MONO LAKE N E W S L E T T E R

Winter & Spring 2018

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he theme of this issue of the Mono Lake Newsletter is vigilance. Really, it has run through every *Newsletter*, starting 40 years ago with a group of sharp-eyed, shaggy biologists who took note of what was happening to Mono Lake. Ever since those early days, we've kept watch.

You'll see our continued vigilance in the pages that follow—we noticed a leaking stream, an unusual development proposal, a new threat to the California Gulls, and a flow violation at Rush Creek. We watched the Mill Creek return ditch flow test carefully. We visit the streams regularly, we keep an eye on daily streamflow reports, and we scrutinize the lake level.

We look around, and we look ahead. As this winter seems more convincingly dry, we run models and projections to see how Mono Lake's level will respond. We check each new snow survey, adjust our models, and examine the projections. As Geoff writes on page 4, we are serious about protecting this place. We are on constant alert.

It is important to keep an eye out for good things too. We delighted in Mono Lake's alkali flies making headline news, and we saw our county government strengthen support for federal laws protecting the Mono Basin. We have watched Mono Lake continue to rise this winter, celebrating each fraction of a foot gained.

Lucky for us, and lucky for Mono Lake, we have a whole extended family to keep watch with us-you can see that in this Newsletter too. That family helped raise \$6,930 for Eared Grebe research, and called to offer legal support in case HR 23 proceeds through Congress. You'll see members of the Mono Lake family who won Free Drawing prizes, who celebrated Arya's wedding, and who sent donations to honor loved ones.

This Mono Lake family is 16,000 people—and 40 years—strong. So keep an eye on your favorite lake. Look for the peace and wildness here, the beauty and the resilience. We are here, watching with you.

-Elin Ljung, Communications Coordinator



During his regular visits to Rush Creek to measure groundwater levels, Restoration Field Technician Robbie Di Paolo observes and notes other interesting conditions, like these frozenover ponds.

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 Office Information Center & Bookstore

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

> info@monolake.org monolake.org monobasinresearch.org

Los Angeles Office

1718 Wellesley Avenue Los Angeles, California 90025-3634

Staff

Executive Director Geoffrey McQuilkin
Eastern Sierra Policy Director Lisa Cutting
Education DirectorBartshé Miller
Communications DirectorArya Harp
Office Director Jessica Horn
Membership Coordinator Ellen King
Information & Restoration Specialist Greg Reis
Restoration Field TechnicianRobert Di Paolo
Sacramento Policy Associate Betsy Reifsnider
Outdoor Education Center Manager
Santiago M. Escruceria
Lead Naturalist Guide Nora Livingston
LA Education CoordinatorHerley Jim Bowling
Communications Coordinator Elin Ljung
Digital Engagement Coord Andrew Youssef
Information Center & Bookstore MgrLily Pastel
BookkeeperDonnette Huselton
Membership Assistant Maureen McGlinchy
Project Specialist Gabrielle Renteria
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The Mono Lake Committee is a 501(c)(3) non-profit organization, also known as the Mono Lake Foundation. Tax ID: 77-0051124



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Reflections on 40 years

A trip in the way-back machine to the early Mono Lake Committee

alf a lifetime for a person, 40 years is negligible for a 760,000-year-old lake. As an old timer (or the "OG"—Original Gangster—as I was recently called by a young staff member), here's my brief summary of the first four decades of the Mono Lake Committee—our story, as I will someday tell my grandkids.

In the 1970s, only a handful of sightseers, residents, and birdwatchers understood that Mono Lake was declining fast due to excessive creek diversions. In 1976, a dozen undergraduates inventoried the basin to describe a simple but very productive ecosystem that would be lost if it dried up, which it was on track to do.

So our group of shaggy biologists organized a non-profit to use legal, legislative, and educational means specifically to help Mono Lake. Love of the lake overcame our hesitation of things unfamiliar. Why else would we be on the 40th floor of a San Francisco law office building trying to understand

by Sally Gaines

the finer points of 501(c)(3) versus 501(c)(4) non-profits in our best noholes jeans?

Our pro bono lawyer predicted the lawsuit based on the Public Trust doctrine would take two to three years. Ha! Once I left working at the mail and membership desk to raise my kids I lost track of every twist and turn of the convoluted legal issues, but I do know we won every round.

We also had to brave the halls of Sacramento and Washington, DC to get state and national protection. Over the years the staff have gained knowledge and sophistication in politics, legal matters, and new technology as these things change every year.

Publicity was all important to our cause. We sent out press releases and showed hundreds of reporters and photographers around the lake. We knew our members needed to be informed with the science behind our positions, so we educated anyone we could reach using this *Newsletter*, slide shows, books, and best of all, field trips. We are still amazed and eternally grateful for the widespread grassroots support that made us successful on all fronts. Mono Lake is now world famous and heavily visited.

We were able to rent, then buy, the storefront on Highway 395 so we could more easily help people learn about Mono Lake, sell Mono Lake-y items, show the slide show, and keep our staff—huddled around a woodstove in the winter—working together. Although the building has been remodeled several times, space is always cramped. I still don't understand how so much great work gets done by everyone in that "rustic" office.

In the early days we used manual typewriters, rub-off letters, mail-in Kodak film processing, and black rotary-dial phones, while working on plywood-topped desks we constructed ourselves. Actually, the expanded staff still uses those desks, but just about everything else they use in the office

Continued on page 17



Diverse watchdog duties keep the Mono Lake Committee busy

by Geoffrey McQuilkin

he Mono Lake Committee is serious about protecting and restoring Mono Lake, its tributary streams, and surrounding lands. That means being on constant alert as a watchdog, and recent months have provided some interesting examples of what that requires.

Sometimes the Committee chases issues that have lengthy histories and require continuous pressure to move toward resolution-the 2013 Stream Restoration Agreement with the Los Angeles Department of Water & Power (DWP) is one example. Years of work led to the Agreement, which implements the next phase of stream restoration required by the California State Water Resources Control Board to rejuvenate 19 miles of streams and forest habitat. We celebrated the signing of the Agreement by all parties in 2013, but it has yet to be formalized into a new State Water Board order. A lot of work has been done and progress made in those years, but every detail requires frequent follow up and we've found the process tends to grind to a halt without continuous pressure. The Committee's watchdog role in this context is to take the lead in charting the path forward and prodding progress along among multiple parties distracted by other matters.

Other issues are identified during our routine monitoring, observation, and analysis of water management in the Mono Basin. Committee members know that State Water Board Decision 1631 set an ecologically sound management level for Mono Lake in addition to rules for how much water DWP can export. We routinely ensure that those rules are being followed; one example is our annual lake level reading with DWP each April 1st.



The Committee keeps a close eye on daily Mono Basin streamflows at multiple locations, such as the recovering Rush Creek bottomlands.



BIE DI PAOLO

Last summer the Committee noticed water diverted unintentionally from Mill Creek that reduced the creek's flow and made a Forest Service road impassible.

The State Water Board also has rules for how much water must flow in the streams below DWP diversion facilities. The rules can be complex because they vary by time of year, the water year type (of which there are seven, ranging from "Dry" to "Extreme Wet"), and they can be modified by other factors. To ensure continuous implementation of these important rules, the Committee keeps a close eye on daily Mono Basin streamflows at multiple locations.

Sometimes we find problems—a recent example arose in December 2017. DWP lowered the flow in Rush Creek for the winter as expected, but the flow fell below the required minimum of 36 cubic feet per second. On the Friday before Christmas we alerted DWP to the problem, which it subsequently corrected. The source of the trouble? DWP had not followed a special provision in the rules that applies when upstream flows are low and when Grant Lake Reservoir is above a certain level—both of which were the case at the time.

Issues don't always announce themselves, and the watchdog role requires the Committee to be ever vigilant and ready to craft solutions. A 2017 problem with water escaping from Mill Creek's channel is one example. After the extremely wet winter, springtime high flows raced down Mill Creek. Committee staff in the field observed a DWP irrigation ditch unexpectedly carrying water in late spring, removing water from Mill Creek without apparent purpose.

We investigated—why was DWP operating the ditch? The result was interesting: DWP was as surprised as we

Mill Creek return ditch passes test

Possible solution to returning diverted water back to Mill Creek

by Lisa Cutting

n an effort to explore ways to return water to Mill Creek and therefore satisfy its legal obligations, Southern California Edison (SCE) released water from the Lundy hydroelectric plant into the Mill Creek return ditch last September, successfully returning water to the creek (see Fall 2017 *Mono Lake Newsletter*). The return ditch has been part of

the hydropower system for a century. SCE was motivated to do this flow test because of the languishing problem of how to comply with Mill Creek water rights.

Prior to releasing water into the ditch, SCE evaluated the system and did routine maintenance to stabilize the earthen banks. SCE staff were on site during the test to monitor flows and record flow measurements. During the 61-day test, flows reached 16 cubic feet per second and the return ditch performed quite well.

SCE's efforts and this successful test bode well for Mill Creek, which has been suffering for decades due to infrastructure limitations that result in over 75% of the creek's flow being diverted. Once Mill Creek's water can be successfully returned to Mill Creek, consistent with water rights, the restoration process can begin—especially in the lower reaches where insufficient flow has been detrimental to streamside vegetation.

The Committee continues to work to find a solution that provides flows necessary for Mill Creek's health in compliance with long-established water rights.



The Mill Creek return ditch carried flows of up to 16 cubic feet per second during a 61-day test last fall, returning water to the creek consistent with long-established water rights.

Mono Lake Committee supports Proposition 68

by Geoffrey McQuilkin

The Mono Lake Committee is encouraging California voters to support Proposition 68, the California Clean Water & Safe Parks Act, in the upcoming June election. The measure was created with bipartisan support in the legislature and provides \$4 billion to address important park, water, and natural resource needs.

Among many statewide benefits, including important clean water and parks access provisions for underserved communities, Prop 68 contains components that are important for Mono Lake.

Funding for existing State Parks could improve infrastructure at the Mono Lake Tufa State Natural Reserve and funding dedicated to the Sierra Nevada Conservancy will benefit resource management in the Mono Basin. There is funding for climate change planning, habitat resiliency, and watershed restoration projects, which will support priorities that the Committee sees as critical to protecting Mono Lake's long-term health.

At the southern end of the Los Angeles Aqueduct, Prop 68 would provide funding to advance urban water-wise strategies that the Committee has long promoted as solutions to protect Mono Lake, including water recycling, groundwater planning, and stormwater capture. Prop 68 will also help stabilize the Salton Sea, which provides vital migratory habitat for Mono's Eared Grebes. More information on Prop 68 can be found at *yes68ca.com*.

Lundy Canyon development proposal

Mono Lake Committee action helps avert threat

by Lisa Cutting

ono Lake Committee staff are constantly looking out for activity that conflicts with agency management plans or that threatens the Mono Basin, as described on page 4. At the end of last year, one such thing caught our eye: a development inquiry for a remote, undeveloped, 49.3-acre inholding in Lundy Canyon.

The inquiry was listed on the public meeting agenda for Mono County's Land Development Technical Advisory Committee (LDTAC), which provides early coordinated technical review of development projects and educates applicants on Mono County regulations and requirements.

Too good to be true

The LDTAC inquiry was made by a potential buyer who was lured into the purchase of the property under the assumption that it would be possible to build a cabin on the site. For someone who has never been to Lundy Canyon, the concept of a remote inholding probably sounded appealing the property is surrounded by Inyo National Forest land and adjacent to the Hoover Wilderness.

But the reality is that the parcel was once a mine site, almost-exclusively consists of an extremely steep talus slope, and has no feasible building site. The potential buyer was dutifully checking in with the LDTAC in the course of doing due-diligence on the feasibility of building a seasonal floating houseboat-type cabin where the property touches a beaver pond.

Fairly quickly the potential buyer realized that those plans were not going to work. There is no road to the parcel, and there are issues of permitting authority with building dwellings on water. The initial list of permits needed was long—Inyo National Forest, Army Corps of Engineers, Lahontan Regional Water Quality Control Board, and California Department of Fish & Wildlife, to name a few.

On top of all of this, the beaver pond is no longer there. Last year's high streamflows broke through the beaver dam, turning the pond into a mudflat. For those familiar with Lundy Canyon, the property is on the south side of the first pond you come to approximately one quarter-mile from the trailhead (see photo below).

When issues lead to opportunities

Given the parcel's proximity to adjacent public land and the challenges of actually building anything on the site, the most appropriate outcome would be to add it to the Inyo National Forest. The Committee has been working toward that goal, and we connected the potential buyer with several land trusts with which options are currently being discussed. The Committee also connected the potential buyer with helpful people in the local community, such as local Lundy Canyon historian Linda LaPierre. Linda's meticulous records and knowledge of historic mining claims and parcels helped unravel some legal mysteries and expedited clearing the title on the property.

The good news on this issue is that everyone agrees that the best outcome for the property is to secure longterm conservation, ideally by transferring ownership to the Inyo National Forest. There are several paths to achieve that goal—all of which are currently being explored. Most important is that spectacular Lundy Canyon be protected as public land for all to enjoy. The Committee is doing everything possible to make sure that happens. �



A 49.3-acre private parcel in Lundy Canyon, located on the talus slope pictured here, will ideally become part of the Inyo National Forest.

35th year for California Gull study

Research documents changes in gull population and nesting habitat

n 2017 Point Blue Conservation Science continued its Mono Lake California Gull monitoring study with the goal of better understanding how the gulls respond to changes in lake conditions over time. Indeed, 2017 was a year of change for both the gulls and this critical long-term study, which is supported by the Mono Lake Committee (read the full report online at *monobasinresearch.org/gulls*).

Following two years of testing, the nesting gull counts were done using aerial photography instead of the previous method of ground counts. Results indicate that counting nesting gulls from the aerial photographs matched ground count tallies by 96%, and the new survey method is less disruptive to the gulls.

Lowest-ever number of nesting gulls

The population of nesting California Gulls (*Larus californicus*) in 2017 was the lowest ever recorded at 27,000

by Elin Ljung

nesting adults—well-below the 35year average of 46,000 nesting adults. The reasons for this decline are not fully understood, though springtime temperatures, the timing and size of the annual brine shrimp hatch, coyote activity on the islets in 2016, and invasive plant encroachment all likely played a role. Although last year's numbers were low, they would have been far worse without the temporary fence that deterred coyotes.

Temporary fence successful

Last winter's well above average snowpack had not yet melted and raised Mono Lake's level by the time the gull nesting season began in April, so the lake was low enough that coyotes could access the nesting islets to prey on eggs and chicks. Anticipating this problem, prior to nesting season the Committee worked with California State Parks and other agency partners to install a temporary electric fence across the landbridge, which had been exposed by the lake's drop over five years of drought.

For the duration of the nesting season the mile-long, mesh-netting fence withstood snowstorms, strong wind, baking sun, and wave action at each end where it extended into Mono Lake. It also withstood forays by coyotes looking for a way around or through, as shown in photos from wildlife cameras along its length, and documented by researchers and volunteers who saw coyote tracks approaching and retreating from the fence.

Although coyotes did not reach the islets in 2017, there may have been some lingering effects from the prior year. In 2016 coyote activity was documented on at least one islet,

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Fence not needed this year

This spring when California Gulls return to nest at Mono Lake, the lake will be nearly four feet higher than it was at the same time last year, which means the temporary fence is not needed this nesting season.

Last winter's record-breaking precipitation and the subsequent extraordinary runoff raised Mono Lake to 6381.6 feet above sea level well above the 6380-foot threshold at which a fence across the exposed landbridge is necessary to protect nesting gulls from coyotes.

The fence, which was removed last August, will remain in storage and the gulls will once again be protected from mainland predators naturally by a moat of Mono Lake water.



Approximately 27,000 California Gulls nested on Mono Lake's islets in 2017, well below the 35-year average of 46,000 nesting adults.

Expanded Eared Grebe research to continue

#GivefortheGrebes Giving Tuesday campaign exceeds goal

by Arya Harp

How many Eared Grebes refuel at Mono Lake on their fall migration each year? For the Mono Lake Committee, the answer is more than a passing curiosity—it's one of the key indicators of lake health. Because of this, Eared Grebe surveys have been going on at Mono Lake since the 1980s, with improvements in methods and technologies giving us more accurate numbers and added perspective on these unusual diving birds. Thanks to support from the extended Mono Lake Committee online community, an exciting expansion of the research will continue this year.

Since 1996, Dr. Sean Boyd, a Research Scientist with Environment & Climate Change Canada, has led aerial photography surveys to count grebes on the lake each fall. In 2013, with the goal of better understanding the variability in grebe numbers from year to year, we added more survey flights. This data gave us both a better sense of the grebe numbers as well as new questions about grebe migration. Because this information is so crucial to understanding the health of Mono Lake, the Committee supports the research with on-the-ground coordination of flights and volunteer photographers.

In 2017 Dr. Boyd secured funding to equip 30 Eared Grebes in British Columbia with small geolocators and radio transmitters in order to get more specific information on the timing of migration, wintering areas, migration routes, and the percentage of time the birds spend underwater. The Committee supported this expanded research by helping track radio transmitter signals on additional flights and by boat. The 2017 research data is still being processed, but it is clear that having a second season of this new data will be extremely informative, so we decided to see if we could raise the extra funds needed to keep the additional research going for another year. On Giving Tuesday (November 28, 2017) we did a Facebook Live video stream about the research with the goal of raising \$5,000—we raised \$6,930 online that day, which means that the expanded grebe research will continue!

Thank you Eared Grebe enthusiasts near and far—we look forward to seeing you "live" online again soon. To see the grebe research reports visit *monobasinresearch.org/grebes*.



The #GivefortheGrebes Facebook Live broadcast in progress.

Alkali flies get their moment in the spotlight

by Arya Harp

• November 20, 2017 news about Mono Lake's alkali flies began popping up everywhere. *Nature, National Geographic, The New York Times,* and others were having a field day with the release of a new research paper explaining how the endemic alkali fly traps an air bubble around itself to walk underwater for up to 15 minutes.

The study, "Superhydrophobic diving flies (*Ephydra hians*) and the hypersaline water of Mono Lake," was conducted by California Institute of Technology biologists Floris van Breugel and Michael H. Dickinson, who used the Mono Basin Field Station for the Mono Lake portion of their research and gave a talk at the Committee last summer.

Using high-speed videography, force measurements,

scanning electron microscopy, and manipulations of water chemistry, van Breugel and Dickinson found that the flies have a denser coat of hair than species that can't stay dry in Mono Lake water, and that the waxy coating on their hair contains smaller hydrocarbons than those of other species. Together, this is what prevents the flies from getting wet underwater.

From May to October you can reliably see the flies in action at Mono Lake—especially on partially submerged tufa. If you are patient you can watch as the flies walk underwater—a silvery bubble of air envelops them as they graze on algae and you'll understand why we love alkali flies.

To see the study and more: monobasinresearch.org/flies.





Dorsey reunion

S tudents from Los Angeles Unified School District's Susan Miller Dorsey High School have been coming to the OEC since 2001. In 2008 the group from Dorsey was particularly cohesive, and their bond, with each other as well as with the OEC program and Mono Lake, has only grown since then. Over the winter the group had their 10th annual get together, complete with the next generation of OEC students!



Our mission is to build understanding and appreciation for the Mono Basin/ Los Angeles watershed through education programs and muscle-powered recreational activity; to demonstrate that balanced solutions are possible for meeting the water needs of people and the environment; and to kindle stewardship through service projects that restore and improve the quality of the Mono Basin watershed.

monolake.org/education facebook.com/mono.oec

No hibernation for the OEC

From December to April the Mono Basin Outdoor Education Center (OEC) gets all buttoned up for winter, but really it's only the sleeping bags that get much hibernation. As the program's field season comes to a close, the outreach season launches as Outdoor Education Center Manager Santiago Escruceria makes his winter migration to the southern end of the Los Angeles Aqueduct.

Together with Los Angeles Education Coordinator Herley Jim Bowling, he visits as many schools and community groups as possible—connecting with teachers, students, community leaders, community members, and program alumni—to inspire people to do the hard work necessary to make a trip to Mono Lake happen. They give programs about Mono Lake for school classes, get alumni together with new group leaders, visit with interested City Council members and Los Angeles Department of Water & Power staff, and they even volunteer as judges for a high school science fair. It's all planting the seeds that will sprout into more students getting to participate in the OEC program in the upcoming field season.

This year's outreach season was fruitful, and there are currently 27 groups on the schedule for 2018—a new record if, together, we can make it happen. Most OEC groups must raise money to rent vans to travel, pay for gas, and buy food for the trip to Mono Lake; if you would like to help students get to the Mono Basin, contact Santiago (*santiago@monolake.org*) at (760) 647-6595 about contributing to the OEC Access Fund.



OEC Manager Santiago Escruceria (center) visits with Mono Basin OEC students from the environmental justice community group Pacoima Beautiful at the southern end of the Los Angeles Aqueduct.

Policy notes

by Lisa Cutting & Geoffrey McQuilkin

Lee Vining Creek Trail repairs still needed

In the months since last year's high runoff washed out a section of the popular Lee Vining Creek Trail (see Fall 2017 *Mono Lake Newsletter*), use trails around the washed-out area had begun to spring up because closure barriers weren't deterring hikers. The popular trail connects the south end of Lee Vining to the Mono Basin Scenic Area Visitor Center.

The trail was originally developed as a joint project of the town of Lee Vining, the Mono Lake Committee, the Inyo National Forest, and the Los Angeles Department of Water & Power (DWP)—which owns the land the trail traverses. Therefore, the process to arrive at a long-term fix is complex.

Since people were disregarding the closure, last fall a crew from Bishopbased stewardship organization Friends of the Inyo temporarily rerouted the trail around the damaged section. The crew also used their expertise to provide an initial assessment for a long-term fix, which will require a



Last fall Friends of the Inyo's trail crew assessed the washed-out section of the Lee Vining Creek Trail, with the goal of getting the trail repaired before summer.

rehabilitation plan, permission from DWP, and securing a trail crew. The Committee is working with all of the parties in hopes of getting the trail completely repaired in time for summer.

Utility cable hanging across Lee Vining Creek

Oddly, one day last summer a utility cable appeared below town—crossing the Lee Vining Creek Trail on the ground and strung across Lee Vining



The Committee is working on a solution to the jury-rigged utility cable strung across Lee Vining Creek, which appeared last summer.

Creek attached to bushes with zip ties. It appeared to have been put there temporarily, but it was both unsightly and potentially dangerous, so the Committee began contacting local utilities to find out what was going on. It turns out that the cable belongs to Frontier Communications, an internet, TV, and phone provider—as of press time the cable is still hanging across the creek.

The Committee has been working with Mono County and DWP (the landowner) on this curious situation. It appears as though neither agency was contacted about the cable installation— DWP's real estate department is checking to see if any permission was requested. The Committee is hopeful that DWP's investigation will result in information that will be helpful for the next phase: getting the temporary cable removed and figuring out a solution that has consideration for the scenic nature of Lee Vining Creek as well as permission from the landowner.

Marina Fire barricades

Drivers on Highway 395 north of Lee Vining along Mono Lake have probably noticed that the white concrete barriers placed on the west shoulder after the 2016 Marina Fire are still there. Immediately after the fire, Caltrans installed the barriers and a high fence to prevent rocks and debris associated with the unstable slopes from falling onto the highway.

From the beginning, the barriers were installed as a temporary safety measure, and are not part of the Lee Vining Rockfall Safety Project (see Summer 2017 Mono Lake Newsletter). The Committee supports both keeping the highway safe and also the removal of the barriers as soon as the safety risk subsides, possibly in a phased approach since several sections are not adjacent to steep slopes where falling rocks are more likely. The Committee is continuing to work with Caltrans in assessing opportunities for improving the scenic nature of the highway while addressing public safety needs.

Inyo National Forest Plan

Originally scheduled for release in January, the revised Inyo National Forest Plan won't be distributed until later this spring. The plan revision process, which began in 2014, will result in a final management plan that will replace the 1988 Land & Resource Management Plan, which the Inyo National Forest currently uses to manage its public lands.

Throughout the revision process the Committee has paid close attention to the sections of the plan that directly affect the Mono Basin-the Mono Basin National Forest Scenic Area and the Wild & Scenic River designation inventory-two important protection and management tools. The Scenic Area designation comes with its own management plan that recognizes and protects the unique values of the Mono Basin within the Inyo National Forest. The condition of Mono Lake's tributary streams has improved dramatically since 1988 (under the State Water Board's authority and DWP's mandatory restoration requirements), thus making them eligible for Wild & Scenic River designation in the new plan.

Once the final plan is released, there will be one last opportunity for objections if previous comments have not been sufficiently addressed. The Inyo National Forest will then have 90 days to respond to objections by accommodating requests, compromising, or sharing information that supports its final decision.

Alarming legislation stalled in the Senate

Federal legislation (HR 23) that would override California's use of the Public Trust doctrine to protect Mono Lake and other water resources remains stalled in the Senate after passing in the House last summer (see Fall 2017 Mono Lake Newsletter). Although it is unlikely to move forward in its current form, the possibility of its language being included in other must-pass legislation remains a real possibility. The Committee is prepared for rapid response if needed, in part with muchappreciated help from Committee members who have volunteered legal expertise in recent months. *

Lisa Cutting is the Committee's Eastern Sierra Policy Director. She dreams of someday following Rush Creek from the headwaters at the Sierra crest all the way downstream to Mono Lake.

Local support for federal laws that protect Mono Lake

S ince 2014, Mono County elected officials have established and updated a concise but comprehensive document that guides all County staff in evaluating State and Federal legislation, as well as executive and regulatory actions as they relate to the unique characteristics of Mono County. The Mono County Legislative Platform has proven to be extremely useful giving County staff a tool to maintain established priorities in a unified way in advance of potentially-problematic issues arising.

In January, the Committee made recommendations related to specific protections at Mono Lake for the Board of Supervisors to consider including in the platform. The Committee requested and the Supervisors agreed—to include an entire new section about Mono Lake: "Support existing federal legislation and regulations that protect Mono Lake, and oppose those that would reduce the size or authority of the Mono Basin National Forest Scenic Area, weaken application of the Clean Air Act to PM₁₀ emissions from Mono Lake's exposed lakebed, or restrict the application of the Public Trust doctrine by the state to water rights relevant to Mono Lake."

In addition, the Committee suggested adding Wild & Scenic River designations under the section that lists support for special designations for public lands such as National Scenic Areas, Wilderness, National Monuments, and National Conservation Areas "when demonstrated conservation values and public support warrant such designations."

Upholding and memorializing the protections at Mono Lake is more important than ever, since the federal government is experiencing substantial new uncertainties in budget, land management, regulatory approach, and water policy. Unexpected challenges may arise in 2018 and the Mono County Legislative Platform now supports maintaining existing established protections and regulations at Mono Lake.

Mono Lake still rising despite dry winter

by Greg Reis

or the Mono Basin, 2017 was among the wettest years on record, and Mono Lake has risen 3.9 feet since this time last year. That is the largest rise since 1983–84, and exceeds the 1995–96 rise by 0.6 feet. The lake's volume increase in 2017 of approximately 170,000 acre-feet falls between the volume increases that occurred in those other two extremely wet years.

Since excessive water diversions ended in 1989, Mono Lake has always risen in January–February. It rose 0.14 feet this January despite the month's precipitation being among the driest 30% of years on record. Incredibly dry conditions since October 1st were punctuated only by a wet November. Years with similar precipitation patterns at this point in the season have all turned out to be dry—and with warm and dry conditions in the first half of February, it is almost certain to be a below-average year. This means that Mono Lake's level is likely to drop by early 2019 as much as 1.5 feet from its current level of 6381.6 feet above sea level.

Fortunately, last year's total lake rise

bought the California Gull colony some time and a measure of safety. Even with dry conditions the lake won't drop below 6380 feet this nesting season. If next winter is dry, Mono Lake would drop below 6380 feet in 2019; however, if next winter is wet the lake would stay above that level. The fence put up last year to protect the nesting gulls will stay in storage for the 2018 nesting season, but we will have it at the ready just in case it is needed again in early 2019 (see page 7). ❖

Streamwatch

Low streamflows expected this year

by Greg Reis

This winter, only 4.2 inches of snow fell in Lee Vining by the end of January—the lowest snowfall at that point in the winter since 1992.

At higher elevations in the Mono 6417' Basin, snow surveys done at the end of January found the snowpack at 45% of averagethe state's highest watershed percentage, yet still extremely low. Given the record warmth and dry first half of February, the April 1st snowpack and the runoff 6392' forecast will be well below average and likely among the lowest 10% on record. 6381.6′ State Water Board rules will classify this as a "Dry" year-type if 6372' the final Mono Basin runoff forecast is ediversion lake level, 1941 less than 68.5% of anagement lake level average, meaning that storic low, 1982 peak flows would not be required for Mono Basin streams. If it is wetter, careful runoff forecasting

and modeling will be required to plan operations that maximize benefits to the streams. Additionally, the Los Angeles Department of Water & Power is not required to release peak flows if doing so would cause Grant Lake Reservoir to drop below 11,500 acre-feet of storage.

This year's aqueduct operations, streamflows, and reservoir levels will be sensitive to the timing of the allowed 16,000 acre-feet of export, the magnitude and timing of runoff, and the distribution of flows among streams. Slight changes in the runoff forecast can make a big difference in the required peak flows if those changes cause a switch between year-type categories.

Especially within this context, the benefits to the streams of last year's high peak flows can't be overstated. Newly-deposited sediments are ready for colonization by fast-growing riparian vegetation; however, a dry year would minimize the chances of successful recruitment this year. A nearaverage year-type would provide more opportunities for riparian vegetation to spread and grow.

It is also important to note that side channels in the Rush Creek bottomlands, like Channel 8, are still flowing despite lower winter flows. Channel changes from 2017 peak flows resulted in additional flow into Channel 8, raising groundwater levels that could stimulate recovery of riparian vegetation across the floodplain. Other areas, such as ponds in the Channel 4bii complex, have higher groundwater levels not seen since the beginning of the recent drought (see page 13). It is an exciting time in Rush Creek's recovery, and careful management of this year's Grant Lake Reservoir releases is more important than ever. *

Greg Reis is the Committee's Information & Restoration Specialist. He has been puzzled by frequent ice lenses on Mono Lake and frozenover ponds along Rush Creek despite daytime high temperatures as high as the 60°s.

Mono Basin Journal

A roundup of quiet happenings at Mono Lake

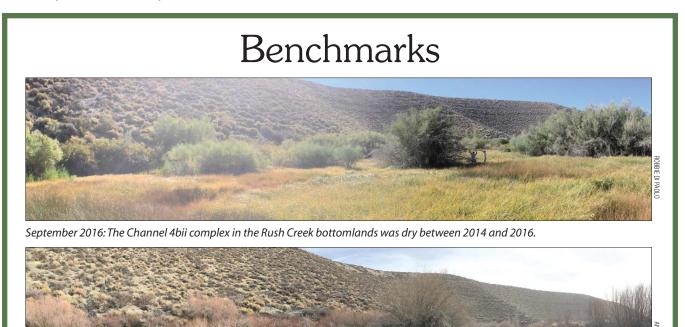
by Geoffrey McQuilkin



Sometimes the hidden happenings of the Mono Basin are small and elusive: the tracks of a kangaroo mouse glowing across sand at sunset, a swirl of brine shrimp traveling a winding current among tufa towers. Sometimes it's the big things that are somehow hidden. Hiking a steep glacial moraine slope of Lundy Canyon recently delivered me unexpectedly to such a find.

The thin snow cover of a dry winter allowed for scrambling up the eight-hundred-foot-tall pile of rocks, past hardy aspen and wind-battered mountain mahogany. The crest of the moraine revealed a hidden garden in a flat hollow bisected by a small, but steady, stream. Taking advantage of the spot was an impressively tall and ancient Jeffrey pine—its trunk so large it would take eight hikers joining hands to surround it, and bark so furrowed you could put your entire hand, and perhaps an arm, into the cracks. The branches, themselves as thick as trees, rose in a whirled ladder high overhead.

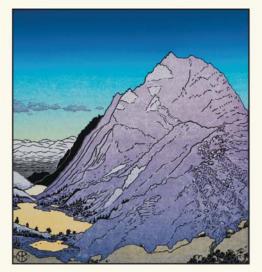
This grand tree, I later determined, is visible from miles away, even from the highway if you know what to look for. And that is the trick—before you can realize all that you are actually seeing in the vast panoramic landscape of the Mono Basin, you have to discover the special spots up close. \diamondsuit



February 2018: High flows in 2017 restructured the Rush Creek bottomlands, rewatering this channel and helping to restore waterfowl and riparian habitat.

MONO LAKE COMMITTEE INFORMATION CENTER & BOOKSTORE

NAMING MT. THOREAU



edited by Laurie Glover Michael Blumlein • Dick Bryan • Darryl DeVinney • Hilary Gordon Paul Park • Kim Stanley Robinson • Carter Scholz • Gary Snyder NAMING MT. THOREAU EDITED BY LAURIE GLOVER

Naming Mt. Thoreau is a collection of essays that arose from the simple undertaking of ascending a



mountain; it is a meditation on friendship and influence, proximity and distance. This compilation's authors set out to rename USGS peak 12,691 "Mt. Thoreau" to honor Henry David Thoreau for his writing that has been so important to generations of Americans seeking to define their relationship to wilderness and nature. Taking their cues from Thoreau, the authors offer this collective set of texts and images as a call to close attention. Featuring art, photos, and essays by: Michael Blumlein, Dick Bryan, Darryl DeVinney, Hilary Gordon, Tom Killion, Paul Park, David Robertson, Kim Stanley Robinson, Carter Scholz, Gary Snyder, and Christopher Woodcock.

Naming Mt. Thoreau, paperback, Artemisia Press, 167 pages, 6"x 9": \$16.95

hen editor Laurie Glover floated the idea of the Mono Lake Committee publishing Naming Mt. Thoreau we knew we had to figure out a way to make it happen. We are so glad we did—not only did the contributors donate their work in hopes that the sale of the book would raise funds for the Committee, but we are very happy to be able to offer this little gem of a book to the world." —Arya Harp, Communications Director





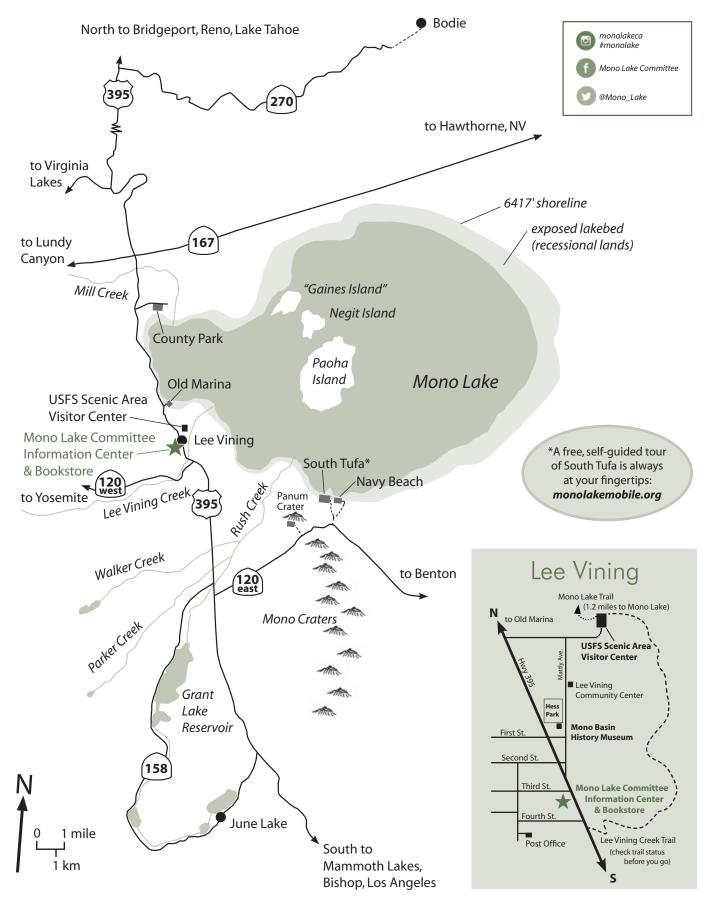
Naming Mt. Thoreau authors and contributors on the summit of Mt. Thoreau, looking south.



It was standing room only at Moe's Books in Berkeley during a Naming Mt.Thoreau reading and signing in January.

See Naming Mt. Thoreau in color and place your order online anytime at MONOLAKE.ORG/STORE, or call (760) 647-6595.

Mono Lake map



Turning the tide

by Vern Gersh

Editor's note: Each year we ask a writer to contribute to the Mono Lake Calendar—this essay appears in the 2018 calendar.

ever give up for that is the time and place that the tide will turn."—Harriet Beecher Stowe Forty years ago, in the Eastern Sierra, the tide was running. Like all tides it ran in one direction. Its flow must have seemed inexorable as the waters of life were sucked away.

Shakespeare referred to living in "the tide of times." The tide that has been running strongest in my life is the stream of change. When I was born in 1955 there were half as many humans on the planet. Nothing human-made orbited the earth. There were fewer than 600 pizza parlors in the entire United States. The majority of Americans shared their phone line with a neighbor. You would dial that phone and were tethered to it with a cord. There was one Mexican restaurant in the city of half a million Americans where I was born.

Forty years ago, when the Mono Lake Committee was born in "the tide of times," the world was divided by an Iron Curtain with half of Europe in the thrall of the Soviet Union. There was no space shuttle, no cell phones, and computers occupied full rooms. Google was not a verb, email and "text" were unknown concepts. Terms like ecology, environment, and climate change were learned in college, if at all. There were more than twice as many vertebrate animals in the wild. Even now we are still too ignorant to know how many species have been driven to extinction in those forty years.

In the flow of the tide, there are organisms. A benthos hangs on, buried or clinging to whatever it can. A plankton can swim within the tide but, ultimately it must go along with the flow. And then there are the nektons.

Nektons can swim against the tide. They have the strength, vigor, and determination to overcome the phenomena brought about by titanic forces beyond their control.

People have changed the face of an entire planet. Our strength, vigor, determination, and intelligence have harnessed titanic forces. The tide we have set in motion has too often been careless of the consequences.

The political and societal forces in my lifetime have ebbed and flowed. Our commitment to the world we leave to future generations has washed to and fro but worldwide the tide seems to be running out.

Even here, in the United States of America, political forces seem to have turned. A nation, whose scientific prowess has

Continued on page 25



2017 Free Drawing for Mono Lake

by Gabrielle Renteria

Thank you to everyone who entered the 2017 Free Drawing for Mono Lake—your contributions ensure that Mono Lake will continue to be restored and enjoyed by generations to come. Congratulations to this year's winners, and a huge thank you to the generous sponsors who donated the prizes that make this a successful fundraiser.

Orlene Kelting of Hawthorne won the Taste of Yosemite package. Mono Basin retreat: Janiska Nordstrom of Susanville. Cali4nia ski pass: Suzanne Whitaker of Manchester. iPad Mini 4: Bonnie Grey of Castroville. National Park adventure: William Fjellbo of Coarsegold. Experience the Channel Islands: Karl Marhenke of Aptos. A day on the Bay: Kevin Tobeck of Tracy. Crowley Lake retreat: David Leff of Sebastopol. Escape to Benton Hot Springs: Steve Harding of Blairsden-Graeagle.

The Friends of the River package went to Paula Paggi of Northridge. Eastern Sierra getaway: Rev. J. Patrick Foley of Sacramento. Hope Valley retreat: The Worthington Family of Northridge. Golden Gate vacation: Thomas Dwyer of Granite Bay. Bishop escape: Nancy King of San Juan Capistrano. Mammoth Lakes vacation: Henry Pietropaoli of Albany. Tamarack cross country ski pass: Brian & Karen Swift of Pleasanton. Bodie Photo Day: Jacqueline Flink of San Diego.

David Hepler of Cressona, PA and Troy Windsor of

Oakland won the Patagonia jackets. Mono Lake Committee gift packs: Julie Lutz of Green River, WY and Tim Ryan of Capistrano Beach. Aquarium of the Pacific passes: Anna Fitzgerald of Ridgecrest. A day at the Huntington: The Hendrycks Family of Reno, NV. Friends of the Inyo package: Carol Silva of West Covina. Juniper Ridge gift set: Otto Hub of Tahoe City. USS Midway Museum tickets: Greg Spooner of Cypress. Sonoran Desert adventure: Juliana Mijares of Brentwood. Canoe adventure on Mono Lake: Londa Goodell of Bishop. ❖



Gabby pulls a winning ticket in the 2017 Free Drawing for Mono Lake.

Reflections from page 3

has changed radically, except maybe the fax machine.

The outdoor activities like canoe tours and field trips continue about the same pace; the landscape putters along on a slower timeframe. People still enjoy getting out of their vehicles to walk to long solitary beaches, meadows, creeks, and mountains—marveling at the wide open landscape under a blue sky. The lake endures. As our first bumper stickers read,

Watchdog from page 4

were. It hadn't activated the ditch, and the DWP diversion headgate was sealed shut. It turned out that a logjam in the main channel of Mill Creek had developed, capturing cobbles and gravel and raising the elevation of the streambed. We generally support natural stream-shaping processes, but in this case the change was causing a new, small—but significant—sideways flow, causing water to pour into the irrigation ditch downstream from the headgate. At first the issue seemed likely to fix itself after high flows subsided, but as summer ended the ditch still carried water, so the Committee started figuring out how to get the problem fixed.

The situation is unusual. DWP is responsible for the ditch,

and as they still do 40 years later, Long Live Mono Lake. 🛠

Sally Gaines is co-founder of the Mono Lake Committee and Chair of the Board of Directors. For the Committee's 40th anniversary she is writing a series of articles reflecting on the organization's past, present, and future, and she is swimming in Mono Lake as often as possible.

but the logjam creating the problem is on Forest Service land, squarely in the middle of the stream and thus also under California Department of Fish & Wildlife jurisdiction. With no single agency directly responsible, the Committee has taken the lead, working with all three agencies to put the issue on their priority lists, craft a solution, and get the problem fixed as quickly as possible.

In the big picture, the Committee's watchdog role on the day-to-day level is vital to ensuring that the many protection and restoration measures we have won through our advocacy efforts deliver the intended benefits of a healthy Mono Lake and thriving tributary streams. \diamondsuit

The coming of spring

by Nora Livingston

ave you ever watched a new leaf unfurl from a bud? The fresh, bright, delicate leaf pushes out of its winter home, reaches gently for the sun, and slowly unwraps itself cell by cell, finally free and alive. It's almost as if you can witness it gulping for air like a newborn and sighing when it first feels the sun's buttery warmth.

This leaf will work hard all summer to make sugar and clean oxygen; it will toughen as it grows from that first tiny emergence into an essential factory for the survival of its larger self, the tree. This leaf will shade Bullock's Orioles as they weave their pendulum nests and hide the entrance

so their young can poke their heads out and observe the world before they are ready to fledge. This leaf will flutter in the spring breeze and, along with its neighbors, create the dazzling illusion of a hundred birds taking off at once.

This leaf will stand by as migrant birds return to the Mono Basin and hear Red-winged Blackbirds calling from the nearby lakeshore marsh, American Robins warbling melodically from the next tree over, or a distant Sage Thrasher "ecstatically welcoming spring's return," as David Gaines once wrote. If you are patient and attentive, you can enjoy the small but breathtaking details of the coming of spring.

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Mono Lake: The whole picture

Spend a day learning all about the natural history of the lake while exploring the basin with an expert.

Ice & fire

Explore geology hotspots and transport yourself millions of years into the past.



e spent two wonderful mornings birdwatching with Nora. She is very knowledgeable and an excellent observer of birds and other wildlife. Besides, she's a lot of fun to be with. We recommend her highly." -Marty Maskall & Subhash Chand

Call (760) 647-6595 or email *guides@* monolake.org for a custom trip.

Design your own trip! Email guides@monolake.org.

2018 Field Seminars



Birding Mono Basin Hotspots

June 1 (half day) • Nora Livingston \$75 per person / \$65 for members

Mono Basin creeks and canyons are hidden jewels for breeding and migrating songbirds in a region where high desert habitat dominates. This half-day birding trip will explore lush riparian areas that are hotspots for bird activity. Expect to see warblers, sapsuckers, pewees, buntings, sparrows, towhees, vireos, and if you're lucky, an American Dipper or Townsend's Solitaire.

Breeding Birds of the Mono Basin

June 2 • Nora Livingston \$95 per person / \$85 for members

Early summer is the best time to find breeding birds in the Mono Basin—they are singing from the tops of every tree and shrub to declare their territory to rivals and protect their mates. This one-day seminar will visit several spots in the Mono Basin to learn about the many breeding birds that raise their families here.

Twilight Birding & Owling

June 3 (half day) • Nora Livingston \$60 per person / \$50 for members

Evening in the Mono Basin is spectacular—clouds light up with vivid color, fading light turns the landscape inky blue,

and unique wildlife emerges. Spend the twilight hours with a naturalist while the sun sets. We will look for songbirds, search for twilight specialists like Wilson's Snipe and Common Nighthawk, scan the trees for owls, and scour the back roads for poorwills.

The Art of Wildflower Macrophotography

June 8–10 • David Gubernick \$275 per person / \$250 for members

Learn to take creative and beautiful close-up images, further develop your artistic vision, and enhance your photographic skills in the supportive learning environment of this workshop for beginning to advanced amateur photographers. The weekend will emphasize the artistry of macrophotography and the technical means to render such images; this is not a course in botanical identification.

South Shore Kayak

June 9 • Stuart Wilkinson & Committee staff \$122 per person / \$112 for members

Early summer reveals snow-capped mountains towering over a glassy Mono Lake—a great time to kayak. Join Stuart Wilkinson and a Mono Lake Committee staff member for a guided naturalist expedition that will cover a wide variety of topics relating to this unusual Great Basin lake, including geology, ecology, history, and politics. Expect to see

Mono Lake Committee Field Seminars fill quickly register online at *monolake.org/seminars* or call (760) 647-6595. underwater tufa towers, birds, brine shrimp, and lake-bottom springs. Some kayak experience is helpful, but not necessary; kayaks and safety equipment are provided.

Natural History of Mono Basin Woodpeckers

June 12–14 • Steve Shunk \$182 per person / \$167 for members

Join this fascinating seminar for a dynamic overview of Mono Basin woodpeckers. One of the most specialized bird families in the world, at least nine species of woodpeckers occur regularly in the Mono Basin, making the forests around Mono Lake a perfect stage for observing these amazing forest carpenters. This field seminar will complement the Mono Basin Bird Chautauqua, which takes place June 15–17, 2018.



During early summer migration, more than one hundred bird species can be seen in the Mono Basin, including Mountain Bluebird.

Mining the Past through Binoculars

June 24 • Nora Livingston \$95 per person / \$85 for members

The Mono Basin is rich with Native American, mining, logging, and ranching history. This seminar will visit historic locations that give background to the tenacious pioneers, legendary basket weavers, and hardscrabble miners who came before us. We'll also learn about the animals and plants that inhabit these places now.

Natural History Ramble

June 27 (half day) • Nora Livingston \$75 per person / \$65 for members

At the edge of the Great Basin high desert and the steep eastern escarpment of the Sierra Nevada, the Mono Basin has beautiful and diverse habitats, as well as ample opportunities to observe wildlife, wildflowers, and wild views. Hike with a naturalist guide on this half-day seminar and learn to identify local plants, birds, mammals, clouds, rocks—you name it!

Birding Between the Breweries

June 28 (half day) • Nora Livingston \$135 per person / \$125 for members

Mono County is notable for spectacular scenery, great birding, and a growing collection of high-elevation breweries. Combine your love for birds and brews on this relaxing afternoon trip, which will introduce you to some great birding at a few local hotspots as well as great beer at hotspots of another kind. Bring your binoculars, proof of age, and thirst for birds (beginners and experts welcome). We will provide a 14-person van and sober birding guide(s). One beverage per person per brewery is included in the tour fee.

Miwok-Paiute Basketry

June 29–July 1 • Lucy Parker & Ursula Jones with special guest Julia Parker \$265 per person / \$250 for members \$80 materials fee

During this seminar participants will prepare materials for and create a small Miwok-Paiute basket. This seminar is designed for weavers of all levels and participants are encouraged (but not required) to camp with the group at a peaceful private campsite near Lundy Canyon. Lucy Parker is a descendent of the Yosemite Miwok, Mono Lake Kutzadika^a, and Kayasha Pomo peoples, who learned traditional handiwork from her mother, master basket weaver Julia Parker. Ursula Jones, Lucy's daughter and Julia's granddaughter, is carrying the tradition forward.

Wildflower Waltz

July 6 (half day) • Nora Livingston \$75 per person / \$65 for members

Working on your wildflower identification? July is the perfect month to practice as the flowers will be out in abundance, taking advantage of plentiful sunlight and warm temperatures. On this half-day seminar we will scour meadows and canyons for the plethora of blooms that grace the trails. We will focus on identification and natural history of the flowers we see. Great for photographers and budding botanists.

Birding Between the Breweries

July 12 (half day) • Nora Livingston \$135 per person / \$125 for members

See the June 28 seminar description above.



A pale swallowtail, Papilio eurymedon, is one of the many butterfly species that can be seen in the Mono Basin in the summer months.

Mono Basin & Bodie Photography

July 13–15 • David Gubernick \$300 per person / \$275 for members

Join this field seminar to enhance your photo-taking abilities in the uniquely beautiful Mono Basin and at the world-renowned Bodie State Historic Park. Field trips and classroom sessions will combine to cover a multitude of photographic topics. Plus, the group will visit Bodie for private after-hours evening access.

Mono Basin Natural History: Aquatic & Terrestrial Habitats

July 13–15 • David Wimpfheimer \$207 per person / \$192 for members

The Mono Basin is one of the most diverse ecosystems on the continent; this field seminar will be an overview of the varied habitats that are found here. We will enjoy the rich diversity of mammals, butterflies, wildflowers, trees, and other plants as we explore the Mono Basin, and a major focus of this seminar will be the identification and ecology of birds that breed here. A guided canoeing exploration of Mono's south shore is included in this class.

Mining the Past through Binoculars

July 19 (half day) • Nora Livingston \$75 per person / \$65 for members

See the June 24 seminar description on page 20.

En Plein Air at Mono Lake: **Beginning Oil Painting**

July 20–22 • Penny Otwell \$192 per person / \$177 for members

Painting outdoors allows an instant connection with landscape, and the textural possibilities and complete-coverage quality of oil paint allow students to portray their own unique feelings in their work. This field seminar is designed to be an introduction to the sometimes-intimidating subject of oil painting for students who may or may not have experience painting but who want to learn oil painting outdoors.

Butterflies of the Mono Basin & Sierra Nevada

July 21–22 • Kristie Nelson \$172 per person / \$157 for members

Join local naturalist Kristie Nelson for an exploration of butterflies of the Mono Basin and Sierra Nevada high country. With a range of habitats and plant species on which butterflies depend, this region is an excellent place to get acquainted with these bright splashes of living color. In fact, the Tioga Pass region is known to be one of the most productive and speciesdiverse regions for butterflies in the United States.

Natural History Ramble

July 25 (half day) • Nora Livingston \$75 per person / \$65 for members

See the June 27 seminar description on page 20.



Canoeing among the tufa towers is the best way to learn about Mono Lake's aquatic ecosystem firsthand.



Mono Lake's water is very dense from salts and minerals, which allows stunning mirror-like reflections to form on the lake's surface.

Wildflower Waltz

July 26 (half day) • Nora Livingston \$75 per person / \$65 for members

See the July 6 seminar description on page 20.

Birding the White Mountains

July 27 • Nora Livingston \$95 per person / \$85 for members

The gradient from the Owens Valley to the White Mountains provides a great swath of diverse habitat, from desert oasis up to high-elevation pinyon-juniper woodland. On a day of birding like this, one could easily see over 100 species in eight hours. This one-day field seminar will search high and low for a great variety of species and end the day tallying up the list at the Mountain Rambler Brewery in Bishop.

Mono Basin Mammals

July 27–29 • John Harris \$182 per person / \$167 for members

This class will cover the diversity of mammals found in the Mono Basin, from desert sand dunes to forests and alpine meadows of the high Sierra. More mammals occur here than in many states, and the group will try to see as many as possible by live-trapping and field observation. Participants will look for tracks and learn to identify skulls, focusing on identification and adaptations to Mono's varied environments.

High Country Plants & Habitats: How are they coping with climate change?

August 3–5 • Ann Howald \$182 per person / \$167 for members

This class will explore the mosaic of habitats found in the Eastern Sierra high country—flower-filled meadows fed by meandering streams, sagebrush-covered slopes, lodgepole pine forests, subalpine lakes bordered by willows, and flowery rock gardens. A special focus will be the ways high elevation plants and animals of the Mono Basin are affected by climate change, now and in the future.

Landscape Photography, Milky Way, & Perseid Meteor Dark Sky Astrophotography

August 10–12 • Jeff Sullivan \$275 per person / \$250 for members

Summer is a special time for photographers in the Eastern Sierra, with wildflowers blooming, snow lingering on Sierra Nevada peaks catching morning alpenglow, and afternoon cumulus cloud formations for potential sunset color, typically yielding to clear skies for night photography. Jeff Sullivan will show you some of his favorite techniques and spots for landscape and night photography in the Mono Basin.

Mining the Past through Binoculars

August 15 (half day) • Nora Livingston \$75 per person / \$65 for members

See the June 24 seminar description on page 20.

Falling for the Migration: Bridgeport Valley & Mono Basin

August 16–17 • Dave Shuford \$172 per person / \$157 for members

Falling for the Migration: Crowley, Mammoth, Mono

August 18–19 • Dave Shuford \$172 per person / \$157 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, late summer is the time to see fall migrants and early arriving wintering birds in the Mono Basin, Bridgeport, Crowley, and Mammoth areas.

Miwok-Paiute Basketry

August 24–26 • Lucy Parker & Ursula Jones with special guest Julia Parker \$265 per person / \$250 for members \$80 materials fee

See the June 29 seminar description on page 20.

Natural History Ramble

August 30 (half day) • Nora Livingston \$75 per person / \$65 for members

See the June 27 seminar description on page 20.

Volcanism at Mono Lake

August 31 • Nora Livingston \$95 per person / \$85 for members

Mono Lake sits in a geologic bowl formed by ancient volcanic sediments and recent volcanic eruptions. Plug dome volcanoes, underwater eruptions, and hot springs are a few of the exciting geologic features this region holds. This seminar will visit several volcanic formations around the lake while addressing the overall picture of volcanism in the Mono Basin and its role in shaping the landscape we see today.

A Long Journey: Shorebird Migration

September 7 • Nora Livingston \$95 per person / \$85 for members

As birds fly south for winter, we wonder "Where exactly are they going? Where are they coming from? How long does it take them to get there? How do they know where to go?" This seminar strives to answer those questions during a fun time in the field observing these ultra-lightweight travelers as they fuel up along their migration. We will focus on waterbirds and shorebirds, but there also will be plenty of landbird migrants.

Living on the Edge: Sierra Nevada Bighorn Sheep in the Mono Basin

September 8–9 • John Wehausen \$182 per person / \$167 for members

This field seminar will involve discussions about the fascinating biology of the federally endangered Sierra Nevada bighorn sheep, their relationship with other mammals (including mountain lions and humans), and their conservation in the field. Past participants saw bighorn 15 out of the last 16 years—while there is a very good chance of seeing bighorn sheep during this seminar, there is no guarantee. *Please be aware that this seminar involves very strenuous hiking at the 10,000-foot elevation and above.*

Mono Basin Tree Identification

September 14 • Nora Livingston \$95 per person / \$85 for members

This one-day seminar will delve into the diversity of trees in the Mono Basin and their identifying traits. We will examine, observe, and even smell the trees to help ingrain the knowledge into our senses.

Fire Ecology of the Eastern Sierra

September 15–16 • Malcolm North \$172 per person / \$157 for members

We live in a pyrogenic landscape, where most forests are born and shaped by fire. Fires are inevitable in much of the western United States, but many modern fires burn differently than what forests evolved with. This seminar will visit several recent fires in the Mono Basin, show fire effects on forest ecosystems, and discuss the good, bad, and ugly of current fire management and policy.

Mining the Past through Binoculars

September 21 (half day) • Nora Livingston \$75 per person / \$65 for members

See the June 24 seminar description on page 20.



Interested in a private tour at Mono Lake? Email guides@monolake.org to schedule a custom trip.

Geology of the Mono Basin

September 21–23 • Greg Stock \$182 per person / \$167 for members

From volcanic craters to glacial moraines, earthquake faults to tufa towers, the Mono Basin displays some of the most unique, spectacular, and accessible geology anywhere in the world. In this seminar, consisting mostly of field visits to locations like Tioga Pass and Panum Crater, Greg Stock will guide you through eons of fascinating Mono Basin geology.

Fall Color Foray

October 3 (half day) • Nora Livingston \$75 per person / \$65 for members

Every fall, quaking aspen trees famously paint the landscape with spectacular hues as their leaves change. This seminar will hit the hotspots of colorful groves during peak season. We will enjoy glittering golden, ruby, and emerald forests while learning about aspen ecology. Great for photographers.

Fall Color Foray

October 11 (half day) • Nora Livingston \$75 per person / \$65 for members

See the October 3 seminar description above.

Mono Basin Fall Photography

October 12–14 • Robb Hirsch \$275 per person / \$250 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. Join Robb to explore shoreline locations at sunrise and sunset, fall color in nearby canyons, and grand overviews of the Mono Basin. Photographers of all levels are welcome; a fully adjustable camera of any size or format is suggested.



Join one of the fall color seminars to discover the stunning beauty of the Mono Basin's aspen groves in autumn.

Arborglyphs & Aspen Natural History

October 13–14 • Richard Potashin & Nancy Hadlock \$197 per person / \$182 for members

A century of sheep grazing brought Basque sheepherders into the Mono Basin's aspen-bordered meadows, and they left numerous carvings—arborglyphs—on the aspens. Join the instructors for an enchanting journey into the aspen groves at peak color to explore this historic art form and to learn about the wildlife, insects, and birds that are drawn to the groves.

Fall Color Foray

October 15 (half day) • Nora Livingston \$75 per person / \$65 for members

See the October 3 seminar description above.

Field Seminar Information

To register for a Field Seminar, please visit monolake.org/seminars or call (760) 647-6595.

To see complete Field Seminar itineraries, cancellation and refund policies, seminar leader information, and answers to frequently asked questions, visit *monolake.org/seminars*.

Field Seminars are open to all, but Mono Lake Committee members get to register early and receive discounts. All instructors are experts who have received high ratings from past seminar participants. We emphasize a spirit of learning and camaraderie in this magnificent outdoor setting for a reasonable cost. Proceeds from Field Seminars benefit research and education in the Mono Basin.

All Field Seminars and custom trips operate under Inyo National Forest and California State Parks permits.

which likely contributed to the low number of nesting gulls last year—the study has previously documented that islets visited by coyotes are usually avoided by nesting gulls the following year.

While the gulls nested in safety from mainland predators last year, a new factor may have affected the population.

Invasive weed encroaches on nesting ground

California Gulls select open ground areas for nesting, which have, until last year, been plentiful on the islets in Mono Lake. Last year researchers documented rapid, thick growth of the thigh-high, prickly, dense Eurasian invasive weed *Bassia hyssopifolia* on the islets, which encroached quickly on the available nesting space. That may have discouraged some gulls from nesting and caused others to lose access to their nests over the summer—researchers found two deceased chicks tangled in the weedy growth during a September site visit. *Bassia* continued to grow after nesting concluded last year; as a result the widespread coverage of this thick vegetation could prevent gulls from nesting successfully this year.

Last fall gull researchers and Committee staff met with US Forest Service and California State Park staff to discuss what could be done to combat the *Bassia* so that returning gulls have places to nest. The reason for the sudden abundance of *Bassia* is unclear, but removal tests conducted on the islets in 2012 produced a lasting benefit—*Bassia* was slow to move back into cleared areas.

The group considered several options for removing the weeds and decided to pursue controlled burns with hand removal as a secondary option. Controlled burning will be the most effective at removing thick mats of previous growth and slowing new growth across a wide area. Permitting and planning is underway for the burns, which will hopefully take place in early March before the gulls arrive.

Setting gulls up for success

Water diversions that began in the Mono Basin in the 1940s drastically changed Mono Lake's ecosystem, which impacted the thriving gull colony. As the lake rises to its long-term management level, interventions such as the temporary fence and controlled burns can help California Gulls nest safely and as productively as possible. When you see gulls wheeling overhead during your visit to Mono Lake you'll be able to envision the behind-the-scenes efforts made to keep their nesting grounds safe.



Gulls select open ground areas for nesting, like the habitat shown above. Last year the rapid spread of an invasive plant across the islets reduced nesting habitat and adversely impacted the gulls.



The invasive plant Bassia hyssopifolia covered the islets by last fall; controlled burning is necessary to clear the islets so that gulls returning to Mono Lake this spring will have places to nest.

Turning the tide from page 16

led the world, seems hesitant to lead.

Henry Wadsworth Longfellow said, "The lowest ebb is the turning of the tide."

Like the benthos we can cling, hunker down, and hope for better days. Like the plankton, we can paddle within the current. Forty years ago, a dedicated few on the shore of Mono Lake formed a committee and stemmed a tide at that place and time.

The great Nordic king Canute had his throne placed on

the shore of the ocean. Resting on his throne, in a monarch's voice he commanded the tide to turn. It did not.

Forty years ago a few nektons changed things. They did what Canute could not. If we join together no power or earthly king can stop us. �

Vern Gersh is a former guide and naturalist, now retired. A lover of birds and plants, Vern is leaving his heart in the Mono Basin for the next adventure, retirement on the Colorado Plateau.

Become a Mono Lake Volunteer this summer

by Jessica Horn

Lad in their official blue shirts and brown vests, toting spotting scopes and backpacks filled with tufa-making supplies and photos of local wildlife, Mono Lake Volunteers are ever-present on the boardwalks of South Tufa, Old Marina, and County Park each summer.

Over 80 volunteers help introduce Mono Lake's natural history to the thousands of people who visit its shores each year. Volunteers not only talk with visitors at the lake, they do restoration projects such as invasive plant removal along streambanks and trails, help with mailings at the Mono Lake Committee, lead patio talks at the Mono Basin National Forest Scenic Area Visitor Center, and lend a hand on special projects when needed.

This year volunteer training will take place from 9:00AM to 4:00PM in a three-day block over one weekend, starting Friday, June 1st with an overview at South Tufa and basic natural history of Mono Lake, and culminating in a graduation ceremony on Sunday, June 3rd.

Janet Carle, one of Mono Lake's first State Park Rangers, teaches the volunteer training. With her vast experience, Janet helps the Mono Lake Volunteers become some of the most knowledgeable folks in the basin. During the threeday training, volunteers are immersed in the Mono Basin's natural history and learn how to interpret Mono Lake at key visitation sites. Volunteers tour Panum Crater, the Mono Lake Committee, the Old Schoolhouse Museum, and the Scenic Area Visitor Center as well.

New volunteers are required to attend all three days of this free training, and are asked to donate eight hours a month to the program, June through August, on a flexible schedule. Participants must be at least 18 years old, be able to walk short distances, and stand for two hours.

The Mono Lake Volunteer Program is a joint initiative sponsored by California State Parks (the Mono Lake Tufa State Natural Reserve), the US Forest Service, and the Mono Lake Committee, with support from the Eastern Sierra Interpretive Association and the Bodie Foundation. Volunteers have opportunities to work with all of the partners.

The program would not be possible without the hard work of Karen Gardner, Mono Lake Volunteer Coordinator. We extend a huge thank you for all the time and work that Karen and Janet devote to the Mono Lake Volunteers. If you are interested in volunteering, or for more information, please contact Office Director Jessica Horn (*jessica@monolake.org*) at (760) 647-6595. ◆



Arya & Gabriel Harp were married on October 8, 2017 in Yosemite Valley, with their daughter Illia napping nearby in the warm fall sunshine. The Mono Lake Committee family—current staff, former staff, intern roommates, membership consultants, researchers, and Living Lakes partners—all gathered to celebrate. Congratulations, Harps!



From the mailbag

News from members and friends

by Ellen King

This year's dry winter stands in sharp contrast to last year, when we almost ran out of places to put all the snow we shoveled here in Lee Vining. We're left wondering if last year's wet weather marked the end of a multi-year drought, or if it was just an anomaly in what may be more dry years to come. Your gifts help us carry on the work that will keep Mono Lake a special place through wet years and dry—we thank all of you who sent in contributions in honor or in memory of your friends and loved ones.

In honor

Kathleen Gaines & Ray Welch of San Rafael sent a contribution in honor of Edith Gaines on her 98th birthday. Jane Grossman of Reno, NV made a donation in honor of Brad Rassler. Kathie Kinzie of Philo gave a gift "honoring the service of **Terry** McLaughlin & Vern Gersh to the Mono Lake Committee." Margret Lohfeld of Los Angeles sent a contribution in honor of her brother Martin Engel. Sheila Mount of San Gabriel made a donation in honor of Sherryl Taylor. Kathleen Mugele of Sonoma gave a gift in celebration of Margaret Spaulding. Sophie Powell sent a contribution in honor of Stephen G. Powell. Ron Rutowski of Tempe, AZ made a donation in honor of **Patricia** Rutowski & Lauren Mitchell.

In memory

Bob Battagin of Woodacre made a donation in memory of Rich Stallcup. Diane Bonilla of Escondido gave a gift in memory of Mary Jane Thomason. Bea Beyer of Mammoth Lakes sent a contribution in memory of Eva Beyer. Robert Coronado of Huntington Beach made a donation in memory of Bernard F. Ryan. Marcia Correia of Elk Grove gave a gift in memory of her brother James S. Grant, "who worked at Reds Meadow and Thompson Shell Station in the late 1950s." Edith Gaines of Los Angeles sent a contribution and a note: "On December 30, we remember David's 70th birthday. The enclosed check is his



Susan Maples of Carson City, NV at Mono Lake with her siblings in the mid-1960s.

gift back to the lake he loved so much." Terence Kelly of Palo Alto made a donation in memory of his mother Gretchen Kelly. Matthew Lawrence & Kimberly Seater of Seattle, WA gave a gift in memory of Andrea Lawrence. Kay Lockhart of Los Angeles sent a contribution in memory of her traveling buddy Lois Eylar. Carol Mathews of Walnut Creek made donations "in loving memory" of Robert Mathews. Nicole Nedeff of Carmel Valley gave a gift remembering Kevin Dummer. Toshi Okada of Los Altos sent a contribution in memory of Mitzi Okada. Julia Stoud of San Francisco made a donation in memory of Jim MacDonald.

Diane Oman of Gallatin Gateway, MT gave a gift in memory of Chris Oman, "the best brother ever." David & Karen Vandervoet of Los Alamitos sent a contribution in memory of **Gary Brooks**, "who spent many years photographing the Range of Light."

Carol Broberg and Jeanne Walter, both of Swall Meadows, made donations in memory of Lorenzo Stowell. Jack & Dewana Sue Ellis of Athens, OH, Quentin Lawrence of Haymarket, VA, and Martha Miller of Yosemite sent contributions in memory of Jan Simis. We received a grant from the George W. Davis Fund in memory of Grace de Laet and Richard & Virginia Davis.

New member with a longtime connection

Susan & Jeff Maples of Carson City, NV recently joined the Mono Lake Committee after participating in a walking tour at South Tufa. Susan sent us this fun photo of herself with her siblings at Mono Lake in the mid-1960s (see above). ❖



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