at a lake level of approximately 6372 feet in 1981 and 1982 came during the June nestling period when gulls need plentiful food for their young as well as themselves.

In 1981, when approximately 95 percent of the gull chicks (25,000) died prior to fledging, we attributed the die-off to the lack of brine shrimp (Autumn, 1981 newsletter). This conclusion was premature; we still do not know—and may never know—precisely what caused the nesting failures. The NAS study, however, does not discuss 1981 chick mortality at all. Judging from its conclusions, the panel considered the correlation between the chick die-off and the paucity of shrimp coincidental—which it may, or may not, have been.

The NAS study also dismisses, with no discussion, the possibility that Negit Island affords more favorable nesting conditions than most of the islets, or that overall nesting success has declined since Negit Island was abandoned in 1979.¹⁵

STREAMSIDE VEGETATION AND FISH POPULATIONS

In our Summer, 1985 newsletter, we maintained that the court-ordered minimum flow of 19 cubic feet per second down Rush Creek was "not enough for healthy trout" and "not enough for a healthy stream." Similarly we argued that the minimum flow of 10 cfs down Lee Vining Creek was also insufficient. The NAS study disagreed, concluding that these flows "should be adequate to maintain riparian strands equivalent to those existing in 1941," and that they are "adequate to support reproducing populations of brown trout." The study adds, however, that "it is probable that increasing the flows (up to a point) would increase the sizes of the trout populations."¹⁶

These conclusions are premature. As the NAS study states, "it is difficult to specify minimal flows required to maintain viable populations of trout... The Instream Flow Incremental Methodology model...widely regarded as a reliable method for estimating flow requirements for fish species in streams like Rush and Lee Vining creeks...has not yet been applied to those streams."¹⁷ The NAS panel should have deferred to ongoing stream studies, which are utilizing the IFIM model, rather than rushing to this hasty conclusion.

SUMMARY

The NAS study confirms the serious threat to Mono Lake's ecosystem. It discounts or ignores, however, circumstantial evidence that brine shrimp and gulls are adversely affected at lake levels as high as 6378 feet.

NOTES

- Study = Mono Basin
Ecosystem Study Committee,
1987, *The Mono Basin
Ecosystem: Effects of Chang-
ing Lake Level*, National
Academy Press.
1. Study, p. 210.
 2. Study, p. 189.
 3. Study, p. 75.
 4. Study, p. 189.
 5. Study, p. 188-189.
 6. Study, p. 192.
 7. Study, p. 191.
 8. Study, p. 107.
 9. Study, p. 103.
 10. Study, p. 192.
 11. Study, p. 210.
 12. Study, p. 191.
 13. Study, p. 191.
 14. Study, p. 107; Grinnell,
J. and T. I. Storer, 1924, *Animal*

Life in the Yosemite; Dawson,
W. L., 1923, *The Birds of
California*, 1398-1413.

15. For discussion of these possibilities, see: Chappell, M. A., D. L. Goldstein and D. W. Winkler, 1984, *Physiol. Zool.* 67: 204-214; Shuford, W. D., 1985, *Reproductive success and ecology of California gulls at Mono Lake, California in 1985*, Point Reyes Bird Observatory Contribution No. 318; Winkler, D. W., 1983, *Ecological and behavioral determinants of clutch size: California Gull in the Great Basin*, Ph.D. dissertation, U.C. Berkeley.

16. Study, p. 205.
17. Study, p. 163.

Another Study On The Way

Another study of the effect of changing lake levels on Mono Lake will be released near the end of the year. Funded by the California legislature in 1984, the study is being conducted for Fish and Game by the Community and Organization Research Institute, a non-profit organization associated with U.C. Santa Barbara.

In many respects the CORI study is similar to the one just released by the National Academy of Sciences. A "blue ribbon panel" of eminent scientists is assessing and integrating existing data. The CORI study will complement the NAS report, filling in gaps and providing more specific analyses and projections.

Copies of the National Academy report, *THE MONO BASIN ECOSYSTEM: Effects of Changing Lake Level*, are available from MLC in Lee Vining for \$22.50 + \$2 shipping and handling (Calif. residents please add \$1.32 sales tax).

Legal Updates

DWP Seeks to Dry Up Lee Vining Creek

The Lee Vining Creek case is heating up. The Los Angeles Department of Water and Power, pleading dry year water shortages and a cost of "\$13,600 per fish," has asked a Fresno Superior Court judge to lift a temporary restraining order and allow the agency to divert every drop from Mono Lake's second largest tributary stream. The Mono Lake Committee is urging the court to issue a preliminary injunction increasing the minimum flow from 10 to 20 cubic feet per second.

The embattled trout stream won a reprieve in August, 1986, when the court granted a temporary restraining order forcing DWP to release at least 10 cfs down Lee Vining Creek into Mono Lake. At an Oct. 7 hearing, the court will consider whether the waters should keep flowing until the case goes to trial.

The Lee Vining Creek case is based on fish and game codes and the public trust doctrine. The codes require dam owners to keep "in good condition" downstream fisheries. The public trust requires protection of the creek environment, including riparian vegetation, wildlife habitat and recreational values, "as far as feasible."

DWP's cost of "\$13,600 per fish" is imaginative sleight of hand. It is based on the highest priced replacement water and power and on a problematical, DWP fish survey that found only 360 fish in the stretch of Lee Vining Creek between U.S. 395 and Mono Lake. It's not surprising there are not more fish--yet. The water has only been flowing a little over a year, and 10 cfs is not enough for a thriving fishery. With time, care and water, Lee Vining Creek could likely support thousands of fish, and rival lower Rush Creek as one of America's premier trout streams.

DWP also chose to discount the stretch of Lee Vining Creek between U.S. 395 and its diversion dam, which currently supports thousands of trout. It claims that full diversions will leave enough water to support a "viable" fish population. In fact, with only a trickle in the creek most of the year, the fish population would be barely viable at best, and hardly in the "good condition" required by law.

Moreover DWP ignores the importance of water, not just to fisheries, but to Lee Vining Creek's vegetation, wildlife, recreation and other public trust values. The water not only nurtures the stream, but slows the decline of Mono Lake as well.

Meanwhile, the Mono Lake public trust suit, cornerstone of legal efforts to save the lake itself, continues to languish in the 9th Circuit Court of Appeals. Over 26 months ago a court took the case under submission. While we hope to hear soon on whether the case will go to federal or state court, we cannot augur when, or account for the long delay.

Another of our logjammed cases, however, has begun to flow. After a one-year delay, the Sacramento Court of

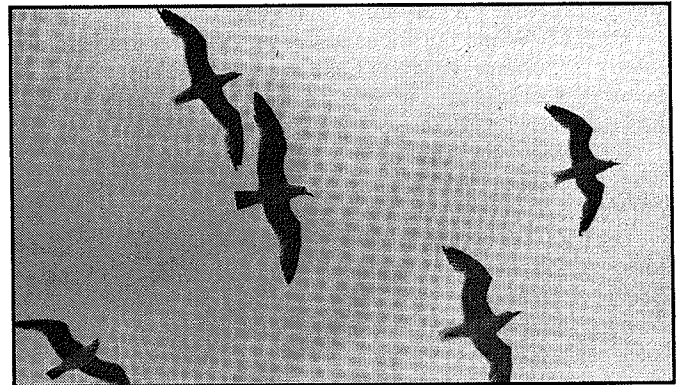
Appeals has set an Oct. 20 hearing on our suit challenging the validity of DWP's Mono Basin water licenses. We lost the first round in Aug., 1986, when a superior court judge ruled that fish and game codes do not apply to DWP's diversions. We believe, however, that we have an excellent chance of winning on appeal.

For background on our four suits, please write our Lee Vining office for a free copy of our 16-page *Field Guide to the Mono Lake Lawsuits*.

Lake Level Falling

With DWP diverting every drop it legally can from Mono's tributary streams, the lake continues to drop. In the past 12 months, it has fallen over a foot, and is currently losing about a vertical inch each week.

Court orders are keeping water trickling down Rush and Lee Vining creeks, but not enough to halt Mono's decline. By September, the lake had fallen to 6379 feet; by year's end, it is likely to plummet another half a foot.



Lauren Davis

Forest Service, Mono County Join LA-MLC Talks

For over two years, the Mono Lake Committee has been meeting with the Los Angeles Department of Water and Power and representatives of Los Angeles City government to informally explore solutions to the Mono Lake controversy. This summer, the Forest Service and Mono County joined the discussions.

The talks are not negotiations, but are informal, confidential dialogues. In the interest of promoting frank and candid discussions, the Mono Lake Committee and DWP agreed that matters discussed in the talks would not be made public or used in litigation. Leroy Graymer of the UCLA Public Policy Program is helping the talks progress through his expertise as a neutral facilitator.

Currently the talks are exploring ways of identifying and obtaining cost-effective and environmentally benign water and energy supplies for helping resolve the Mono Lake issue.

WATER, DWP AND MONO LAKE:

A Conversation With Mono County Supervisor Glenn Thompson

In late August, David Gaines conducted the following interview with Mono County Supervisor Glenn Thompson. Elected to the board in 1984, Glenn has been a staunch and politically savvy ally.

DAVE: What is the long-term importance of Mono Lake to Mono County?

GLENN: Because of what the Mono Lake Committee has accomplished—the creation of the National Scenic Area and the State Tufa Reserve as well as national publicity about its values and plight—Mono Lake has become a great resource for our tourist industry. That helps all of us. For the county, that's a very important gain.

DAVE: While our focus has never been on tourism, it's vitally important. If Mono Lake's voice is going to be heard in Sacramento and Washington D.C., it needs a large, broad-based constituency. It needs all the friends it can get.

GLENN: That kind of interest has been generated by what the Mono Lake Committee has done. As time goes on, you'll probably get more credit.

DAVE: We would like to work more closely with the local community. As you know, the establishment of the Scenic Area and the restrictions it placed on private landowners generated hard feelings between ourselves and some local residents.

GLENN: But until the Scenic Area passed, I don't believe you were making much progress toward saving Mono Lake.

DAVE: The Scenic Area may prove one of the most important steps toward saving the lake. The Forest Service, for instance, is actively nudging Los Angeles toward negotiations.

GLENN: And that's important. The Scenic Area has made most of your other goals more reachable. And I think the Scenic Area Advisory Committee has been as lenient, flexible and understanding as is possible toward private landowners. I think it's all going to work.

DAVE: Our biggest challenge is still securing an adequate water supply for Mono Lake. This year, some Mono County communities, such as Mammoth Lakes, are facing shortages, and have had to impose mandatory conservation measures. Do you see a conflict between securing water for Mono Lake and meeting the ultimate needs of the county?

GLENN: Mammoth is the only community in this county with a serious water problem. June Lake, for all intents and purposes, is adequately watered. Mammoth's problems, frankly, have more to do with uncoordinated planning than lack of supplies. That's why I think the threat from a local point of view is slim. Mammoth needs to deal

with problems in water supply, but I think there is opportunity to do that.

DAVE: Isn't Mammoth considering turning to the Los Angeles Department of Water and Power for additional supplies, which would come from the upper Owens River and Mono Lake watersheds?

GLENN: There is a danger Mammoth will have to do that, but mostly because of its failure to deal with the problem. I believe people in Mammoth are as interested in the beauty and protection of this county as those in other places, and will want their government officials to deal with the water problem in a different way if possible. And I think it is possible.

DAVE: What's your perspective on working with DWP?

GLENN: I get along fine with them as individuals. But as an organization, I've found them very difficult to move or to talk to. They refuse to deal on a straight across basis with almost anyone. They were created a long time ago in a time when power and brute force were acceptable ways to accomplish goals. They are still more inclined to that sort of combat than to today's planning, consensus building and problem solving. I'm hoping they will change, but have yet to see any real signs. But as new people rise in the hierarchy, I think it will.

DAVE: In Inyo County the impetus toward finding an alternative to litigation came, not from DWP, but from the Los Angeles City Council. Do you think we should be talking more with council members and the mayor's office rather than continuing to butt heads with the department?

GLENN: Yes, and Mono County should be doing that as well. As a matter of fact, one of our supervisors, Andrea Lawrence, recently visited most council offices to discuss Mono Lake. And the council is changing too. Elected officials have to be concerned because their constituents are. DWP is insulated, but elected officials are not.

DAVE: What role do you see for Mono County in helping to solve the Mono Lake controversy?

GLENN: I would like to see the county more intensely involved. I would like to have seen, for example, the county file amicus briefs in the current litigation.

DAVE: You have been a staunch friend for many years, but now you are leaving the Mono County Board. How will your successor be appointed, and will he or she continue to defend Mono Lake?

GLENN: The governor will make the appointment. The Mono County Board will make recommendations based on who has expressed interest. I hope our board will support someone as interested in the future of Mono Lake as Andrea and I. I think they probably will. This district demands that sort of involvement.

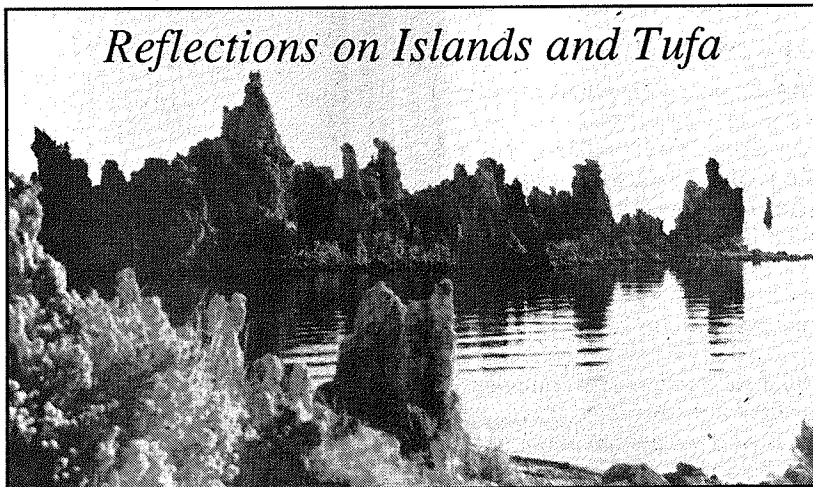
DAVE: Do you have anything you would like to add?

GLENN: I don't think there's that big of a conflict in the community. The Mono Lake Committee's success has been impressive. You've created a national following in a relatively short period of time that has made all the difference in the world. Even the most ecologically insensitive recognize the likely outcome if the committee had not accomplished what it has: turning this basin from a beautiful place into an ugly dustbowl.

PROTECTING AESTHETIC VALUES

Reflections on Islands and Tufa

Lauren Davis



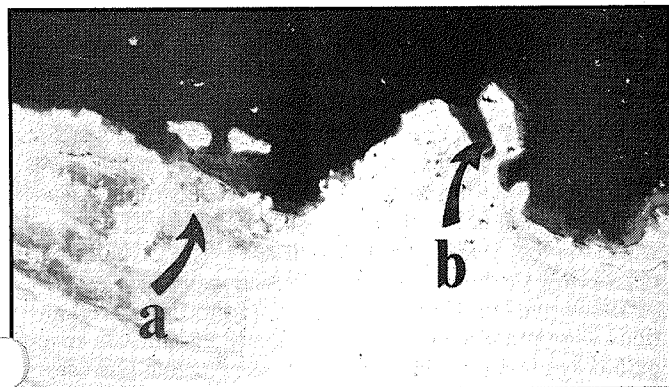
The "grotto tufa" will be engulfed by mud and alkali if the lake drops below 6375 feet.

A minimum lake elevation should protect, not only birds and brine shrimp, but Mono Lake's aesthetic qualities. These qualities are subjective: many would find the lake more beautiful under natural conditions with its level over 40 feet higher than today; others

enjoy the exposed lakebottom with its plethora of tufa sculptures. Yet there are bottom lines; Mono possesses attributes that nearly all would agree cannot be lost without aiming the lakescape and sapping its power to infuse our souls and inspire our lives.

The scientists on the National Academy of Science's Mono Basin Ecosystem Study Committee also recognized these values although they did not address them. While the body of their report reflects "unbiased scientific analysis," the preface touches on "aesthetic features." Among these are two that I believe everyone who *loves* Mono Lake would assent to:

1. "The larger islands, as discrete islands, are part of the aesthetic balance of the lake" (p. x).
2. "The tufa towers with their reflection in the lake are aesthetically more pleasing than tufa towers on land—the lake-tufa tower relationship characterizes Mono Lake" (p. x).



Aerial view: South Tufa on Sept. 20, 1982 at a lake elevation of 6372.7 feet, approximately six feet lower than today. The "spire tufa" (a), "grotto tufa" (b) and most of the other towers and islets are connected to the mainland.

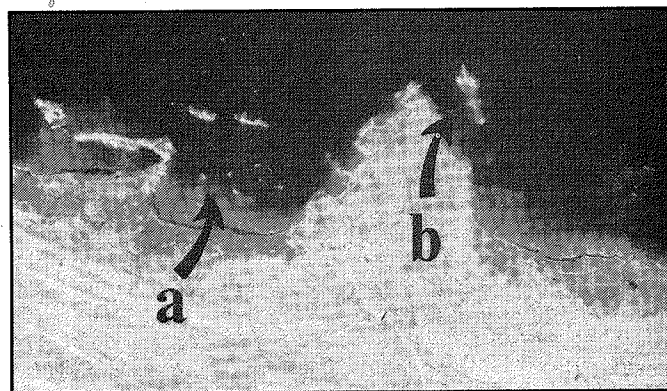
Islands

Let's consider the islands first. Almost 25 years ago, when I first looked down on Mono Lake from the summit of Mt. Dana, I was struck by the black and white islands that seemed adrift in a vast,

azure sea. Mono's elemental power derives from such polarities: black and white, ice and fire, water and desert. The landscape is an ongoing resolution of opposites, a grand dialectic of primal forces. Paoha and her black sister Negit rise from its center in bold counterpoint to the lake's cradling mountains and circular symmetry.

Yet even at Mono Lake's present elevation (6379 feet), Negit Island is severely compromised. Once separated from the mainland by over a mile of water, it is now sequestered by a narrow, muddy channel less than 300 feet wide and four feet deep. The lake's receding waters have whitewashed its black lava with a disfiguring bathtub ring. Alkali flats are poised to engulf its northern shore. From many vantage points, it doesn't look like an island at all.

In 1978, Mono's falling waters turned Negit into a peninsula, and allowed mainland predators to rout its gull colonies. Instead of a black island cradled by blue water, we saw a black cinder cone marooned on white alkali. In a fundamental way, this change impoverished, uglified and



South Tufa on July 19, 1986 at a lake elevation of 6381.0 feet, approximately two feet higher than today. The "spire tufa" (a) and "grotto tufa" (b) are surrounded by water.

disturbed the landscape. It was wrong in the way that a fish flopping on land is psychically unsettling. If aesthetic values count for anything, the lake will be stabilized above a minimum elevation of at least 6378 feet, and Negit will remain an island.

Tufa

Like Negit Island, tufa towers are a quintessential part of the lakescape. Consider posters and postcards as well as countless illustrations in newspapers, books and magazines; they nearly always depict the lake-tufa interface, often with flocks of birds as well. People start clicking camera shutters, not when they see tufa on land, but when they see tufa in the lake.

As Mono Lake fell to its historic low ebb of 6372 feet, most of the tufa towers were marooned on land. At the three areas visited by most people—Old Marina, Mono Lake County Park, and South Tufa—the changes caused profound aesthetic degradation as measured by the loss of insular tufa and embayments. Let's consider these areas more closely.

Old Marina

More people view the Old Marina tufa than any others, since they may be seen from U.S. 395 as it traverses the western shore of Mono Lake. They will be the only tufa visible from the Forest Service's new visitor center. At the current lake elevation, the largest and most spectacular are surrounded by water. Viewed from U.S. 395 or the west shore, they are among the lake's most impressive features, especially at sunrise or sunset (see cover).

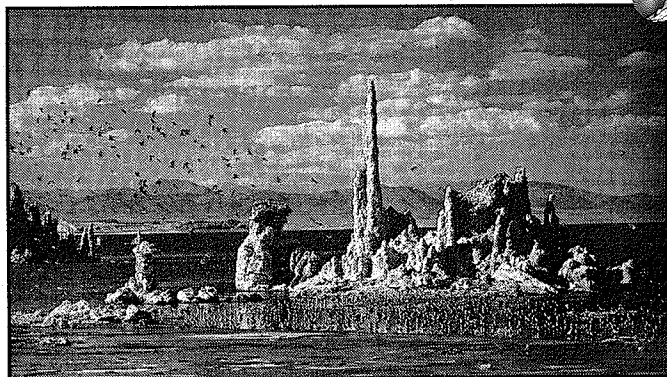
As Mono drops below approximately 6376 feet, however, essentially all the Old Marina tufa are connected to the mainland. Swallowed by alkali and muck, they blend into the shoreline, and are no longer conspicuous or impressive when viewed from a distance. The receding lake also exposes extensive areas of viscous mud. In fact, this area has been dubbed "sneaker flat" in honor of the super-numerary mud-clogged tennis shoes abandoned on its shores. From an aesthetic perspective, Old Marina deserves a minimum lake level of at least 6378 feet.

Mono Lake County Park

The County Park tufa were probably at their best when the lake stood between 6390 and 6400 feet. Since then, most have been left high and dry. Nevertheless, the current lake level is far preferable to one a few feet lower, since the large, dome-shaped tufa at the end of the boardwalk remains a striking and attractive shoreline feature, tufa islands persist just offshore and it is possible to walk nearly to the lakeshore without sinking into knee-deep mud. If the lake drops, however, the shoreline will become an impassable mudflat. In 1981, at the lake's low ebb of 6372 feet, most offshore tufa were connected to the mainland. From an aesthetic perspective, this area also deserves a minimum lake level of at least 6378 feet.

South Tufa

At the lake's low ebb, many of South Tufa's most graceful and photogenic insular tufa became connected to the mainland. The "spire tufa" that graces our original Mono



Tim Snyder

At present diversion rates, the "spire tufa" which graces our original Mono Lake poster will be left high and dry within two to three years.

Lake poster, for example, was marooned over 100 yards from the water. Today, walking to the lake from the parking area, one is greeted, not only by this spire, but by over 30 other insular tufa including intricate east-west trending islands over 100 feet in length. As the lake drops, all of these insular tufa are connected to the mainland, and the intervening embayments and channels are turned into alkali-encrusted mudflats; at approximately 6373 feet, virtually no tufa islets remain.

Many places around Mono Lake elicit an "oh wow!" response, but few so dependably as the South Tufa trail as it rounds "tufa point." The shoreline curves suddenly to the south, revealing an island, the "grotto tufa," rising from its reflection in a quiet channel. In the late 70s, as the lake dropped below 6375 feet, mudflats engulfed grotto tufa and many others.

At the lake's low ebb of 6372 feet, few of South Tufa's towers remained islands or even peninsulas. A minimum elevation of at least 6376 feet is necessary to maintain the insular character of the "spire" and "grotto" tufa, and, in general, preserve the exceptional aesthetic qualities of Mono's most extensive and heavily visited tufa grove.

While I have not examined other areas in detail, I suspect a minimum lake elevation in the 6375- to 6380-foot range will likewise be required to preserve basic aesthetic values at the Lee Vining and Simons Spring tufa groves. At these areas, as at South Tufa and Old Marina, the most spectacular towers lie above 6375 feet.

Closing Reflections

While beauty may be largely in the eyes of the beholder, I sense a criterium that may usefully apply to Mono Lake. That criterium, I propose, is the quality of its reflections. Will the lake continue to mirror the black as well as the white island? Tufa towers as well as birds? Or will it only mirror dust storms and alkali-encrusted shorelines?

Below the current lake elevation, Mono Lake's reflections deteriorate dramatically as islands and tufa are engulfed by alkali, and channels and embayments turn into mudflats. We've seen it happen before—dismembering and debilitating the landscape. Let's not let it happen again.

Dave Gaines

GULLS, GULLS AND MORE GULLS

Life As A Gull Biologist

By Lauren Davis

I've been sent to Tahiti on assignment. I pack my gear and head to the meeting spot. As I wait for my connection, I scan the island. There are extinct volcanoes alright, but where are the palm trees soughing in the wind?

I try to imagine otherwise, but I'm not standing on a sand spit in the South Pacific waiting for an out-rigger. Linda Brown and I are sinking into the muck of the landbridge near Negit Island on the edge of Mono Lake. We're waiting for gull researcher Emilie Strauss to meet us with her aluminum skiff.

Linda and I have volunteered to help Emilie with the yearly nest count on Mono's islands, a task which is sponsored by the Point Reyes Bird Observatory. Although it is late in May, dark clouds are already gathering across the morning sky. Here in their shadows its cold.

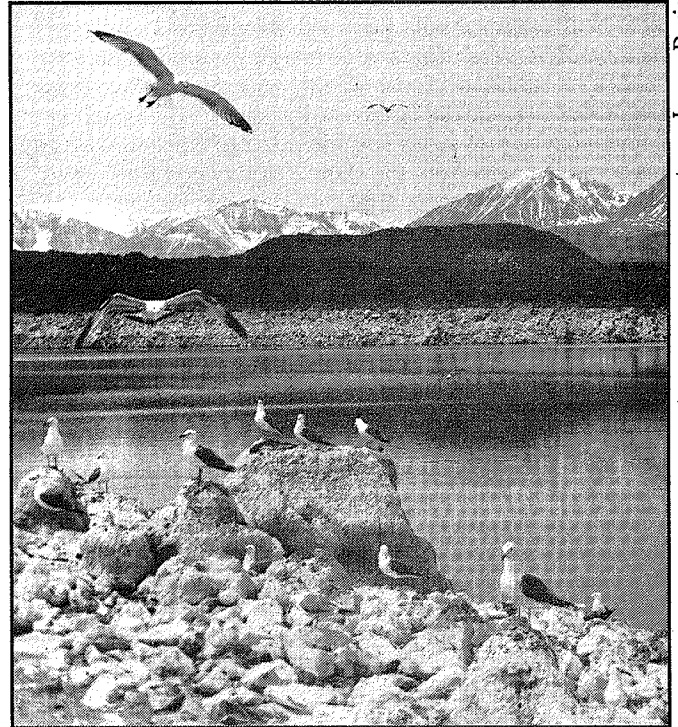
At last we spot the tiny boat leaving a silver wake behind it. Emilie arrives and drops off two other frazzled but willing volunteers. "Hop in!," she says. We climb on board and head out toward the islets east of Negit. Clouds of gulls rise and swirl indicating the height of the breeding season. Their eggs were laid weeks ago, and the chicks are just beginning to hatch.

Breeding season is a very sensitive time in the life of a gull colony. From the first of May until August all the islands are closed to visitors. During this period only licensed researchers are allowed to the gull colony for a few days at a time. We feel privileged to participate in Emilie's study.

Tahiti is a jumble of tufa-coated volcanic rocks thickly covered with screaming gulls. Our job is to mark each nest with a dot of paint, and record the number of eggs and/or chicks. Sounds simple enough until you add the supreme unpleasantness of being attacked by the egg's parents. Gulls dive and scream at our heads making it difficult to concentrate. What's worse is the wet, warm bombs of excrement that splat all around us, occasionally hitting the mark.

The nests are small depressions lined with sticks, feathers and gathered objects. Many of them have wings or the skulls from other gulls. In a less natural vein, some gulls decorate their nests with "juju" gleaned from the dumps of the Eastern Sierra. Gull juju mostly consists of brightly colored pieces of trash; butter wrappers, shoe laces, plastic wrap, toy cowboy legs, rubber erasers in the shape of space aliens, swizzle sticks in the shape of showgirls, fishing lures, buttons, a tiny pocket knife, popped balloons...

When I find a clear spot away from nests, I sit and watch the parent birds settle back on their nests. The adults take turns protecting the young. While one parent shades the nest, the other flies off to gather food. I begin to



Lauren Davis

appreciate all the work that goes into raising young. I am struck by the individuality of the birds near by. Some look so worried, others look aggressive. The chicks are nearly impossible to see. Their speckled fluff blends in with the tufa-covered rocks perfectly. The colony smells of excrement and brine. The air is filled with a constant commotion, the sound of wings above and behind me. A splat of bird bomb hits beside me. Too close! I jump up and start back to work.

The sounds of the adult gulls take on the quality of human voices. As I approach they seem to say "help" and "look out," punctuated with moans and sighs. The parents take turns watching the nests. When the chicks hatch, the adults begin constant excursions across the lake to gather brine shrimp and brine flies for the young. By watching carefully I can distinguish male from female. The males are slightly bigger, with a heavier chest and stocky bill. The females are more refined with slender bills. Both are aggressive.

The wind picks up. Gull screams penetrate my head. I lose track of my nest count, nearly step on an egg. The birds sense my weariness and scream louder as they dive at my head. I give up for the time being, make my way to an empty bit of shoreline and stare out at the other islets. I can see Emilie marking nests on a peninsula. She holds the spray paint can on her head to give the gulls a target other

than her hat. Dots of colored paint fan-tail behind her as she completes the survey. Soon, Emilie slogs across a low spot to join me. Out of her pockets she pulls bits of what we assume is trash. "More gull juju," she announces. "Look at this. King crab legs, corn cobs, pieces of net, a fishing lure... Here's one of my favorites, steak markers from Harvey's Wagon Wheel casino." She holds out a piece of red plastic in the shape of an old wagon wheel and steer skull stamped with the word "Medium." "Gulls prefer medium done steaks by a wide margin," says Emilie.

After a snack, we finish Tahiti, pack the boat and head to gull research headquarters on Krakatoa. The island is named for the movie set volcano made of chicken wire and plaster that erupts from the shore. Hollywood film crews, however, are long gone. Krakatoa is in shabby shape, yet still provides some shelter from the wind, if not the rain. Within the cone, researchers have built a make-shift floor about six feet above the rocks. The deck is the only level spot on the entire island. Pots and pans hang from nails. There's a rough table, a long bench and two rickety chairs. The wind moves right on through the living area and out over the lake again.

We eat a hasty lunch, then head out to count nests on Krakatoa. Emily had met two canoeists and a dog on her way out to do the nest count. She was shocked they'd gone ashore with the dog during breeding season, and told them about the closure. The visitors had mentioned their stop at Krakatoa. Emilie fears the disturbance caused extensive predation.

Krakatoa is so rocky that looking for nests resembles an Easter egg hunt. By the time we finish, I feel as though I have a square-foot knowledge of the island's topography. The three of us compare notes. The island's population seems in fine shape. The people and dog must have only visited the volcano, then left. With an hour of daylight remaining, we cook dinner.

The wind continues most of the night, as do the gull cries, while a single cricket chirps. Mice raid the kitchen, waking me frequently with their racket. Amid the flurry, I dream of birds.

We wake at 5:30 to a gray dawn. Clouds hang low on the eastern shore. The scene reminds me of maritime Alaska, cold breezes, islands and mist. In a stupor, we pack up our gear and head for Negit island.

Weak sunlight penetrates the clouds. I sit in the bow of the boat watching for rocks. As I peer into the still water, my eyes begin to focus on schools of brine shrimp shining just under the surface. We glide over them, entranced. Emilie guides the boat into a small inlet graced with a smooth beach of sand, a rare occurrence on Mono's islands.

We begin the nest count in tufa jumbles near the beach. Amid the new life and clamor are also signs of death. We find parts of adult birds, severed wings or heads scattered through the colony. Emilie concludes that Great Horned owls are feeding on the Negit colony.

Except for owl predation, Negit island seems to provide choicer nesting sites than the islets. "Look!" says Linda, "The birds can put their nests under these rocky overhangs for shade, and there are flowering plants spread all through the colony too. Seems pretty homey to me." We also



Gull juju.

notice that the gulls are making use of the shelter provided by greasewood shrubs which grow well on the big island.

As the day continues, we climb the flanks of the island to check a heavily vegetated plateau for nests. "Up here is the traditional nesting area for the gulls," Emilie explains. "Before diversions began, when the lake was high, most of Mono's gulls gathered together here to raise their young. The greasewood provided shade and wind protection for the nests. When Negit was joined to the mainland, coyotes hit this area hard." I wander across the plateau imagining where I would put a nest if I were a gull. While I find old juju from past nests, I strike out on current habitations. Finally, as we're about to give up, we flush a few gulls off nests at the edge of a crater. Proceeding around the crater we find a small colony in the greasewood. En route to the next counting place, I wander into the crater to get a closer look at a deep fissure within. The wind is blowing hard. I can hear it whistling through the branches of a nearby pinon pine, the only tree we've seen on any of the islands. The crater, in the midst of the storm and cloud, is very wild.

We still have another peninsula of jumbled lava to comb for nests. As we scramble down the crater to the water, the wind tries to blow us back. Dark clouds boil up from the south, and soon it is hailing. Emilie says, "I told you it never rains on the islands." The black sands of Negit turn white with animated balls of ice that gleefully bounce off each other. Although its cold and the wind is fierce, we delight in the playful hail balls.

By the time we clamber over the lava flow to the gull colony, the clouds are parting over the Sierra. Sunlight shoots through the darkness trailing glimmering pools across the lake. Although I know the peaks that rim the Basin well, from the island they seem glorious, as though composed for a landscape painter's brush. We watch transfixed, forgetting our sore feet and weariness.

When the last nests are tallied, we drag back to the boat. Night is racing toward us from the east. After thirteen hours on the island, we crave sleeping bags, food and hot tea. Emilie turns the boat toward Krakatoa. Gull cries drift across the inky water—dreamlike, surreal, primordial.

Gull Numbers Double on Negit

Negit Island's nesting gulls have increased from approximately 200 in 1985 and 1,200 in 1986 to over 3,000 this year. The rugged, volcanic island formerly supported most of Mono's gull population, but was abandoned in 1979 when the receding lake turned it into a peninsula. In 1983, rising water resurrected the island, but the presence of coyotes prevented the return of nesting gulls until 1985.

Another 25,000 gulls—half of Mono's total population—crowded onto Twain Islet northeast of Negit. The remainder nested on other islets near Negit and west of Paoha Island.

By mid-July, brown juveniles had left their island nurseries to feast on flies and shrimp along Mono's shores. Preliminary observations suggest good nesting success, though not up to last year's exceptional production. We will feature a more detailed report in our winter newsletter.

House Approves Funding for Scenic Area Visitor Center

Thanks to the efforts of Congressman Richard Lehman (D-Sanger), the House of Representatives has earmarked \$3 million for the construction of a 15,000 square foot visitor center for the Mono Basin National Forest Scenic Area. If approved by the Senate, groundbreaking could occur next fall, and the facility could be open by 1989.

Forest Service officials unveiled plans for the visitor center to the Scenic Area Advisory Board August 12. The circular, dome-shaped, two-tiered edifice will perch on the edge of a bluff about one mile northeast of Lee Vining. The building is intended to blend and harmonize with the bluff and surrounding landforms. The site affords a panoramic view of Mono Lake, its islands, the Mono Craters, Black Point, Lee Vining Creek and the Old Marina tufa formations.

Except on one point, the advisory board was favorably impressed. Board members David Gaines and Dan Dawson, however, opposed the use of non-native trees for landscaping. The Forest Service landscape architect has proposed non-natives because they are less expensive and faster growing. Under natural conditions, the site supports sagebrush, bitterbrush, desert peach and other shrubs, but no trees.

"The visitor center should acquaint the public, not with exotic trees, but with the native plants and animals of the Great Basin desert," opined MLC Chairperson David Gaines. "If trees are desirable to screen the parking area or provide shade, they should be natives like pinyon pines or Utah junipers."

AS Study, continued from p. 4.

aquatic biology, bird populations, tufa formations, air quality, shoreline environment, and the plants and animals in the streams that feed the lake. Our central conclusion is that continued drops

in the water level at Mono Lake can be expected to have severe effects on the basin's wildlife and other parts of its ecosystem.

These effects become noticeable between 10 and 20 feet below the current lake level. At 6350 feet, or 30 feet below the current elevation, the difference in the Mono Lake ecosystem would be striking. The dense populations of brine flies and brine shrimp now present in the lake would die off in large numbers due to the increase in salinity associated with a reduced lake volume and lower water levels. The lake's large populations of eared grebes and Wilson's and red-necked phalaropes and California gulls all depend on the flies and shrimp for food. With this resource gone, these birds would have to search elsewhere for food.

Lower water levels would also create land bridges to current island areas in the lake, exposing nesting sites for California gulls to predators such as foxes and coyotes. At a lake level of 6350 feet, essentially no protected nesting areas would remain.

Perhaps the most distinctive feature of the Mono Lake environment—its rock formations called tufa towers—would also be endangered by falling water levels. Many of the tufa towers now surrounded by water would be accessible by land, making them vulnerable to damage by rock-climbing tourists or outright vandalism. On the other hand, wave action from rising lake levels might topple the tufa formations.

Finally, the alkali dust that lines much of the lake bottom would be further exposed by dropping water levels. Consequently, the frequency and severity of dust storms would increase with significant effects on the area's general air quality.

We found the current flow in the streams to be adequate to maintain healthy vegetation along the streams and healthy fish populations. We could not determine if reduced flows would be adequate.

Brine flies would begin to face difficulties at 6370 feet due to a substantial cutback in suitable shallow breeding habitats. If the lake level dropped further, the ability of the brine flies to reproduce would be severely curtailed because of increased salinity. The lake's more than 100,000 phalaropes depend on the flies for food and would be affected at the same elevation. Between 6360 and 6350 feet phalaropes would not be able to find enough food to sustain them.

Brine shrimp and the birds that feed on them, primarily the gulls and grebes, would be affected by reduced food sources beginning at 6360 feet above sea level. By 6350 feet only the snowy plover will be able to survive at the lake in numbers close to their current population. At that level the plovers would find food at freshwater spring areas around the shoreline.

A natural question is the following: If Los Angeles continues to divert water at the current rates, when will the lake drop to levels that significantly affect the ecosystem, especially the wildlife? We don't have a definitive answer. If you assume that climatic conditions stay the same as they have been for the last 40 years and that Los Angeles diverts an average of 100,000 acre-feet of water per year, then the lake level is predicted to eventually stabilize at about 6330 feet, well below the critical levels supporting the current ecosystem.

The problem is that climatic conditions cannot be assumed to be unchanging... The key to future management...will be to recognize such uncertainties. Our committee has not recommended a specific water level at which Mono Lake should be maintained. If a maintenance water level is selected, however, in order to protect the ecosystem, a buffer should be built into that level to account for uncertainties. Maintaining the lake level higher than the minimum level desired would help ensure that inevitable changes in climate do not drastically alter the lake's ecosystem.

[1] Mono Lake is more than 500,000 years old. Lakebottom sediments underlie the Bishop tuff, a volcanic ash that erupted 730,000 years ago; the lake is at least that old, and possibly much older. For details, see: Geol. Soc. Amer. Bull. 78: 596.

MLC NEWS AND ACTIVITIES

Antarctica Is Next For Mono Lake Adventurers—Jan. 1989

The Alaskan Odyssey of June 1987 raised over \$10,000 for Mono Lake. Now we hope our antics in ANTARCTICA will do as well for our cause. This odyssey will provide wondrous sights of a land defined by water, snow, ice and the continuing forces of nature. Antarctica, with its vast, untamed expanses, is a mecca for photographers, nature-lovers and travel adventurers.

Our cruise to "The Shining Continent" will be aboard Society Expedition's *World Discoverer*, a 140-passenger ship fitted with a special hull for use in icy waters. It offers luxury accommodations and excellent cuisine. Highly-qualified lecturers will present programs on the history, wildlife, geology, oceanography, and meteorology of each of our destinations. Zodiacs, inflatable boats, will carry us to rookeries and beaches to observe wildlife.

We have reserved ten cabins on the *World Discoverer*. The cost of the 15-day excursion will be approximately \$6,000 for Mono Lake Committee members. This includes all expenses for the trip except airfare to Miami where the excursion originates. If you are interested in receiving a brochure with full information and an invitation to a trip preview, send a self-addressed, stamped legal-size envelope to: Mildred Bennett, 2719 Marin Ave., Berkeley, CA. 94708. You'll receive a reply in December.

Looking Ahead to Future Trips

The Committee has sponsored four fund-raising trips to such places as Alaska, Peru, Galapagos, and now, Antarctica. We are looking ahead to future adventures, but we need to know your interests. Would you be tempted by an easy trek through Bhutan (a small country east of Nepal)? A wildlife safari to Kenya? Another odyssey to Alaska? All trips would be limited to less than 20 participants and would be about three weeks long.

Since it takes one to two years of advance planning to set up a trip, we'd like to hear from you now if you would be interested in any of the proposed trips or have suggestions for other excursions. Please send your trip preferences, name and address to Mildred Bennett at the address above.

Hellos and Good-bys

We are pleased to welcome Helen Green to the Mono Lake Committee Board of Directors. A staunch monophile, veteran bike-a-thoner and ace birder, Helen has been supporting the lake for years through her work with the Golden Gate Audubon Society.

Nancy Desser will be leaving as Development Coordinator after organizing our bike-a-thon.

Mono Lake Internships

Interns work full time staffing our Lee Vining information center, answering mail, leading field trips and on other projects. We will be needing interns for winter (January-March) and especially during the spring season (March-May). For more information, please contact Debby Parker in Lee Vining.

Memorial and Accolades

We are grateful to Jeanne Gallegos for a contribution in memory of Ron Gallegos.

A hearty, well-fed thank you to the Mono Inn, Lee Vining, for donating cole slaw to feed 150 hungry bike-a-thoners and their retinue.

Profuse thanks to George Larimore, our volunteer-par-excellence. This is the fifth year George has provided boundless enthusiasm and long hours at the Lee Vining Visitor Center.

We also wish to express our gratitude to C.D. Ritter of the Mono Herald and now, Mammoth Magazine, for all the typesetting and proofing she has done for us over the years. We appreciate her enthusiasm and devotion to the cause.

There are so many people to thank, we're bound to forget a few; please forgive us. We are deeply grateful to Harriet Hess of Lee Vining for paper bags to use in our Visitor Center, Don Deck for a copy machine and answering machine, Michael Drury for a landscape painting, Ann and Riley Gilke for earrings and used books, Genny Smith for used books, Gerry Anderson for fashioning a beautiful oak bookshelf, Vern and Marylou Judy for flowering plants to grace our Visitor Center, and to Matt Mazurek and George Garrigues for Mono Lake poems.

As for businesses, Wilderness Press provided free shipping on our book orders, Designs Unlimited of Mammoth Lakes donated a silk screen for our new t-shirt, and Mammoth Lakes Nursery gave us water-storing granules for our planter boxes.

We are grateful to Furth Foundation, California Alpine Club and the customers at A16 Wilderness Camping outfitters for generous donations.

We're grateful to the many folks and businesses that helped us revamp some of the displays in our Visitor Center: Linda Brown, Sophie Davis, Debbie Jo Bird, C.D. Ritter, Stephen Johnson, John Veelick, Wayne's Glass of Gardnerville, Nevada Fine Art of Reno, Mammoth Frame and Photo and The Laser's Edge.

Our Los Angeles office wishes to thank the following people for helping to educate the Southern Californians about Mono's plight: Lieux Dressler, Todd Berens, Michael & Nancy Longacre, Bill Lewis and Eli' Harris. The following volunteers helped give our L.A. office a needed face lift: Barbara Blake, Jeff Brenner, Bob Burroughs, Greg Esgate, Edie and Mort Gaines, John Poorman and Steve Wenker. For advance work on the Bike-a-thon we are grateful to Doug Burrows, Kimberly Fisher and Brian Day. Ernest Thompson donated a file cabinet. Edie Gaines, Teri Chalmers and Matt Schneider volunteered their time to keep the L.A. office running smoothly. We also have a new phone system thanks to Don Jackson of Sonoma Backboards.

And heartfelt thanks to Kenneth and Barbara Coates of Claremont for their donation in honor of Louise and Bob Hill of Mariposa.

MLC Financial Report—1986

Since we last published a financial statement in our Autumn, 1985 newsletter, our income as well as our expenses have nearly doubled. So has our membership. Most of our increased outlays have gone to litigation and staff.

Last year, the Mono Lake Committee brought in \$514,283, including \$155,932 from grants, \$102,976 from memberships, \$63,616 from fundraising events, \$50,868 from retail sales and \$13,316 from fundraising appeals. The large income from grants, however, is a little misleading, since most of these funds (\$133,612) are tax-deductible contributions given to the Mono Lake Foundation in response to Mono Lake Committee fundraising events. Funds from the Mono Lake Foundation support tax-deductible activities such as litigation and research.

In 1986, we spent \$16,930 less than we raised, the largest expenditures being for salaries (\$172,913) and fundraising (\$152,017). Most of the fundraising expenses were for mailings of drawing tickets and membership appeals (\$124,418), which in addition to generating net returns, placed Mono Lake information into several hundred thousand households.

While most of our expenses should be self-explanatory, the outlay of \$6,494 for public policy talks may not. This helped to fund our continuing talks with the Los Angeles Department of Water and Power, which are mediated by the UCLA Public Policy Program (see p. 7).

If you have questions or comments, please let us know. We are constantly striving to augment income and reduce expenses while increasing our effectiveness on Mono Lake's behalf.

INCOME

Grants from Mono Lake Foundation	\$133,612	26%
Drawing	115,237	22%
Membership Renewals	72,587	14%
Sales (net)	50,868	10%
Bird-a-thon	36,758	7%
New Members	30,389	6%
Other grants	30,948	6%
Bike-a-thon	19,617	4%
Fundraising Appeals	13,316	3%
Interest/other	1,219	+

TOTAL \$522,911

EXPENSES

Payroll/taxes	\$162,427	32%
Drawing	65,593	13%
Prospecting mailings	58,825	12%
Litigation	34,949	7%
Other Fundraising Expenses	27,593	5%
Telephone	17,592	3%
Rent and Utilities	16,325	3%
Travel	12,968	3%
Newsletter	12,645	3%
Health Benefits	10,486	2%
Research Projects	8,931	2%
Office Supplies	7,265	1%
Misc. Operating Expenses	6,833	1%
Public Policy Talks	6,494	1%
Postage and Shipping	5,854	1%
Visitor Center Remodeling	4,540	1%
Insurance	3,733	1%
Educational Publications	3,343	1%
Printing and Copying	3,254	1%

TOTAL \$505,981

THE MONO LAKE COMMITTEE

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Ed Grosswiler	Treasurer
Todd Berens	Secretary

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BOOK REVIEWS

The following two new books will be great interest to all monophiles. Both are available through the Mono Lake Catalog at the back of this newsletter.

CADILLAC DESERT

by Marc Reisner, Viking Penguin, 1986, 582 pages
Reviewed by Laurence Dickey

What is happening to Mono Lake and has already happened to the Owens Valley are small disasters in comparison to the water crisis brewing throughout the western United States. In *Cadillac Desert*, Marc Reisner describes the mismanagement of water resources during the past century, and paints a bleak picture for the future.

Cadillac Desert's nearly six-hundred pages weave a dramatic, tragic story replete with villains and victims, but, to date, no heroes. It is a deeply disturbing history of people in power using and abusing the West's most precious resource, water, to achieve personal gain. Most importantly, it is a warning to all of us who are concerned about the future.

Reisner clearly outlines the threat the West faces because the dam-builders and water seekers failed to think of long-term consequences over the next 50 years, millions of acres of America's most productive farmland will be abandoned due to the exhaustion of groundwater reserves; within centuries, perhaps within decades, hundreds of reservoirs will silt up, turning to mud and renewing the danger of floods; more and more soil and irrigated water will be contaminated by salt—the downfall of nearly every previous desert civilization.

Moreover the huge dams and vast water projects could not have been built without very large public expenditures. The water is mostly sold to agribusiness at a fraction of its actual delivery cost. This subsidy encourages farming on marginal lands and blatant disregard for the water conservation practices developed by countries, such as Israel, with similar climates and soils. Often this subsidized water irrigates surplus crops which qualify for price supports.

Cadillac Desert is, in sum, a stunning, compulsively readable history of how the waters of the West, sparse to begin with, have been stretched, exploited and depleted. Highly recommended.

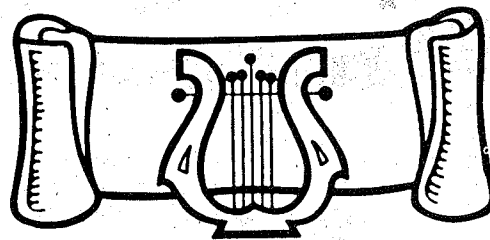
PAIUTE, PROSPECTOR, PIONEER: The Bodie-Mono Lake Area in the Nineteenth Century

by Thomas C. Fletcher, Artemisia Press, 1987, 123 pages.
Reviewed by Jack Shipley, Bodie State Historical Park

Local history books tend to be fun to read, though they are often an embarrassment to the serious historian. Full of short and tall tales about noble pioneers, far-seeing entrepreneurs and success against difficult odds, earnest local historians create a storybook land where gunfighters and prostitutes all have hearts of gold and our high school history books seem to be right after all.

It's fiction. The real story is almost infinitely complex, and includes some messages that we prefer not to hear.

Good local history is difficult to write, and it is a pleasant surprise to find someone writing it about our own backyard. Thomas Fletcher's *Paiute, Prospector, Pioneer* is an excellent holistic, neo-revisionist history of central Mono County. It is enjoyable reading, and doesn't pull punches to protect the author's own race, class or personal biases. Fletcher's main contribution to Mono's historiography is that he successfully integrates the stories, not only of Paiutes, prospectors and pioneers, but also loggers, ranchers, trees, grasses, animals and various others that make real history. Highly recommended.



SPEND AN EVENING WITH JAMES TAYLOR IN CONCERT...AND BENEFIT THE EFFORT TO SAVE MONO LAKE

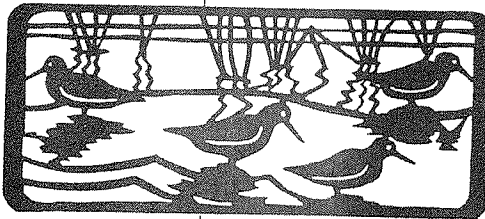
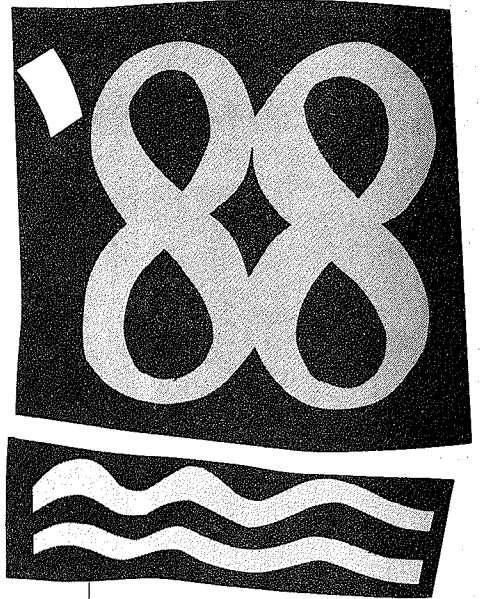
It's not often we can offer Committee supporters and friends the chance to enjoy a rare evening listening to one of our era's most powerful songwriters and musicians—and at the same time benefit the effort to protect Mono Lake.

Yet just such a unique opportunity exists. 250 pit and front section seats for **James Taylor's** November 14th 8 PM concert performance at Costa Mesa's Pacific Amphitheatre have been reserved to benefit the Mono Lake Committee. This special block of seats—the best in the house—has been made available through the auspices of Grether Productions of Pasadena. Seat prices range from \$75 to \$200, with over 75% of the proceeds benefitting the fight to save Mono Lake.

And there's more. Ticket prices include **parking**, as well as a **special pre-concert party at 7 PM for these special ticket-holders**. Although no promises have been made, James Taylor may make a personal appearance at the party.

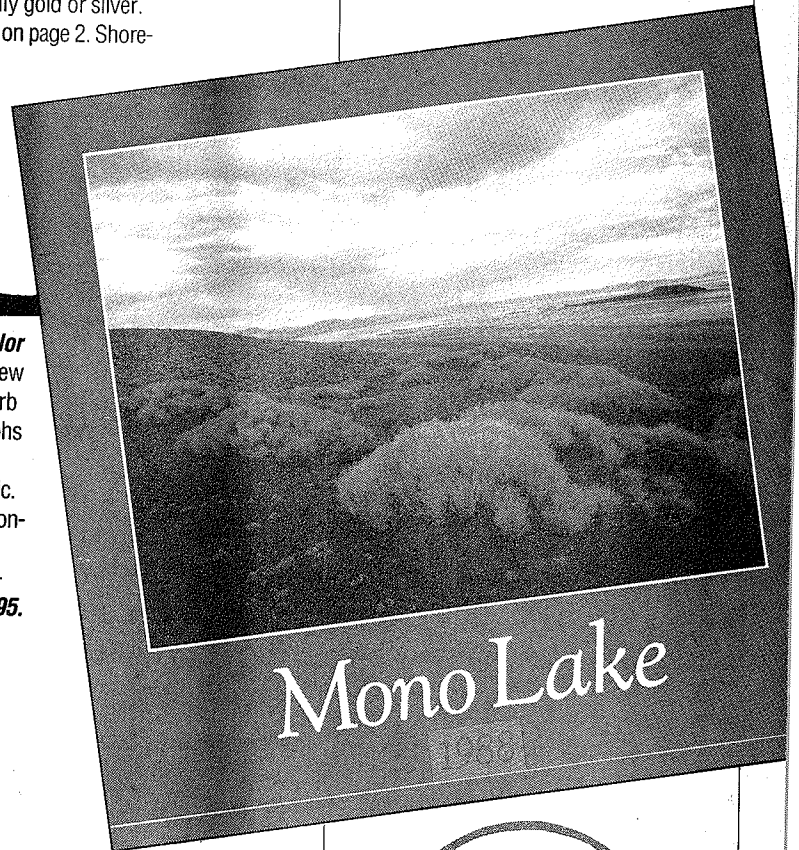
Taylor's concerts are few and far between, so tickets sell fast. **CALL (818) 304-0777 NOW** and reserve your tickets. You may charge tickets on your VISA or MasterCard.

MONO LAKE CATALOG



Mono Lake Pin. 14K Gold or silver-plate pin from hand cut original design by Wild Bryde Jewelry. Shown actual size. When ordering, please specify gold or silver. More Jewellery shown on page 2. Shore-bird Pin, \$22.00.

Mono Lake Color Calendar. All new for 1988. Superb color photographs capture Mono's beauty and magic. A must for all monophiles. Special Mono Lake Catalogue Price, \$7.95.

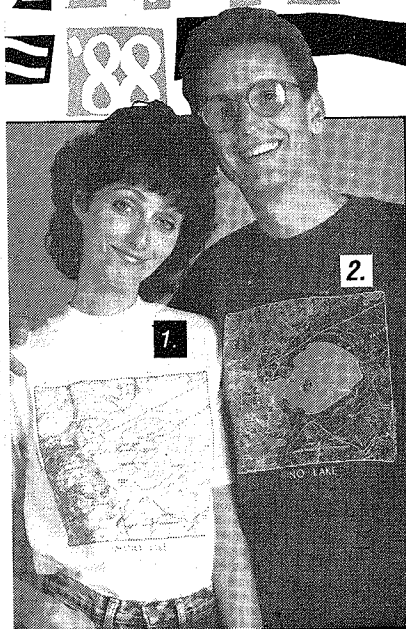


Mono Lake License Plate. Sturdy metal design with white printing on blue background. Get your vehicle involved. \$4.00.

Mono Lake Rubber Stamp. New! "Save Mono Lake" rubber stamp. Easy to use--helps get the message out. Stamp on the outside of your water bills! Design donated by Mark Warner of Wild Bryde Jewelry. Actual size 1 1/4", \$4.95.

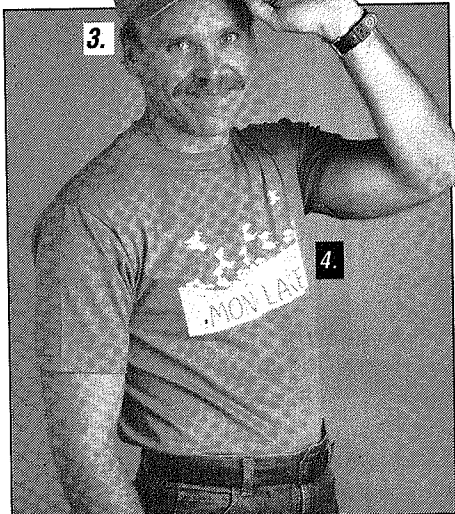


2 MONO LAKE CATALOG



Mono Topo T-Shirts & Sweatshirts.

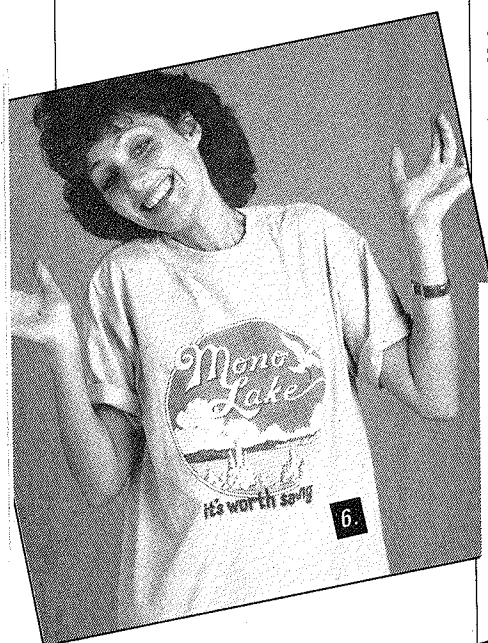
(1) Topo T-shirt, 100% cotton, in cream, red, grey or dark blue, **\$9.95**; (2) Topo sweatshirt in navy, silver or light blue, **\$16.95**.



Mono Lake Caps. Adorn your pate with attractive, quality Mono Lake headgear. Sizes are adjustable, and fit everyone we know. (3) Canvas caps are adorned with our 5-color Mono Lake patch. 100% cotton in sand, grey, spruce, brown, lilac, navy or red, **\$7.50**.

Mono Lake Shorebird T-Shirts. (4) Shorebird T-shirts, 100% cotton, in light blue, royal blue, red, pink, turquoise. Lilac and purple (in a 50-50 blend), **\$9.00**.

Mono Lake "It's Worth Saving" T-Shirts & Sweatshirts. High-quality. 100% cotton shirts silk screened with Rebecca Shearin's evocative and colorful design. Sizes S,M,L,XL. (6) Short-sleeved crew in blue, gray or cream, **\$8.50**. (Not shown) - Short-sleeved kid's in blue, pink or gray (no XL) **\$7.00**; Sweatshirt in lilac, light blue, silver, or turquoise, **\$15.95**; Baseball jersey with red, light blue or dark blue sleeves, **\$9.00**



Mono Lake Slide Program. (Not shown). 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 sales 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, etc. **\$10.50**.

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

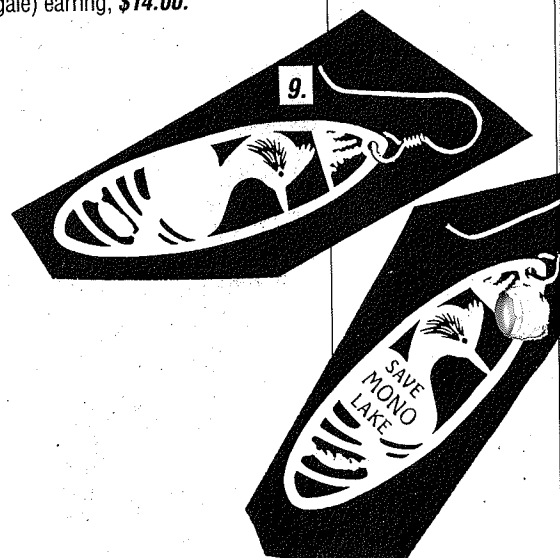


Petroglyph T-Shirt. (5) Ancient petroglyphs discovered in the Great Basin are combined with the symbols of Mono Lake-- water and brine shrimp. This large, two-sided shirt proclaims "One Million Years and Counting...Long Live Mono Lake". Makes a great night-shirt, too! White only. Oversize, **\$10.00**.

Save Mono Seals. Spread the word! Use these eye catching, blue on white, self-affixing seals on letters and envelopes. Designed by Charlotte Cooper. Shown actual size. Roll of 50, **\$2.50**.

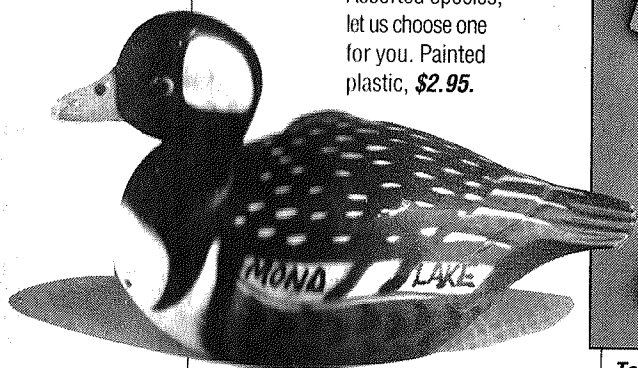


Mono Lake Jewelry. 14K Gold or silver-plate earrings from hand cut original designs by Wild Bryde Jewelry. Ear wires are filled with respective pure metals. All shown actual size. When ordering, please specify gold or silver. (9) Large Grebe earring, with tufa and a real biwi pearl, **\$18.00**; (10) Eared Grebe head earring, or (11) Grebe and Brine Shrimp earring. Both have "Save Mono Lake" engraved on back. **\$10.00**; (12) Water-ouzel (Sierra Nightingale) earring, **\$14.00**.



Duck Refrigerator Magnets.

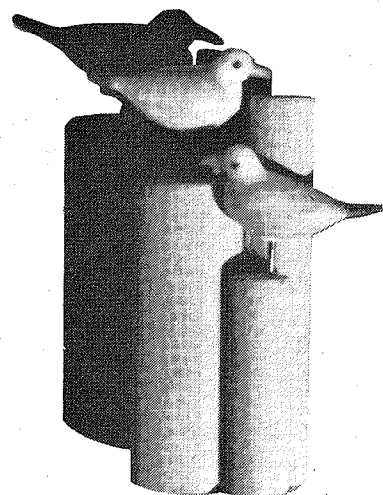
Assorted species, let us choose one for you. Painted plastic, \$2.95.



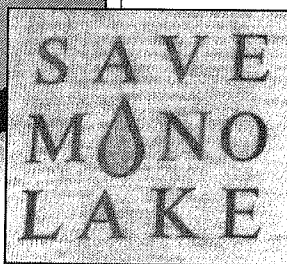
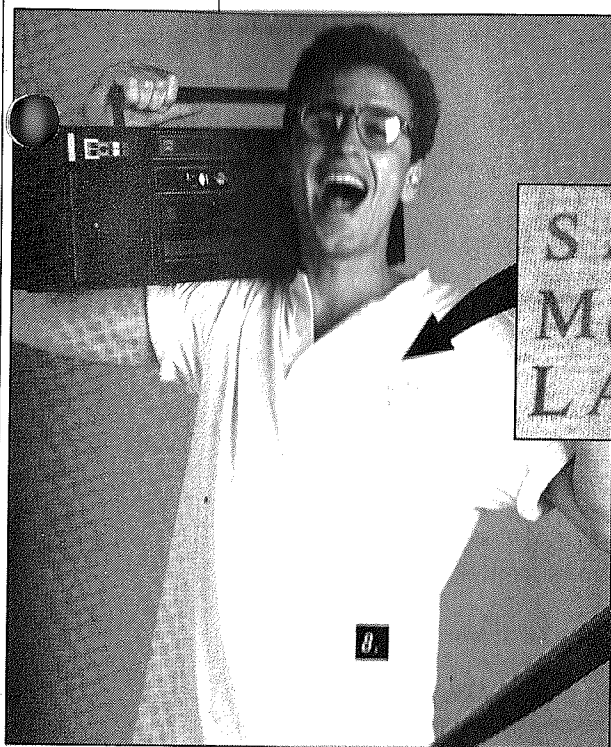
Toddler Shorebird Sweats. (7) Matching sweatshirt and sweat pants in a 50-50 poly/cotton blend. Sizes 12 or 24 months, pink or blue, \$18.95.

Gull Refrigerator Magnets.

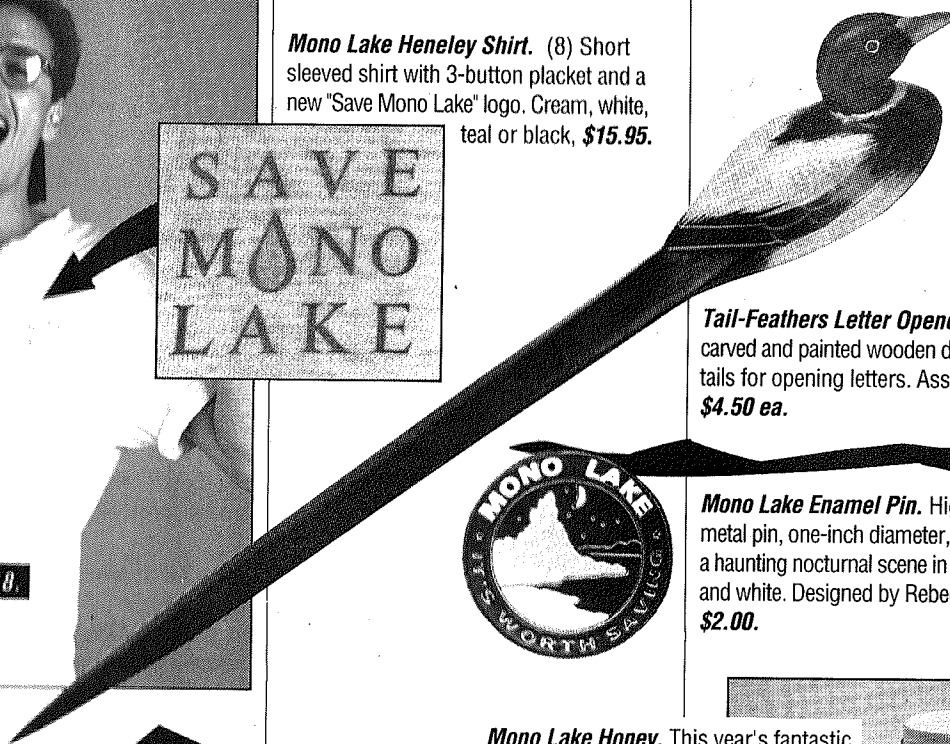
Gulls on piling, \$1.00.



Mono Lake Henley Shirt. (8) Short sleeved shirt with 3-button placket and a new "Save Mono Lake" logo. Cream, white, teal or black, \$15.95.



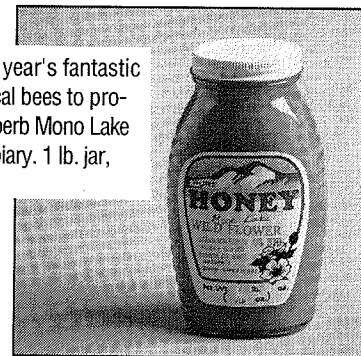
Tail-Feathers Letter Opener. Beautifully carved and painted wooden ducks with long tails for opening letters. Assorted species, \$4.50 ea.



Mono Lake Enamel Pin. High-quality metal pin, one-inch diameter, engraved with a haunting nocturnal scene in blues, silver and white. Designed by Rebecca Shearin, \$2.00.



Mono Lake Honey. This year's fantastic flower display enabled local bees to produce a bumper crop of superb Mono Lake honey. Starmoon Farm Apiary. 1 lb. jar, \$4.50.

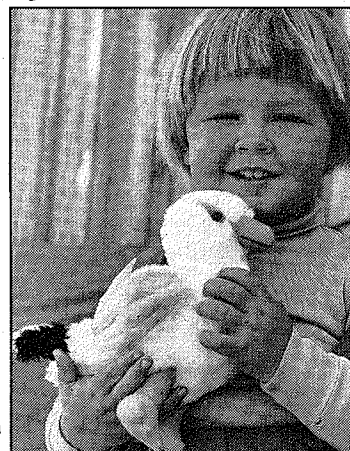


4 MONO LAKE CATALOG

'88

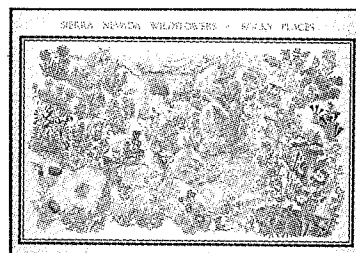


Auto Shades. Produced by the San Francisco based 'Save the Wetlands' group, this colorfully printed shade keeps your car cool and prolongs the life of your dash and upholstery. Folds to 5-1/2" by 20-1/2". Fits all passenger cars, **\$7.50.**

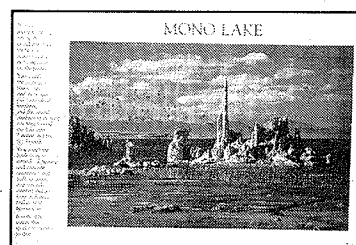


Gulliver Seagull. A cuddly reminder of the birds we're fighting to save. We've never seen a more adorable stuffed animal. Ideal for children of all ages- adults, too! **\$6.95.**

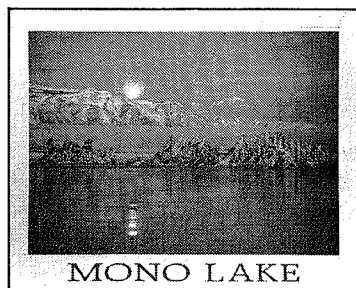
Water Saver Shower Head. Finest quality chrome-plated brass shower fixture mixes air and water for truly luxuriant showers. Cuts water consumption by up to 75% and pays for itself in lower water-heating bills. Easy to install. Deluxe (with turn-off), **\$13.00.**



Sierra Nevada Wildflowers Poster. Vivid, full-color 25 by 35 inch poster illustrates 60 Sierra wildflowers with marmots, lizards and other critters hiding in the greenery. Contrary to the artists, not all grow in rocky places, but that hardly detracts from one of the most beautiful posters we've ever seen, **\$7.50.**

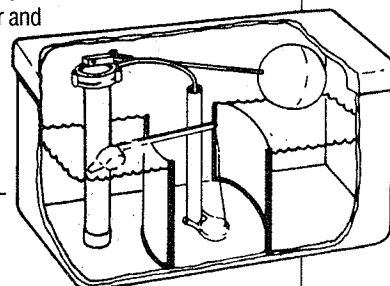


Tim Snyder Poster. A striking 15-by-22-inch color reproduction of shore birds swooping among tufa spires, **\$3.95.**

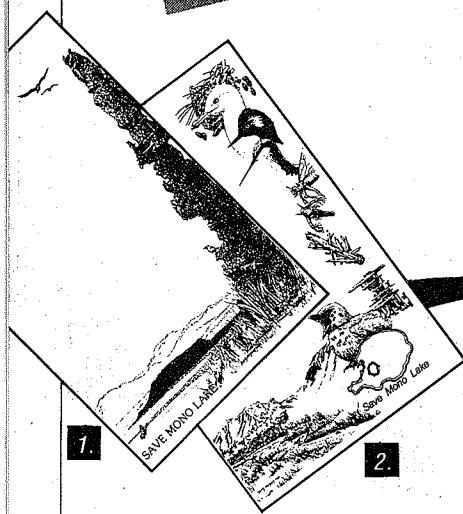


Moonset Over Mono Lake. The grandeur of a winter morning, snow-clad Sierra and spires of tufa reflected in Mono's placid water are beautifully reproduced on heavy 100-lb. cover stock. This 16-by-20-inch poster includes Gray Brechin's essay, "Elegy for a Dying Lake," on the back. Photo by Anselm Spring,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

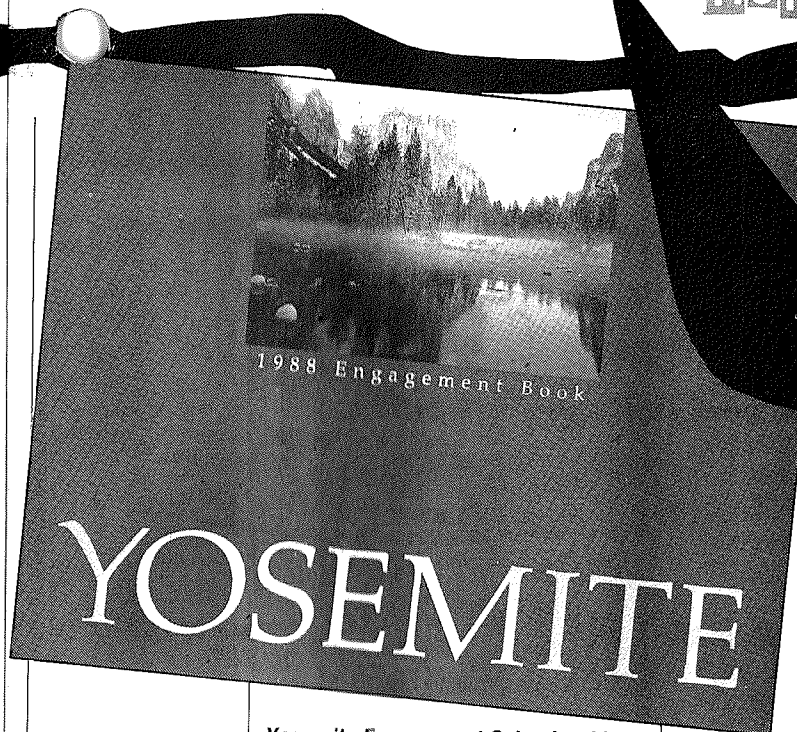
Water Conservation Kit. Conventional flush toilets use 5-8 gallons when 2-3 gallons are sufficient. What can we do about this waste? Use toilet dams. Our conservation kit includes two brass toilet dams guaranteed for five years, as well as a shower head water saver and toilet leak detection tablets. A family of 4 will save 20,000 gallons a year! **\$3.50.**



Mono Lake Stationery. Two outstanding pen-and-ink designs donated by Keith Hansen. Each Package contains 50 5-1/2 by 8-1/2 inch sheets with 25 matching envelopes. On cream or grey paper. (1) Tufa tower and Negit Island; (2) Save Mono Lake, **\$4.95.**

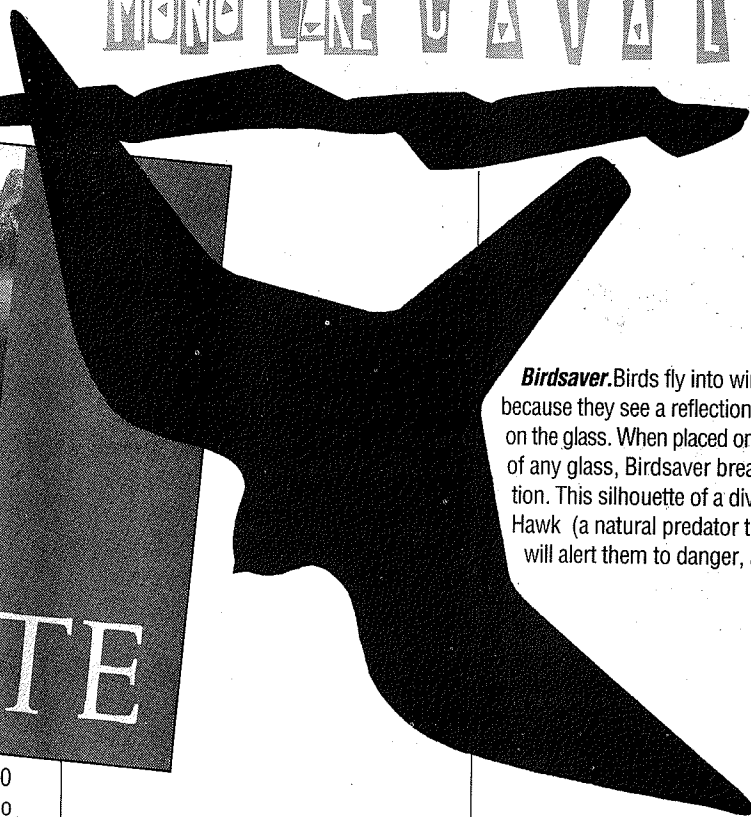
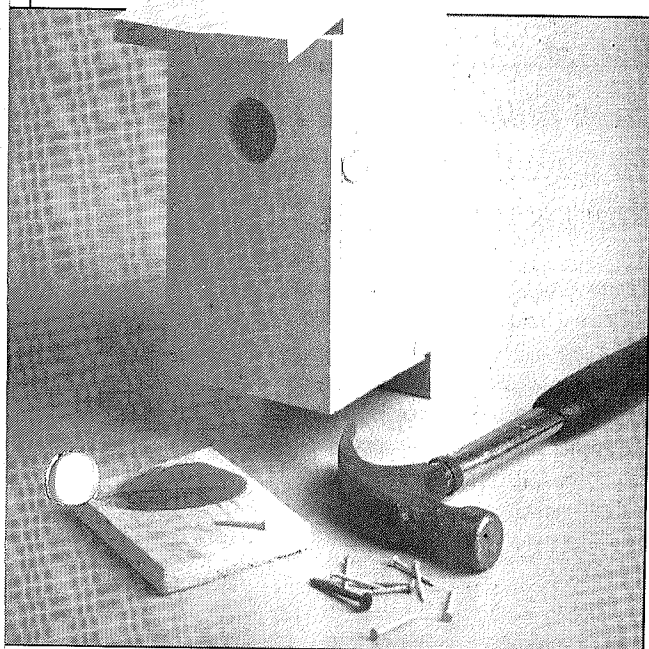


ALL PROCEEDS BENEFIT THE **SAVE MONO LAKE CAMPAIGN**



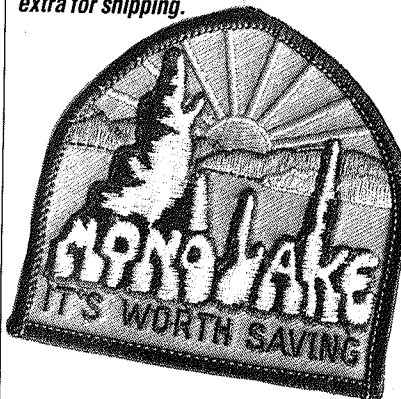
Yosemite Engagement Calendar. 30 great color photographs, including Mono Lake. 7" x 9", \$7.95.

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 removeable bottom for easy cleaning. (1) Bluebird house, (2) Chickadee birdhouse, \$9.50 each.



Birdsaver. Birds fly into windows because they see a reflection of the sky on 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.

New "Official" Bat House. (3) Bat houses have become necessary as bats lose their natural and man-made roosts in old trees, buildings and caves. One bat is capable of catching 500 or more mosquito-sized insects in an hour. Give a bat a home! This red cedar house features an open bottom design that precludes use by unwanted animals like mice or squirrels. 17" by 10" by 7" with two interior dividers, 8 lbs., \$29.95. Please add \$2.50 extra for shipping.

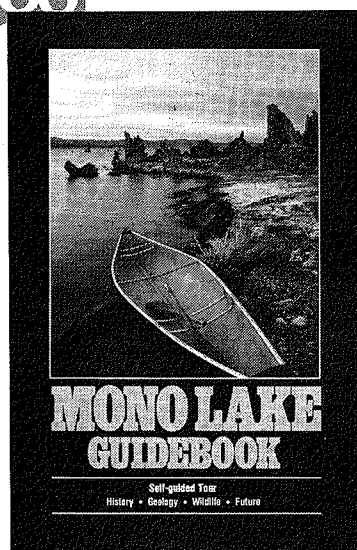


Mono Lake Patch. Striking 5-color design by Rebecca Shearin, 3 inches across, \$2.50.

Retail Sales: Debbie Parker
Catalog Design & Production: Brian Day and Kimberley J. Fisher, Fisher & Day/San Francisco.

Studio Photography: Dennis Bettencourt, San Francisco
 Created using an Apple Macintosh and Ready, Set, Go!3 software (courtesy of Letraset USA) Final output at The Copy Network, San Francisco. Thanks to Gayle Hamilton and Dr. David Middleton.





Mono Lake Guidebook. 1985 edition. From tufa to volcanos, brine shrimp to gulls, aqueducts to water conservation, this newly rewritten, authoritative guidebook delves into Mono's geology, wildlife and history, and the alternatives to its destruction. Sixty-eight photographs and numerous drawings, figures and tables complement the 113 pages of text. By David Gaines and the Mono Lake Committee, **\$5.95.**

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

Music. Dakota Sid's beautifully crafted tunes are leavened with wistful humor. (1) For the Birds includes songs about eagles, condors and other ordinary folks caught in and confused by civilization. (2) Small Towns and Tiny Faces reflects on old cars, high school sweethearts and home, **\$9.00.**

GREAT BASIN

Present and Extinct Lakes of Nevada, by Israel C. Russell. Reprint of 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, archeology and plant & animal life. Recently reprinted with numerous color plates by Philip Hyde. 290 pp., paper, **\$11.95.**

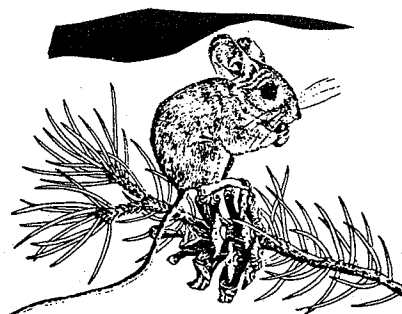
HISTORY

Survival Arts of the Primitive Paiutes, by Margaret M. Wheat. An intimate, beautiful portrayal illustrated with superb photographs. 117 pp., paper, **\$7.50.**

Up and Down California in 1860-1864, by William H. Brewer. Classic Californiana, including visit to Mono Lake (he sampled brine shrimp fly soup). 538 pp., paper, **\$10.95.**

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, **\$6.95.**

Man From Mono, by Lily Mathieu La Braque. This memoir of the La Braque family, 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 water or the trouble his passion for gambling got him into. 196 pp., paper, **\$10.95.**



"The most thorough account I've read of Muir's complicated struggle towards harmony & nature..." ▶

NEW YORK TIMES BOOK REVIEW

The Pathless Way: John Muir and the American Wilderness, by Michael P. Cohen. Superb, powerful new book that traces Muir's spiritual journey and ecological enlightenment. Paper, 408 pp. **\$12.95.**



John Muir visiting a Paiute camp on Mono's shores. From "Paiute, Prospector, Pioneer."

Paiute, Prospector, 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, Artemisia Press, 1987, **\$9.50.**

PLANTS AND ANIMALS

Field Checklist of the Birds of Mono Basin, by Terry Hart and David Gaines. Includes all 259 species with bar graphs. 15 pp., paper, **\$60.**

California Butterflies, by John S. Garth and J.W. Tilden. At last, a field guide that enables us to identify butterflies as easily as birds! In addition, this compact volume packs an enormous amount of information on habitat, distribution, life history and behavior of both larvae and adults. From the California Dog-Face to the Zephyr Angelwing, it will add new dimensions of discovery and enjoyment to your outdoor ramblings. 246 pp., hardbound, University of California Press, **\$22.95.**

"A monumental achievement. Indispensable to every serious birder."

▼ ROGER TORY PETERSON

Distributional Checklist to North American Birds, by David DeSante 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 and enter state and provincial lists. Indispensable to serious birders. 456 pp., hardbound, **\$29.95.**

National Geographic Society Field Guide to the Birds of North America. Hard to find. One of the best guides to field identification available. Second edition, 464 pp., paper, **\$16.95.**

Mammals of the Mono Lake-Tioga Pass Region, by John H. Harris. Intimate, authoritative accounts of every species. 55 pp., paper, **\$3.95.**

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

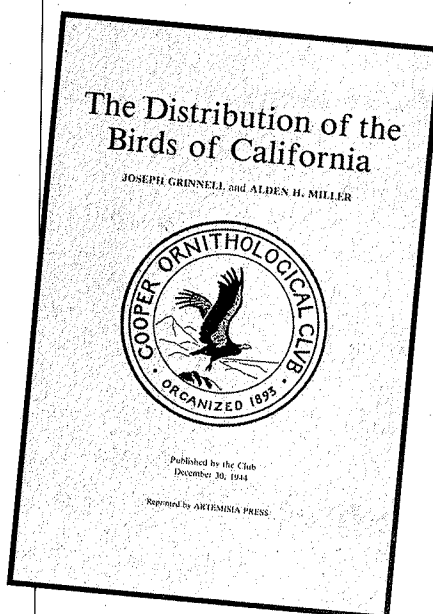
Earthquakes and Young Volcanoes Along the Eastern Sierra Nevada, by C. Dean Rinehart and Ward C. Smith. Well-illustrated, up-to-date account by USGU geologists. 62 pp., paper, **\$5.95.**

Geologic Guide to Aspen Valley, Mono Lake, Mono Craters and the Inyo Volcanic Chain, California, by Scott Stine and others. A field trip that focuses on volcanic ash layers 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.**

MONO LAKE

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



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 appreciated.**

"At Mono Lake" Catalog. Highest quality reproductions of 16 color and 49 black-and-white photographs from the "At Mono Lake" exhibition, including work by Ansel Adams, Brett Weston, Philip Hyde and many other artists. Edited by Stephen Johnson and published by Friends of the Earth Foundation with the financial assistance of the Mortimer Fleishacker Foundation and Zellerbach Family Fund. Paper; 8-1/2" x 10-1/2". A stunning production! **\$12.95.**

Quaternary History of the Mono Valley, California, by Israel C. Russell. Published in 1883, this remains the outstanding study of Mono's geography and geology. Includes all original engravings and topographic maps. 192 pp., paper, **\$9.95.**

LOS ANGELES AQUEDUCT AND 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, **\$11.95**

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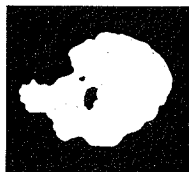
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