Summer

1997

## MONO LAKE NEWSLETTER

Summer at Mono Lake!

### Mono Lake Newsletter

Summer 1997

Volume 20, Number 1



### Mono Lake Information Center and Office

Highway 395 at Third Street Post Office Box 29 Lee Vining, California 93541 Phone (760) 647-6595

### Los Angeles Office

322 Culver Blvd. Playa Del Rey, California 90293 Phone (310) 578-9884

#### On the Internet

Web site: www.monolake.org Email: info@monolake.org

#### Staff

Development Director
Membership Coordinator
Intern Program Coordinator
Canoe Program Coordinator
Eastern Sierra Policy Director
Outdoor Experiences Coordinator
Bookstore Manager
Education Director
Canoe Tour Supervisor
Administrative Director
Marketing and Sales Director
Information Specialist
Executive Director
Bowker Senior Interns
einz, Arya Degenhardt,
e Petter Interns

#### **Board of Directors**

Jim Baetge, Lake Tahoe Barbara Blake, Los Angeles Martha Davis, South Pasadena Sally Gaines, Mammoth Lakes Ed Grosswiler, Portland, Oregon Dian M. Grueneich, Oakland Ed Manning, Los Angeles David Marquart, Lee Vining Tom Soto, Santa Monica

#### Officers

Sally Gaines and Ed Manning, Co-chairs Barbara Blake, Treasurer Tom Soto, Secretary Frances Spivy-Weber, Executive Director

### **Directors Emeriti**

Grace de Laet, San Francisco Helen Green, Berkeley Mary Hanson, Swall Meadows Genny Smith, Mammoth Lakes



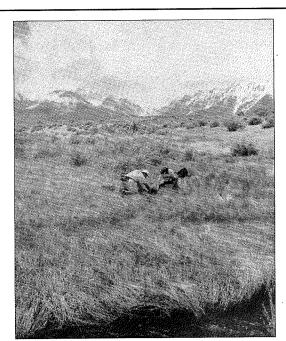
spring storm hangs over the Sierra in this issue's cover photograph, and in the foreground the rising lake recaptures a sandbar, making it lakebottom once more.

The weather is warm and the thunderclouds are building here in the Mono Basin, a sure sign of summer. The season also launches us into volume twenty of the *Mono Lake Newsletter!* Mono Lake, and the *Newsletter*, have come a long way in since 1978, and we're planning some special twentieth anniversary events for 1998—you'll be hearing more in upcoming issues.

You'll find lots to read about in this issue: the restoration Settlement is discussed on pages 8–9, summer activities are in the center section, former Executive Director Martha Davis remembers her thirteen years with the Committee on pages 3–4, and Tufa State Reserve Ranger Dave Carle reflects on the rising lake on page 5.

Page 20 features a special report on the bighorn sheep population of Lee Vining Canyon while page 23 starts off a new column, called Naturalist Notes, which compiles sightings and observations from our field notebooks here in Lee Vining. Happy reading, and we hope to see you at the lake!

-Geoff McQuilkin



Mono Lake Committee staff and volunteers planted over 300 lodgepole and Jeffrey pines along Mono's tributaries in May.

### 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 of excessive water use, and promoting cooperative solutions that protect Mono Lake and meet real water needs without transferring environmental problems to other areas.

The Mono Lake Newsletter is a quarterly publication on the Mono Lake Committee. Written material contained in this newsletter may be quoted or reproduced for review, news reporting, educational purposes, or related non-profit uses; a copy of the publication is requested. Reproduction or quotation for other purposes may be approved upon written request. ISSN #0275-6633. Copyright ©1997 Mono Lake Committee.

## Mono Lake remembered

By Martha Davis

Editor's note: As Executive Director until 1997, Martha Davis led the Mono Lake Committee through thirteen years of litigation, negotiation, and problemsolving. The following essay, written for the 1998 Mono Lake Calendar (see page 21), looks back at those years. Martha has hardly left the Mono Basin behind, however. She has joined the Board of Directors and makes frequent visits to the basin. She's as busy as ever on Mono's behalf and, we suspect, she's having more fun these days, too.

y first memory of Mono
Lake is of the scent of sage.
Even a whiff of this pungent
odor at the local market takes me back to
a hot, dust-filled afternoon where, in the
mmer of 1984, I was stumbling
through thickets of sagebrush and desert
peach trying to keep up with Mono Lake
Committee co-founder Dave Gaines.

I wanted to convince Dave that a negotiated solution for Mono Lake was possible. He eyed me skeptically. When we finally stopped to rest in the shade of a Jeffrey pine, Dave tugged thoughtfully on a corner of his beard and shook his head. He had already tried talking with the Los Angeles Department of Water and Power, with no success. What made me think DWP would listen now?

And so, high on the slopes above Mono Lake, Dave and I debated the future of the Mono Lake campaign, looking down on a dying lake choked with white alkali dust, breathing in the aroma of sage tinged with hope.

In the end we combined a legal strategy with a problem-solving twist. Without the successful court challenge to Los Angeles' water rights, there would be no incentive for DWP to respond to Mono Lake's needs. But for LA, there were real issues if DWP substantially duced its water diversions from the Mono Basin to protect Mono Lake—

issues of how to replace this water and where the replacement would come from. Unless the Committee addressed those concerns, DWP would pursue the legal battle against Mono Lake endlessly.

There was an even deeper worry for the Mono Lake Committee. For years, DWP had threatened to take water from the San Francisco Bay Delta or some other environmentally sensitive area of California if Mono Lake was protected. Under this punitive script, if Mono Lake won, another place would lose.

Through the decade of struggle to come, the Committee never gave up pursuing a principled answer to the problem: real protection for Mono Lake, locally developed replacement water supplies for Los Angeles, and the assurance that LA's water needs would not be transferred to another region.

And we won. In 1994, the
California State Water Resources
Control Board issued its landmark
decision promising Mono Lake a
higher, healthier lake level and the
restoration of its streams and
waterfowl habitat. The Water Board
also found that Los Angeles could replace
the lost diversions through conservation
and water recycling projects rather than
adversely impacting other places.

But back on that hot afternoon in 1984, Dave and I could not know the joy that the tumultuous years ahead would bring, or the profound sadness they would hold. We were worrying about how to return water to a thirsty lake.

Far below we could see where flowing water had once shaped the land. In our imaginations, ribbons of blue again wove their way through the silver stumps and snags—all that remained of the thick canopy of trees that, just a few decades earlier, had bordered lower Lee Vining Creek.

We reached no conclusions that day, other than we had to "keep on keeping on," as Dave was fond of saying. But in the years that followed, the sound of that imagined water haunted our dreams. As



Martha Davis has spent thirteen years working for Mono Lake's protection.

the Committee slogged through the seemingly endless rounds of court hearings and conflict resolution discussions with DWP, we clung to visions of water: water re-filling the empty stream beds below DWP's diversion dams and replenishing the cottonwoods and willows; water tumbling over the dry cobblestones and inundating alkali flats; water restoring life to a dying land.

A succession of court victories between 1984 and 1990 pried open DWP's diversion dams and created the opportunity for the Water Board to issue its historic decision. Out of the legal cracks, water seeped into the streams and down to the lake. It was a trickle at first,

Continued on page 4

### Mono Lake remembered (continued)

Continued from page 3

but enough to maintain a tiny pool near the mouth of Lee Vining Creek holding three brown trout and numerous fingerlings.

Later, the water came in a gush when the court ordered DWP to raise Mono Lake to a minimum protective level. On a hot August morning in 1989, DWP had to crank the release gate on Rush Creek's return ditch wide open.

Our joy that day was irrepressible. We forced ourselves to stay in the office to answer press calls. By mid-afternoon, we couldn't wait any longer. We abandoned

ever change." But how and where do we begin to "imagine" the changes that are possible?

I have always liked N. Scott Momaday's answer to this question. When he writes about the importance of the "remembered earth," he is describing a way of seeing that reaches deep into our souls and connects us more firmly to the land than the force of gravity. It is our ability to give ourselves up to a landscape like Mono Lake, to wonder upon it and to see it with fresh eyes, envisioning a new future out of the of bringing other social and economic benefits to our Los Angeles community.

And for California, we averted the substitution of one form of environmental harm for another. No other region will be adversely impacted by Mono Lake's protection. The Mono Lake Committee demonstrated a new way to address the state's water problems.

Now I return every summer to Mono Lake to walk the streams in celebration of the lake's extraordinary victory. With each step, I breath in the scent of sage and listen to the sound of flowing water

Once in his life a man ought to concentrate his mind upon the remembered earth. He ought to give himself up to a particular landscape in his experience, to look at it from as many angles as he can, to wonder upon it, to dwell upon it. He ought to imagine that he touches it with his hands at every season and listens to the sounds that are made upon it.

He ought to imagine the creatures there and all the faintest motions of the wind.

- N. Scott Momaday

the wildly ringing phones, and dashed down to Rush Creek where we dove into the newly released water, immersing ourselves in Mono Lake's victory and the promise it held for the future.

But our happiness was not unalloyed. A car accident on an icy road the preceding winter had claimed the life of Dave Gaines along with that of another Committee staff member, Don Oberlin. And so, the man who had first imagined a living Mono Lake where others had seen only a "noble waste of time," as one writer described it, would never know how completely his vision would be fulfilled.

"Dreams and visions are the counterpoint to laws and lawsuits," Dave once wrote. "Without them, nothing would wreckage of the present, that gives us the courage to struggle forward against the greatest of odds.

At Mono Lake we dreamed an impossible dream and made it come true. Today, water has re-filled the dry creek beds and life is returning to Mono's streams. In the years to come, Mono Lake will rise to a higher, healthier lake level and our children will witness the rebirth of an entire ecosystem.

Equally important, Los Angeles—California's largest, most powerful city—has chosen at last to respect the beauty and ecological well-being of this distant watershed. LA will develop the water supplies it needs through local conservation and water recycling. These water supply options will be a vital part

with renewed faith in our united ability to make the changes we need to secure the future we want.

True, I must still use my imagination to see a dense forest of cottonwood, pine, aspen, and willow standing beside the streams where the pungent sagebrush yet grows.

But the sound of the flowing water transforms the land. And for a single moment, amid the shimmering heat devils, that sound blurs the past, present and future, and the empty flood plain fills once again with trees.

Martha Davis was Executive Director of the Committee for thirteen years; she now serves on the Board of Directors.

## It's yesterday once more

By David Carle

ono Lake is back to a level not seen since the 1970s. Today, as I write, waves lap at a 1975 shoreline, but by the time you read this the lake may rise on past the 6382 foot elevation. It was back in 1974 that Mono Lake dropped below that same point.

By mid-summer, when runoff has contributed its share of this winter's snow, we should be reliving the early 1970s.

The State Water Board decision to protect Mono Lake, by reducing stream diversions to Los Angeles, is now two-and-a-half years old. We have been blessed with three heavier than normal winters since that decision went into effect.

We watch the shoreline change, pull out flooded boardwalk sections, and keep rerouting the South Tufa area nature trail. The most common conversation topic at Mono Lake, lately, has been how fast the lake is moving. If you have not been here in awhile, consider a return visit. Be prepared for startling changes.

A new "reflecting pool" separates a peninsula of tufa towers from the "mainland" on the west side of the South Tufa Area. The landbridge that connected Negit Island to the north shore, allowing coyotes to disrupt the gull breeding colony, is now severed. In fact, two water channels, one close to Negit and another spanning the north end of the bridge, have created a "new," third big island in the lake: "Landbridge Island."

Suggestions for a better name for this new land mass are in order. Though it will shrink as the lake continues to rise, the feature will persist ... flat, featureless, no longer any help to invading predators, but there, nevertheless. Ideas, anyone?

While watching all the fascinating hanges, the refrain from a song by the Carpenters has kept invading my mind:

"Just like before,
It's yesterday once more."

I had not thought of that song in ages. But there it was in my head, lyrics performed by Karen Carpenter, with her brother coming in with the backbeat, nonsense-word chorus, "Shooby-doolang-lang."

"Every Sha-la-la-la Every Wo-o-wo-o Still shines (Only oldies but goodies)

"Every shing-aling-a-ling That they're startin' to sing's So fine."

It's yesterday, once more, at Mono Lake. In fact, it is fast approaching the early 1970s, the very time when, coincidentally, that Carpenters hit was being played on the radio.

Many things are different today, of course. Most of the students in the college biology class I now teach in Mammoth were not yet born. I was a seasonal park aid at San Onofre State Beach that summer, and had never visited Mono Lake (unless you count driving by on Highway 395 and taking a picture from the viewpoint at Conway Summit; after 15 years park rangering here, I now know that neither act qualifies as a visit to Mono Lake; until you get off the road and take a closer look you won't appreciate this amazing, one-of-a-kind, inland sea).

Though at the same elevation as in 1974, today's rising lake behaves differently than the falling lake did. Right now you can see piles of plants washed up like seaweed on an ocean beach. Yet only microscopic algae grows in Mono Lake. These plants once grew near the shore, were engulfed by the

rising lake, killed by the alkaline saltwater and piled by the waves of winter windstorms.

Many more people come to see Mono Lake now then ever did a quarter decade ago. The Mono Lake Committee's efforts to build awareness, to build a caring constituency for this most unusual lake ecosystem, did not begin until the final years of the '70s. They had an uphill battle to convince the world that there were reasons to pull off of Highway 395; that there were amazing discoveries not immediately obvious from the west shore highway. They began a process that continues today. Well over a quarter million visitors came to the lakeshore in 1996.

The benefits of diluting the lake's concentrated salt solution back down to healthier, more productive levels for algae, brine shrimp, alkali flies, and birds are just beginning. Though the inland sea has risen 6 feet since the Water Board decision, it still has more than 10 feet to go to reach the "management level." That will still be 25 feet short of the prediversion lake level, but we hope it will be adequate to lower salinity, protect islands for nesting birds, mean fewer dust storms and—most of all—give a good buffer against fatally long droughts.

Come see, again, for yourself. It is 1975, today, while the years keep counting backwards.

It's yesterday, once more, at Mono Lake.

(Shooby-doo-lang-lang).

Dave Carle has been a ranger at the Mono Lake Tufa State Reserve since its establishment in 1982. He writes a weekly column for the local paper and is out and about at Mono Lake daily. See "Lakewatch" on page 9 for more on Mono's current level.

## Settlement reached on Mono Basin restoration

By Heidi Hopkins

n early May—over a year following the initial release of Mono Basin Restoration Plans by the Los Angeles Department of Water and Power (DWP)—parties to the restoration planning process presented a signed Settlement on Mono Basin restoration. to the State Water Board.

The Board will consider the document over the summer. If approved, the Settlement will guide restoration activities and annual monitoring through the year 2014.

It was no easy matter to bring 12 diverse parties together over the highly technical features of the wide-ranging plan for restoration of the Mono Basin's streams and waterfowl habitat. While virtually everyone agreed in principle that it is best to use natural processes to recreate former habitat, it took months of negotiating to agree, for example, on specific peak flow regimes and criteria for determining restoration success.

The settling parties included parties that have been involved in the Mono Lake struggle for many years such as

DWP, the Mono Lake Committee, California Department of Fish & Game, State Lands Commission, Department of Parks and Recreation, California Trout, National Audubon Society, and U.S. Forest Service. Several other parties, including the Bureau of Land Management and The Trust for Public Land, signed on this spring.

The Settlement presently is pending approval by the State Water Board. If approved, the actions described in the plan are expected to jump-start the recovery of the Mono Basin streams and waterfowl habitat which have been degraded by 50 years of DWP water diversions.

### Stream Restoration Plan

The Mono Basin Stream Restoration Plan garnered broad support.

The key features of the restoration plan include:

- restoration of peak flows to Rush, Lee Vining, Walker, and Parker creeks
- reopening certain abandoned channels in Rush Creek

• a monitoring plan with specific criteria for what it means to "restore" a stream, against which progress will be measured

One of the restoration actions required by the Water Board—the bypassing of sediment around DWP diversion dams was deferred for further analysis.

Flow regimes. All parties agreed that the most important means of reviving the creeks is to provide stream flow regimes that will allow naturally functioning, dynamic, and self-sustaining stream systems. The parties' disagreement centered on peak flows, termed "channel maintenance" flows.

High flows shape stream channels, transport and deposit sediments, spread seeds, scour pools and generally provide the energy necessary for the streams to re-establish their natural processes.

The problem is that all significant Mono Basin creeks have dams or diversion facilities that modulate natural flows, capture sediment, and prevent fish passage. The challenge was to come up with a plan, coordinated between DWP and Southern California Edison (which operates dams along Rush and Lee Vining creeks), that would allow spring runoff flows to pass through in as natural a fashion as possible.

The problem is particularly acute on Rush Creek. Four dams constrain its natural flows. The final dam, DWP's Grant Lake Dam, was built to divert water, not to release flows. As currently constructed, this dam does not have an outlet capable of releasing the peak flows originally recommended by the scientists.

In its plan, DWP proposed the "Lee Vining augmentation" of Rush Creek's peak flows. Water from Lee Vining Creek would be diverted over to Rush Creek, via the aqueduct and an overflow valve, to supplement releases into Rush Creek. Aside from problematic mechani-

## Mono County objects to Settlement

he waterfowl habitat restoration plan that emerged out of the Settlement did not enjoy the same unanimity of support as did the stream plan. In a 3-2 vote, Mono County supervisors opposed the waterfowl element of the Settlement. The basis of the County's objection was the concern that the Mill Creek restoration proposal would affect the County's opportunities to raise fish on the Conway Ranch, which the County hopes to purchase.

People for Mono Basin Preservation, a new group in the Basin, also opposed the Settlement.

Concerns expressed in the county

with regard to "dewatering" Conway Ranch, including impacts on fish-rearing, could likely be addressed and satisfied should the Mill Creek proposal be approved for consideration. The outstanding question would be wintertime flows in Wilson Creek, which runs through the Conway Ranch and carries Mill Creek water.

The Water Board specifically retains final authority over restoration projects that might have environmental impacts. Any decision on the Mill Creek restoration proposal ultimately will be made by the Water Board.

cal issues associated with this transfer of water, there is concern about the potential effects on Lee Vining Creek.

Many of the parties vigorously opposed the augmentation scheme as unreliable. In the end, however, the settlement parties agreed to the Lee Vining augmentation when DWP formally stated to the Water Board that it would construct an outlet in Grant Lake Dam if monitoring proved that the flows achieved through the augmentation scheme were unreliable or insufficient to restore a functioning stream.

Channel reopening. Many of the creeks' side channels were plugged with gravel or abandoned because of stream degradation during the 50 years of unrestricted DWP diversions. To address this, a certain amount of channel reopening occurred along Lee Vining and Rush creeks under court order prior to the 1994 State Water Board decision on Mono Lake.

In the stream restoration plan, additional channels on Rush Creek will be reopened to help spread water, provide fish habitat, and raise the water table along the stream course. Raising the water table will help support vegetation across a broad area, rebuilding the former cottonwood and Jeffrey pine forests that were abundant along the creeks prior to diversions. Vegetation will also stabilize a broad area across which the creeks can migrate over time.

Monitoring plan. The monitoring plan and termination criteria were not finalized until the very last moment this May. These revisions to DWP's original plan were critical to securing broad support from the settlement parties.

Monitoring will allow scientists to assess progress and guide modifications to the stream restoration actions as more is learned about the actual recovery. From the parties' point of view, monitoring will be particularly important for determining the success of the Lee Vining augmentation approach to Rush Creek flows. In the Settlement, monitoring is expected to continue until 2014,

when the Water Board will review the Mono Basin's recovery.

The monitoring plan describes monitoring activities for each of the four streams, their scope and duration, the protocol to be used in gathering data, and the methodology for analyzing the collected data.

Adaptive management.

The restoration approach finally approved by the parties was one of adaptive management. This means that the actions described in the restoration plan may be refined or modified based on conclusions reached through monitoring. This approach allows flexibility,

particularly important in a resource management field as new as restoration.

All parties agree that, adaptive management is the best approach.

### Waterfowl Habitat Restoration Plan

The Waterfowl Habitat Restoration Plan differed from the Stream Restoration Plan in that DWP agreed to not participate in future decision-making on waterfowl habitat restoration and monitoring. Instead, it is proposed that DWP establish a trust fund of \$3.6 million to be administered by a foundation. Initial members of the foundation would be five parties to the Mono Lake proceedings (California Department of Fish & Game, State Lands Commission, U.S. Forest Service, National Audubon Society, and the Mono Lake Committee), with a mechanism for adding new interested parties.

Activities of the foundation would include annual monitoring activities, restoring open water habitat adjacent to the lake, and rewatering Mill Creek if

## The Committee's restoration principles

The Mono Lake Committee believes that the best and most cost-effective method of restoration is re-establishing natural processes. This means re-establishing peak flows on the creeks that give the creeks enough energy to recreate their former habitats without significant intervention or continued maintenance. When past degradation is such that it is difficult to reinstate natural processes, the Committee supports a limited "helping hand," such as reopening side channels to raise water tables and provide complex habitat, or planting native vegetation to jump-start streambank recovery.

this project meets the requirements of CEQA/NEPA and is approved by the State Water Board.

DWP would continue its brine shrimp productivity studies, open several channels on Rush Creek, and make its Mill Creek water rights available for rewatering Mill Creek, based on the recommendations of the foundation.

Despite not getting all we wanted—such as an outlet in Grant Lake Dam to provide reliable peak flows to Rush Creek—the Committee is pleased overall with the Settlement. It addresses an array of incredibly complex issues. Not only do we expect that significant restoration can be achieved, but data collected during monitoring will result in a case history of tremendous value to others working on stream and waterfowl habitat management up and down the Eastern Sierra.

Heidi Hopkins is the Committee's Eastern Sierra Policy Director. She liked skiing but is happy to see hiking days again.

## Mono Basin Journal

A roundup of less political events at Mono Lake

By Geoffrey McQuilkin

Flowers are the currency of the season, and in this unusually warm spring the Mono Basin is rich.

Arrow-leaved balsamroot blankets the mountain slopes, visible for miles, making the shafts of sunlight that pass through the afternoon thunderstorms strike the ground with especially glowing shades of yellow. Lately, a new color has grown into the mix as the brilliant green-yellow blooms of sulfur eriogonum have pushed up between balsamroot blooms.

Likewise turning things yellow is the antelope bitterbrush that sparkles in the supposedly monotonous sagebrush flats all around. Like a hillside shedding snow to the sun, the bitterbrush bloom began on the south side of the

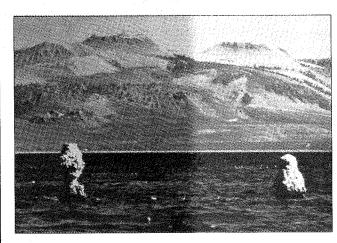


shrub, moving over the top and down to the northern branches as the warm weather continued.

Monsoonal flow has been sweeping into the Mono Basin, providing moisture for towering thunderclouds to build over the lake, and providing a medium for high altitude winds to shape long wave clouds which bloom with color at sunset.

The delicate pink blossoms of the desert peach have come and mostly gone, but lupine is still going strong. In one spot along the old highway, an abandoned gravel pit is cloaked in the blue flowers, spiced with vibrant red paintbrush, surrounded by bitterbrush blooming hard as the scent of sagebrush drifts by on breezes moistened by afternoon rains.

### Benchmarks



1962: Twenty years of water diversions have lowered the lake 23 vertical feet, revealing the tops of two tufa towers. Lake level 6,394 feet.



1997: At a lake level of 6,381.7 feet the "benchmark" tufa are high and dry, despite recent lake rises. When the Water Board-ordered level is reached, the towers will be partially submerged.



### Lakewatch

## Record dryness in the Mono Basin

By Greg Reis

ait a minute, you think as you read the above head-line—the last issue of the Mono Lake Newsletter featured record snowpack in this column. Just a few months later I'm reading about "record dryness?" What is going on?

As usual, California's weather is being predictably unpredictable. December and January brought record amounts of precipitation, and February and March set records for lack of precipitation. This dryness, coupled with relatively warm temperatures, caused an unprecedented drop in the Sierra snowpack between February 1 and April 1. Warm temperatures and dryness continued through April and May, although in May we did get some precipitation from thunderstorms that also sparked a few lightning fires. The fuel moisture level, an index of fire danger recently recorded near Topaz, California, was the lowest ever recorded for this time of year.

The April–September runoff forecast issued by the Los Angeles Department of Water and Power (DWP) is predicting 127,800 acre-feet of water to roar down the Mono Basin streams, which is 127% of average. Rush Creek runoff is expected to be 127% of average, Lee Vining Creek 126%, Parker Creek 125%, and Walker Creek 136%.

The unseasonably warm weather has caused an early snowmelt—Lee Vining Creek saw a peak of 414 cubic feet per second (cfs) on June 1, almost 100 cfs higher than the peak was expected to be! The streams are running high and Grant Lake Reservoir is spilling.

DWP has no plans to divert Lee Vining, Parker, or Walker creeks this year, and almost all of this year's runoff will flow past the Rush Creek aqueduct facilities as well. DWP is planning to export the 16,000 acre-feet allowed under the Water Board decision when Mono Lake stands higher than 6,380 feet above sea level. DWP began exporting 20-25 cfs through the Mono Craters tunnel on April 16. Diversions will stop temporarily during Rush Creek's peak, and then continue through next March.

Mono Lake, in early June, stood at an elevation of 6,381.8 feet above sea level. It is 2.3 feet higher than this time last year, and has risen 7.2 feet since the September 1994 Water Board Decision. Due to the recent dry weather, the lake now might not reach 6,383 feet above sea level, as was forecast in the last newsletter. But it is still likely to rise about a foot between now and next April.

### January storm

The figures are finally in for January's monster storm. Lee Vining Creek peaked at 740 cfs! This is an 80-year flood, but without the flood control effect of upstream reservoirs, this flood would occur on average every 25 years. In other words, a flood that would naturally occur about three times in a person's life has become a once in a lifetime event.

Many floodplain surfaces in the Lee Vining Creek bottomlands were covered by floodwaters for the first time since a similar flood in 1967. This is the first time, however, that a flood of this magnitude occurred during the winter. The other creeks didn't peak nearly as high, but did rise significantly. And you can still see the effects of the flooding in many areas. The Parker Lake Road, washed out by South Parker Creek, wasn't repaired until just before fishing season in late April.

Changes will continue to occur. In fact, this spring's high flows on Lee Vining Creek have moved debris that the January flood pushed into the entrance of

the A-2 channel. Now the A-2 channel has much more water entering it, estimated to be about 20% of the streamflow.

When you are in the Mono Basin this summer, take a look at the changes brought about by the winter of 1996–97. Walk along the Lee Vining Creek trail to see the channel changes in the bottomlands. Walk around the South Tufa Area and Navy Beach to see the results of the lake's rise.

There are many new dead end trails at South Tufa, and the lower hot spring at Navy Beach is now underwater. The island at Old Marina that hasn't been there since the early 1970s has reappeared. Take a look at the landbridge to Negit Island, now an island itself. Make your presence here a voice for continued protection of the Mono Basin. Come and see the lake at the highest it has been since 1974!

Greg Reis is the Committee's
Information Specialist. Look for him out
along the creeks, checking up on flows.



## Summer at Mono Lake

ummer activities are plentiful at Mono Lake and throughout the Mono Basin! For information on everything that's happening, stop by the Mono Lake Committee Information Center and Bookstore in the middle of Lee Vining. Our staff can provide you with activity schedules, lodging information, suggested hikes, and even a map or two.

Here's a sampling of places and programs available for your enjoyment. If you need more details, just ask at the Information Center. Most guided walks listed are summer programs which run from June to September.

### **Programs**

### South Tufa walks

Conducted three times daily throughout the summer, these walking tours are an excellent introduction to Mono Lake. Tours last about an hour and meet at the South Tufa parking lot at 11:00, 1:00, and 6:00.

### Canoe tours

Experience Mono Lake from a different perspective! Canoe tours depart every Saturday and Sunday morning at 8:00, 9:30, and 11:00. Reservations are required through the Mono Lake Committee Information Center (760-647-6595).

### Creek walks

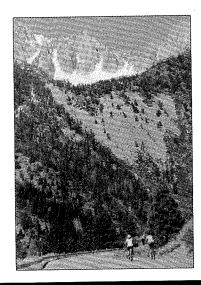
Join a Mono Lake Committee naturalist for a walk along Lee Vining Creek. Learn about restoration work done on the creek as well as the plants and animals of the area. Meet at the Information Center Wednesdays and Fridays at 9:00.

### Stargazing

Join State Reserve Rangers Dave and Janet Carle for an evening of stargazing and astronomical lore at Navy Beach.

### Special programs

Slideshows, lectures, field seminars, and more occur all summer. Check in for a schedule of upcoming special events—and see page 16 for field seminar information.



### Places to go and things to do

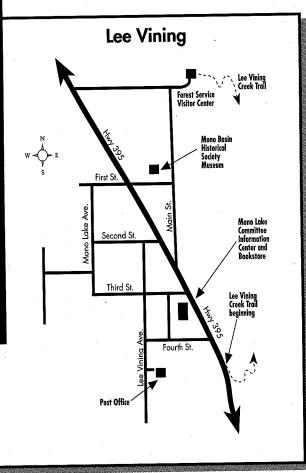
### Lee Vining Creek trail

Connecting the town of Lee Vining with the U.S. Forest Service Visitor Center, the creek trail takes you down close to one of Mono's recovering tributaries. Be sure to pick up the self-guided Creek Trail Brochure for profiles of the plants and animals you may see, as well as the creek's history of the water diversions and restoration work.

### **Panum Crater**

Come face to face with recent volcanic activity! Formed only 640 years ago, Panum Crater offers lots of interesting terrain to explore on your own. Guided tours, led by the Forest Service, are also available.





### **County Park**

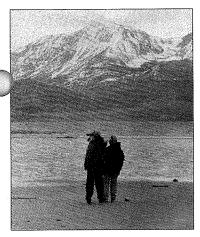
A great spot for picnicking, birdwatching, and visiting the lake. A boardwalk to the lake departs from the bottom of a large grassy area. Restrooms available.

### South Tufa

The best spot to visit Mono Lake! A self-guided nature trail takes you among the tufa towers and along the lakeshore. Guided walking tours are also available.

### Birdwatching

The Mono Basin is famous for birds and the diversity of local habitats creates a wide range of birding opportunities. Mono Lake hosts over 95 species of water birds alone, is a Western Hemisphere Shorebird Reserve, and is sure to provide you with a great day of birdwatching.



### **Fishing**

Try your luck along Lee Vining, Rush, or Mill creeks, or at Ellery, Saddlebag, or Lundy lakes. Lee Vining stores provide bait, tackle, and information on where the fish are biting!

### Photography

The varied and vast scenic beauty of the Mono Basin offers endless opportunities for photographers of all skill levels. Visit glacier-clad mountains, aspen-lined streams, ghost towns, and tufa towers.

### **Exploring**

The Mono Basin is yours to explore. Walk the lakeshore or hike through the sagebrush flats. All kinds of discoveries await your curiosity.

### **Visitor Information**

## Mono Lake Committee Information Center and Bookstore

Stop in for all the information you need about summer activities. Educational exhibits and free video presentations discuss the natural and political history of Mono Lake, and an excellent selection of regional books, T-shirts, maps, and other merchandise is offered. Located in the middle of Lee Vining, next to Nicely's Restaurant, the Center is open daily from 9 A.M. to 10 P.M. for the summer (9–5 the rest of the year).

### Mono Basin Historical Society Museum

Located in Lee Vining at Hess Park, the Historical Society Museum houses a fascinating collection of materials from the Mono Basin's past. See Native American artifacts, gold mining implements, and even the old Bodie bar, all kept within the former Mono Lake schoolhouse.

## Forest Service Visitor Center

The Forest Service Visitor Center, just north of town, features an excellent view of Mono Lake, educational exhibits, an art gallery, and selections from the "At Mono Lake" photo exhibit. Also featured are special patio talks, evening programs, and a movie about Mono Lake.

Continued on page 12



### **Local Resources**

### Lee Vining and Mono Lake

Mono Lake Committee Information Center (760) 647-6595
Lee Vining Chamber of Commerce (760) 647-6629
U.S. Forest Service Visitor Center

(760) 647-3044 Mono Lake Tufa State Reserve (760) 647-6331

### Yosemite

Information
(209) 372-0200
Campground Reservations
(800) 436-7275
Hotel and Motel Reservations
(209) 252-4848
Wilderness Permit reservations
(209) 372-0740

### Southbound on Hwy 395

Mammoth Lakes Visitor Center
(760) 924-5500; recorded info: 934-1094
Devil's Postpile
(760) 934-2289
White Mountain Ranger District (Bishop)
(760) 873-2500
Lone Pine Interagency Visitor Center

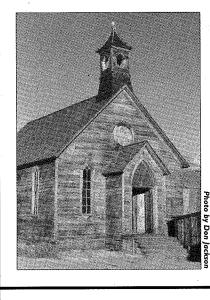
### Northbound on Hwy 395

(760) 876-4252

Bridgeport Ranger Station—Toiyabe Forest (760) 932-7070

### General

California Road Conditions (800) 427-7623 Inyo National Forest Wilderness Permits (888) 374-3773



### The Eastern Sierra

### Bodie ghost town

Bodie, located about 30 miles from Lee Vining, offers a glimpse into California's past. The gold mining town is preserved in a state of "arrested decay" and was once one of the largest towns in the state. Today, you can roam the streets, looking through windows into preserved homes and businesses. Rangers lead tours and offer special programs. \$2 admission per person, open 9 A.M. to 7 P.M. during the summer.

### June Lake loop

The Highway 158 loop is a terrific drive

through a glacier-carved canyon with views of towering peaks and quiet lakes. Popular for fishing and camping, the loop makes an enjoyable scenic drive as well.

### Yosemite

Ever popular with visitors, Yosemite is one of the crown jewels of the National Park System. A visit to the valley offers the chance to see towering waterfalls, sheer cliffs, and many famous landmarks. But be sure to visit the rest of the park as well; easily accessible from Mono Lake in the summertime is Tuolumne Meadows, which offers an excellent sampling of High Sierra wildflowers and hiking. A seven-day pass is \$20 per car.

### Special film events

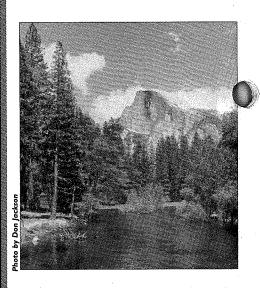
### **Documentary Features**

Mono Lake is a critical part of two documentary films being released this year, and both will be available for viewing in the Committee's Information Center and Bookstore this summer.

Featured is *The Battle for Mono Lake*, a one-hour feature produced for public television by Steven Fisher in association with KTEH, San Jose. The show documents the many aspects of the long struggle to protect Mono Lake and highlights the emotional ties to place that played such a critical role in motivating the lake's many advocates. *The Battle for Mono Lake* covers lots of ground—from wildlife and field research to local politics and legal doctrine—and includes footage and interviews from the historic 1994 Water Board decision.

Also being shown is episode one of the PBS *Cadillac Desert* series, titled "Mulholland's Dream." Based on Marc Reisner's classic history of water in the West, "Mulholland's Dream" focuses on Los Angeles's ever-expanding search for water supplies in the twentieth century. The Owens Valley water wars and Mono Lake are featured, and the episode includes an interview with mmittee co-founder Sally Gaines, rare footage of a news interview done by

Committee co-founder Sally Gaines, rare footage of a news interview done by David Gaines, and much more.



### Devil's Postpile

Located beyond the town of Mammoth Lakes, Devil's Postpile is an unusual geologic formation of columnar basalt. The surrounding area offers spectacular scenery and the hike to nearby 101-foot Rainbow Falls is popular.

### High Sierra hiking

Find a trail and head off in search of wildflowers, lakes, and solitude. Numerous trails are available for day and overnight hiking in the Sierra. Stop by the Mono Lake Committee Information Center for maps and advice.



## JOIN US FOR RESTORATION DAYS 1997

AUG. 29-SEPT. 1



et ready! Here come Restoration
Days! The Mono Lake Committee
is planning an exciting set of activities
for the Labor Day weekend which you
won't want to miss. Tree planting, a
movie premier, natural history walks,
picnics, stream health seminars, star
talks, and a lot more are in the offering
and you're invited to be there!

The weekend of activities are open to everyone. Bring your family and take your pick from the wide range of events, or join us for all of them! Please call to check on details as some activities require reservations—and if you're planning to stay in a motel, make your reservations now!

### Film premier

Friday, August 29

Join us for the premier of *The Battle for Mono Lake*, an exciting documentary film about the struggle to protect Mono produced by Stephen Fisher in

association with KTEH, San Jose. Prior to the showing, join us for a reception for Steve and the Committee's Executive Director Frances Spivy-Weber.

### Rehydration and Picnic

Saturday, August 30

Start the day birdwatching and watering young trees along Mono's creeks. Then join us at the lakeshore to renew our commitment to Mono Lake with the annual Rehydration Ceremony. Following on the heels of the Rehydration Ceremony, bring a lunch and join us at County Park for a round of updates on Mono Lake, stream and waterfowl habitat restoration, and other current news.

### **Restoration Day**

Sunday, August 31

Take part in the real work of rebuilding Mono's health! We'll spend the morning planting and watering trees to help restore the damage caused by fifty years of water diversions from the Mono Basin. It's a great opportunity to do hard but meaningful restoration work. As a special opportunity, join biologist David Herbst in the afternoon to explore one of Mono's tributaries and discuss ways of assessing stream health.

### **Restoration Day**

Monday, September 1

Another half-day of restoration work including tree planting, watering, and cleanup projects. Additional opportunities include guided Mono Lake canoe tours (reservations required) and natural history walks.

### More information

Contact the Committee for a more detailed schedule of events for the weekend. Call Kay at (760) 647-6595; you can also reach her via email at kay@monolake.org.







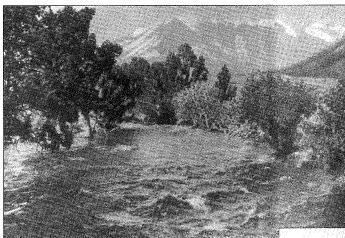
## High Sierra Fall Century

e're doing it again ... and this year will be even bigger and better! Start training, because on Saturday, September 13, we hope you'll be pedaling the back roads of the Eastern Sierra with your friends and family.

Escape to the mild days and lightly travelled roads of the beautiful region surrounding Mono Lake. Join us for a scenic and well-supported 100-mile tour of the Mono Basin and vicinity, with spectacular views and dramatic Sierra landscapes. The course includes zero stoplights and just one stop sign!

Your \$35 entry fee (\$55 for tandems) includes four fully stocked rest stops, SAG support, an event T-shirt, and a patch. And if 100 miles is a bit more than you're ready for, join us for a scenic 30-mile ride that includes support services for just \$25.

Are you really ready to participate all the way? Raise funds for the continuing protection and restoration of Mono Lake by getting sponsors for your ride and qualify for great prizes!



Pre-1940: Before diversions, Rush Creek supported a rich stream and forest habitat stretching all the way to Mono Lake's shore.

## The Mono Basin past and present

50 years of water diversions by the Department of Water and Power changed Mono Lake and the Mono Basin dramatically, and today's landscape looks quite different than that of fifty—and even thirty—years ago.

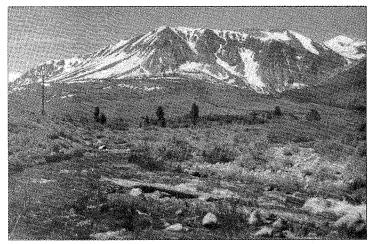
As you travel the basin and visit Mono Lake, keep in mind that many of the views you encounter are of landscapes in transition from desiccation to health. Restoration work will help heal much of the damage, though some places will remain forever altered.

Printed here, along with a map of the region, are three photos of Rush Creek, Mono Lake's largest tributary. The first photo shows Rush Creek before diversions, with full flows and streamside vegetation. The middle photo shows the same spot in 1982 from the middle of the stream channel—no flows, and dead vegetation.

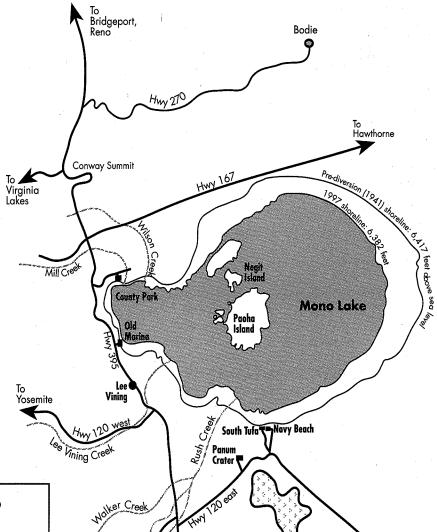
The last photo shows the same area in the late spring of 1997. Water has been returned to the creek, thanks to the work of the Mono Lake Committee and others, and new vegetation is getting started. Mono Basin restoration projects include planting pine tree seedlings in this area.



1982: Full diversions into the aqueduct leave Rush Creek dry; the streamside forest has been lost.



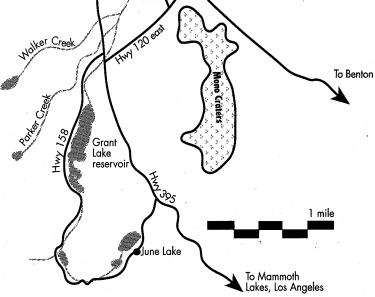
1997: Rush Creek making a recovery thanks to victories which returned water to the creek and to restoration work.



### How far is it?

## Distance in miles from Lee Vining to:

South Tufa	11 miles
Yosemite Park entrance	13
Tuolumne Meadows	21
Mammoth Lakes	27
Bodie	32
	66
Yosemite Valley	77
Lake Tahoe	110
Reno	140
Death Valley	1 <i>77</i>
San Francisco (via 120)	250
Los Angeles	303





## 1997 Mono Lake Committee Field Seminars



### SOUTH SHORE KAYAK

Stuart Wilkinson; June 15 \$60 per person/\$50 for MLC members

Join a veteran kayaker and explore Mono Lake's south shore. Paddle among spectacular tufa towers and underwater springs. Stuart is well versed in Mono Lake ecology, history, and politics, and this natural history kayak tour will cover a wide range of topics relating to your favorite high desert lake. The tour lasts 4–5 hours; kayaks and safety equipment are provided. Some kayaking experience is a plus, but beginners are welcome.

### GEOLOGY OF THE MONO BASIN

Tim Tierney; June 21–22 \$90 per person/\$75 for MLC members

Perhaps nowhere else in California is the geology more varied than in the Mono Basin, where both glaciers and volcanoes have left their mark. Explore weird mineral towers, volcanoes, and glacial remains. The first day will be spent exploring the area by car and foot. Day two will focus on thoroughly exploring a few special points of interest. Tim is a geologist and author of the Committee's Geology of the Mono Basin field guide.



### MONO-BODIE PHOTOGRAPHY

Clinton Smith; June 27–29 \$250 per person/\$225 for MLC members

This seminar begins Friday evening with an exploration of the mysterious ghost town of Bodie through sunset and into darkness, entering buildings not normally open to the public. On the second and third days, visit tufa groves both on land and from a canoe and explore aspen-lined canyons, volcanoes, and other unique features of the Mono Basin. Clinton, a renowned advocate of photography as an art form, gears his classes to stimulate thinking and sensitivity. This class is loosely structured and open to all levels of expertise. A fully adjustable camera is suggested.

### MONO BASIN WILDFLOWERS

Ann Howald; July 5–6 \$90 per person/\$75 for MLC members

The Mono Basin is an exceptional place to see wildflowers—fuzzy desert lupines, delicate streamside orchids, golden Mule's ears, prickly-stemmed "fried egg flower," scarlet gilia, skunk monkeyflower, and many more. Wildflowers are the focus of this seminar, but we won't neglect the insects, birds and other critters that eat them, pollinate them, and distribute their seeds. Join Ann, biology instructor and experienced Mono Basin naturalist, to explore the basin's botanical treasures.

### NATIVE AMERICAN BASKETRY

Lucy Parker; July 12–13 \$90 per person/ \$75 for MLC members \$50 materials fee

In the tradition of the regional Paiute, learn to make a small coiled basket from seasoned willow with a design in split redbud and fresh willow similar to a Pomo-style fast basket used for gathering nuts and berries. Lucy Parker is a descendent of the Yosemite Miwok, Mono Lake Kuzedika'a, and Pomo peoples. She learned traditional

## New for '97: Special Seminar for Teachers

### ENVIRONMENTAL EDUCATION AT MONO LAKE: A FIELD SEMINAR FOR TEACHERS

Dave and Janet Carle; July 21-24

\$100 per person (includes one unit of college credit and basic accommodation)

Science, mathematics, social studies, environmental studies, and the visual arts—Mono Lake can be used as a model for a wide range of curriculum concepts. From fourth grade to high school, learn how you can integrate Mono Lake into your class studies. Designed for teachers to enhance their skills in environmental education, this new seminar stresses study in the field and involves some easy hiking. Dave and Janet Carle are State Park Rangers and each hold a Masters degree in environmental interpretation. Cerro Coso Community College will give one unit of college credit for the completion of this seminar. This promises to be a unique experience for teachers. Accommodation will be at the primitive and remote Burger's Retreat. Located at an elevation of 8,000 feet, this pristine mountain locale with aspen, fir, and Jeffrey pine provides a welcome setting for your stay in the Mono Basin. Please call for more details on this special field class for teachers.



handiwork from her mother, a master basket weaver, and will pass on some of her knowledge in this two-day seminar. Lucy will see that you have adequate material to take home after the seminar is over.

### STREAM RESTORATION: A HANDS-ON CASE STUDY

Scott English; July 19-20 \$90 per person/\$75 for MLC members

Explore the magical, hidden world of the Mono Basin's riparian corridors and learn about the evolving art and science of stream restoration in the Mono Basin. What can be brought back and what can't? Why is restoration necessary and how do we gauge its success? After one day of field exploration we will get our hands dirty and actually do some light restoration work on Rush Creek. Scott English has worked as a consulting biologist on stream restoration in the Mono Basin.

### MONO LAKE PHOTOGRAPHY: SCENIC AND WILDLIFE WONDERS

B. Moose Peterson; July 25-27 \$175 per person/\$150 for MLC members

Explore the incredible wildlife and scenery of Mono Lake through your camera lens. The seminar begins Friday night with a slide show. Saturday will be a full day of photography beginning very early with star trails and

sunrise at Mono Lake. After breakfast, we'll be back down at the lake photographing the vast collection of shorebirds, waterfowl, and other avian wonders. After lunch, we will travel to Lee Vining Canyon and explore the beauty of Lee Vining Creek. We'll visit the lake again at sunset and then conclude the day with an evening of sharing slides and prints. On Sunday morning we'll return to Mono Lake for sunrise and a final half-day of activities. Moose is a professional photographer who has developed particular renown for his environmentally sound wildlife photography.

### MONO LAKE, MARS, AND BEYOND

Alan Stahler; August 1–2 \$90 per person/\$75 for MLC members

As night falls, Mono's dark skies set off the stars. This field seminar will focus on learning one's way around the galaxy and the universe. We'll observe at night and by day, studying the sun, the stars, the sky, and also images returned to Earth by spacecraft. We'll discuss how life fits into the scheme of things, and how research at Mono ties into the search for past life on Mars. An amateur astronomer who trained as a biologist, Alan talks about science and the environment on KVMR-FM, Nevada City. This field seminar begins on Friday evening.

CONTINUED ON **PAGE 19** ⇔

## Research Opportunity on Mono Lake's Islands: California Gulls Need Your Help

### GULL RESEARCH ON MONO'S ISLANDS

May 22-26, July 3-6 \$120 per person per day Overnight; meals included

Your participation and seminar fee will allow 14 years of research to continue on Mono's islands and will provide you with a field expedition opportunity and a desert island adventure you will not soon forget! Collect data on the Mono Lake gull colony and gain hands-on experience in field survey techniques. You'll enjoy the rare adventure of visiting Mono Lake's spectacular Negit Islets, and at close range you'll observe the second largest California gull breeding colony in North America.

Will this be the year that California gulls return to nest on Negit Island? Will the widening channel between Negit and the landbridge deter coyotes' access to the gulls? Last year coyotes returned to Negit Island and Twain Islet at a lake level six feet higher than when coyotes first reached Twain Islet in 1982. Further research is needed to document the length of time needed for gulls to recolonize abandoned Negit Island and Islets. Join a research team directed by the Point Reyes Bird Observatory as they continue monitoring this vital gull rookery.

Sign up for one to five days in late May or early July. You'll camp on Krakatoa Islet, inside the movie set volcano from the 1950s classic Fair Wind to Java. You can expect very rugged field conditions, long hours in hot sun or cold wind, hearty meals, and the hue and din of 35,000 nesting gulls. The remote experience and incomparable views of Mono Lake and the Sierra Crest make this research seminar a unique experience. You bring your gear, curiosity and energy, we provide training, food, fresh water, and boat transportation.

### **NEST COUNT**

The size of the gull population will be estimated by to make nests over a five-day period on Negit Island and all the Negit Islets. Field workers can have and mark nearby rocks to avoid duplicative counts.

### CHICK BANDING

July 3, 4, 5, or 6

The reproductive success of the gull colony will be estimated by counting and banding all gull chicks found in eight study plots. Banding aids in making final survivorship calculations, and data from the study plots is extrapolated to form an overall picture of the gull population.

### **WEEKEND CANOE TOURS**

One-hour tours every Saturday and Sunday at 8 A.M., 9:30 A.M., and 11 A.M. June 21 though September 7

Adults \$15, kids \$6 (Sorry, no kids under 4)

Join expert guides for natural history from a unique perspective: the lake itself. Starting at Navy Beach (near South Tufa), you will canoe among tufa spires along Mono's shoreline and learn about this ancient, life-productive lake. Special group tours can be arranged. All participants must wear the life jackets provided and obey safety rules. Please arrive 30 minutes before departure time and allow additional time to walk to Navy Beach. Reservations are strongly recommended for these popular tours: call (760) 647-6595 (9 A.M. to 5 P.M. daily) and ask for canoe reservations.



## 1997 Mono Lake Committee Field Seminars



### **⇔ CONTINUED FROM PAGE 17**

### **VOLCANOES OF THE MONO BASIN**

Tim Tierney; August 9–10 \$90 per person/\$75 for MLC members

The region we call the Eastern Sierra has been volcanically active for millions of years. Learn when and why volcanoes have erupted, and how to spot them nearly everywhere in this region. The first day we will explore the local area and learn about the ancient volcanic history of the region. The second day will be spent hiking and driving within the Mono Basin, discovering the present and future volcanic story. Tim is a geologist and the author of the Committee's *Geology of the Mono Basin* field guide.

### FALL BIRD MIGRATION

Dave Shuford; August 16–17 \$90 per person/\$75 for MLC 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 is an expert on birds and well acquainted with where to find them in the Eastern Sierra.

### HIGH COUNTRY WILDFLOWERS

Mark Bagley; August 23–24 \$90 per person/ \$75 for MLC members Optional group campground facilities included

A big winter in the Sierra promises a fantastic, late summer wildflower show! The headwaters of Lee Vining Creek, near Tioga Pass and Saddlebag Lake, feature some of the best and most accessible locations for studying the magnificent flower displays of the High Sierra. After reviewing the basics of plant structure, the workshop will

journey through subalpine forests, across meadows and fell fields, along cascading creeks, and around jewel-like lakes identifying up to 150 species of flowers, trees and shrubs. Mark, a consulting biologist in the Eastern Sierra, will lead this field seminar's easily paced 2-4 mile hikes at the 10,000 foot elevation. The seminar has reserved a group campground at Saddlebag Lake (elevation 10,000 ft.) for those who wish to use it.

### PAOHA ISLAND KAYAK

Stuart Wilkinson; September 13
\$60 per person/\$50 for MLC members

Wind and weather permitting, visit Paoha Island for a picnic lunch! Stuart is well versed in Mono Lake ecology, history, and politics and this natural history kayak tour will cover a wide range of topics relating to this 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.

### MONO BASIN FALL PHOTOGRAPHY

Richard Knepp; October 10–12 \$125 per person/\$100 for MLC members

The Mono Basin in autumn 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 Rick Knepp to explore varied shoreline locations at sunrise and sunset and to discover 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. This seminar begins on Friday evening.



## The future of Sierra bighorn sheep

### and the role of the Mono Basin

By John Wehausen

e called them "the bravest of all Sierra mountaineers" but John Muir may have observed bighorn sheep only once in all the time he spent in the high Sierra Nevada. His one documented sighting was in the southern Sierra, but Muir's writings nevertheless documented the existence of bighorn in the Mono Basin.

In 1986 bighorn were reintroduced to the Mono Basin from a population further to the south. Now the population in Lee Vining Canyon is the primary hope for the future of Sierra Nevada bighorn.

Impacts on bighorn populations quickly followed California's gold rush days. As a result, the State Legislature enacted laws to conserve bighorn sheep as early as 1873, and gave them full protection in 1878. Historical evidence indicates that bighorn populations were scattered along the crest and east side of the central and southern Sierra from around Sonora Pass to Olancha Peak, and in the Mineral King and Kaweah Peaks area west of the Kern River.

How many there were or what happened to each population that disappeared will

never be known. However, it is well established that contact with domestic sheep often results in pneumonia outbreaks that can eliminate entire bighorn populations. Given the high level of domestic sheep grazing that began in the Sierra in the 1860s, and local market hunting, it is a wonder that any native bighorn survived.

About seven Sierra bighorn populations made it to the twentieth century, but by the 1970s, when intensive research began, only two remained. One of them, on Mount Williamson, numbered only 30 sheep and remained at that size up to 1985. The other population (the Mount Baxter herd) ranged from Kearsarge almost to Taboose Pass, and contained 220 sheep in the late 1970s.

The size and productivity of this population allowed the creation of an interagency reintroduction program for Sierra bighorn. Sheep from the Mount Baxter herd were moved over a ten year period to three formerly occupied locations.

This program was initially successful and increased the total bighorn population by about 25%. However, mountain lion predation on bighorn occupying low

elevation winter ranges increased dramatically in the 1980s. Each bighorn population responded by abandoning these habitats. This left them wintering high in the mountains in considerable snow, with poor forage resources.

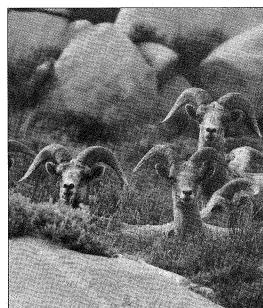
The result has been large population declines, especially during the particularly severe winter of 1995, when many bighorn perished. A careful inventory taken in 1995 and 1996 found only 120 bighorn remaining in the Sierra Nevada, with two populations (Mt. Langley and Mt. Williamson) on the edge of extinction, each with three or fewer ewes left as their reproductive base. The Mount Baxter herd is now only 15% of its former size.

The one hope for recovery lies with the population reintroduced to Lee Vining Canyon in the Mono Basin. Although it suffered a large loss in 1995, 29 survived that winter, and it already showed strong signs of recovery in 1996. Barring an unforeseen catastrophe, it is hoped that this population will serve as a new source of translocation stock in a couple of years.

Recent work on genetics and morphology of bighorn sheep has found Sierra Nevada bighorn to be a notably unique form of bighorn sheep that occurs only in the Sierra Nevada. Consequently, some of the first available sheep may go to a captive facility to help preserve this unique gene pool. Nonetheless, a high priority for use of Lee Vining Canyon stock will be the establishment of other viable populations in the Mono Basin, including Lundy and Bloody canyons. Because the future of Sierra Nevada bighorn hinges so strongly on the Lee Vining Canyon population, Inyo National Forest recently used controlled burning to open up habitat in an attempt to make bighorn less vulnerable to any mountain lions that might happen into the area.

At a time when every possible effort is needed to save Sierra Nevada bighorn, funding is as scarce as the sheep themselves. Consequently, in 1995 the Sierra Nevada Bighorn Sheep Foundation was established as a tax-deductible nonprofit foundation to help assure the future of these unique sheep. If you would like to help, please contact them at P.O. Box 1183, Bishop, CA 93515; (760) 873-4563; or snbsf@telis.org.

John Wehausen is a research associate at White Mountain Research Station in Bishop. He has been investigating various aspects of 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.



## News from the Executive Director

By Frances Spivy-Weber

ongratulations Mono Lake
Committee members! The
education program fundraiser—
which you received an appeal for in
April—has been a great success. We
raised the full amount needed and will
now receive a matching grant of \$16,000
for education programs. This year's first
group of students from Los Angeles
arrived in the Mono Basin over Memorial Day weekend and had a terrific
experience.

### Upcoming events

Over the next year, Mono Lake Committee staff and volunteers will be meeting with many of you in your communities. This fall, we will host the San Francisco Bay Area premier of The Battle for Mono Lake, a one-hour public television special produced by Stephen Fisher in association with KTEH, San Jose (date to be announced.) In 1998, when we celebrate our 20th anniversary, we will take Mono Lake "on the road." That is how we started, and we want to say thank you to the many Audubon and Sierra Club chapters and others who helped us get to this "ripe old age." We'll be seeking your help to schedule programs.

### Let us hear from you!

As I begin to meet Mono Lake Committee members, each encounter reinforces why the Committee is such a great organization. Our members are the best! Here's a sample:

Sally Gutierrez from Long Beach and Tom Bohigian from Fresno each sent me email. Sally offered to take on a volunteer computer assignment. Tom, who works for Senator Barbara Boxer, told me he loves the region after being "bit" by Mono Lake back in 1973.

Anne Phillips from San Luis Obispo sent in a note with a \$250 contribution to the Committee's education program, saying "As a retired college English teacher, I can't easily afford this amount. But as a retired teacher, I can't afford not to. I really like your approach on this campaign."

Protecting Mono Lake remains the top priority of the Mono Lake Committee. To ensure the "Long Live Mono Lake!" goal, Mono Lake Committee members and staff have learned that we must work with others to heal the decades of damage done to the streams and waterfowl habitat of the Mono Basin. Through education, we hope to inspire young and old alike to make a commitment to conservation.

In order for me to do my job, I need to hear from you. It will take all of us working together to carry out the Mono Lake Committee mission, and we will do it best if you tell us what you think.

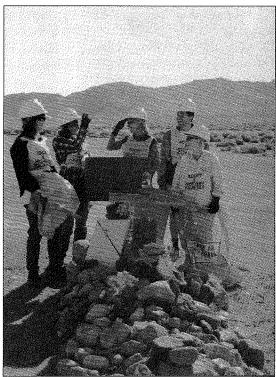
There are many ways to contact your staff here at the Committee. Postcards and letters work. Each staff member has an email address. Mine is frances@monolake.org; our general email address is info@monolake.org. We can be reached on the World Wide Web, too: www.monolake.org. You can meet us face-to-face at the Mono Lake Committee Information Center and Bookstore in Lee Vining, the best in the Eastern Sierra. It is open seven days a week, 9 A.M.-10 P.M. in the summer, 9-5 the rest of the year.

Ours is not a one-way conversation. You can hear from us—sometimes daily—on the Web site, thanks to information specialist Greg Reis (greg@monolake.org). The *Mono Lake Newsletter* tells you what's happening with our programs and priorities four times a year. Want something

covered? Let editor Geoff McQuilkin know (geoff@monolake.org). Through the mail you receive appeals and membership renewal letters or Guardian-of-the-Lake mailings. While you may not be able to respond to each of our requests, please read the letters. Each one emphasizes an important aspect of the Mono Lake Committee program, and usually our most urgent activities.

Ultimately, Mono Lake will continue to live—will thrive—if we work together, and I look forward to doing just that.

Frances Spivy-Weber is the Committee's Executive Director. If it were possible, she'd happily meet every Committee member.



Community service project: Mono Lake Committee staff preparing to gather trash on the Committee's two-mile adopt-a-highway section of Highway 395. Fortunately, the "grave" of the unknown fisherman didn't need to be picked up!

## 1997 Eco Expo excitement

By Cori Takasane

ree toilet exchange? How does this work? Is it really free? Am I eligible? Who is my water provider?"

These were just some of the questions answered by members of the Los Angeles Water Conservation Coalition at the 1997 Eco Expo in March. The LA Water Conservation Coalition brings together the Mono Lake Committee with four community organizations to present educational school programs on Mono Lake and water conservation. The four groups are the Asian American Drug Abuse Program (AADAP), the Korean Youth and Community Center, New Directions for Youth, and the Watts Labor Community Action Committee (WLAC).

Over the three-day Eco Expo event we explained to a diverse group of 400 people the free ultra-low flush toilet exchange program in Los Angeles County and the importance of conserving water. Most people inquired about the program for themselves, while some took information to pass on to their friends and family. Out-of-state conference attendees and residents of Los Angeles,

Orange, and Riverside counties were equally interested in finding out more about the free toilet exchange. We also managed to capture the attention of a group of elementary school age children and even Ed Begley, Jr. stopped by and informed us that he has his ultra-low flush toilet installed! Both WLCAC and AADAP conduct toilet retrofit programs,

and their staff estimated that this event will generate many new customers. They expect to be very busy saving water within the next few weeks.

Cori Takasane is a consultant helping with education programs in the Los
Angeles area. A native of Hawaii, she saw
her first snowfall here in the Mono Basin.



Xiomara, John, and Diane, all members of the Los Angeles Water Conservation Coalition, discuss a free toilet exchange strategy at the 1997 Eco-Expo.

## Gift giving made simple with new offer!



We can ship 1998 Mono Lake Calendars to your list of gift recipients! Easy gift giving for clients and friends!

ive your clients, business partners, and friends something they will really remember this year: the 1998 Mono Lake Calendar!

Why the calendar? Because this year we're offering a special program that makes it easier than ever to give calendars as gifts.

Here's the deal: you purchase fifteen or more calendars at the \$10.95 retail price and provide us with a list (any length is OK) of the folks you want to receive them. We package a calendar in a protective mailer, enclose a special gift

notice with your name, and mail one to each recipient on your list. No hassle for you, and great gifts for your friends!

For 1998, the calendar features beautiful full color photos of Mono Lake and the Mono Basin by renowned photographers such as Fred Hirschmann, William Neil, and Jim Stimson. The year gets underway with an essay by former Committee Executive Director Martha Davis, who looks back at the many years of struggle for Mono's protection.

Call Kay at (760) 647-6595 to set up your order today!

## **Naturalist Notes**

### A Mono Basin Chronicle

Late February: first California gulls of the season spotted ... Comet Hale-Bopp becoming visible.

Early March: red-winged blackbirds, magpies, killdeer, five eared grebes, redhead duck at County Park ... great horned owl and numerous gulls in Negit Island vicinity ... American robins in town ... winter on the way out for sure ... dragonfly near lake ... wooly bear caterpillar crossing Highway 120 ... Bewick's wrens in Rush Creek willows ... female bufflehead and female canvasback on the lake ... bitterbrush (*Purshia tridentata*) leafing out ... hairy woodpeckers exploring north shore willows ... rufous-sided towhee singing in County Park cottonwood ... Clark's nutcrackers arrive in town ... common snipe, meadowlarks make lakeside appearance.

Late March: willows budding next to Committee Bookstore ... killdeer and red-winged blackbirds at County Park ... ruby-crowned kinglet ... great-horned owl sighted by day ... spring equinox at a rising lake ... two scrub jays visit a Lee Vining feeder ... first generation brine shrimp hatch visible in lake ... desert peach (*Prunus andersonii*) beginning to leaf out ... starlings and scavenging magpies ... kestrals over lakeshore meadows ... Canada geese honking from tufa towers ... prairie (maybe peregrine?) falcons nesting in the Mono Craters ... sundogs in the afternoons ... horned larks near the landbridge ... ruddy ducks out on the lake ... Paoha Island sightings: sage thrashers, California gulls, violet green swallows, Say's phoebe, red-tailed hawks, red-breasted sapsuckers ... lunar eclipse over Mono ... a pair of mallards and five American avocets in breeding plumage ... Great Basin spadefoot toads loud with evening chorus ... the osprey return ... first sightings of Brewer's blackbirds, yellow-headed blackbirds ... east shore duststorms.

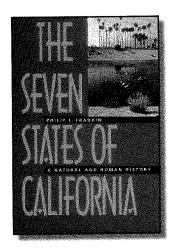
Early April: snow flurries and windy ... more dust storms ... soaring red-tailed hawks ... snowy egret at Rush Creek sandbar ... American dipper on grey granite boulder ... blue flax (*Linum lewisii*) making a start at the office ... desert peach starting to bloom ... paintbush (*Castilleja spp.*) in full bloom ... piñon jays and a flock of bushtits out by the Bodie road ... sage grouse strutting ... rainbow around the moon ... Lee Vining Creek trees leafing out.

Late April: lakeshore sightings of Canada geese, a rail, starlings ... snipe winnowing ... violets (Viola spp.) blooming on moraines ... bitterbrush blooming now ... a marten up on Tioga Pass ... lupine (Lupinus spp.) and larkspur (Delphinium spp.) going strong ... eared grebes ... mallards, and a sora ... white-faced ibis at the lake ... visible hypopycnal zones around the creek mouths ... penstemon (Penstemon spp.) along the creek ... Great Basin spadefoots singing.

Early May: yellow Sierra wallflower (*Erysimum perenne*) on the moraines ... unidentified gilia (*Gilia spp.*) ... soaring turkey vulture over piñons ... black-necked stilt, snowy egret, and white-faced ibis in marshland ... sixteen cinnamon teal floating by ... bananaheads a.k.a. yellow-headed blackbirds ... double-breasted cormorant ... Serengeti of birds ... where are the alkali flies? ... least sandpipers ... green-backed heron ... gadwalls on the lake ... arrowleaf balsamroot (*Balsamorhiza sagittata*) turning hillsides yellow ... California gulls everywhere ... northern harrier hunting ... thunderstorms building ... afternoon lightning and power failures ... white-tailed jackrabbit ... a wandering garter snake.

Late May: ten acres of sage up in smoke ... leaping orange flames in the dusk ... meadowlarks ... green-winged teal in roadside ponds ... grazing sheep ... black-tailed weasel crossing the highway ... smoldering fire near Mt. Lewis ... common merganser on Parker Lake ... prickly phlox (Leptodactylon pungens) and another mystery gilia ... osprey plucks trout out of Grant Lake reservoir ... western tanager in the Jeffrey pines ... snowy plover near landbridge ... Sarah says yes ... lenticular clouds parallel the Sierra crest ... spiny hopsage (Grayia spinosa) and Mormon tea (Ephedra viridis) blooming away.

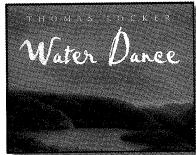




### THE SEVEN STATES OF CALIFORNIA

In this personal and historical exploration of California, acclaimed author Philip Fradkin divides the state into seven distinct ecological provinces. From each, he selects one feature upon which he hangs a series of linked stories about characters as dissimilar as politicians, railroad builders, Chinese laborers, and Hollywood celebrities. Fradkin even stops at our favorite lake, and includes a few words on David Gaines and the Mono Lake Committee.

By Philip L. Fradkin; UC Press; paperbound; 474 pages: \$14.95



### WATER DANCE

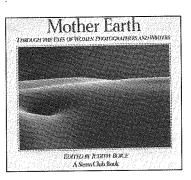
For children and adults, too, the quiet, powerful poetry of *Water Dance* stands alongside beautiful illustrations which are inspiring and alive. Water does dance through the world and *Water Dance* shows us how, in a beautiful way.

By Thomas Locker; cloth; 30 pages with color illustrations: \$16.00

## MOTHER EARTH: THROUGH THE EYES OF WOMEN PHOTOGRAPHERS AND WRITERS

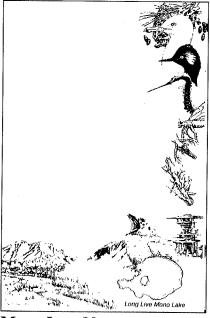
This anthology of seventy brilliant color photographs and accompanying rich text combines the work of some of the most talented women photographers with the poetry and prose of eminent women writers to present a woman's view of our planet. Together, the words and images reveal mother earth's tenderness and power, grace and violence, intimate details and vast breadth, inspiring readers to look afresh at earth's fragile yet powerful beauty.

Paperback; Sierra Club; 142 pages: \$20.00



#### Use our postage-paid envelope Price Total Quantity to send in your order! Committee Cap size, color: \$25.00 Kokopelli Earrings \$10.95 Name 1998 Mono Lake Calendar \$20.00 Mother Earth Address \$16.00 Water Dance State City \$14.95 The Seven States of California \$9.95 Mono Lake Notepad and Envelopes Check (to Mono Lake Committee) Daytime phone Shipping: use rates at left ☐ MasterCard SHIPPING RATES Subtotal Up to \$10 \$4.00 CA residents-add 7.25% sales tax to subtotal \$5.00 \$10 - \$25 Expiration Date Card Number \$25 - \$50 \$5.50 \$4.00 charge for additional mailing addresses California law requires us to charge sales tax on shipping \$6.00 Over \$50 Mono Lake Committee P.O. Box 29, Lee Vining, CA 93541 Phone: (760) 647-6595 Fax: (760) 647-6377





### MONO LAKE NOTEPADS

A fifty-sheet notepad—recycled paper of course—plus fifty matching envelopes! A montage of Mono Lake illustrations compliment the paper's cream color, making the perfect stationery to show your enthusiasm for our favorite lake.

Fifty sheets and envelopes: \$9.95





### **NEW!** COMMITTEE CAPS!

Perfect for summer wear, the Mono Lake Committee logo is featured on a baseball-style cap with adjustable cloth band. Stonewashed colors come in two basic sizes.

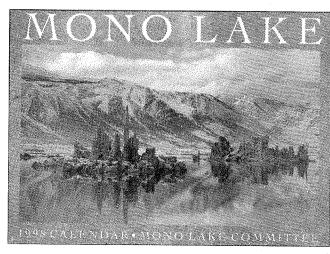
Youth: red, forest, or purple: \$12.00 Adult: sage, blue, or heather grey: \$15.00



### KOKOPELLI EARRINGS

The kokopelli is believed to be the oldest of supernatural figures, and is celebrated here in classic form!

Sterling silver with natural lapis lazuli: \$25.00



### JUST IN! 1998 MONO LAKE CALENDAR

The 1998 Mono Lake Calendar features full-color images from renowned photographers such as William Neil, Jim Stimson, Don Jackson, and Fred Hirschmann. An introductory essay by former Committee Executive Director Martha Davis looks back on the many years of struggle for Mono's protection. Great for early gift giving—or take advantage of our gift mailing program on page 18! 12 months; full color: \$10.95

Quantity discounts: 2–5, \$9.95 each; 6–10, \$8.95; 11+, \$7.95

## Staff migrations

This summer we welcome back Shelly Backlar to the staff as Development Director. Shelly was Development Director for the Committee from 1987 to 1992, and you may remember her from Bike-A-Thons past. She'll now be working with us on special events and she'll be taking on some special development projects as well. Welcome Shelly!

The start of summer means we've built up to full staffing in the Lee Vining office, allowing us to lead natural history walks, keep the store open late, and conduct the Outdoor Experiences program. Welcome to all the folks joining us for the season:

Cheryl Ecklund will be our Intern Program Coordinator for the summer, handling supervision and scheduling for our intern team. In addition, Cheryl brings environmental education experience with her from Vermont, where she just graduated from Johnson State College, and she'll be assisting with our field programs.

Mike Klapp, a recent graduate of UC Davis, takes on the job of Outdoor Experiences Coordinator this year. Mike is extremely enthusiastic about the Mono Basin and will be sharing his energy with youth visiting from the Los Angeles area.

Michelle Hofmann returns for her second year as Canoe Program Coordinator and is already whipping our reservation system into shape. You'll see her down at South Tufa with paddle in hand.

Keeping the busy summer on track will be our two Senior Interns: Nathan Bomer and Davin Bowker. Nathan, currently in college at Oklahoma State University, is here for his second summer season and has taken charge of front counter information services, although you can expect to see him happily keeping all aspects of the program running smoothly. Davin has been with the Committee since last fall and will be making sure our interpretive walks are interesting, exciting, and up-to-date, as well as troubleshooting all sorts of office issues.

Departing is winter intern, artist, and student workbook mastermind **Nancy Rehg**, who'll be doing educational work of her own in the Mono Basin this summer. Thanks for your hard work Nancy!

Our five summer interns will be leading natural history walks, staffing the store, and getting visitors excited about Mono Lake. Sedina Banks is an Environment, Economy, and Politics major at Claremont McKenna College on her way to being an environmental lawyer. Arya Degenhardt is a student at Prescott College and will be applying past experience in the Sierra to Mono Lake. Coming to us from Whitman College is Carol **Heinz**, who is excited to be working with children in the outdoors. Yee Kee Lam, a native of Singapore and currently a student at Claremont McKenna, also joins us for his first time ever at Mono. And Michelle Petter, an Environmental Resources engineering major at Humboldt State who is particularly interested in water resources, rounds out the crew.

## Check your newsletter mailing label for new info!

ondering if your Mono Lake Committee membership is up for renewal? Not sure when you last renewed? The *Mono Lake Newsletter* now brings you the answers!

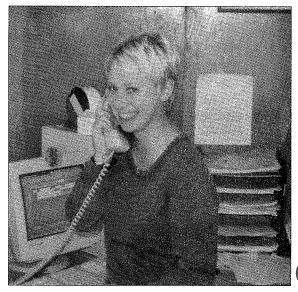
The address label on your newsletter now tells you when your membership is next up for renewal. Or, if your renewal date has past, you'll see that too—please renew!

As always, there's a bit of a time lag between the time the labels are printed and the time you receive the newsletter, so if you renewed your membership just a few weeks before receiving the newsletter, your label may not yet reflect it.

If you find that your name or address are incorrect—or you have any other membership needs—don't hesitate to contact us. Membership Coordinator Rebecca Dobert has a new database of membership information at her fingertips and can solve your puzzling questions!

Membership Coordinator Rebecca Dobert is ready to help you with any of your membership questions or needs.

Call her at (760) 647-6595 or send email to rebecca@monolake.org!



## Matched gifts

Michael Malone of San Rafael made a gift to the Committee which has been matched by SAFECO Corporation.

**Bob Stoll**, who lives in Sunnyvale, made a gift which was matched by **Silicon Graphics Inc**.

**Peter Comerford** of Pollock Pines sent in a gift which was matched by **The Sacramento Bee**.

And Anchor Brewing Company matched a gift made by Lynn MacDermott.

Your employer may sponsor a matching gift program; check with your company's human resources office. If so, your gift to the Committee will go even further.

### **Accolades**

### In memoriam

Jeanne Ellis was remembered with a donation made by Phyllis Melin Nickerson and her children. They were friends and fellow campers at Trumbull Lake campground.

Enid Shapiro, a lover and supporter of Mono Lake, was remembered with a donation made in her name by Nancy Upham and John Louth.

### Special mention

Former Mono County sheriff and Lee Vining resident **Martin Strelneck** had a surplus of flowers in his garden this spring and kindly brought by a few bachelor's buttons for the Information Center.

Thanks to **Rick Donaldson** of Spokane, Washington, for sending in a 1941 photo of Mono Lake. The photo as taken by **Lola Lommori** when she was living in Yerington, Nevada, and shows the lake's former high level.

### From the mailbag

I have been returning year after year to Mono Lake since 1972, mostly in the summer and fall, only occasionally in the winter. I have seen the shoreline creep slowly out further into the lake in those past years of little rain and high diversions. The shoreline resembled a sandstone boardwalk upon which were trampled tufa and muddy footprints. Skeptical was I that one day we would see the lake retake these lands, swallow up the tufa, and recover to its former glory.

I was frankly amazed at how rapidly this wonderful place has changed with the recent wet winters and decreased diversions. Tufa that were at one time high

and dry, or grasses that had crept out into sandy beaches, are now under the lake's sparkling waters. Soon, towers will become islands.

Like this enclosed image taken in February from the South Tufa, we are now seeing reflections of tufa towers and bushes that will soon be submerged. The lake seems to be changing week by week. I get an anxious feeling that I should be capturing as many of these magic moments as I can while there are still quiet reflections such as these.

Steven Anderson
 Fountain Valley
 (a great photo of South
 Tufa was also enclosed)

## Mono Lake Web page refurbished

The world of electronic information moves quickly, and we've found ourselves inspired to do the same with the Mono Lake Committee site on the World Wide Web.

The rapid expansion of information we keep on the site made our old

And a special thank you to the Marion E. Evans Trust which, acting on the wishes of Marion E. Evans, made a welcome gift to the Committee this spring. Members may want to follow her example, and we can help: your bequest decisions are private, but if you want to include the Mono Lake Committee in your estate plans, we are prepared to offer any assistance you need.

structure outdated and inefficient, so we've set up a new format—and look—to make the page more accessible and fun to use.

Staff members Greg Reis and Mike Klapp have been hard at work designing new graphics and compiling new information about Mono Lake! Check out the Mono Lake photo gallery, review data tables of lake levels throughout the century, register a change of address, or figure out where to stay when you next travel to Lee Vining.

Of course, we'll be continuing to keep the site updated with the latest news, so check in often; our address on the Internet is www.monolake.org.

# JOIN US FOR RESTORATION DAYS 1997

**AUGUST 29-SEPTEMBER 1** 



MAKE A DIFFERENCE FOR MONO ... JOIN US FOR TREE PLANTING

- **+ MONO LAKE FILM PREMIER**
- REHYDRATION AND PICNIC
- TREE PLANTING
- CANOE TOURS
- BIRDWATCHING WALKS
- + AND MORE ...

SEE PAGE 12 INSIDE!

## FALL CENTURY TOO!



SEPTEMBER 13, 1997
THE ULTIMATE
EASTERN SIERRA
BIKE RIDE

SEE PAGE 12 INSIDE FOR MORE INFO!





Postmaster: Forwarding and Return Postage Guaranteed — Address Correction Requested Nonprofit Organization
U.S. Postage
PAID
Mono Lake Committee