

Mono Lake: Its (still) Uncertain Future



Stephen Johnson

Old. Immense. Productive. Delicate. Spectacular. Bizarre. Nourishing. Timeless. Mono Lake and its mountain watershed is, to many different people, appropriately captioned by various combinations of these modifiers. What is unmodified by concept or adjective is the fact that the Mono Lake ecosystem faces an uncertain future.

Mono Lake of the present is North America's oldest lake, an immense ellipse of nutrient-rich water that fuels one of the most productive aquatic ecosystems on earth. Spectacular glacially carved canyons and recently active volcanos reflect in the lake's shining

waters—amidst bizarre geologic sculptures of tufa. Delicate phalaropes and millions of other waterbirds absolutely depend on Mono's productivity, nourishing their young or fueling their annual migrations. A timeless landscape that may not last to the end of this century.

Mono's continued existence is being threatened by uncontrolled, unmanaged, unrestricted diversion of its tributary streams. The choice is simple: more efficient use of water resources and a living lake, or continued inefficient waste and a sterile, chemical sump.

For Mono, the choice stands clear: it's worth saving.



**The
Mono Lake
Committee**

Newsletter

Editor

Dean Wm. Taylor

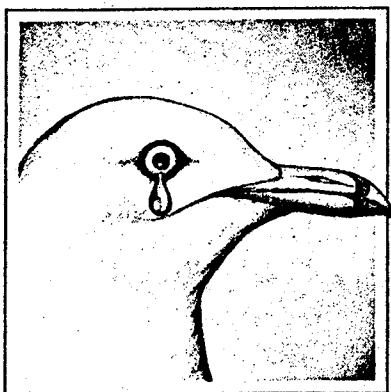
The quarterly *Mono Lake Committee Newsletter* features updates on the latest developments affecting Mono's future as well as articles on the natural, geological and human history of Mono and other Great Basin lakes, reviews of current research and recent publications, and announcements of field trips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

IMPORTANT: If your copy is improperly addressed, if you fail to receive a copy, or if you are moving, please let us know.

ON THE COVER

Participants in the 1980 Labor Day Bucketwalk rehydrating a thirsty Mono Lake. Each year the bucketwalkers carry water four miles to Mono Lake—water that would otherwise be destined for the Los Angeles Aqueduct. By offering the lake a drink, the walkers demonstrate their—and our—commitment to Mono's preservation. Join us in 1981, and long live the ol' lake!

Erratum: Our apologies to Mono's patron saint of geology, Israel C. Russell, whose surname we truncated on the cover of *Newsletter 3:2*.



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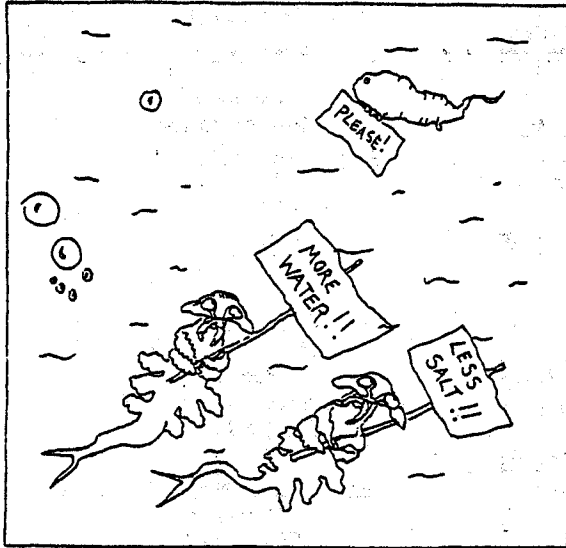
Mark Ross

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The Deadly Salt Build-Up

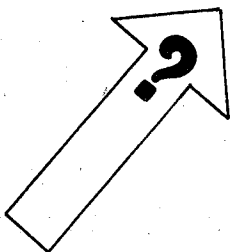
"Anything that we can destroy, but are unable to make, is sacred..."
E.F. Schumacher



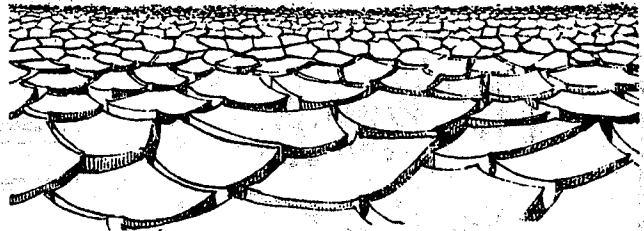
A biologist releases adult Mono Brine Shrimp into a flask filled with Mono lakewater concentrated to twice present salinity. Several days later most are dead or dying.

Brine shrimp, brine flies, algae and birds can thrive in saline, alkaline water up to a critical point, but not beyond. As Mono shrinks in volume, its carbonates, sulfates, chlorides and other chemical constituents become ever more concentrated. Salinity has already doubled. If diversions continue at their present rate, it will triple by the turn of the century and quadruple by the year 2014 (see figure below).¹ Eventually the salt build-up will poison most of the lake's inhabitants. How much longer can they hold out?

The brine shrimp experiment and others like it approach the answer. In 1976, University of California biology students David B. Herbst and Gayle Dana assayed the survival rates of brine fly larvae as well as shrimp in Mono Lake water concentrated in gradual increments up to three times the present level. At twice present salinity, the effects were traumatic. Most of the shrimp died from osmotic (salt) stress. The fly larvae coiled up, clumped together and reduced physiological activities to a minimum. They survived, but no longer grew or developed. Such a condition would suspend flies in the larval stage indefinitely. Herbst and Dana concluded that: "although the possibility exists that the brine shrimp and fly larvae may be able to evolve a genetic tolerance enabling survival, the weight of evidence indicates that the present populations of these animals will not be able to withstand the increasing salinity predicted for Mono Lake."²



Past and future salinities of Mono Lake, assuming diversions are maintained at the present average of 100,000 acre-feet/year, and no groundwater extraction. Increased diversions or groundwater mining would increase the stabilization salinity considerably. Mono Lake would reach 700% of its natural salinity in about 100 years, a concentration toxic to most life-forms.



We cannot confine our concern to shrimp and fly larvae. Yet we know next to nothing about anything else. That's why further increase in Mono's salinity is a terrible risk.

What needs to be studied? Certainly the algae, those microscopic plants that fix solar energy by photosynthesis into food within Mono's waters. In 1976 Connie Lovejoy and Gayle Dana reported that "a 25% increase in salinity resulted in immediate depression of photosynthetic rates."³ What would be the impact of higher concentration?

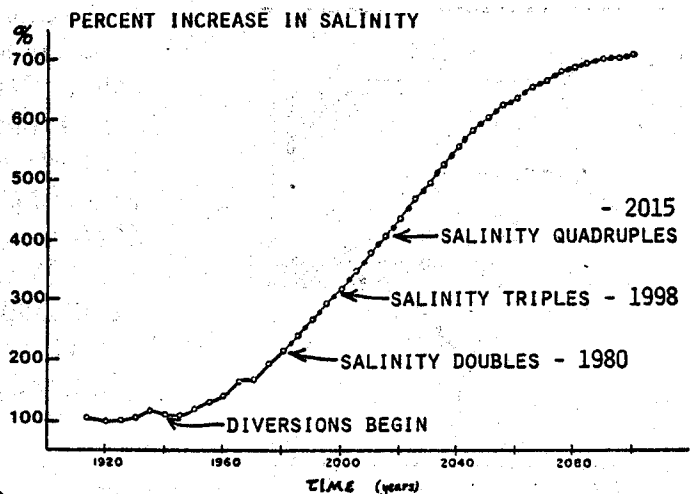
Not all algae are palatable to brine shrimp. Might those presently most common in the lake be replaced by more salt-tolerant, but poisonous species? If this happened, the shrimp, and in turn the birds, would perish.

Herbst and Dana have studied adult shrimp, but not the eggs and immatures (*nauplii*). Yet the early stages in the life cycle are most vulnerable to salinity changes. Will the eggs continue to hatch? At the proper season? Will the nauplii develop into adults? Nobody knows.

Similarly we know nothing about the impact of increased salinity on the eggs of brine flies, nor on the critical development from pupa to adult.

The DWP has tried to counter this conclusion by pointing out that adult brine shrimp survive in the salt-saturated north arm of Great Salt Lake. This is deceptive as well as irrelevant. Great Salt supports a different species of shrimp adapted to a chemically different lake. Even at present salinity Great Salt shrimp cannot survive in Mono. Furthermore, no reproduction occurs in the salt-saturated North Arm; adults colonize from the dilute South Arm.

The prognosis looks even gloomier when we consider the Mono lake ecosystem as a whole. Increasing salinity will affect, not just shrimp and fly larvae, but algae and birds as well. At Lake Nakuru, a rift valley carbonate lake in Africa, the entire ecosystem quickly collapsed from salinity stress after a protracted period of gradual salt build-up. If the same pattern happens at Mono, the shrimp and flies, and in turn the birds, will suddenly starve. Each part of the living community is intimately linked to every other. If one fails, the others follow.



Indirect consequences may be as deleterious as salt stress. For instance, less dissolved oxygen in Mono's water could reduce shrimp and fly populations even if palatable algae remained abundant. Increased water density could restrict the relatively buoyant shrimp to surface waters, confining and greatly depleting their numbers.⁴ More ominously, it could prevent their eggs from sinking to the bottom. If this happened, few if any of the eggs would hatch and the shrimp population would be devastated.

As for the birds, they may be more vulnerable than either shrimp, flies or algae. No bird yet studied, even those with specialized nasal salt-excreting glands, could survive for long on Mono's brine alone. Yet they inevitably imbibe the water as they feed. For this reason, gulls, phalaropes and many shorebirds visit freshwater daily to drink, bathe and generally cleanse their systems of excess salts. But as salinity increases, it is a matter of diminishing returns. Down the line, will visits to freshwater leave insufficient time for feeding and breeding? When that point is reached, the birds will perish.⁵ How much time is left?

The first to go may be grebes and seagull chicks. Mono's millions of grebes never seem to leave the lake to seek freshwater. They must be able to drink the brine. The California Gull chicks, marooned on island nurseries, never take freshwater until they fledge. How do they do it? How much longer can they survive?

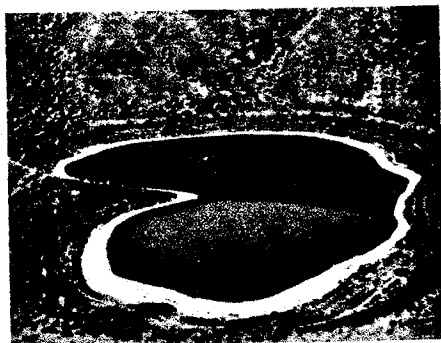
These are only some of the reasons we fear the worst. All of the above impacts are plausible within the next few years and probably within the next few decades.

Mono has already doubled in salinity. Have there been any warning signals?

Have birds, shrimp, flies or algae been affected?

Undoubtedly yes, but to what extent may never be known. Unfortunately, no one studied the Mono Lake ecosystem before diversions began. Qualitative, anecdotal impressions are the only information from earlier years. Still some disturbing trends are obvious.

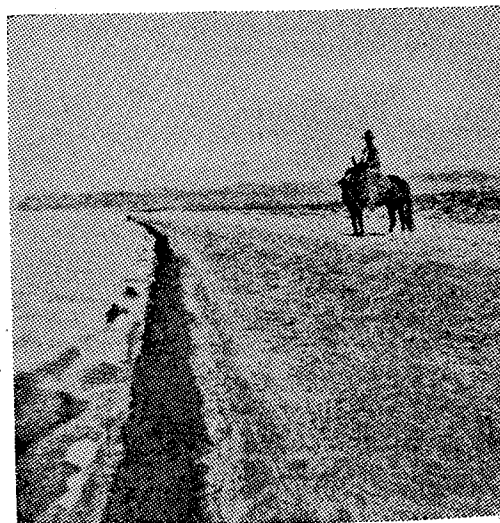
Ducks were certainly more numerous. An 1852 newspaper article, the first mention of Mono in print, speaks of "wild ducks and gulls, in abundance"⁶ In 1865 J. Ross Browne described a "gunning expedition" as "nothing short of wholesale slaughter."⁷ Oldtime residents, who recall taking two or three hundred ducks a day, lament the decline since diversions began. Increasing salinity is a plausible cause, for ducks, unlike gulls, shorebirds and grebes, lack well-developed salt glands.



Mono Lake won't be the only lake to suffer at the hands of Los Angeles water diversions. Heart Lake, formerly located in the cinder cone on Paoha Island, dried up years ago as Mono's level dropped. Wholesale geographic offenses such as this should be punishable by a fine not less than reprinting of all maps thus outdated! Cartographers should voice protest.

Brine flies have likely suffered as well. Most historic accounts echo Twain's description of "a belt of flies one hundred miles long . . . an inch deep and six feet wide."⁸ A photograph taken by C. Hart Merriam around the turn of the century shows brine flies blackening the shore for as far as the eye can see.⁹ The annual Paiute harvest of Kutsavi, the dried brine fly pupae, depended on this superabundance. When numbers of flies dwindled, by the 1950s, the harvest ceased.¹⁰ Nor is all the evidence qualitative. Recent studies at Great Salt Lake correlate salinity and brine fly numbers—the greater the salt concentrations, the fewer the flies.¹¹

Merriam's Photo



Brine Flies "blackening the shore for as far as the eye can see." Concentrations such as this have not been observed in modern times, indicating a decrease in fly densities with lowering of Mono's surface elevation.

Algae, brine shrimp, shorebirds, grebes and gulls still seem to be thriving despite the doubling of salinity. But are they as abundant as they used to be? Nobody can say.

But the future looks bleak. If diversions continue uncurtailed, Mono will continue to shrink and increase in salinity. One spring the birds will return, as they have for millennia, only to find a sterile chemical sump on whose waters they will starve.

¹Predictions for future salinity derive from R. Loeffler's hydrological model published in the 1977 *Ecological Study of Mono Lake* (Univ. of Calif. Davis Inst. of Ecol. Publ. 12: 6-38).

²The experiments conducted by Herbst and Dana in 1976 were reported in the 1977 *Ecological Study* (op. cit., pp. 63-69). Studies conducted in 1979 and 1980 corroborate these findings.

³*Ecological Study*, op. cit., pp. 42-57.

⁴*Ecological Study*, op. cit., p. 61.

⁵This prognosis derives from D. Winkler et al. discussion in the *Ecological Study* (op. cit., pp. 111-113).

⁶*Alta California*, Aug. 26, 1852.

⁷Harper's New Monthly Magazine 31: 411-419.

⁸*Roughing It*

⁹The photograph appears in Merriam's *Studies of California Indians*, published by UC Press. The original has apparently vanished from the Bancroft Library.

¹⁰Reported by F.L. Davis in 1965 (Univ. Utah Anthro. Papers 75: 1-55)

¹¹Nick Collins, pers. comm.

Mono Lakewatch

Dry Year Blues

One year we wither under cloudless skies, the next we nearly wash into the sea. During 1976 and 1977, California experienced the most severe drought in the state's history. Then, for the next three years, it rained and snowed with a vengeance. Now it looks like the dry year blues again.

That's bad news for Mono Lake. If the Los Angeles Department of Water and Power won't share water during wet years, how will Mono fare during droughts? During 1981, the lake will probably fall another couple of feet and increase in salinity.

We realize there are times when we thirsty humans desperately need a little of the Mono Basin's water. During the last drought, for instance. The lake would not begrudge us, if we only were more generous when the rains returned.

That's why we support the Task Force Plan's provision for tapping Mono's water "during any period of extreme drought conditions," i.e., when additional water is truly needed and alternative sources are unavailable. In other words, we support a "wet year/dry year" approach of sharing with the lake during times of average and above-average precipitation, and taking as needed during droughts.

But DWP wants it all, every year, regardless of need. Greed, not need, is depriving Mono of enough to survive. Just consider the past three-year period, the wettest in LA history. If diversions had been curtailed, the lake would have risen about five vertical feet. Negit would still be an island. The lake's health would not be in jeopardy. But, although alternative supplies were readily available, DWP took every drop the aqueduct system could handle.

As a consequence, Mono didn't rise five feet. It didn't rise at all. In fact, the lake fell from a January 1978 elevation of 6,375 feet to its present elevation of 6,373 feet. Salinity jumped about five percent. And that brings us closer to eventual disaster.

Just how devastating salt build-up can be is illustrated by Africa's Lake Nakuru. For five years biologists watched this saline, alkaline lake increase in salinity without detecting any dramatic ecological changes. Then, in less than two weeks, the food chain collapsed. Without warning most of the lake's algae perished and its thousands of birds disappeared.

Unless we share some water, Mono will someday suffer Nkuru's fate. Exactly when we cannot say. Maybe this year, maybe a decade or two from now. But when it happens, the collapse will be sudden and, more importantly, irreversible.

That's why any further increase in salinity is too great a risk. If DWP was really concerned with balancing the needs of Mono Lake with the needs of Los Angeles, they would share water in times of abundance. Instead they hollowly claim that "There is not any reliable scientific data . . . that the lake environment requires immediate protection," and vehemently oppose any reduction in diversions while studies are conducted. In essence, they just don't care what happens to the lake.

Why didn't DWP allow Mono to rise these past three wet years? Because it would have cut into their profits. Why was DWP's "conservation program" so ineffective that LA's per capita water consumption increased? Because they want to sell water, not conserve it—to drink Mono dry for short-term profit. So the rape continues, and will continue, until the lake dries up and its remains blow away. Unless we do something.

But how do we turn rape into marriage? How do we fight the Almighty Dollar? By convincing our friends and neighbors, especially in Los Angeles, that we need Mono Lake as much as the birds do. By translating our growing support into effective political action.

We can do it, but only with your continued help. Spread the word. Keep writing our elected representatives. Wear Mono Lake T-shirts (especially in LA). Let us know you're ready to volunteer. And don't give up hope. We've come a long way in three years. Together we can still Save Mono Lake!

Vote Environment

California League of Conservation Voters

All our efforts on behalf of Mono Lake and places like it will be in vain unless we can translate them into effective political action. That comes down to electing concerned representatives. Thank goodness there is a hard-working citizens group involved in campaign politics: The California League of Conservation Voters.

The League publishes an informative quarterly newsletter, *Ecopolitics*, and an annual voting chart that reports how each California representative voted on key environmental issues (we use it almost every day). They also oppose the "bad guys," endorse environmentally receptive candidates, and help on their campaigns by recruiting volunteers and soliciting contributions.

Good news! A LOS ANGELES CHAPTER OF THE LEAGUE OF CONSERVATION VOTERS is being formed to elect environmentally sensitive candidates to local offices. With their help maybe we can elect a monophile to the LA City Council!

Among the priority issues for the Los Angeles League are water and energy conservation, air quality, public transportation, environmental toxins and the preservation of the Santa Monica Mountains.

The League of Conservation Voters deserves our support. For further information (and a copy of the voting chart), write or call the..

LOS ANGELES LEAGUE OF CONSERVATION VOTERS

(membership dues, \$10+)

CALIFORNIA LEAGUE OF CONSERVATION VOTERS

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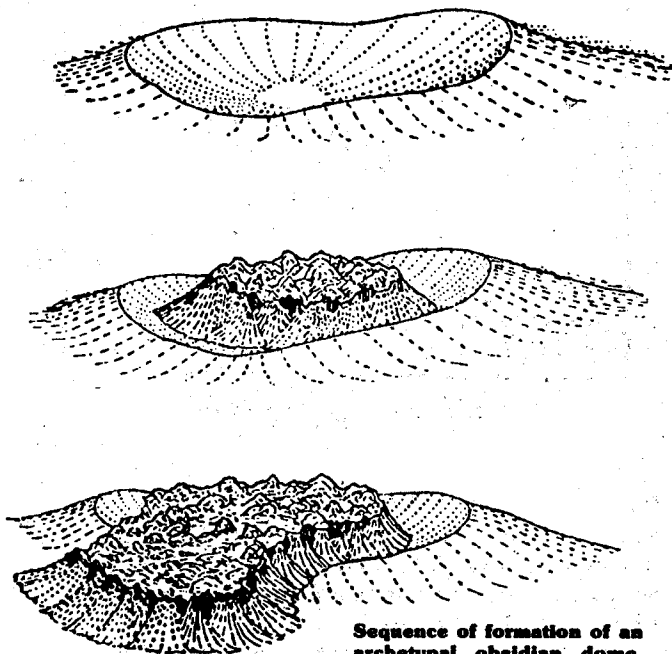


A Mono Craters Eruption?

California's youngest mountain range, the Mono Craters bisecting the southern edge of Mono Lake, is a potentially active volcanic zone. In the last 13,000 years, the "craters" have produced violent ash eruptions and numerous flows, or coulees, of obsidian.

The most recent activity in the chain, which are not craters in the strict sense but are rather domes of rhyolite surrounded by moats of ash, has been at Inyo Crater Lakes (550 yr Before Present), Panum Crater (750 yr BP) and on Negit Island (250 yr BP). Curiously, there are reports of an 1890 "eruption" below the waters of Mono Lake, complete with steam and sulfurous gases issuing from its surface, but documentation is so anecdotal the nature of any such event is doubtful.

Formation of an obsidian dome follows a rather generalized sequence. First, the eruption produces quantities of mixed sizes of ash, termed *tephra*, smaller pieces are termed *lapilli*, and larger chunks are simply pumice. Later in an eruptive sequence, a plug of viscous lava begins to form within the rim of ash, which may breach its ash moat and flow, very slowly, downhill. Great quantities of ash deposits blanket the Mono Basin to a depth of hundreds of feet in some places in the immediate vicinity of the source vents. Panum Crater is perhaps the most perfect example of an obsidian plug-dome with the moat of ash still intact to be seen on this continent.



Sequence of formation of an archetypal obsidian dome. Drawing taken from *Geology of the Sierra Nevada* by Mary Hill.

The US Geological Survey Volcanic Hazards Program includes the Mono Craters as one of the four volcanic areas to be monitored for potential activity in the next few years. The Hazards Program is to issue a report on their studies within three years.

Hot springs and steam vents about Mono Lake are surface evidence of the underlying proximity of a magma chamber, which has been estimated to be 12 miles in diameter and as close as six miles down.

The kind of eruption, its size and extent, cannot be predicted at present. An event producing extrusive volcanic rocks such as those which compose Negit Island, would be much less cataclysmic than one which was preceded by copious ash production. Such extrusive flows of lava tend to be relatively tame.

One thing is certain—that activity of any kind in the main chain of the Mono Craters could easily sever the artificial hydraulic umbilicus man has punched through the volcanos. And Mono's fate may yet be decided by natural rather than contrived processes.

Volunteers Needed!

Los Angeles Update

With the help of dedicated volunteers, our Los Angeles office is slowly marshalling grass-root and political support in the critical Southern California area.

In the midst of mega-megalopolis, our tiny office is becoming an environmental beacon. Our office-mates, the California League of Conservation Voters and Friends of the River, have been a welcome source of sage political and practical advice.

During the past two months, in addition to presenting slide programs, talking to reporters and distributing MLC literature and merchandise, our activities have focused on the Mono Lake Tufa National Monument. We were able to generate hundreds of letters and mailgrams, and win the support of Los Angeles area Assemblymen Howard Berman, Herschel Rosenthal and Mel Levine, State Senators Alan Sieroty, David Roberti, Ollie Speraw, Ralph Dills and Ed Davis, and Congressman Anthony Beilenson.

In the months ahead, the LA office will be spearheading our political efforts throughout Southern California. **But we can only be effective with your help.**

If you live in the Los Angeles area and can spare a few hours a week, why not give us (and Mono Lake) some help? We need your letter-writing hands, stamp-licking tongues, phone-dialing fingers, and enthusiastic support. We need volunteers to visit legislators, staff booths, organize events, and hawk T-shirts! Plus it's satisfying to help the ol' lake. Give Tom Cassidy a call (213 477-8229), and become a monomaniacal grass-root.

p.s. More and more stores in the Los Angeles area (and state-wide) are selling our Mono Lake posters, postcards, coloring books and T-shirts. This is a fine way to spread the word about Mono's plight while raising funds for the cause. If you're an Angeleno, stop by Adventure 16, The Famous Department Store, Los Angeles County Museum of Natural History, Los Angeles Audubon House, or Westridge Mountaineering, and thank our friends for stocking Mono Lake merchandise. Wherever you live, why not don your Mono T-shirt and ask your local merchants to carry the Mono Lake line? Our Lee Vining headquarters will be delighted to send ordering information.

p.p.s. Special thanks to our Los Angeles area volunteers and friends: Steve Cunha, Jean Dale, Jackie Dingfelder, Simone Feinman, JoAnne Fleischer, Edith Gaines, Corliss Karasov, Michael Kinney, Ed Krause, Nancy Quiggle, Dr. Florence Sharp and Jeff Zuckerman.

Mono Lake Tufa National Monument, State Reserve Proposed

April 17, 1980

Dear Mono Lake,
I have a suggestion
that might help.
Why don't we make
Mono Lake into
a national monument?
I think that the
beauty of it would
attract alot of people
coming down south of
Yosemite. It also
would stop the people
pumping water out!



your friend,
Marla Garmine

Mono Lake's delicate tufa towers are in danger of being loved to dust. In August 1980, the US Bureau of Land Management reported that "an unprecedented increase of recreation use . . . has created numerous impacts to the tufa formations as evidenced by felled tufa formations, char-stained tufa resulting from campfires, loss of vegetation due to site compaction, etc."

To protect Mono's tufa, volcanos and other unique shoreline features, the Mono Lake Committee is urging the establishment of a Mono Lake Tufa National Monument and State Reserve. Such action will not save the lake or affect the lake level question one way or the other. But it will afford the tufa the protection they deserve.

In November the Mono Lake Tufa National Monument idea was submitted to President Carter. Included in the proposal were Panum Crater, Black Point, the northern, eastern and southern shores of the lake, and Negit and Paoha Islands. Since these lands were already in federal ownership, Carter had the power to establish the monument without congressional approval. Over the past 25 years presidents have declared 94 national monuments, including Death Valley and Joshua Tree. Surprisingly, despite bipartisan support from throughout California, the National Park Service opposed the

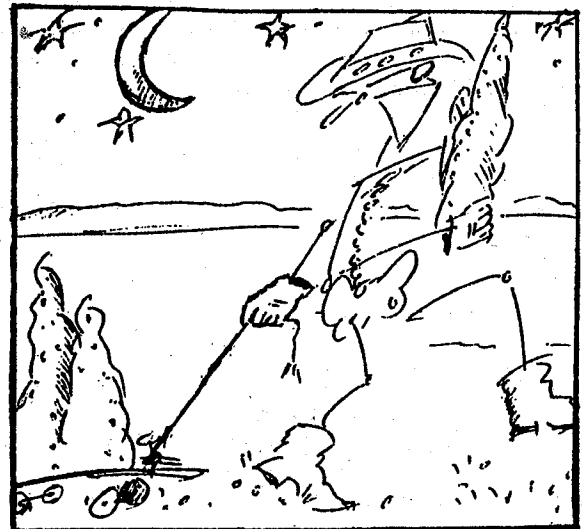
proposal. They wanted nothing to do with Mono until the water issue was settled. Less surprisingly, the Los Angeles mayor's office also opposed the monument. As a result, Carter left office without taking action.

Hopes for establishing a Mono Lake Tufa National Monument now rest with Congress and the new administration.

Chances are better for the Mono Lake Tufa State Reserve. On December 19, 1980 State Senator John Garamendi introduced legislation (SB 83) to set aside state-owned portions of the lakebed lying at or below an elevation of 6,417 feet, including the most spectacular and fragile tufa formations.

"The primary purpose of this bill," said Garamendi, "is to protect Mono Lake's beautiful and unique tufa formations . . . While I realize that this bill will do nothing to put more water into the lake itself, it is my hope that the establishment of a State Reserve will help foster greater public attention on the entire Mono Lake situation."

Garamendi's bill will also make it a crime to molest a tufa. "Disturbance, defacement, displacement, or other interference with any tufa" could cost \$500 and six months in the county jail.



Emily Hart

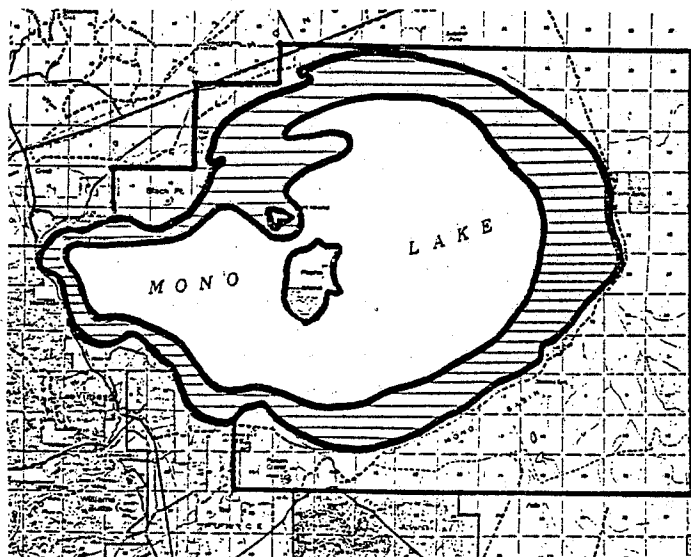
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WHAT YOU CAN DO: Urge your state senators and assemblymen to support SB 83 (while reminding them that we also need to save Mono Lake!). Ask your Congressman, Secretary of the Interior Watt and President Reagan to support a Mono Lake Tufa National Monument.

Let's also thank our supporters. If your elected representatives are among the following 30 California Assemblyman and 21 State Senators who supported the national monument proposal, please let them know of your approval:

ASSEMBLYMEN: Art Agnos, Tom Bates, Howard Berman, Doug Bosco, Willie Brown, Peter Chacon, Jim Costa, Wadie Deddah, Sam Farr, William Filante, Terry Goggin, Leroy Greene, Carol Hallett, Tom Hannigan, Elihu Harris, Gary Hart, Charles Imbrecht, Lawrence Kapiloff, Mel Levine, Bill Lockyer, Allister McAllister, Lew McCarthy, Jean Moorhead, Louis Papan, Patrick Johnston, Herschel Rosenthal, John Thurman, Norman Waters, Chet Wray.
STATE SENATORS: Alfred Alquist, Daniel Boatwright, William Campbell, Ed Davis, Ralph Dills, John Garamendi, Ray Johnson, Barry Keene, Ken Maddy, Milton Marks, Henry Mello, Jim Nielson, Nicholas Petris, Robert Presley, Omar Rains, David Roberti, Ollie Speraw, Alan Steroly, Walter Stern, Rose Ann Vuich, Diane Watson.

TUFA CHEERS FOR State Senator John Garamendi and staffers Mike Magliari and Sammy, Peggy Lee, Betty and Maria of Assemblyman Norman Waters' staff, and Congressman Norman Shumway and staffers Peter Thomas and Charles Jones for helping to marshal legislative support for the national monument.



Boundaries of proposed Mono Lake Tufa National Monument (northern, eastern and southern shores, Black Point, Panum Crater, Negit and Paoha Island) and Mono Lake Tufa State Preserve (exposed lakebottom; shown with crosshatching). Privately owned lands within these boundaries would be excluded.

Resurrecting The Task Force Plan

Remember the Interagency Mono Lake Task Force chaired by the California Department of Water Resources? In December 1979 they recommended a plan to restore Mono Lake to its 1970 elevation of 6,388 feet. The plan would have cost Los Angeles residents only 54¢ per person per year. It would have saved the net energy equivalent of about 200,000 barrels of oil per year. Moreover it would have required no change in water-use habits and no replacement water supplies. How? By recycling wastewater for use in industry and irrigation, and by installing modern high efficiency bathroom, kitchen and laundry fixtures in homes.

Last year intensive lobbying by the DWP and water development interests defeated the Task Force Plan in the state legislature. The story this year will likely be the same.

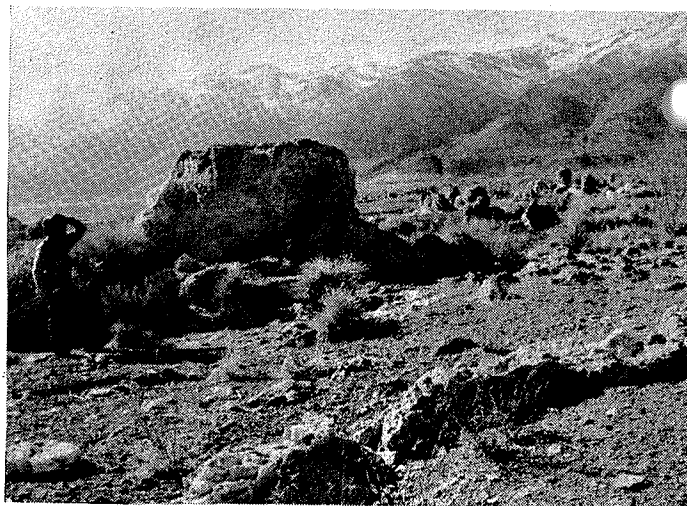
Through distortions and half-truths, the DWP has been all too successful in discrediting the Task Force and minimizing the seriousness of Mono's plight. Here are just two examples: DWP: To achieve the needed conservation, L.A. would have to enforce strict water rationing every year . . .

MLC: Since the needed conservation would be achieved mechanically, i.e. through wastewater recycling and more efficient plumbing, it would not require rationing or any change at all in user habits.

DWP: There is no immediate threat to the Mono Lake environment . . .

MLC: Alkali dust already violates state and federal air quality standards and threatens human health far from the lake itself. The Negit Island seagull rookery has already been abandoned. Salt build-up could poison the lake's ecosystem at any time.

Heretofore the credibility and clout of DWP have eclipsed that of scientists and MLC'ers. But truth is a powerful weapon. If we only persevere, the Task Force Plan and Mono Lake will rise again!



Ardent monophiles will recall this scene (above) as the one featured on the cover of *Newsletter 3:2*. Only one small difference—100 years after Israel C. Russell drifted by this spot in his rowboat (below), the lake seems to have been put in drydock!



Fundraising for Lawsuit

Thank You, California Audubon Societies

The National Audubon Society has pledged \$98,000 to carry on the Audubon/MLC/Friend of the Earth lawsuit to protect Mono Lake, but most of the funds will have to be raised by California chapters. The Los Angeles Audubon Society has already donated \$10,000, and the Santa Clara Valley Audubon Society (San Jose area) has pledged \$12,000. Many other societies are planning Mono Lake fundraising drives.

Audubon's generosity frees MLC funds for use in equally critical educational and political campaigns.

Audubon deserves our gratitude and support. If you are not already a member, why not join a local chapter and help them work on Mono's behalf? Membership includes subscription to Audubon Magazine. For information, write: National Audubon Society - Western Regional Office, 555 Audubon Place, Sacramento, CA 95825. Let them know you want to help your local chapter save Mono Lake.

The 1980 Water Year

DWP Takes All It Can

Between October 1, 1979 and September 30, 1980 (1980 water year), abundant water production in all the watersheds supplying Los Angeles gave DWP the flexibility to reduce exports from the Mono Basin and Owens Valley. Instead they exported the second greatest water year total ever.

Precipitation during the 1980 water year averaged about 150% above normal. Grant Lake Reservoir, where DWP collects water diverted from Mono's streams, spilled over for the first time in 11 years. As a result lower Rush Creek flooded, damaging structures and destroying county road crossings.

The response of DWP to the plentiful water supply was to divert and export the maximum amount possible within the constraints imposed by the hydraulics of the aqueduct system. The two barrels of the aqueduct were kept close to capacity. About 500,000 acre-feet of water were shunted south. Altogether DWP prevented about 120,000 acre-feet from reaching Mono Lake through diversions, reservoir storage and flood irrigation of DWP-owned pasture land.

Thanks to nature's generosity, DWP was forced to let about 58,000 acre-feet flow into Mono Lake. There was no place in the aqueduct system to use the water. This inflow, combined with natural inflow from the rest of the basin, more than balanced evaporative losses. As a consequence, the lake now stands several inches higher than it did in January 1980.

If DWP had been generous, however, Mono would have risen two feet and covered the Negit Island landbridge. They could have been. Surplus water was readily available from local groundwater basins, the Colorado River and the State Water Project, while local runoff flowed down the cement-lined LA River into the sea.



Increased Grazing For Mono Basin

The Bureau of Land Management, Bakersfield District office, has released the draft Environmental Impact Statement on its proposed Grazing Management plan for the Benton-Owens Valley Planning Units, which includes the southern half of the Mono Basin.

In the Mono Lake area, the BLM propose actions which would:

1. Increase livestock use of the south shore of Mono Lake by 65%, from 2,000 to nearly 3,500 sheep.
2. Construct four new pipelines to supply water to livestock.
3. Implement prescribed burning to improve range conditions.
4. Remove existing fences along the eastern perimeter of the Mono Basin.
5. Chemically spray extensive areas of natural shrub-steppe vegetation in the vicinity of Granite Mountain and in Adobe Valley.

As far as the Mono Basin is concerned, the draft statement proposes to do nothing to alleviate pressure in the already overgrazed lands within the area. Of the 38,000 Mono Basin acres to be allotted, only 16,000 (42%) are presently classed as in good range condition. There is no ecological evidence presented in the draft to justify the proposed increases in animal numbers, which is particularly disturbing since: 1) the area is presently overgrazed, with the associated lack of native grasses and forbs, and poor shrub reproduction, 2) the area is likely to undergo significant loss of productivity due to desertification associated with alkali-dust storms from the relict bed of Mono Lake, 3) conflicts with recreational use will continue to grow in the next few years throughout the Basin as public awareness of the Mono Lake issue increases, and 4) increased human and animal presence will increase trespass destruction of tufa and spring habitats on the shore of Mono Lake.

The plan also fails to recognize the potential impacts of an increase in sheep numbers on the endemic Mono Pumice Lupine (*Lupinus duranii*) and the Mono Meadow Buckwheat (*Eriogonum amplexum*). In areas where sheep presently graze Mono Lupine stands, old plants are trampled, and in most years, the seed crop is eaten. Mono Buckwheat habitat, moist areas about streams and seeps, will be increasingly disturbed, without appropriate management to insure that neither of these species will decrease in abundance.

The MLC has written to the BLM voicing the above concerns. While the overall proposed action will do much to bring grazing in line with the carrying capacity of the vegetation in the Eastern Sierra, the Mono Basin would be adversely impacted unless the proposed action is modified.

Mono Weather Station Established

The State Department of Water Resources and the Bureau of Land Management have established a major weather station on the NE shore of Mono Lake. The instruments at this site record rainfall, temperature, wind, evaporation and solar radiation. Four additional evaporation stations have been established about the lake. The weather data collected from this program will be useful for modeling the hydrology of Mono Lake, and will improve somewhat the present predictions of its fate should present water diversions remain unchanged. Information on the data collected is available from DWR at Box 6598, Los Angeles, CA 90055.

DWP \$167,000 Research Effort A Bargain?

The August/September 1980 issue of *Intake*, the Los Angeles Department of Water and Power magazine, features several articles on research projects underway at Mono Lake. The DWP is, in their words, "moving ahead with a \$167,000 environmental research program" mandated by the Interagency Task Force on Mono Lake. The question is: where is this research taking them and will they get their money's worth?

By normal standards of the scientific research community, such an amount of funding would cover the cost of extensive studies that would help provide answers to many of the important ecological questions surrounding the debate over Mono's future: salinity effects, hydrology, alkali-dust, *et cetera*. Will the DWP research effort provide some of these needed answers? Again, by professional standards, the answer is probably not.

For one thing, most of DWP's research work is being done by their own employees—hardly impetus for unbiased scholarship. Furthermore, DWP's contracts with academic or private researchers stipulate that all data collected under their sponsorship are proprietary, and will not be made public without their approval—virtually assuring suppression of sensitive results.

Mono Lake, and the fate of its ecosystem, is, unfortunately at this point, still very uncertain. When salinity will kill the lake's web of life is unknown. That it will occur is certain. To investigate this problem in a planned, forthright and timely manner would require neither a technologically novel research approach nor an astronomically expensive effort. All that would be required is the concern that appropriate hypotheses be subject to objective test. In this regard, DWP's contrived research program does little to soothe Mono's informational ululations.

Groundwater Ordinance

Owens Valley Damns DWP's Pumps

In the November election, Owens Valley residents voted three to one for an ordinance to regulate groundwater pumping. The ordinance is targeted at DWP, whose unbridled extraction of groundwater is killing vegetation and turning the valley into a dustbowl.

The ordinance is the latest salvo in the "Owens Valley water war," which began with the construction of the Los Angeles Aqueduct early in the century. During the 1920s, as DWP surreptitiously acquired water rights, frustrated farmers blew up the aqueduct 17 times. But the big city triumphed, leaving a legacy of abandoned homes and barns, dead trees, weed-grown fields, empty ditches and resentment.

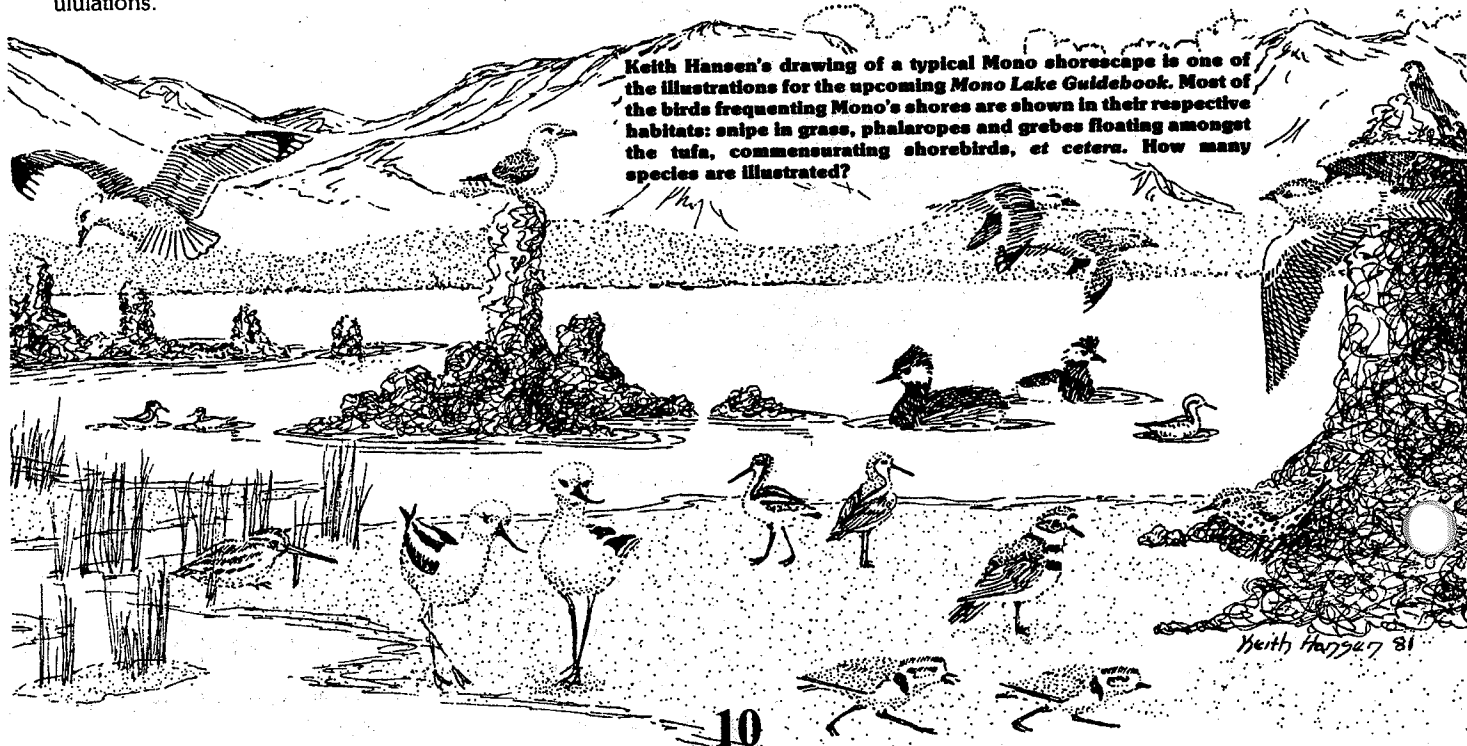
Until 1970, things were relatively peaceful. Then the truce ended with the construction of another aqueduct. To fill the "second barrel," Mono diversions were doubled and Owens groundwater pumping was increased. In 1972 Inyo County went to court, charging DWP with threatening the local environment. They've been there ever since.

The groundwater ordinance gives Inyo County an effective new weapon, provided they can weather legal challenges. DWP has already filed suit. With county budgets already over-committed, Inyo can barely afford another prolonged lawsuit. But neither can they afford the browning of the Owens Valley.

Clean Out Your Garage . . . Improve Our Office

Can you believe that we secretaries have to sit on phone books in order to reach the typewriter? It's true! We need real secretary typing chairs, not common substitutes.

Keith Hansen's drawing of a typical Mono shorescape is one of the illustrations for the upcoming *Mono Lake Guidebook*. Most of the birds frequenting Mono's shores are shown in their respective habitats: snipe in grass, phalaropes and grebes floating amongst the tufa, commensurating shorebirds, *et cetera*. How many species are illustrated?



Bird-A-Thon A Big Success

Tufa cheers to everyone who helped raise over \$40,000 for Mono Lake and the Point Reyes Bird Observatory on the 1980 Bird-A-Thon. Flocks of enthusiastic birdwatchers, 185 in all, were out counting on September 27. Ten counters raised over \$1,000 each!

Jane Church, birding in Virginia, raised over \$2,500 to win the grand prize for the most money raised (PRBO's Bob Stewart and MLC's Dave Gaines were not eligible for prizes). Ron LeValley, Bill Clow, Linda Doerflinger and Robert McKernan tied for highest species counts at 160 each.

The birds cooperated as well. The Farallon Island bird-athoners spotted a Dusky Warbler, the first time this Asian species has ever been observed in North America outside Alaska!

PRBO/MONO LAKE BIRD-ATHON TOP COUNTERS

	Species Seen	Total Pledges
David Gaines	144	\$5,000
Bob Stewart/Diane Williams	144	4,200
Jane Church	98	2,500
Lynnie Stenzel/Gary Page	146	2,030
Rich Stallcup	148	1,500
Warren Bray	125	1,250
Dave DeSante	149	1,250
Bill Clow	160	1,160
Ron LeValley	160	1,120
Harriet Huber	138	1,000

Beekeepers for Mono

The summer of 1980 was the second year in which beekeepers from the Davis area have established temporary apiaries in the Mono Basin. Proceeds from the sale of honey were donated to the Mono Lake Committee.

Nectar flow in the Basin is generally good, and is locally excellent from May through October in the area west of Mono Lake, where small streams from melting snowfields green wet meadows and moisten the surrounding shrub-steppe. The typical early floral progression of major nectar sources is Wild Peach (*Prunus andersonii*), Wild Rose (*Rosa andersonii*) Mule Ears (*Wyethia mollis*), and Meadow Clover (*Trifolium monanthum*). Hardworking bees are especially attracted to clover blossoms which flourish in artificially irrigated sheep pasture. Interestingly, pollen rich Bitterbrush (*Purshia tridentata*) is not visited by bees.

Late in the season, Rabbitbrush (*Crysothamnus*, 4 taxa) and Big Sagebrush (*Artemisia tridentata tridentata*) are the major honey plants. Their nectar is transformed in the hive into a pungently flavored, dark honey which was preferred by tasters and buyers at the Davis Farmer's Market in 1979. The earlier honey is lighter and more "flowery" in flavor and aroma, probably due to a higher percentage of clover nectar and a greater diversity of wildflower sources.

Mono honey has been admired by connoisseurs and may help raise the public consciousness about the plight of Mono Lake.

Evan Sugden

At Mono Lake

Summer Volunteers, Interns Needed

We need help staffing the Mono Lake Information Center, conducting tours, and infecting summer visitors with monomania! Last year over 30,000 people from all over the world learned of Mono's plight at our Information Center in Lee Vining. Over a thousand attended our free weekend tours. This year, let's reach thousands more.

Volunteers have been the heart of our summer programs in the past, and will be this year too. If you would like to volunteer, please let us know the dates and length of time you will be available.

In addition to volunteers, we are filling three full-time summer intern positions. The interns will assist us in conducting our expanded visitor programs. They will not be paid, but will receive room and board. Upon arrival they will attend a one-week orientation and training workshop covering the geology, biology, history and future of Mono Lake as well as their connection with wasteful water use.

Interns will also receive pointers on conducting tours and slide programs, and on communicating with the public.

If you (or someone you know) would like to apply for a summer internship, please send a resume to us in Lee Vining.



Wanted: Northern California Coordinator

Our Northern California Coordinator position is vacant once again. Personal problems forced Richard Newberry to resign, so we are now seeking a dedicated hardworking monophile with a fine disdain for monetary reward (we do pay a subsistence salary). We need someone who is willing to work overtime catalyzing volunteers for publicity, fund-raising and political action throughout Northern California, with emphasis on the San Francisco Bay area. For example, the coordinator's job entails distributing leaflets and displays, organizing awareness and fund-raising events, lobbying local legislators, and coordinating with other conservation groups. In addition there is prosaic leg-work, such as picking up printing, shipping leaflets, etc.

If you (or someone you know) would like to apply, please contact Grace deLaet in San Francisco (415 398-6744) or the Mono Lake Committee in Lee Vining (714 647-6386). We would also appreciate a written resume of your experience, qualifications and reasons for applying.

Legal Assistance Sought

Occasionally we need to consult with a lawyer knowledgeable in nonprofit (C-4) type corporation and tax law. Our questions stem from tax forms, new laws, contracts, insurance policies, and board of directors' business. We need professional advice, but cannot afford to keep someone on a normal retainer for these services.

If you can help us, call or write Sally Judy, MLC corporate secretary, at our Lee Vining address.

Mono Basin Frost Fogs - Poconip

The Mono Basin Naturalist

by Kutsabe

Those conditions which favor air-stagnation over our seething metropolitan areas also favor the formation of valley fogs, or (in California) "tule" fogs—so called from their simple juxtaposition with lowland marshes. In the Mono Basin, such fogs are known by their Paiute name *poconip*.

High pressure systems, which often dominate winter weather on the western portion of the continent for weeks on end, are the chief factor in valley fog formation—they effectively restrict zonal circulation. Wind no blow. In the Mono Basin, a particular kind of valley fog forms in the dead of winter when such capping high pressure occurs in conjunction with snow cover and relatively cold air temperatures. The trapped bowl of air directly over Mono Lake quickly humidifies, gaining moisture from the relatively warm, unfrozen lake, sublimating snow and the many vaporous hot springs. Fog forms.

Poconip fogs hug the sides of the basin as sunny skies outline the snowy peaks above; while under the blanket of frigid mist, temperatures vary little from night to day—hovering well below freezing.

The striking nature of poconip fogs are not their penetrating chill or impenetrable density, but the exquisite variety of rime crystals that coat every object thusly immersed. Day after calm day, riming intensifies, until each hip of rose, each twig of willow, each pinyon cone is beset with a multitude of poconip crystals fully an inch long. A million needles stabbing the frigid bleakness. Surfaces for communication between physical and living media.

Some plants in foggy landscapes reap greater benefit from their saturated surroundings than nearby neighbors. A particular intricacy of branch or twig architecture, shape or display of foliage, or exposure on a particular site can favor greater accumulation of fog droplets, and hence greater "re-precipitation," beneath a particular plant.

Poconip "drip"—the deposition and accumulation of rime crystals—is similarly variable. During poconip conditions this winter (December 12-16, 1980), as much as .005 inches per day fell beneath deciduous Black Cottonwood (*Populus trichocarpa*). Nearby sagebrush stands, although heavily coated, accumulated less than one-tenth that amount.

To be sure, it cannot be said that poconip "drip" is a significant portion of the plant's water budget, but the process does redistribute measurable amounts of moisture within the Mono Basin.



TO ALL OUR MEMBERS WHO RENEWED IN THE LAST THREE MONTHS OF 1980, A BIG KISS.

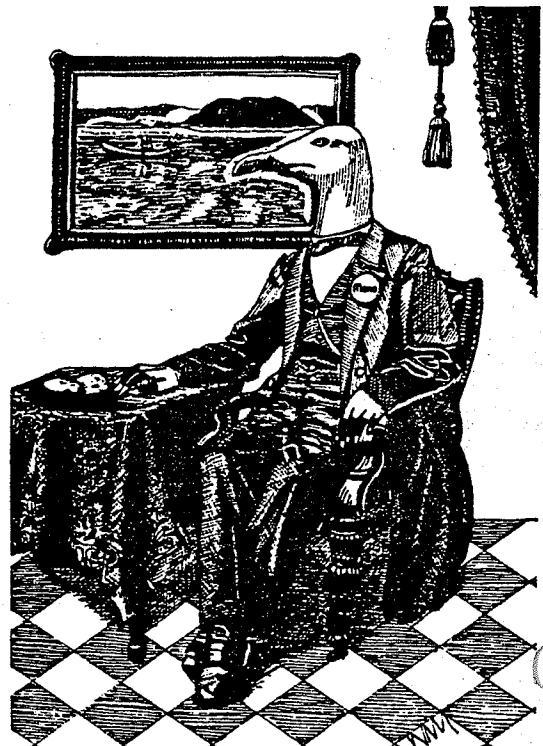
SUPER MONOMANIACS: Anne C. Getty, Gwin Follis Foundation,

MONOPHILE: Mr. and Mrs. Lewis Dale, William Loughlin, Carol and Clay Panlaqui, Renee and Bradley Sonderman, Stephen Steinke

PATRONS: Dennis and Susan Criswell, Grace and Rick de Laet, Liane Enkelis, Kent Fickett, Elizabeth Fields, Dick Gaines, Louise Gooding, Mary Hallesy, Mort and Edith Gaines, Margaret Meek, Bruce Moorad, Cynthia Moren, Audrey Pertl

SPONSORS: Michael Bedwell, Steve de Laet, David Devine, Mrs. B.K. Holbrook, Mrs. Jordan, Ralph Kunin, Enid Pearson, George Peyton, Jr., Jeffrey Schaeffer, Dan Schulz, Margaret Wedertz

REGULARS: Helen Alfredson, Walt and Rebecca Anderson, Edward and Evie Ashburn, Bernice Barnes, Sue Beereboom, Robert Carpenter, Marie Anne Erickson, Ann Follis, Alan Fong, Fames French, Geoff Geupel, Gary Gordon, Peggy Gray, Eleanor Hansen, Jim Hitchcock, Abraham Hoffman, Douglas Johnson, J. Keller, Mona Knight, Jim Langer, Lorraine Lelouarn, Marion and Robert Mackey, Nancy Main, Richard McCutchen, Alan J. Morris, Alice Ocutt, Gerald and Elizabeth Peszek, Mrs. Richard Peterson, Marsh Pitman, Karon Rule, Kenneth Sablik, Leslie Smith, Peggy Stebbins, The Sitzes, Lloyd Tevis, Andi Tice, Evelyn Tompkins, Sharon Whisler, Gregory Wolley



Father Gull?, a line-drawing by Will Dunne, is just one of the many contributions artists are making to our awareness of the Mono Lake situation—many quite unbeknown to us at MLC. Keem 'em coming!

1980 Mono Lake Christmas Bird Count

This winter's annual Christmas Bird Count was held at Mono Lake on December 31, 1980, New Year's Eve. Due to the unusually dry conditions, observers were able to cover more variety of habitat this year than ever before, ranging from lakeshore to timberline. The dozen or so hardy birdwatchers participating in this year's census were able to count only 1,051 individual birds—but they noted 69 species.

Notable differences between this year's count and previous sightings include: fewer Eared Grebes than previous years, large flocks of Pinyon Jays and Cassins Finches and a single Chesnut-collared Longspur.

Species	Year			
	'77	'78	'79	'80
Eared Grebe	43	44	17,112	4
Great Blue Heron	2	1	3	4
swan sp.	-	4*	-	-
Canada Goose	12*	-	-	14
Mallard	1	-	-	-
Pintail	5	-	1	1
Green-winged Teal	-	-	110	5
Common Goldeneye	1	1	-	-
Bufflehead	1	-	-	-
Ruddy Duck	5	-	125	11
Common Merganser	-	3*	-	-
duck sp.	3	-	-	-
hawk	-	1a	-	2a,i
Sharp-shinned Hawk	1	1	1a	-
Cooper's Hawk	4	1	4	1i
Accipiter sp.	1	-	1	1a
Red-tailed Hawk	11	10	8	28
Rough-legged Hawk	16	4	-	14
Buteo sp.	1	-	-	-
Bald Eagle	2a,i	-	1a	-
Golden Eagle	-	-	-	3a,i
Marsh Hawk	1	3	3	7
Prairie Falcon	1	-	-	1
Merlin	2	-	1	-
American Kestrel	2	-	1	1
California Quail	1	-	-	15
Mountain Quail	1	-	-	-
quail sp.	-	-	5*	-
Blue Grouse	-	-	-	4
Chukar	4	-	-	-
American Coot	10	4	54	145
Killdeer	14	9	7	13
Common Snipe	3	6	3	11
Spotted Sandpiper	4	-	-	-
Least Sandpiper	43	2	44	21
sandpiper sp.	-	3	-	3
California Gull	-	-	1	100
Ring-billed Gull	-	3a	1	-
gull sp.	1	-	2	-
Great Horned Owl	5	2	-	2
Long-eared Owl	3	-	-	-
Belted Kingfisher	1	-	1*	-
Common (Red-shafted) Flicker	29	2	3	19
White-breasted Sapsucker	1	-	2	-
Hairy Woodpecker	13	3	6	13
Downy Woodpecker	9	1	5	2
White-headed woodpecker	2	-	-	-

Horned Lark	19	-	12	-
Steller's Jay	106	5	37	72
Scrub Jay	-	-	6	2
Pinyon Jay	250	150	1	300
Black-billed Magpie	60	54	59	64
Common Raven	10	6	27	8
Common Crow	-	-	-	2
Clark's Nutcracker	76	80	19	143
Mountain Chickadee	88	75	132	150
Plain Titmouse	2	-	-	-
Bushtit	154	2*	60	54
White-breasted Nuthatch	14	3	11	11
Red-breasted Nuthatch	8	4	5	-
Pygmy Nuthatch	9	6	12	18
Brown Creeper	8	6	7	22
Dipper	2	3	-	2
Bewick's Wren	4	-	3	15
Long-billed Marsh Wren	4	2	4	14
Canyon Wren	-	1	1	2
Winter Wren	-	-	-	4
wren sp.	-	2	-	-
Mockingbird	1	-	1	-
Sage Thrasher	-	-	-	1
American Robin	370	-	24	7
Varied Thrush	4	-	-	-
Hermit Thrush	1	-	-	-
Mountain Bluebird	25	-	-	4
Townsend's Solitaire	34	7	18	3
Golden-crowned Kinglet	-	30	1*	18
Ruby-crowned Kinglet	1	1	-	8
Water Pipit	42	12	20	69
Northern Shrike	6	-	1	1
Loggerhead Shrike	4	-	-	-
shrike sp.	2	-	-	-
Starling	62	5	60	60
Yellow-rumped Warbler	-	1*	-	1
Yellow-rumped (Myrtle) Warbler	-	-	-	1
House Sparrow	60	4	20	38
Western Meadowlark	16	-	3	-
Red-winged Blackbird	-	-	3	12
Rusty blackbird	-	-	1	-
Brewer's Blackbird	40	8	1*	21
Cassin's Finch	-	3	-	214
finch sp.	-	-	2	2
American Goldfinch	-	-	9	3
goldfinch sp.	4	-	-	-
Pine Grosbeak	3	-	-	4
Red Crossbill	17	-	-	-
Rufous-sided Towhee	9	-	7	4
Dark-eyed (Slate) Junco	5	2	8	8
Dark-eyed (Oregon) Junco	168	35	156	47
junco sp.	-	-	-	45
Savannah Sparrow	-	-	-	2
Tree Sparrow	-	-	3	6
White-crowned Sparrow	1	1*	16	9
Golden-crowned Sparrow	-	-	4	1
Fox Sparrow	1	-	-	-
Lincon's Sparrow	-	-	-	1
Swamp Sparrow	-	2	1	-
Song Sparrow	25	6	10	25
Chesnut-collared Longspur	-	-	-	1

a = adult
i = immature

Participants: Lois Angeles, Walter Diversions, R. D'Stroing, Moe Nolake, Curen Seesott, Lake Solo, Wright Soone, Day Vidgaines, Lee Vining, David Winkler, Compiler

The Secretary Speaks

Where to Send Mail, Oakland or Lee Vining?

As those of you who sent in mid-December Christmas gift orders to our Oakland return address found out, the Oakland P.O. box is the vestigial remains of our primeval origins. We elves now work in Lee Vining collecting, opening, processing and sending out mail seven days a week. But the Oakland P.O. box remains a necessity as I shall explain

With our beginnings centered around a generous printer/friend in Oakland, we naturally got a bulk-mail permit, mailing company and P.O. box address in that town. Although we slowly gravitated eastward, making Lee Vining our headquarters, the newsletters are still printed in the Bay Area. In order to use the Oakland bulk mail permit, we have to sport an accompanying Oakland return address. Post Office regulations.

But do not worry, mail is retrieved every week from the Oakland P.O. box and forwarded to Lee Vining. If you need speedy service, write to Lee Vining.

When To Renew?

Another source of perpetual confusion has been our informal system of renewals. In the beginning, we decided not to keep track of and send renewal notices to people who did not re-subscribe. There were several reasons for this. First, the more people who stayed informed about Mono Lake and wrote their legislators, the better. Second, our deck of address cards would have to be continually hand-sorted, updated and refilled. Third, there was the expense of mailing hundreds of renewal notices first class. So while we were young and inexperienced, we just asked you in each winter newsletter to send in your renewal in January of each year.

This method worked fairly well. But now that we have 3,000 members and debts to pay, we are getting more commercial. Since it costs us several dollars per member per year, we cannot afford to keep everyone on unless they contribute in some way (dollars or time/energy). You will now receive a renewal notice 11 months after you last contributed.

Much work has gone into this reorganization and it is not yet in operation. We had to retrieve each member's joining date by going back to the membership coupon or facsimile that you sent in. Everyone in this office was fired (or quit) several times while working out this system, including the boss for his inconsistent orders. Since this data processing was done by yawning humans, please bear with us if there is an error in your label.

The information on your mailing label, besides name and address, is 1) number of asterisks according to amount of donation, 2) date you last gave and 3) if you are a Letter Writer or something else. A capital 'P' stand for Permanent with the reason in small letters, eg., *as*, *sc*, *mlc*, or *m* means you are an Audubon Society, Sierra Club, Mono Lake Committee or media contact.

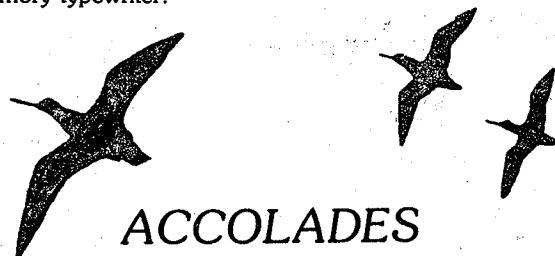
If anyone out there can donate computer arrangement for this mailing list and renewal system, we would be eternally grateful. Everything has to be redone anyway when the new nine digit zip code goes into effect.

Trading Mailing Lists

We are also turning to standard procedures in order to gain more members. To reach new people, we will be using the mailing lists of other environmental groups. In order to get these, we have to trade our list. We can delete some names before trading, so please write or call us immediately if you cannot tolerate receiving mail from other groups. I regret that we have to subject you to this, but it has survival value for our favorite lake.

We will only trade our list to an organization whose literature is rational. The present groups that we have traded with are: Save the Redwoods League, League of Conservation Voters, American Ornithological Union, Defenders of Wildlife, and the Point Reyes Bird Observatory.

A NEW SECRETARY SPEAKS Emily Hart arrived in Lee Vining, June 10, 1980 and she just never left. She has risen rapidly through the ranks to her present spot before the memory typewriter.



The little band in Lee Vining will now strike up a cheery thank you with many choruses. The type before you was set by Laurie Jorden. She worked under cover of darkness in the offices of the Mammoth Lakes District Review to give us more words per page. The other great ladies in this issue are Ann Getty who gave \$5,000 for Christmas, Barbara Horton who continues the search for grants and manages the Los Angeles Education Campaign, and Lady Jill Mueller who painted Mono Lake on the front of the VC in Lee Vining. We might ask her to paint the lake on a billboard if she will.

We created some good-sized piles of paper on a few desks in the nation's capitol thanks to valiant mailgramers statewide. They thought of us in Washington. As the band plays the bottom line, we sing the praises of all those who undertook a fund raiser. From A to Z they are: the Campolindo High School Ecology Club - membership as follows - Teri Bartelero, Carrie Cook, Linda Deanovic, Tory Griffith, Brad Kisner, Debbie Nash, Jodi Nash, Jay Sager, Marion Sherrer, Benjamin Steinzig, Terry Stevenson, Thomas Taylor and John Villandre; Jean Dale and friends, the Great Pacific Ironworks, Mary Lou Judy, Suzanne Luther (who showed us all you can still do it selling soap), The Naturalist, George Peyton, Mary Scully, Florence Sharp and Sopenche. Great Assets, Everyone!

We also thank Michael Beaucage for a complementary copy of his five-minute Mono film (copies are available for purchase ... contact Michael at Box 7108, Berkeley, CA 94707).

Many days have been Christmas day here. We wish it were a White Christmas, though. New shots of the lake arrived from Betty Kenneday, Larry Matthews, Ian Tait, Jeff Share, Dennis Studer (the masked man), and the fathers of our deluxe postcards Michael Dressler, Bill Neill and Jim Stroup. Bevin Smith and the Elsa Wild Animal Appeal helped by contacting a selection of their members.

Don Dunn donated a dozen chairs we hope to use in the new VC patio this summer. Are sun shades or umbrellas available? Darlene Bennett also donated chairs and something we affectionately call the vault. The Pfeifers at the Vista Motel called with two rugs and a convenient cabinet. This author personally testifies to the ample size and weight of said rugs. Sara Burnaby sold a great many calendars on the East Side. Dave Willis put in some good words for the Monument Proposal in Washington and a lot of people sent a lot of nice cards at Christmas. And Mark Ross really did work behind the counter.

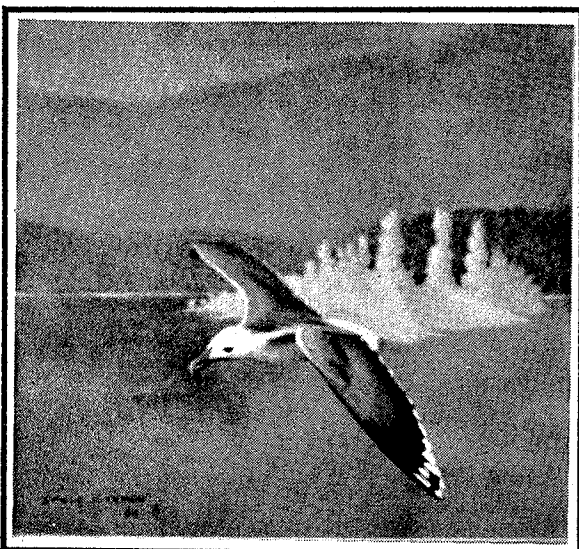
A final short song is dedicated to those in the Lee Vining PO who remain friendly despite all.

ANNUAL FINANCIAL STATEMENT 1980

INCOME	QUARTERS				1980	% of
	First	Second	Third	Fourth	Total	Total
Retail Sales	925	5,846	25,734	11,496	44,001	35.9
Wholesale Sales	0	1,638	3,117	1,316	6,071	4.9
Donations & Memberships	5,391	5,210	25,833	10,524	46,958	38.3
National Audubon Society	6,000	6,000	0	7,500	19,500	15.9
Loans	0	0	0	6,200	6,200	5.9
TOTALS	\$12,316	\$18,694	\$4,684	\$37,036	122,730	100%
EXPENDITURES						
Cost of Resale Merchandise	0	2,281	24,273	12,754	39,308	31.9
Office Expenses & Supplies	1,370	1,754	4,225	4,178	11,527	9.4
Postage	417	465	1,817	1,001	3,700	3.0
Telephone	591	748	1,278	1,257	3,874	3.2
Printing	2,524	3,931	1,317	3,211	10,983	8.9
Photography	216	124	279	551	1,172	1.0
Rent & Utilities	172	562	1,860	2,068	4,662	3.8
Contracts	900	170	3,000	3,400	7,470	6.0
Payroll	3,994	4,723	6,742	6,717	22,176	18.0
Payroll Tax	433	305	782	1,045	2,565	2.1
Sales Tax	121	74	331	1,457	1,983	1.6
Travel Expenses	982	380	2,943	801	5,106	4.1
Grants	20	318	598	0	936	.8
Loan Payments	500	0	5,803	0	6,303	5.1
Lawsuit	0	0	500	0	500	.4
Fund Raising Costs	0	0	0	784	784	.6
Misc.	12	0	0	69	81	.1
TOTALS	\$12,252	\$15,835	\$55,748	\$39,295	123,130	100%
PROFIT (LOSS)	(64)	2,859	(1,064)	(2,259)	(528)	
ASSETS					3,964	
LIABILITIES - Loan					6,200	
NET WORTH					(2,236)	
FUND BALANCE					(2,764)	

NEWSLETTER'S NEW LOOK

This issue of the MLC newsletter is going under a new guise, and the editors hope to continue to make improvements. Printing on newsprint gives us the ability to produce an order magnitude more copies at the same cost, thus facilitating our hopes for increasing membership and support through direct mail solicitation.



Raffle of Mono Painting To Benefit Lake

Yosemite wildlife artist Steve Hickman has donated this hauntingly beautiful color painting of a California Gull to the Mono Lake Committee.

To raise funds to save the lake, the MLC is raffling Steve's painting. Raffle tickets are available for \$1 apiece and six for \$5 from the Mono Lake Committee. Ticket holders need not be present to win. The drawing for the prize will be held on July 4 in Lee Vining.

About the artist: As the Tuolumne Meadows ranger in Yosemite National Park, Steve Hickman appreciates the close relationship between the Sierra Nevada and Mono Lake. A native of Colorado, he has always enjoyed a personal affinity with wildlife of the American West. At Colorado State University, he majored in Wildlife Management and minored in art. While living in British Columbia he began sketching wildlife and developed the desire to become a serious artist. Steve is currently studying under Mariposa, California artist Earl Rogers.

Join us! Mono Lake Needs Your Help

The Mono Lake Committee is a not-for-profit citizen's group dedicated to the preservation of Mono and other Great Basin lakes, and to the wise use of our water and energy resources.

- ☐ I would like to join the Mono Lake Committee.
☐ Please renew my membership

Name _____

Mailing address _____

City _____ State _____ ZIP _____

Phone Area Code _____

IMPORTANT: If you are renewing and have changed your address during the past year, please include your OLD ZIP CODE here: _____

HERE IS MY CONTRIBUTION FOR:

- | | |
|--|---|
| <input type="checkbox"/> \$10 Regular Membership | <input type="checkbox"/> \$50 Patron |
| <input type="checkbox"/> \$5 "I Can't Afford More" Membership | <input type="checkbox"/> \$500 or more Monomaniac |
| <input type="checkbox"/> \$25 Sponsor | |
| <input type="checkbox"/> \$100 Monophile | |
| <input type="checkbox"/> I am willing to write letters! | |
| <input type="checkbox"/> I am willing to visit my legislators for the cause! | |
| <input type="checkbox"/> I would like to volunteer my time, please call! | |

MAKE CHECKS PAYABLE TO:
Mono Lake Committee

Post Office Box 29 Lee Vining, California 93541

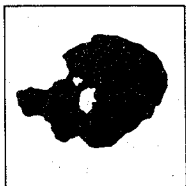
CONTRIBUTIONS TO THE MONO LAKE COMMITTEE ARE NOT TAX DEDUCTIBLE

However, you can make a tax deductible contribution for education, research and legal expenses by making your check payable to:

National Audubon Society/Mono Lake Fund

OR

Friends of the Earth Foundation/Mono Lake Fund



**The
Mono Lake
Committee**

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