

Spring

2000

MONO LAKE NEWSLETTER

Special Bird Issue

 Tufa State Reserve Update

Mono Lake Newsletter

Spring 2000
Volume 22, Number 4



MONO LAKE COMMITTEE

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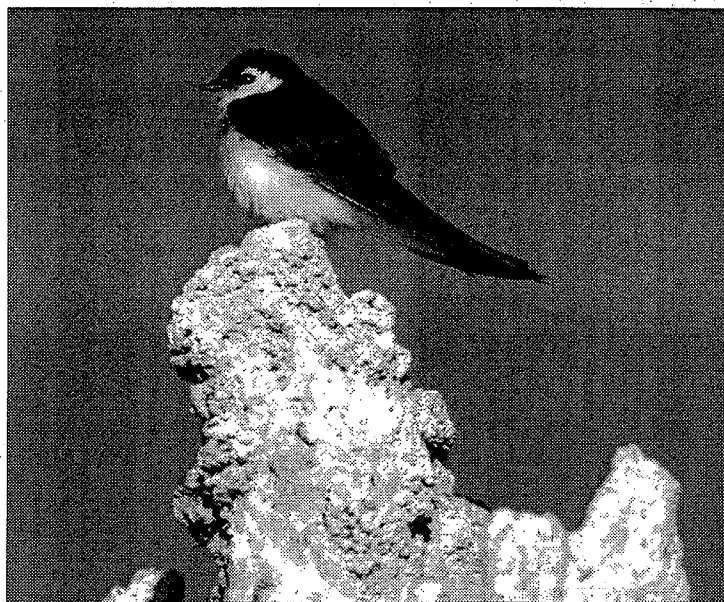
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The entire staff got together for a special meeting out at Rush Creek in March. With the Tufa State Reserve in jeopardy, four new staff members on board, and summer right around the corner, we've got our days and minds in high gear. As we sat there above the creek a flock of gulls flew towards the lake—crisp white against the clear blue sky. Yes, it's spring alright, and the return of the gulls and the chorus of bird songs don't let us forget it. And thus, this issue has a little bit of a bird bent. Find out how the Committee is involved with birds on pages 12–15. The Eastern Sierra Riparian Songbird Study is highlighted on pages 4–5. Learn more about some unusual bird research techniques and international migrations connections on pages 16–17. And if birds aren't your thing we've got plenty for you too—such as the first in a four part series on how Los Angeles gets its water on page 7, and policy updates on page 9.

Spring brings thoughts of summer travel plans, so keep us in mind and we'll look forward to seeing you soon!

—Arya Degenhardt



A Violet-green Swallow perched on a tufa tower. These brightly colored birds are a sure sign of spring both on the creeks and down at the lake.

Mono Lake Committee Mission

The Mono Lake Committee is a non-profit citizens' group dedicated to protecting and restoring the Mono Basin ecosystem, educating the public about Mono Lake and the impacts on the environment of excessive water use, and promoting cooperative solutions that protect Mono Lake and meet real water needs without transferring environmental problems to other areas.

Mono Lake is a part of the Western Hemisphere Shorebird Reserve Network, a member of the international Living Lakes partnership (www.livinglakes.org), and home to a United States Forest Service Scenic Area and a California State Reserve.

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Mono Lake Tufa State Reserve threatened

During the past few weeks, events here in the Mono Basin have proven that keeping a watchful eye on Mono Lake and the surrounding area is always necessary.

The Mono County Board of Supervisors approved a resolution that calls for the state legislature to move the existing boundary of Mono Lake's relict lands—former lakebed now exposed due to water diversions—from an elevation of 6417 feet to 6392 feet above sea level. Although intended to help resolve a local land use dispute, the hastily passed resolution calls for changes that threaten the existence of the Tufa State Reserve: the language of the resolution would remove the land base of the Reserve, effectively eliminating the Reserve itself.

Since the passing of the resolution on February 15, there has been positive progress. The Board of Supervisors and our state legislators have been inundated with letters, phone calls, and emails from members and other Mono Lake enthusiasts expressing concern about the

resolution and support for the Reserve. This response from Committee members has helped tremendously! At press time, the private property owners and the State are working towards an administrative solution outside of the legislative process. The Board of Supervisors has also issued a letter clarifying that it never intended "to undermine the land base of the Tufa State Reserve, nor to adversely affect the Reserve in any fashion." We expect an administrative agreement will be reached, and that the Board's resolution will then be withdrawn.

The Tufa State Reserve is a symbol of California's recognition of the ecological and public trust importance of Mono Lake, and the Reserve staff have done more to provide hands-on protection of Mono Lake's natural resources than any other entity. Established in 1982 as a unit of the State Park system, the Reserve couples overall park protections with specific responsibility for "protecting the tufa and associated sand structures and providing for their interpretation."

Within that mandate, State Reserve staff cover a lot of ground including law enforcement, public safety, interpretive programs, and a general field presence for visitors. The Tufa State Reserve has provided interpretive tours, star talks, stream walks, discovery camps, and campfire programs to nearly 3.5 million visitors since its creation.

So, how can you help? Please voice your concern and support for the Tufa State Reserve, either by returning the action alert letter mailed to members in March or by writing the Board of Supervisors directly at P.O. Box 715, Bridgeport, CA 93517. If possible, plan to attend the scheduled May 2 meeting with the Mono County Board of Supervisors. The agenda will be to hear public testimony regarding this issue, review the status of the settlement between the landowners and the State, and if necessary, the Board may take further action that they deem appropriate at that time. Finally, keep current on all the latest developments by accessing our website at www.monolake.org.

How does the resolution threaten the Tufa Reserve?

The Mono County Board of Supervisors resolution 00-12 calls for the state "to move the boundary of the relict lands from an elevation of 6417 feet to 6392 feet." There are three technical terms involved with the resolution:

Relict land in general is land exposed by changes in water levels or locations, including lake fluctuations and stream meandering. Relict land at Mono Lake is specifically considered to be the land exposed due to the diversion of Mono Basin streams to Los Angeles, which began in 1941. In 1941 the lake's surface elevation was 6417 feet above sea level, therefore Mono's relict land today is the land which lies below the 6417 elevation contour—generally the still-visible white ring of land next to the

lake. With a few exceptions (including the precedence of federal rights) the state is the owner of relict lands created by non-natural means. In summary, Mono's relict land consists of all land below the 6417-foot elevation down to the edge of the lake—currently at about 6385 feet above sea level.

The 6417-foot elevation line is where the edge of the lake was at the time artificial diversions began in 1941.

The 6392-foot elevation is the predicted long-term average surface level of Mono Lake in the decades ahead, based on the 1994 State Water Board decision. However, the lake will still naturally fluctuate in dry and wet years, and as the seasons change. The lake should remain between 6390 and

6394 about 75% of the time according to a model based on the recent past climate. It could rise up to 6400 and drop to 6388 or rare occasions.

The 1982 act creating the Mono Lake Tufa State Reserve declared that all the relict lands at Mono Lake be managed as part of the reserve. Resolution 00-12 is confusing, because it proposes to move the relict land boundary, a redefinition which isn't physically possible. Nonetheless, the intent would be to move the boundary of state ownership, and thus the boundary of the Reserve itself. Simply stated, if the boundary were moved to 6392, the land base of the Tufa State Reserve would be eliminated once the lake reaches its management level.

Eastern Sierra Riparian Songbird Conservation Project

Using songbirds as a tool to assess the health of Mono Basin riparian systems

by Sacha Heath

Riparian habitats in the Mono Basin are diverse, both in vegetative structure and plant species composition. These habitats include canopied forests of aspen, lodgepole pine, and black cottonwood with an understory of snow berry and mugwort; newly established stands of scrub willow, wild rose and cottonwood saplings; and remnant groves of cottonwood gallery mixed with decayed snags. Mono Basin creeks are a small but important component of California's remaining riparian habitat—5–15% of its original size. These habitats are critical—not only for the plants, insects, humans, and the health of Mono Lake itself, but also for the songbird species that depend on them for breeding, migration, and over-wintering.

Riparian habitat has long been identified as one of California's most critical habitats for neotropical migrant

and resident songbirds. Joseph Grinnell and Alden Miller documented this in the 1920s by mapping the distribution of California songbirds. David Gaines continued their work in the 1970s and alerted the conservation community to the disappearance of many riparian breeding songbirds in the Central Valley.

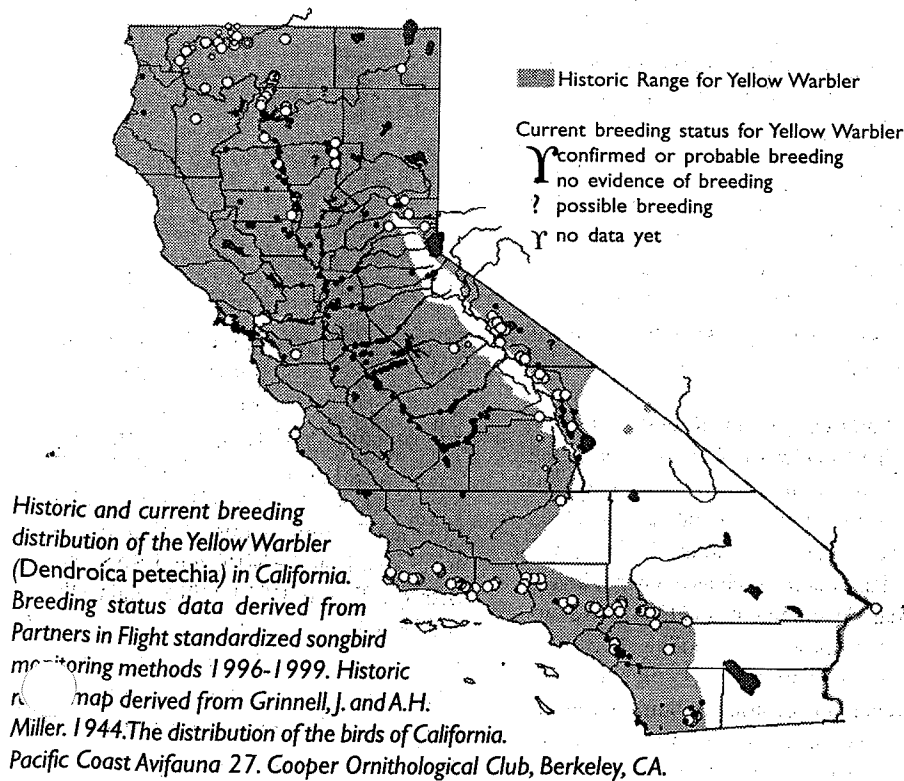
Recently, continent-wide collaborations have been formed among government agencies, non-profit organizations, and private groups to address the issue of habitat loss and the subsequent decline of songbirds. One such effort, California Partners in Flight, identified habitat loss as the major cause of songbird declines, and riparian habitat as the most endangered among these. As a result, the Riparian Habitat Joint Venture was established with the mission to "promote conservation and restoration of riparian habitat sufficient to support the long-term viability and recovery of native bird populations and

associated species."

The relationship between songbirds and riparian habitat is reciprocal, and birds provide an excellent means to track larger changes in riparian systems. Birds occupy a diverse range of niches and are sensitive indicators of ecosystem health. Managing for songbird diversity can protect many other elements of biodiversity, including the processes that are inherent in riparian systems. These physical and biological processes include hydrology, geomorphology, insect and fish production, and plant succession. Songbird monitoring on Mono Basin creeks provides us with such a measure of ecosystem health.

The Eastern Sierra Riparian Songbird Conservation Project was initiated as a collaborative effort spearheaded by the Point Reyes Bird Observatory (PRBO), Bureau of Land Management Bishop Resource Area (BLM), and the Inyo National Forest (USFS) in the spring of 1998. The project seeks to investigate songbird use of riparian habitats in the Eastern Sierra by utilizing nationally standardized songbird monitoring methods. Other project supporters include the National Fish and Wildlife Foundation, Region 5 Partners in Flight, California Department of Fish and Game (CDFG), Mono Lake Committee (MLC), Eastern Sierra Audubon Society (ESAS), Eastern Sierra Institute for Collaborative Education, Mono Lake Tufa State Reserve, Los Angeles Department of Water and Power, Southern California Edison, and Conway Ranch/Trust for Public Land.

Overall, the project documents songbird use of twenty nine creeks and two sections of the Owens River along a 232 km stretch of the Eastern Sierra, ranging from Olancha north to Bridgeport. Within the Mono Basin, we are investigating six areas: Lee Vining, Rush, Mill, Wilson, and Dechambeau creeks and Indian Springs. The project design replicates those used on all of PRBO's riparian study sites and results can be compared on a



cal, regional, and statewide scale. For the past two years, we have monitored these sites with extensive point counts, area search surveys, and vegetation analysis. These methods provide information on songbird breeding distribution, bird abundance, bird species richness (number of species), and bird diversity on these creeks.

Our data is helping to refine the most current understanding of riparian songbird distribution in California. We are comparing current breeding distributions with historic range maps drawn by Grinnell and Miller in order to demonstrate areas of species extirpation or range expansion. We focus on a host of 14 "riparian focal species" whose breeding requirements represent the full range of successional stages of riparian ecosystems.

So far, we have found that Mono Basin creeks provide breeding habitat for four of these focal species and migration stop-over habitat for three others. Yellow Warblers, Song Sparrows, and Warbling Vireos were found in abundance on both the more-established higher reaches and the regenerating lower reaches of Mono Lake's tributaries. Once common throughout the state, these species have recently experienced declines and/or extirpations in other riparian habitats in California. Figure 1 displays the historic and current breeding distribution for the Yellow Warbler in California. Two historic breeding species—Swainson's Thrush and Willow Flycatcher—no longer breed in the Mono Basin, but have been detected as migrants.

Mono Basin creeks had generally higher indices of songbird diversity and species richness in the upper versus lower reaches. Additionally, Mono Basin sites had higher indices than those found for the Owens Valley alluvial fan sites. Differences in riparian type (ie "aspen" vs. "desert" riparian types) probably accounts for much of this variation, so the two should be compared with caution. Additional analysis of bird data and accompanying vegetation and landscape variables may provide insight into what features birds in the Mono Basin key into. Managers may apply these results to improve restoration efforts in other regions of California where some of these species have disappeared.

Species diversity and abundance are good general indices of bird population trends, and breeding status provides insight into distributional changes. However, the evaluation of population health requires a thorough investigation of demographic processes that drive songbird populations—namely reproductive success (number of young produced in a year), survival (year-to-year or over-winter survival), and dispersal and recruitment (the movement of new breeders into or away from a population). Starting this spring, the project will expand to more intensively investigate reproductive success and survival of songbirds utilizing Mono Basin creeks.

Recent studies indicate that songbird declines in North America are largely due



Photo by Ian Teit

A yellow warbler with a brown-headed cowbird in its nest in Lee Vining Canyon.

to breeding ground limitations. For riparian-dependant songbirds, loss of habitat is the primary limitation in California. Where habitat exists, and birds continue to attempt breeding, predation by both native and domesticated species is the primary cause of nest failure in many open-cup nesting songbirds. The expansion of the Brown-headed Cowbird (a species which lays its eggs in the nests of other, smaller songbird species) in the West also contributes to low productivity in songbirds. Other limiting factors include land uses that compromise the integrity of riparian systems such as over-grazing, human development, and the suppression of natural processes (flooding, fire etc.). Poorly timed management practices such as vegetation clearing or burning during the breeding season also impairs reproductive success. Finally, restoration efforts

Thank you

The Committee was awarded a \$25,000 grant from the Commission for Environmental Cooperation (CEC) to integrate migratory bird studies with restoration activities in the Mono Basin. The CEC is a Montreal-based organization created by Canada, the U.S., and Mexico to address environmental issues in North America from a continental perspective. CEC funds will be used for riparian songbird monitoring discussed here, gull research in the Mono Basin, and a web-based clearinghouse to share the information with the public.

that do not take into account habitat requirements of breeding songbirds may create ecological traps. Birds may suffer poor nest success if they are attracted to a system that lacks proper microhabitat components (nest concealment and insect production) or that supports inflated predator or nest parasite populations.

The Mono Basin still harbors an abundant riparian songbird community, including species that have been extirpated in other regions of California. Additionally, with the re-watering and subsequent recovery of the Basin's creeks, new habitats will become available for songbird use. We now have the opportunity to assess current habitat conditions and to track the recovery of songbirds and their habitat over time. These results may illuminate poorly understood habitat requirements for key riparian species and can potentially be extrapolated to regions of California where these species are missing. We will apply this information in the form of recommendations to land managers, locally and statewide.

You may access information about this project and statewide riparian songbird conservation projects at PRBO's website: www.prbo.org. Copies of Eastern Sierra Riparian Songbird Conservation reports are available at the MLC and ESAS, the Bishop offices of BLM, USFS, and CDFG, and PRBO.

Sacha Heath works for the Point Reyes Bird Observatory and is co-principal investigator for the Eastern Sierra Riparian Songbird Conservation Project



High Sierra Fall Century

September 16, 2000

Have you been training? Now is the time to start! The 6th Annual High Sierra Fall Century ride will take place on September 16, 2000. This 100-mile course takes you along the spectacular east side of the Sierra and into the quiet beauty of the Mono Basin with its awesome views of Mono Lake, the White Mountains, and the Sierra Nevada range. If 100 miles of non-stop riding amidst sensational scenery is more than you want to conquer, how about a shorter ride of 30 or 45 miles? Both will be available this year with just as much beauty along the way.

This year's ride is dedicated to the memory of Dr. Mark Milford, a renowned

surgeon from Allied Gardens. He had been an avid outdoorsman, racing motorcycles, competing in a number of distance running events, and recently taking up cycling. Dr. Milford was killed in an auto accident outside Lone Pine while on the way to participate in last year's High Sierra Fall Century.

Proceeds from the High Sierra Fall Century benefit the Mono Lake Committee and the Sierra Cycling Foundation. Registration brochures for this year's ride will be available in April. For more information contact Craig Roecker (craig@monolake.org) at (760) 647-6595 and visit our website at www.monolake.org/century.

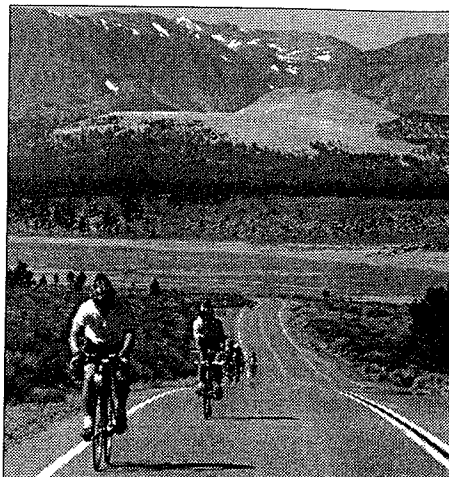


Photo by Geoff McQuilkin

Century riders climbing towards Sagehen Summit.

Mono Lake Luxury Bus Tour

September 22-25, 2000

Back in 1984 emeritus Board Member Grace de Laet, and her husband Rick organized a luxury bus tour from the Bay Area to introduce people to a beautiful and endangered oasis: Mono Lake. The trip was so well received that many have asked when another will be arranged. We are delighted to announce that Grace and Rick are repeating the luxurious bus trip from San Francisco to Mono Lake in celebration of Zenaida Mott's Mono Basin painting exhibit at the Ansel Adams Gallery in Lee Vining.

The tour will leave the Bay Area on Friday, September 22, and will return Monday, September 25. Exquisite travel accommodations will be provided by California Parlor Car Tours in San Francisco. The luxury coach will accommodate 35 people. Some highlights

- a gourmet picnic at Knight's Ferry on the Merced River
- cocktails at Tioga Pass with a

historical talk and update on the Mono Basin

- a sumptuous dinner at the Mono Inn overlooking Mono Lake
 - swimming, canoeing, and birding at Mono Lake with Committee staff
 - a special reception at the Ansel Adams Gallery at Mono Lake and grand opening of Zenaida Mott's exhibition of Mono Basin paintings
 - dinner at the Carson Peak Inn overlooking June Lake
 - a special trip to the historic ghost town of Bodie
 - a picnic at the famous Ahwahnee Lodge in Yosemite
 - a bar-b-que at the Tenaya Lodge
 - a visit to the Kesterson Wildlife Refuge
- The profits received from this special trip will be used to further the ongoing restoration of Mono Lake and its streams. For more information, contact Shelly Backlar (shelly@monolake.org) at (818) 716-8488.

Mono Basin paintings by Zenaida Mott at Ansel Adams Gallery this fall

Bay Area artist, Zenaida (Zee Zee) Mott, will exhibit her oil paintings at the Ansel Adams Gallery at the Mono Inn from September 23 through October 2000.

The idea for the exhibit began when Zee Zee, her husband William, and friends Joe and Gayle Brower were camping in the Mono Basin. Joe (David Brower's brother) and Gayle wanted Zee Zee to show her work to Sarah Adams, Ansel Adams' granddaughter and manager of the Mono Inn. Sarah invited Zee Zee to present a one-woman exhibit of landscape paintings at the Ansel Adams Gallery in the Mono Inn.

So if you are in the area don't miss what promises to be an extraordinary show!

Part I: a journey down the aqueduct

by Greg Reis

Editor's note: The following article is the first in a series of four which will take a close look at the sources and infrastructure of Los Angeles' water. Understanding where your water comes from, how it gets to you, and the associated consequences and trade-offs lie at the heart of responsible water use. We begin the series right here in the Mono Basin with water diverted from Parker, Walker, Rush, and Lee Vining creeks.

Deep under the Mono Craters water rushes through a dark carbon dioxide-filled tunnel as more water trickles in to add to the flow. Eleven miles of tunnel later, the water spills through a flume, back into bright sunlight, through watercress beds, and into the slow-moving Upper Owens River. Water from Grant Lake Reservoir on Rush Creek has just flowed through an active chain of volcanoes.

Once in the Upper Owens, the water meanders past yellow-headed blackbirds, grazing cows, and anglers, finding its way to Crowley Reservoir. Here the 16,000 acre-foot (AF) from the Mono Basin sits with up to 167,000 AF of water native to the Owens River watershed, waiting for L.A.'s water demand to determine when it will make the rest of the trip.

On its way again it rushes into penstocks—big, metal pipes—alongside the Owens Gorge that carry it to turbines which generate electricity. Thanks to precedent-setting cases at Mono Lake, the Owens River at the bottom of the gorge once again carries some water. After the water is released from Pleasant Valley Reservoir, it meanders in the Owens River past Bishop and Big Pine on the floor of the Owens Valley. Soon it reaches Tinnemaha Reservoir, where it reflects herds of Tule Elk before being released back into the Owens River for a short final distance before it is diverted into a canal at Aberdeen.

As the open canal moves south, it slowly moves farther from the Owens River and begins contouring the side of

the Alabama Hills near Lone Pine. High on the side of the valley it passes Owens Dry Lake—now being partially flooded to control the terrible dust storms. After passing through the Cottonwood Treatment Plant, it sits in the Haiwee reservoir before being sucked into pipes that use gravity and siphons to cross the Mojave Desert. In a tunnel it crosses the San Andreas fault, an active geologic feature like the Mono Craters. It sees the light of day once again at the Owensmouth Cascades before ozonation,

filtration, chlorination, and distribution into the city's municipal water system.

The 16,000 AF of water from the Mono Basin is currently 3% of L.A.'s annual 600,000 AF supply, and when combined with an average of 350,000 AF of water from the Owens Valley, the Los Angeles Aqueduct accounts for 60–70% of the city's supply. In the past this supply has been as high as 84% in wet years and as low as 16% in dry years. The capacity of the aqueduct is 560,000 AF per year, and reservoir storage capacity is 325,000 AF. Evaporation from these reservoirs is significant, consuming about 5% of the city's water supply. The water exceeds almost all drinking water standards (see page 9), which makes it more valuable than L.A.'s other sources of water.

The cost of this water to the city is the management of 315,000 acres of watershed lands in the Eastern Sierra, property taxes, and maintenance and operation of the aqueduct. Since the water generates over 1 billion kilowatt-hours of electricity at 11 powerplants on its way downhill, selling this power—enough for 220,000 homes for one year—more than pays for these operations costs. The larger cost of this water to all of us comes in terms of the negative environmental, cultural, and health impacts that excessive diversions have caused in the Eastern Sierra.

This aqueduct is the connection between Mono Lake and the city of Los Angeles. Tenuous in places, a thin lifeline across a vast desert for 3.8 million people each using an average of 136 gallons of water a day, yet very real and very powerful.

Further reading about the Los Angeles Aqueduct: *Water and Power*, by William L. Kahrl; *Storm Over Mono*, by John Hart; *Cadillac Desert*, by Marc Reisner.

Greg Reis is the Committee's Information Specialist. In Part II, he will examine the local sources of water on which L.A. has depended since it was a small, remote Mexican pueblo surrounded by cattle ranches.



Photo by Geoff McQuilkin

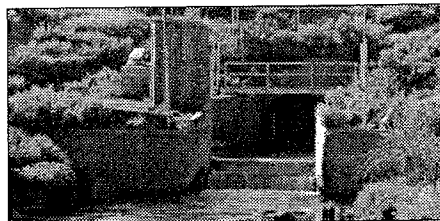


Photo by Erin Ryan

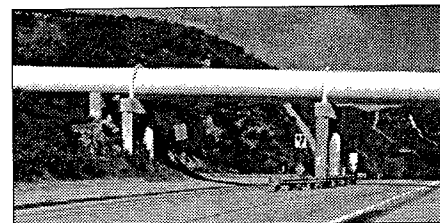
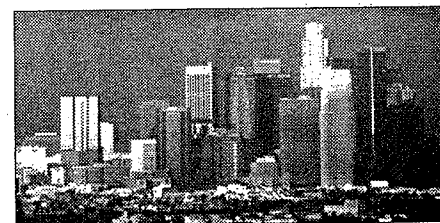


Photo by Erin Ryan



The journey from top to bottom: the Mono Craters. The exit tunnel from the Mono Craters. Aqueduct pipeline over a highway near San Francisquito Canyon. The City of Los Angeles.



Dry winter catches up to average

by Greg Reis

On March 1 snow water-content in the Mono Basin was 116% of average to date, and 99% of average for April 1, the typical date of maximum accumulation. Storms continued to pile snow in the Sierra after March 1, so it probably will be another above-average runoff year for Mono Lake. This is the fifth wetter-than-average year out of the last six years, with last year coming in just below average. For the northern Sierra, it is six wet years in a row, an unprecedented string of wet years as far back as records have been kept.

What is even more amazing is how quickly the snowpack caught up to average in late January and early February. On January 14, it was the

driest winter on record, and by February 15 we had caught up to average, thanks to some powerful winter storms.

These storms have also caused the lake to rise slightly, to 6384.4 feet at the beginning of March, however it was still ~ foot lower than on this date last year. In fact, Mono Lake has been within about ° foot of its current elevation for the past year and a half, the first time the lake elevation has been this stable for this long since April 1993-January 1995 when it hovered around 6375 feet.

While these wet years help Mono Lake rise, they don't help reinforce the reality that California is a dry state. We must plan for the dry years, which are quickly forgotten. As it states prominently on the wall of our Information

Center in Lee Vining:

**And it never failed
that during the dry years
the people forgot
about the rich years,
and during the wet years
they lost all memory
of the dry years.**

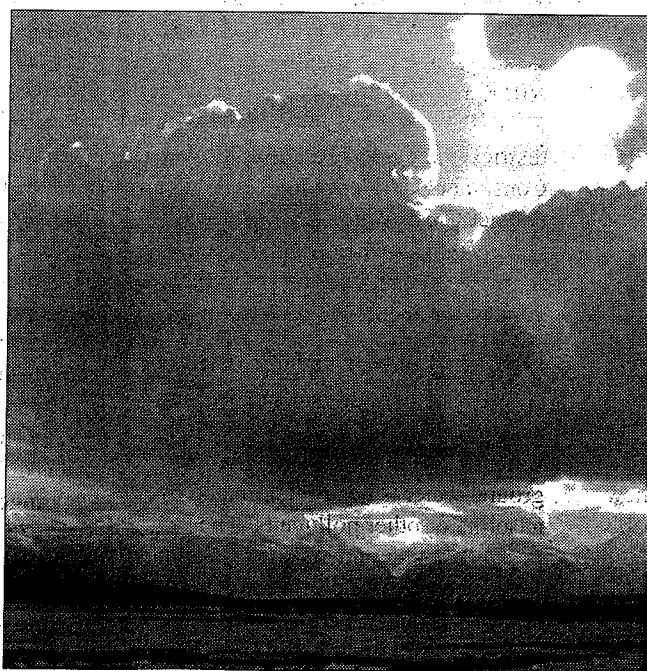
It was always that way.

-East of Eden, John Steinbeck

~ Mono Basin Journal ~

A roundup of less political events at Mono Lake

by Geoffrey McQuilkin



The wind works with the material it is given. In the summer, it's dust but recently it was fresh snow, whipped up into spiraling white columns reaching toward the cold winter sky, then pirouetting across the flats. The dance swung here and there, then some unseen air current undercut the show, collapsing the snow devil and leaving you to wonder if you had really seen it at all.

And now the equinox has gone by; the days last, the sun beats harder and longer against the marks of winter. South facing slopes go bone dry while north facing counterparts still host deep shady snow. In meadows and on open slopes,

fields of snow are no longer flat. The sun melts patterns deep into them where pebbles, twigs, and pine needles absorb the day's heat and chart a course for firm ground. They descend down into the deep snow, slow-motion travelers, melting their way toward the earth below.

It's backcountry skiing time with a natural slalom: left around the sagebrush, right turn at the rock, quick left around the willows. Miss that turn and you end up lying in the spring snow; look up, and there are the gulls, returning again to nest at the lake, white wings outlined against the blue sky as hints of summertime cumulus clouds dance over the snowy Sierra crest.

Policy notes

Good news for parks and water

California voters wholeheartedly supported Proposition 12 (Parks) and Proposition 13 (Water), which give over \$4 billion in bonding authority to state and local agencies responsible for parks and water projects throughout California. The two bonds measures, which were strongly supported by the Governor, are designed to work together to protect and manage watersheds and to help water agencies improve water quality and increase water supply—particularly during droughts. Environmentalists joined urban and agriculture groups to back these measures. Now, the Mono Lake Committee will continue to work with these groups to make sure the funds are spent wisely. Your vote does make a difference!

Arsenic from Hot Creek in Los Angeles' water

A recent report by the Natural Resources Defense Council (NRDC) named the Los Angeles Department of Water and Power as the largest water provider nationwide to supply its customers with drinking water containing five parts per billion or more of arsenic. According to the National Academy of Sciences, if someone drinks two quarts of water a day with the current national drinking water standard for arsenic, 50 parts per billion (ppb), there is one in 100 chances of that person having bladder, lung, or skin cancer. This level of arsenic can also cause kidney and liver cancer as well as problems for the central nervous system, heart, and blood vessels.

Currently the Environmental Protection Agency (EPA) is developing a new and stronger arsenic standard, probably five ppb or a one in 1000 risk factor, and they will seek public comment on this new standard later in the year. The standard sought by NRDC is three ppb,

and Clean Water Action is advocating a two ppb standard.

Naturally occurring arsenic from Hot Creek in Mono County is one of the main sources of arsenic in DWP water. Over the last five years, DWP has set up year round treatment at its Cottonwood Facility to reduce the arsenic levels in LA Aqueduct water. The result has been lowered arsenic levels, between four and seven ppb. Between 1980–1998 the average arsenic level was 6.9 ppb, although in April 1993 there was a spike of 73.3 ppb. If DWP is to get most of the arsenic out of the water, it will need to build a treatment facility at Hot Creek. DWP estimates the cost of a new plant would add \$5–\$14 to a customer's bill, but it is giving this option serious consideration because there would be multiple benefits—lower arsenic levels in Crowley Lake, for example.

The Mono Lake Committee will post a notice on its website www.monolake.org when the new EPA standards are open for comment. You can also contact the EPA directly at www.epa.gov/safewater/arsenic.html or write to Carol Browner, Administrator, USEPA, 401 M St. SW, Washington, D.C. 20460. A copy of the NRDC report is available at www.nrdc.org. Each July all water districts must release a Drinking Water Consumer Confidence Report. You can contact Clean Water Action www.cleanwater.org on how they recommend using this report to help your water agency do its best.

Drinking water safety is no. 1

Orange County's dependence on underground aquifers for its drinking water means it must ensure that the ground water is not contaminated by gasoline or other pollutants. The possibility that underground gasoline tanks need closer scrutiny to guard against leakage deserves more discussion. California's county district

attorneys, who prosecute polluters, supported state legislation requiring the installation of shafts—which would test for leaks—near underground tanks at gas stations. But the legislation was defeated last year on the grounds that many counties are not very dependent on aquifer water, getting their water instead from outside sources like the Colorado River. It is true that installing shafts and operating them would be burdensome, costing gas stations \$3,000 or more to install and perhaps \$5,000 annually to operate. But if it turns out that the shafts are the best way to detect seepage, that's money that may have to be spent.

Orange County received a scare last year when officials found that the gasoline additive MTBE, methyl tertiary butyl ether, had contaminated a well in Yorba Linda. The leak was discovered before the water got as far as household taps, and a deeper well was dug to yield uncontaminated water. The saga of MTBE is a cautionary tale in the battle to provide clean air and water for Southern Californians. It helps gasoline burn more cleanly and has been credited with dramatically reducing air pollution. But it also has been linked to cancer in laboratory animals and is considered a possible cause of cancer in humans. Governor Gray Davis signed an executive order calling for MTBE to be banned by 2002. Gas stations already have spent large amounts of money to overhaul underground tanks to comply with a recent federal law. But the county Health Care Agency has found some type of surface leakage around more than 40% of the underground tank facilities in Orange County. This raises the possibility of even more leakage underground, where it is difficult to detect. It will be up to the Orange County Board of Supervisors to decide whether an ordinance requiring shafts is necessary, but if the evidence is persuasive, public health will demand the extra protection.



Planning a trip to the Mono Basin this summer? Get a jump on it with our field guide series. Printed on recycled paper by the Mono Lake Committee's own Kutsavi Press, these guides fit easily into a pocket or backpack. Buy each guide individually or as a set! *Mono Lake Committee Field Guide Series Set, all 4 books, softcover, 5½'x8½', illustrated: \$15.00 (Item #FGS1)*

Learn about everything from glaciation to volcanism in this easy-to-follow Mono Basin guide. Author Timothy Tierney makes geology interesting to read and easy to understand. Geologic timelines, maps, and suggestions of places to go make this guide a must for visitors! *Geology of the Mono Basin, softcover, 5½'x8½', illustrated, 73 pages: \$5.95 (Item #0572)*

For Helen Constantine covers alkali sink scrub, freshwater marsh, sagebrush scrub, pinyon-juniper woodland, Jeffrey pine and riparian forests. This guide will help you identify those plants that you have been curious about on your hikes at Mono Lake! *Plant Communities of the Mono Basin*, softcover, 5½"x8½", illustrated, 47 pages: \$4.95 (Item #977)

Let the Geologic Society of the Oregon Country take you on a guided auto tour through Twin Lakes, Bodie, Yosemite (via Tioga Pass), June Lake Loop, Mono Craters, Devil's Postpile, Convict Lake, McGee Canyon, Rock Creek Lake, and the Bristlecone Pine Forest. *Roadside Geology of the Eastern Sierra Region, softcover, 5½" x 8½", illustrated, 42 pages: \$3.95 (Item #1031)*

This collaborative work by David Bowker, Cheryl Ecklund and Michelle Hofmann is the newest addition to our Mono Lake field guide series. Learn about tufa towers, water chemistry, the Mono Lake ecosystem, geology, and water conservation—great for all ages! *South Tufa: A Self Guided Walking Tour of Mono Lake*, softcover, 5½"x8½", illustrated, 32 pages: \$4.95 (Item #1142)

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Naturalist notes

A Mono Basin chronicle

January: iced-over ponds moan and echo through canyons and the cold and dry weather means a good year for ice skating ... eight Sage Grouse spotted on the bluff above Mill Creek ... poconip fog shrouds the lake and fills in the bottom of the basin until it burns off to blue skies ... Mountain Quail on Williams Butte ... egret tracks in the ice on the beaver ponds up Lundy Canyon ... a clear sky for the total lunar eclipse and the land goes dark as the moon goes red ... evenings of snowfall bring mornings of snowladen sagebrush, sparkling snowdrifts, and a white Black Point reflected in the glassy lake ...

February: birds are singing but it is still snowing ... the first California Gull sighting over Rush Creek ... the sound of Red-winged Blackbirds back in town make it sound like spring ... Oregon Juncos chatter and flit in soft snowdrifts ... Mountain Bluebirds out on the north shore make one wonder if spring is here ... and Mountain Chickadees singing their mating call confirms it ... two Killdeer running along the highway during a whiteout ... Tree Swallows shiver in a thicket of willows ...

March: warm sunny days with summer clouds make it feel like summer ... nauplii, the larval stage of brine shrimp, freshly hatched from the brine shrimp's overwintering cysts, are beginning to surface around the lake ... an American Kestrel in bright plumage sitting in wait ... a Golden Eagle hovering above Lundy Lake ... large flocks of bright white California Gulls on their return pilgrimage from the coast ... alkali flies already in their long black swaths on the north shore ... 15 species of birds heard down at the County Park in one afternoon ... American Avocets, dowitchers, a phalarope, Lesser Yellowlegs, Sage Thrashers, Savannah Sparrows, Horned Larks, a Loggerhead Shrike, two Northern Harriers, a pair of Gadwall, and several hundred Eared Grebes down at the lake ... if there is one thing letting you know that spring is here, it is the chattering chorus of birds ...

Birding in the Mono Basin

seasonal bird highlights

Whether you are just stopping by for an afternoon picnic or coming to the Mono Basin to find that elusive bird for your life list, the Mono Basin is full of birding opportunities just waiting to happen. We've put together this informal sampling of birds below as a guide to what birds you can find at different times of the year. For more specific information on birding in this area pick up our Birds of the Mono Basin checklist (at right), check out our recent bird sightings board, or talk to one of the local bird nerds here at our Information Center and Bookstore in Lee Vining. The definitive work on birds in the area is *The Birds of Yosemite and the East Slope* by David Gaines and is available at the Committee Bookstore as well.

Spring, March – June: Bonaparte's Gull, White-faced Ibis, Dunlin, Common Snipe, Western Kingbird, American Dipper, Ruby-crowned Kinglet, Sage Thrasher, Townsend's Solitaire, Mountain Bluebird, Yellow-headed Blackbird, Pine Siskin.

Summer, June – August: California Gull, Virginia Rail, Snowy Plover, Greater Yellowlegs, Wilson's Phalarope, Great Horned Owl, Common Nighthawk, Common Poorwill, Anna's Hummingbird, Lewis's Woodpecker, Downy Woodpecker, Hairy Woodpecker, Red-breasted Sapsucker, Say's Phoebe, Violet-green Swallow, Warbling Vireo, Yellow-rumped "Audubon's" Warbler, Orange-crowned Warbler, Lazuli Bunting, Green-tailed Towhee, Rosy Finch.

Fall, August – October: Eared Grebe, Northern Pintail, Northern Shoveler, Green-winged Teal, Cinnamon Teal, Ruddy Duck, Black-necked Stilt, American Avocet, Marbled Godwit, Red-necked Phalarope, Northern Harrier, Pinon Jay, Marsh Wren.

MONO LAKE COMMITTEE FIELD GUIDE SERIES

BIRDS OF THE MONO BASIN

A listing of birds
and their seasonal abundance



Mono Lake Committee
Rushville Press 1996

Mono Lake, it's for the birds ...

This map outlines the protection, restoration, and education activities that the Mono Lake Committee is involved in having to do with birds. With over 325 bird species that either breed here or migrate through, birds play a significant role in restoration, research, and recreation in the basin. More complete explanations on each subject can be found on pages 14-15.

1 North Shore Ponds

The USFS is continuing its investment in water-saving infrastructure at artificial north-shore ponds. While the Committee has supported efforts to provide freshwater habitat at the ponds, we are growing increasingly concerned that the USFS is paying more attention to installing new infrastructure than to scientifically assessing whether work done to date has in fact benefited waterfowl.

2 www.monobasinresearch.com

The developing Digital Archive will be a dynamic hub for a diverse range of information and will provide links related to historical and scientific research in the Mono Basin.

3 Eastern Sierra Riparian Songbird Conservation Project

This study, which covers 232 km of the Eastern Sierra, includes the major Mono Basin creeks, and documents riparian songbird distribution, breeding habitat, and migration patterns. The study is headed up by the Point Reyes Bird Observatory (PRBO).

4 Channel Openings and Road Closures

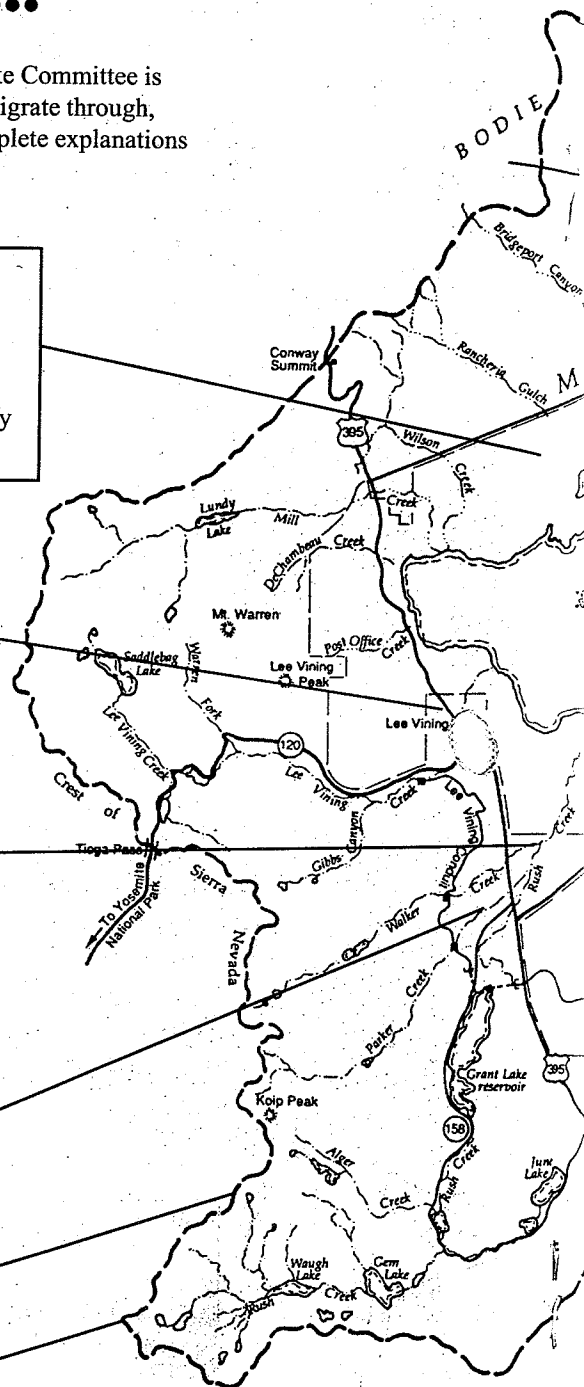
DWP's restoration work in 2000 includes several key channel openings in Rush Creek's bottomlands, as well as more road closures in sensitive areas of the stream floodplains. Specifics about this year's channel openings will be discussed this April at a DWP-sponsored meeting.

5 Birds and people

How do we balance enthusiasm and love for birds and birdwatching with habitat protection and the needs of the birds themselves? This is a challenge faced by the Mono Lake Committee and the land-management agencies in the Mono Basin.

6 Field Seminars

The Mono Basin is an extraordinary place to learn about a wide variety of birds. Mono Lake Committee field seminars take you from riparian corridors to sandy shorelines, and even out to the islands to study birds!



Looking at the big picture

1 North Shore Ponds

This past fall and winter, the USFS continued its efforts to add water-saving infrastructure at the DeChambeau Ranch/County Ponds complex. Crews installed a pipeline between DeChambeau Ponds and County Ponds and sealed East County Pond with bentonite. The goal is to maximize the beneficial uses of the water—and minimize waste—at this series of artificial ponds on Mono's arid north shore. The ponds are maintained primarily by artesian water, but are supplemented with water from the north Mono Basin's Mill Creek.

While the Committee has supported efforts to provide freshwater habitat at ponds, we are growing increasingly concerned that the USFS is paying more attention to installing new infrastructure than to scientifically assessing whether work done to date has in fact benefited waterfowl. In tandem with improving water efficiencies, the USFS should be systematically tracking vegetation response and waterfowl use of the ponds to assess whether the costs—scarce water, USFS staff time, and taxpayers' dollars devoted to ongoing maintenance—will be justified by habitat gains.

The artificial pond complex was partially restored in the mid-1990s to benefit migratory ducks. In 1998, funds were made available to continue restoration work at the ponds under the State Water Resources Control Board's decision on restoration at Mono Lake. The State Water Board required the L.A. Department of Water and Power to pay up to \$250,000 for improvements to surface water diversion and distribution facilities in the County Ponds area. DWP funds will likely be used to install a pipeline between Wilson Creek (which carries Mill Creek water) and the ranch sometime this spring.

2 monobasinresearch.org

The Mono Basin Information Clearinghouse is taking flight. This web-based project will be a comprehensive information source for Mono Basin scientific studies and reports. Once up and running, Mono Basin researchers will have a great place to start a search for Mono Basin studies, ultimately improving resource management and access to scientific information.

Advance preparation such as researching document scanning technology, evaluating methods of searching various document formats, and coming up with a plan for adding server space are challenges we are dealing with before we launch the first substantive version of the website found at www.monobasinresearch.org. Historical interviews and the Mono Basin EIR, thanks to Jones & Stokes Associates, will be accessible by the end of May. The cornerstone of the project will be a comprehensive database of Mono Basin studies—to see a preliminary version visit the Members' section of the Mono Lake Website. Other useful scientific information and studies will be added throughout the summer and fall, such as the results from various bird and bird habitat monitoring programs.

3 Eastern Sierra Riparian Songbird Conservation Project

Started in 1998 this collaborative study spearheaded by the Point Reyes Bird Observatory uses songbirds as a tool to assess the health of the Mono Basin riparian systems. See a complete description of the study on pages 4-5.

4 Channel openings and road closures

The best way to open channels on Rush Creek, called for in the 1998 Mono Basin Restoration Plans, is being discussed in light of changing conditions. Reopening channels that have been cut off increases channel length, raises the water table, and promotes growth of the former multi-storied cottonwood-willow riparian forest. These areas will also have habitat benefits for ducks in addition to benefits for breeding riparian songbirds. Especially in the bottomlands downstream of the confluence of Rush and Walker creeks, re-opening channels is expected to help restore the rare and valuable wooded wetlands that used to exist adjacent to most Great Basin terminal lakes prior to water diversion-caused degradation. Three channels upstream of Highway 395 were reopened last fall, and we are expecting several downstream of the highway to be reopened this year.

The restoration plans also call for closing side roads in the floodplains along the creeks. The roads allow vehicle damage to riparian vegetation and illegal collection of river rock—which could potentially alter the sediment balance in the streams. A few roads have already been closed, and additional closures will take place once projects such as channel openings are finished in the vicinity of each road.

5 Birds and people

With over 325 species recorded from the Sierra Crest to the lakeshore, bird watching is a significant recreational pursuit in the Mono Basin. Large numbers of birds at the lake are best observed in summer and fall. Unfortunately the birds do not always appear at the most-visited day-use sites. Balancing the need for undisturbed habitat and good

Observation sites is a task the Committee will investigate in cooperation with the Tufa State Reserve and USFS. A new, elevated, low-impact boardwalk is in the discussion stages for the Tufa State Reserve, below County Park.

6 **Field Seminars**

Each year the Mono Lake Committee hosts birding seminars in the Mono Basin and surrounding area. Members and non-members alike have the opportunity to join experts in the field locating and identifying birds. California Gull research is also a part of the field seminar program, allowing for volunteer opportunities with the Point Reyes Bird Observatory research efforts. See the seminar listings on pages 18-21.

7 **Important Bird Area (IBA) Designation**

The Mono Lake Committee is seeking Important Bird Area status for Mono Lake. The process has just begun to apply for Important Bird Area (IBA) status from National Audubon Society and American Bird Conservancy. IBA does not add any additional regulations for Mono Lake, but it does grant further recognition of Mono Lake as providing essential habitat for birds in California.

8 **Waterfowl monitoring**

As required by the State Water Board-approved restoration plans for the Mono Basin, DWP has initiated annual waterfowl monitoring. Monitoring includes regular waterfowl counts conducted by boat throughout the peak fall migratory period; two separate aerial surveys that include Crowley Lake and Bridgeport Reservoir along with Mono Lake; and analysis of vegetation transects at sites around the lake. The annual data will help provide a picture of how Mono is changing as it rises and some idea of how birds are responding to these changes. Monitoring expected to continue until 2014, the year set by the Water Board to assess restoration progress at Mono Lake.

9

Prescribed burn program

The Mono Basin Restoration Plans call for a prescribed burn program to enhance lake-fringing marsh and seasonal wet meadow habitats, to mimic natural fire ecology, and to restore waterfowl habitat by maintaining open water sites and increasing the vigor and health of surrounding wetland vegetation.

The Mono Lake Tufa State Reserve has spent several years in a pilot burn program at Simons Springs, learning both how to do the burns and what results are achieved. DWP is developing baseline data at Warm Springs on both vegetation and wildlife in advance of initiating a burn program at Warm Springs. Ultimately, if these burn programs are deemed to be effective, they will likely develop an ongoing, interagency burn program.

A Yale University student report on the historic role of fire in the Great Basin was written last year. It puts into perspective fire's role in the Mono Basin, and offers a vision of what one integral part of the Mono Lake Committee's mission, "restoration of the Mono Basin ecosystem," really means when it comes to fire and grazing.

10

Gull research

In 2000, the Committee will again sponsor gull research at Mono Lake. Mono Lake supports the second largest breeding population of California Gulls in the world, and studies of this bird population played a central role in the resolution of the environmental controversy at Mono Lake. Much of the data that informed the Water Board's decision on Mono Lake came from a long and uninterrupted series of investigations on the nesting gulls. Now, the huge influx of fresh water into Mono Lake has resulted in a condition at Mono Lake where the fresher and lighter surface water floats over a deeper layer of very heavy and saline water, potentially keeping large amounts of nutrients in the lower, saline part of the lake. This condition is termed "meromixis," and the

lake has been meromictic sporadically throughout its long history.

Adaptive management of the Mono Lake ecosystem requires this type of monitoring and scientific investigation as conditions change. Gull productivity and foraging research will provide valuable management guidance. For an update on last year's research see page 16.

11

Shorebird counts

Bird migration is at best a risky business. Today, migration conditions are aggravated not only by the significant loss of historic wetlands during the last century, but also by contamination and impoverishment of prey populations at the wetlands that remain. Mono Lake is one of the western Great Basin lakes that provide critical food and shelter along the Pacific Flyway. Mono Lake has risen 10 feet since 1994, resulting in dynamic changes along some sections of shoreline and relict land. Understanding these local changes in habitat and birds' response may help monitor the success of restoring Mono Lake. In the spring and fall volunteers participate in shorebird counts along the entire lakeshore, which help to monitor shorebird and waterfowl populations. For more information see page 17.

12

Sage Grouse

Sage grouse populations have been declining in the west, and annual lek populations of Sage Grouse in the Eastern Sierra have as well. There are Sage Grouse in the Mono Basin, though there is little information on their distribution and numbers. The nearest known lek, or strutting ground, is in the Bodie Hills.

The U.S. Fish and Wildlife Service (USFWS) expects conservationists to file a petition to list Sage Grouse under the Endangered Species Act in the coming months. The Wildlife Service recently listed the Gunnison Sage Grouse in Colorado and Utah—recognized by USFWS as a separate species. An endangered listing status has the potential to change grazing, mining, and other public land-use practices throughout the bird's entire range, including the Mono Basin.

Mono Lake gull research update

by Nathaniel H. Taylor, Justin M. Hite, and David W. Winkler

In 1999, a team of researchers from Cornell University augmented the team from the Point Reyes Bird Observatory to carry out annual monitoring as well as to investigate the effects of meromixis on the feeding and productivity of California Gulls at Mono Lake. (Meromixis is a state in which the lake does not completely mix on an annual basis, resulting in a less saline water layer floating on top of a more saline layer—for more information on meromixis see www.monolake.org/library/profiles/meromixis.htm.)

Researchers assisted in the censusing of the gulls and began studies directed toward understanding the poor productivity of gull nesting in recent years. Much of the Cornell team's work was involved in developing methods for

research and establishing a new plot and observation site on Little Tahiti islet. Relatively small sample sizes obtained last summer are sufficient to suggest the following tentative conclusions:

- the growth rates of chicks in 1999 appear to have been slightly lower than those that Winkler observed at Mono in 1980-1982
- the rate of gull predation on other gulls in 1999 appears to have been higher than "normal"
- gulls fed their chicks a large amount of alkali fly larvae and pupae, though there are still a lot of shrimp being taken
- they also added long-legged fly larvae to their diet, a relatively freshwater species that has not been common at the lake since the meromictic event of the early 1980s.

Last summer's research makes it clear that the gulls are taking substantial numbers of alkali flies, but future research needs to explore just how good alkali flies are as food items. If, as seems likely, the flies are better prey than shrimp, where are the limits to greater use of the flies by the gulls?

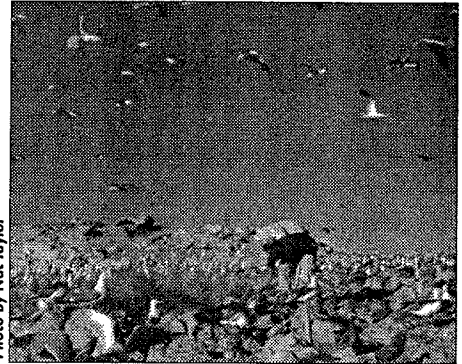


Photo by Nat Taylor

Justin Hite collecting data on one of Mono's islets.

Wilson's Phalaropes: expected visitors in Argentina

by Estela Bonino

During September, when the Argentine spring season starts, the first Wilson's Phalaropes arrive at the Mar Chiquita wetland system. Many of them come from Mono Lake, traveling over 3000 miles to get here. Congregations of a reported 500,000 birds, locally known as *chorlo nadador grande*, the great swimmer plover, fill the shorelines.

Here, in this vast and nearly uninhabited region, the Wilson's Phalarope can be

seen from September to May. These graceful birds share the river mouths with an extraordinary 75 species of aquatic birds—like flamingos and various species of herons, which make up large breeding colonies.

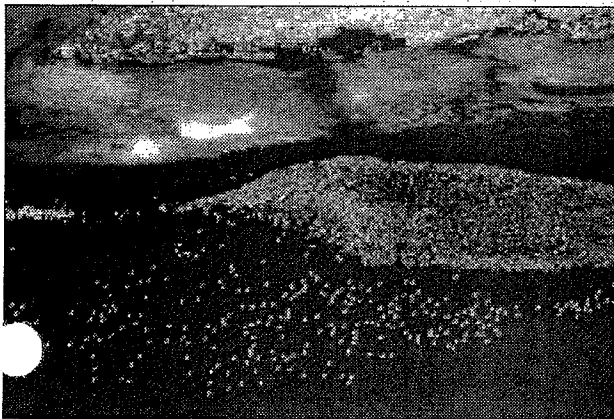
I shall never forget my first experience on Mar Chiquita with a group of students. We stopped 150 meters off the tree-lined coast at sunset and sat in complete silence. Suddenly the air was filled with all sorts of sounds, a chorus of squawking and fluttering, while the sky grew dark with flocks of herons, ducks, plovers, flamingos, and storks flying over our heads. We were completely fascinated as we watched this impressive spectacle.

Mar Chiquita, one of the largest salt lakes in the world, is situated in the central region of

Argentina. It is a terminal lake with a huge watershed that includes the Dulce, Primero, and Segundo Rivers. Over the last 30 years its variable surface has ranged between 1,960 km² in dry periods to 5,770 km² in wet periods.

Unfortunately, this paradise is threatened. A proposal to divert water from the Dulce River to neighboring states is currently being discussed in Buenos Aires. If approved, the diversions would pose a serious threat to Mar Chiquita's ecosystems. The region is somewhat protected: it is a Regional Natural Reserve and has been designated Hemispheric Site by the Western Hemisphere Shorebird Reserve Network, and later twined with Mono Lake. Nevertheless, as law enforcement is insufficient, we must be in constant alertness to protect this biodiversity reserve shared between the two hemispheres.

Estela Bonino is a research assistant at the University of Cordoba, mother of two, and fiercely protective of Mar Chiquita.



Aerial view of flocks of flamingos at the mouth of the Dulce River.

1.6 million grebes and counting

by Sean Boyd

The Canadian Wildlife Service and Simon Fraser University have been studying the breeding biology of the Eared Grebe, *Podiceps nigricolis*, at Riske Creek (near Williams Lake), British Columbia, for the last 10-12 years. Work by Dr. Joseph Jehl Jr. suggested that up to three quarters of a million Eared Grebes staged and molted on Mono Lake each fall. In an attempt to determine to what extent our grebes used Mono Lake, I marked birds with radio transmitters at Riske Creek in the summers of 1995 and 1996 and found that about 50% of these marked birds were on Mono Lake each fall.

While tracking birds at Mono Lake, I noticed that the grebes were easy to photograph from a small aircraft. So, I developed a cost-effective protocol to estimate total abundance; this involves flying east-west transects across the lake

at about 1200 ft above the lake and taking vertical photos every 10 seconds. The protocol results in a good estimate of abundance with little error.

I have conducted photo surveys in conjunction with Dr. Jehl every October since 1996. The number of Eared Grebes on the surface has varied from 0.8 million to 1.6 million birds. Data from radio-marked birds suggested that the birds spend about 15-20% of their time foraging under water in October so total abundance on Mono Lake has varied between 1-2 million birds. We estimate that Mono Lake and Great Salt Lake together support more than 90% of all North American grebes in fall. A large die-off of grebes apparently occurred in Mexico during the winter of 1998, and our counts at Mono Lake (and Great Salt Lake) may reflect this die-off. Hence,

consistent counts at Mono Lake may be a good way to track the health of a large proportion of the North American population of Eared Grebes.

Sean Boyd works out of the Pacific Wildlife Research Centre in British Columbia with the Canadian Wildlife Service.



An Eared Grebe with its young on its back.

Counting Mono's shorebirds

by Bartshe Miller

For the past three years the Mono Lake Committee has coordinated seasonal shorebird counts around the entire shoreline of Mono Lake. A small group of participants, some from the Mono Basin, and some from the Owens Valley, along with volunteer Committee members from the Eastern Sierra and beyond have been making the shorebird counts a semi-annual tradition. With spotting scopes and binoculars in tow, we circumnavigate the lake, searching out every foot of shoreline for avian occupancy.

In late April and August we meet early in the morning and, regardless of weather, strike out for desolate sections of Mono Lake. Following precise logistical maneuvers that would be the envy of any army, we arrange drop-off points, strategically position 4WD vehicles, hike 2-6 miles, and rendezvous the pick up points. In between it all we focus on the birds.

Shorebirds and waterfowl are counted below the 6417 foot pre-diversion lake

level. Savannah Sparrows and Horned Larks try to distract you, but we save the counting for the shorebirds and ducks. Eared Grebes and California Gulls are not counted due to other ongoing census/research efforts.

Some highlights of past counts include: a Peregrine Falcon hunting phalaropes, 113 Black Terns congregating at Navy Beach, a flock of 70 Double-crested Cormorants passing over the northeast shore, a Bald Eagle perched on a tufa, a Parasitic Jaeger harassing gulls, and a Mountain Plover along the north shore. During the fall '99 count we totaled 18,654 individuals and 47 species. Some of the more common species you might encounter are the Western and Least Sandpiper, American Avocet, Black-necked Stilt, Common Snipe, Cinnamon Teal, dowitchers, and Snowy Plover.

The next count will be on

Saturday, April 22, and the fall shorebird count is scheduled for August 19. If you are adept at identifying shorebirds and waterfowl (and ideally ducks in flight) and don't mind getting your feet into the notoriously mucky stretches of Mono Lake we would love to have your help! Please contact the Mono Lake Committee at (760) 647-6595 or info@monolake.org.

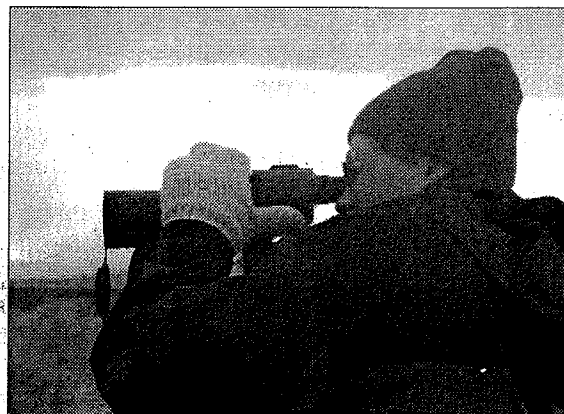


Photo by Arya Degenhardt

Bird enthusiasts help with shorebird counts around Mono Lake.

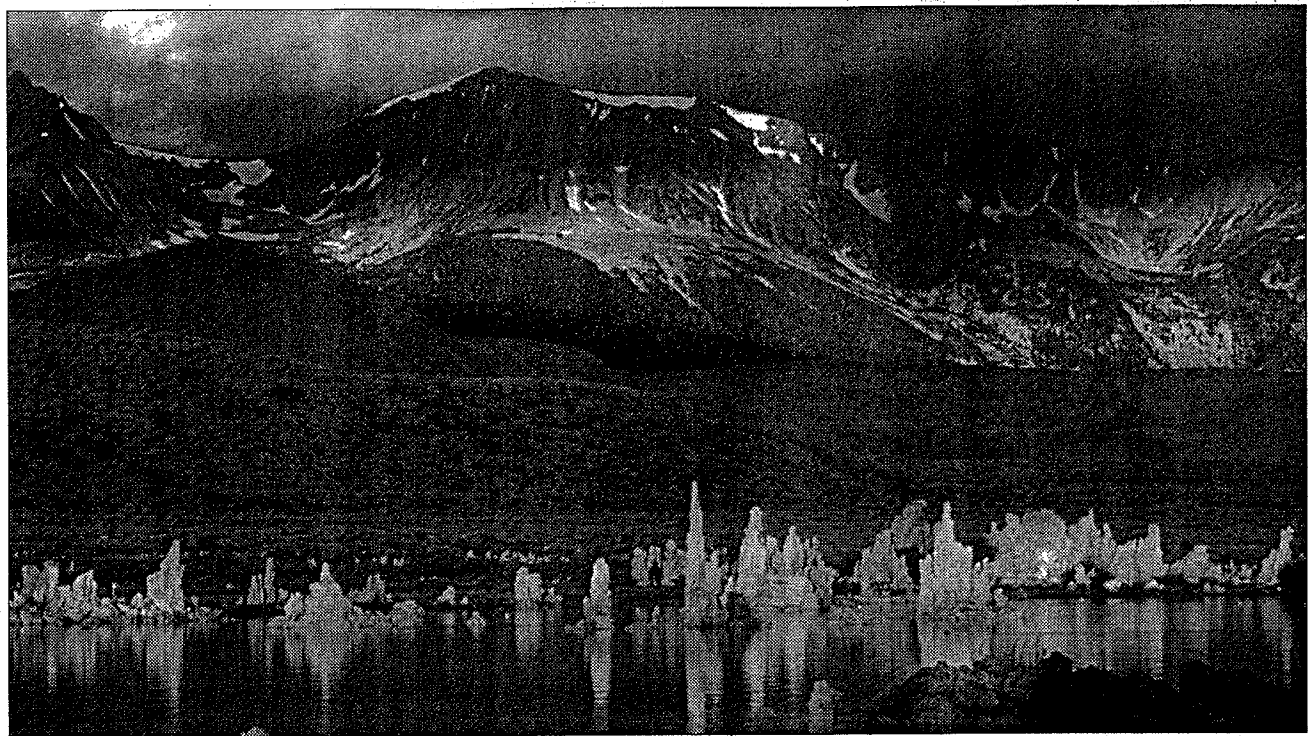


Photo by Richard Knepp

2000 Field Seminars

California Gull Research: Gull Response to a Rising Lake

Dave Shuford/ Point Reyes Bird Observatory

May 24-28

\$120 per person per day; overnight; meals included

Join a research team directed by the Point Reyes Bird Observatory and Cornell University in collecting data on the gull colony. Gain hands-on experience in field survey techniques while investigating whether the lake's changing chemistry—due to Mono's recent lake level increase—is affecting gull reproductive success. Your help is needed in continuing this important research. The rare adventure of visiting Mono Lake's spectacular Negit Islets and observing at close quarters the second largest California Gull rookery in North America is for the stout of body and heart. Please contact the Field Seminar Desk for more information on this unique Mono adventure.

Birds of the Eastern Sierra

Lisa Hug, June 10-11

\$95 per person/ \$80 for members

The Eastern Sierra offers a wide variety of breeding habitats for many species of birds during spring and summer. In this two-day seminar, we will explore the alpine lakeside, desert scrub, riparian canyons, Jeffrey pines, and lodgepole pine forests to discover the unique blend of birds that reside in the region. We will focus on sharpening field identification techniques as well as learning life history strategies of the common local birds. Lisa Hug is a California naturalist with experiences in the Eastern Sierra as a Committee intern and as a field assistant for the Point Reyes Bird Observatory breeding bird study. She has led many public bird walks through Point Reyes National Seashore. She currently teaches a shorebird identification course through the community education department at Santa Rosa Junior College.

*Call (760) 647-6595 for registration and
information. Ask for the seminar desk.*

2000 Field Seminars

The Story Behind the Land: Geology of the Mono Basin

Tim Tierney, June 17-18
\$95 per person/ \$80 for members

The Mono Basin is a geological showcase, featuring young volcanoes, glaciated landscapes, stark mountains and weird mineral towers, all set about ancient and saline Mono Lake. Explore this land with geologist Tim Tierney, author of the Committee's field guide *Geology of the Mono Basin*, and learn how to recognize the geology, know the reasons behind why things have happened, and what the future may hold. The first day of the seminar will be spent gaining an overview of the area via car and short walks. The second day will focus on thoroughly exploring a few select areas with extended hikes. Tim is an excellent teacher and interpreter of the "hard" languages.

Pigments, Perfumes, and Poisons

Glenn Keator and Margareta Séquin, June 23-25
\$110 per person/ \$95 for members

Plants interact with their environment in a multitude of ways: They attract pollinators with perfumes and brightly pigmented flowers, yet they repel other visitors with prickles, thorns, strong odors, sticky resins, and poisons. In their struggle to compete, grow and reproduce, they carry out chemical warfare with their neighbors—or elicit their help. Join us as we investigate plant structures, and the methods plants employ to pollinate and protect themselves.

Each day of this full three-day seminar will include a half-day field trip to plant habitats in the environs of Mono Lake, where we will study plants and learn about their special chemistry (no previous chemistry knowledge required!). In the hot afternoons we will go inside and spend some time on field trip topics, illustrated by pictures, hands-on demonstrations, and discussions. In the evenings there will be slide shows. Glenn Keator is a Bay Area botanist, teacher, and writer with long experience in California's native plants. He has taught widely on many botanical subjects for adult education at a number of California campuses. Margareta Séquin is an organic chemist, with an emphasis on natural products. She is a teacher at San Francisco State University, and has also actively participated in chemistry events geared to promote a better understanding of chemistry among the general public.

California Gull Research: Chick Banding

Dave Shuford/ Point Reyes Bird Observatory
July 1-4
\$120 per person per day; overnight; meals included

This seminar will focus on the actual banding of the gull chicks. See description of California Gull Research seminar above.

Paiute Burden Basketry

Lucy Parker, July 14-16
\$135 per person/ \$115 for members (primitive group campsite included)
\$50 materials fee

Learn to weave baskets in the tradition of the regional Paiute. Students will prepare and use willow strings and whole shoots for a miniature cone-shaped basket. California red bud will be added for color design. Plain twining will be used for weaving and a stack stitch design will be created. Three-strand weaving will also be incorporated. The cone-shaped basket was traditionally used for gathering pine nuts in the Mono Basin. Lucy Parker is a descendant of the Yosemite Miwok, Mono Lake Kutzadika^a, and Pomo peoples. She learned traditional handiwork from her mother, a master basket weaver, and will pass on some of her knowledge in this special three-day/two-night camping seminar. You do not have to camp to participate, but the evenings will be spent around the campfire with traditional songs and stories. This seminar is designed for those with prior basket-weaving experience.

Mono Basin Wildflowers

Mark Bagley, July 22-23
\$95 per person/ \$80 for members

From the sagebrush scrub to the aspen forests of Lundy Canyon, from the marshes and meadows along the shore of Mono Lake to the whitebark and lodgepole pine forests of Tioga Pass, the Mono Basin is home to a wide variety of wildflower habitats. This workshop is for beginners, as well as for dedicated wildflower enthusiasts who want to know more about the plant life of the Mono Basin. We will learn to identify many common wildflowers, trees, and shrubs, and the plant communities they inhabit. We will also review the names of some basic plant parts, learn how to recognize a few of the most important plant families, and

2000 Field Seminars

examine the environmental factors which shape the various habitats. Mark Bagley, your instructor, is a full-time consulting botanist in the Eastern Sierra and Mojave Desert. Mark is well-known among past seminar participants for his easy-going pace and engaging teaching style in the field.

Ancient Landscapes of the Mono Basin

Wally Woolfenden, August 5-6

\$95 per person/ \$80 Members

Climate and volcanism have been the chief architects of Mono environments during the past several millennia. Vegetation associations, animal populations, lake levels, weathering rates, glaciers and, more recently, human communities all responded to dramatic changes in climate. Occasional eruptions of magma created numerous rhyolite domes and covered the area with pyroclastic flows and ash. Prehistoric people also left their imprint on the landscape. This field seminar will explore geological and archaeological sites throughout the Mono Basin area and discuss the

dence and methods used by scientists to reconstruct past environments and human cultures. Dr. Wally Woolfenden has lived and worked in the Sierra Nevada as an archaeologist and paleoecologist for the Forest Service over the past two decades. He has recently studied vegetation and climate history from pollen deposited in the sediments of Owens Lake and Glass Creek Meadow. This seminar will involve moderately strenuous hiking into unique Eastern Sierra landscapes.

Mono Basin, Bodie, and Full Moon Photography

Don Jackson, August 11-14

\$235 per person/ \$195 for members

Join award-winning photographer and 15-year Monophile Don Jackson in exploring and photographing the wonders of the Mono Basin and Bodie State Park during the full-moon weekend and the peak of phalarope visitation. This four-day workshop will be a combination of field sessions and classroom work and will cover the art and technical aspects of creating impactful images, including composition, perspective, lighting and exposure, the Zone System, new

films, and more. Critiques of participants' work will be an important part of this workshop. Open to all color and black and white photographers that have a fully-adjustable camera (35mm to view camera) and a basic understanding of its operation. To see Don Jackson's work visit his website at www.donjackson.com.

Fall Bird Migration

Dave Shuford, August 26-27

\$95 per person/ \$80 for members

The east slope of the Sierra Nevada is a major migration route for birds traveling from northern nesting areas to warm southern habitats. As a result, early autumn is the time of year to see the greatest diversity of landbirds, shorebirds, and waterbirds in the Mono Basin and on Crowley Reservoir. Dave Shuford has been a staff biologist at Point Reyes Bird Observatory for twenty years. He has conducted numerous surveys and research projects in the Mono Basin and beyond, and is well acquainted with where to find birds in the Eastern Sierra.



Call (760) 647-6595 for registration and information. Ask for the seminar desk.

2000 Field Seminars

Surviving on the Edge: Sierra Bighorn Sheep in the Mono Basin

John Wehausen and Karl Chang, September 2-3
\$95 per person/ \$80 for members

Controversy surrounds the fate of the Sierra bighorn, one of the most recent additions to the federal list of endangered species. This field seminar will involve discussions of the biology and conservation of these animals with attempts to view them. John Wehausen is a research scientist at White Mountain Research Station in Bishop. He has been investigating various aspects of the Sierra bighorn and working for their conservation since 1974. In the late 1970s he initiated the restoration program that brought bighorn back to the Mono Basin. This seminar involves strenuous hiking at the 10,000-foot elevation and above.

Paoha Island Kayak

Stuart Wilkinson and MLC Staff, September 9
\$5 per person/ \$55 for members

Wind and weather permitting, visit Paoha Island for a picnic lunch! Join Stuart Wilkinson and a Mono Lake Committee staff member for a guided naturalist expedition to Paoha Island. Your leaders are well-versed in Mono Lake geology, ecology, history, and politics, and this natural history kayak tour will cover a wide variety of topics relating to this unique high desert lake. Plan on four to five hours for the tour. Some kayak experience is recommended for this trip to Paoha Island. Kayaks and safety equipment are provided.

Miwok-Paiute Work Basketry

Lucy Parker, September 15-17
\$135 per person/ \$115 for members (primitive group campsite included)
\$50 materials fee

Learn to weave baskets in the tradition of the regional Paiute. Students will prepare and use whole shoots of willow for a bowl-shaped basket. A design of cleaned willow will be incorporated for color, and a close, plain twining will be used. This basket was traditionally used for gathering corns and berries. Lucy Parker is a descendent of the Semite Miwok, Mono Lake Kutzadika, and Pomo peoples. She learned traditional handiwork from her mother, a master basket weaver, and will pass on some of her

knowledge in this special three-day/two-night camping seminar. You do not have to camp to participate, but the evenings will be spent around the campfire with traditional songs and stories. This seminar is designed for those with little or no experience in basket weaving.

Mono Basin Fall Photography

Richard Knepp, October 6-8
\$150 per person/ \$125 for members

Autumn in the Mono Basin is one of the greatest photographic experiences in the country. Spectacular foliage and skies combine with exceptional light, presenting ample subject matter for photographers in both color and black and white. Join accomplished photographer Richard Knepp to explore varied shoreline locations at sunrise and sunset, and fall color in nearby canyons. Subjects for discussion include composition, exposure techniques, filtration, basic theory of the Zone System, and developing a personal vision. Photographers of all levels are welcome; a fully adjustable camera of any size or format is suggested.

REGISTRATION INFORMATION

Call the Mono Lake Committee at 760-647-6595 and ask for the seminar desk to register. A more complete seminar description is available upon request. Sorry, we cannot accept registration by mail.

• REGISTRATION •

Seminars are limited to fifteen people except where noted. If a seminar receives less than six participants, the seminar will be cancelled two weeks in advance and full refunds will be given. If you cancel three weeks prior to the seminar start date, we will refund your payment (less a \$10 processing fee). No refunds after that date, but tuition can be applied to another class in 2000. We accept

VISA, MasterCard, and Discover or personal checks payable to the Mono Lake Committee. Participants must sign a liability release form. All seminars operate under permit from the Inyo National Forest.

• DISCOUNTS •

Mono Lake Committee members receive discounted seminar prices where noted. If you are not a current member of the Mono Lake Committee, you may receive the discount by joining when you register.

Call (760) 647-6595 to register

Staff Migrations



Carl Dennis Buell

Oh the hustle and bustle of springtime in the office! We've got quite a few new, and much needed, staff members around the Lee Vining office these days.

We made new Office Director Jeff Darlington welcome with plenty to do. You can almost hear the sound of back burners are getting turned off as he gets the office organized, projects done, and summer planning in action—all with an amazing sense of humor. He and his fiancée Christiana are back in the Sierra after a year in Alaska, and Jeff is gearing for his first summer, which is sure to include some quality fly-fishing time in the basin.

We also welcome Lisa Cutting to the new position of Environmental Resource Coordinator. Lisa has spent time in the Eastern Sierra since she was a little girl, and now lives at Twin Lakes just outside of Bridgeport. After interning with us last summer she's back for the hiking, fly-fishing, and of course, for work!

New to a new position is Craig Roecker from Mammoth Lakes. As Mono County Outreach Coordinator Craig has hit the ground running. We welcome him, his wife Stephanie, and his children Zachary and Jason to the Committee family.

We bid farewell to Membership Coordinator Anna Christensen with heavy hearts. Her witty sense of humor,

urban know-how, and her dedicated work will be sorely missed. Luckily, she was able to show our new Membership Coordinator Brett Pyle the ropes. Brett, who has worked in the Mono Basin for three years, is carrying the membership torch well, and in high style.

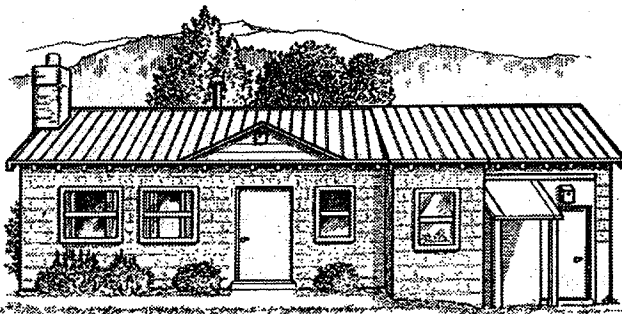
At the time that this Newsletter is going to press former Marketing Director Kay Ogden is somewhere in Italy on a year-long around-the-world bicycle trip. More than 230 cyclists (including 4 Bike-A-Thons) from 9 countries are cycling approximately 400 miles per week, totaling almost 20,000 cycling miles for the year. Kay is collaborating with the Living Lake global partnership to visit each of the partner lakes on her ride. So if you are thinking, "where in the world is Kay?" you're right on track!

We owe a big thank you to Gina Smith of Mono City for helping us out in the bookkeeping office—just seeing her face around brings a sigh of relief.

And with a stroke of luck we welcome back former Business Manager Stacy Brown for a few weeks in the basin. Stacy, who has a long history with the Mono Lake Committee, will be helping us make sure our financial audit goes smoothly.

And in the true sense of a staff migration Shannon Nelson is back from her overwintering in Oklahoma. We welcome her back with open arms, and an armload of work to do too! Shannon is already working as our new Development Assistant.

So don't hesitate to introduce yourself when you come to visit. We are all eager to connect faces with members' names, and love to hear your stories about and histories with the Mono Basin.



Carl Dennis Buell

Two years ago, the Committee purchased David and Sally Gaines' property—including the two houses that are part of Committee operations—on Third Street in Lee Vining, thanks to generous member support. The down payment was made, repairs commenced, and the property has been put to work housing staff, important records and Mono Lake documents, computer equipment, and more. If you've visited us in Lee Vining, more than likely one of the staff members you've talked with has been living in the houses there.

Last fall, the Committee's Board of Directors reviewed our savings and our mortgage on the property. Seeing that we would save money by paying off the loan early, the Board took action, paid the balance due, and we're happy to announce that the Committee is now the full owner of the property and the buildings! With housing and workspace still extremely hard to find in Lee Vining—and real estate prices rising—the property is already critical to Committee operations and we know it will only be more valuable for our success in the future!

Member Corner: News from the membership desk

by Anna Christensen

Bequests

*From Executive Director of Policy
Frances Spivy-Weber:*

My husband Michael and I have had loads of first-hand experience with the Mono Lake Committee staff, Board, and programs since I joined the Committee staff in 1997. When we updated our wills recently it took no thought at all to name the Committee as a beneficiary. We could think of few other organizations that were as cost-effective an investment.

Michael and I know that the Committee is doing great work, and we know that that work will need doing forever. We also know that bequests allow the Mono Lake Committee to do special things—beyond its budget. One year, the Committee used a bequest to fund research on alkali flies at Mono Lake. Another year, we were able to substantially increase the down payment we made to purchase Sally Gaines' property in Lee Vining. This year, again, we may use a bequest to support research on feeding studies of California Gulls on alkali flies, which will fill in important gaps in our understanding of Mono Lake's ecosystem. Looking ahead, there are capital improvements needed at the office and the intern house that we will tackle more quickly if we receive bequest funds.

When you write or update your will, I hope you decide to make a gift to the Mono Lake Committee. If you have questions or want more information, please contact Membership Coordinator Brett Pyle.

Sincerely,

Frances Spivy-Weber

In Memory

To honor the memory of **William Wells Palmer** of Los Gatos, friends and family established a fund through the Mono Lake Committee. These generous donations will be used to place a bench at Mono Lake in memory of Mr. Palmer.

Robert and Clara Calhoun of Lee Vining donated in memory of **Robert Potts** of Coarsegold.

Gordon Wood Anderson of Washington D.C. made a gift in honor of **Jacob Ryan Nagel-Boyd**.

Dorothy Brownold, a lover of Mono Lake, was remembered by **Charles Brownold** of Davis.

Alan Taylor of Mono City donated in memory of **Marilyn Lloyd** who was inspired by the beauty of Mono Lake to paint and sculpt. The **Lee Vining Ranger Station Employees Fund** also donated in her name.

The Mono Lake Committee would like to extend condolences to **Virginia Adams' family**, who have been Mono Lake Committee and Mono Basin friends for many years.

Did you know?

1999 was a tremendous year for the Mono Lake Committee's membership! We had more than 2,000 new members join in 1999 to help strengthen our education programs, research and monitoring, and restoration work. With these new friends, our membership is growing at the fastest rate in years! Thank you to members new and old for such a successful year.

Matched gifts

Cadence Design Systems, Inc. matched a donation from **Edwin Duerr** of Fremont. **Merrill Lynch and Company Foundation, Inc.** matched a generous gift from **Richard MacDonald** of San Rafael. **Mal Warwick and Associates, Inc.** and **Response Management Technologies, Inc.** matched the donations of **Steve Hitchcock** of Albany and **Alan Magree** of Long Beach. The **Charles Schwab Corporation Foundation** matched a gift from **Susan Mills** of Bakersfield. **Microsoft Corporation** matched a donation by **John Platt** of Fremont. Finally, **Bank of America Foundation** matched gifts by **Traude Buckland** of Berkeley and **Joyce Robinson**.

Thanks

Special thanks to photographer **Warren Marr** of Tujunga for donating his time and expertise in repainting our slideshow room. Come check it out when you visit!

Thank you to photographer **Don Jackson** of Forestville for mentioning Mono Lake and the Mono Lake Committee in his feature in the LowePro product catalog.

With the changing of the membership guard we bid farewell to Anna Christensen and welcome our new Membership Coordinator Brett Pyle! If you have any membership questions contact Brett by phone at (760) 647-6595, written mail at P.O. Box 29, Lee Vining, CA 93541, or email him at brett@monolake.org.

Upcoming events at Mono Lake



Restoration Days

September 1-4

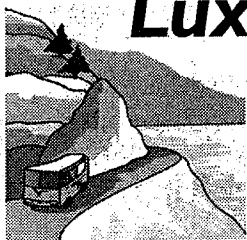
Join us Labor Day Weekend for restoration activities, workshops, and lots of fun all around the Mono Basin. This annual tradition is fun for the entire family!

High Sierra Fall Century

September 16



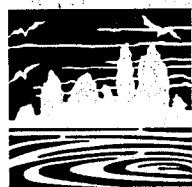
Bicycle 30, 45, or 100 miles over summits, through desert landscapes, and along Mono Lake without a single stoplight! This year's ride is dedicated to the memory of Dr. Mark Milford.



Luxury Bus Tour

September 22-25

Travel from San Francisco to Mono Lake in style! Stop for fine dining, spectacular views, and special activities in Yosemite, Mono Lake, and Bodie on this fundraising tour.



MONO LAKE

COMMITTEE

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