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MAGPIE CALLS

Newsletter of the Santa Ynez Valley Natural History Society PO Box 794, Los Olivos, CA 93441 805-693-5683 www.syvnature.org syvnhs@syvnature.org

Dedicated to the study, exploration, and appreciation of natural history in the Santa Ynez Valley region

Oak-Planting Workshop at Sedgwick Reserve: How to Propagate, Plant and Identify Native Oaks

Free workshop with John Evarts, Brenda Juarez, and Gary Nett Saturday, March 5, 10 a.m to 12:00 p.m.

Co-hosted by UC Sedgwick Reserve

UC Sedgwick Reserve, 3566 Brinkerhoff Avenue, Santa Ynez. Participation is limited to 15. Advance registration is required for this free workshop and is now open to members and nonmembers at syvnhs@syvnature.org or 805/ 693-5683.

This hands-on workshop held in an oak regeneration site at beautiful Sedgwick Reserve will provide step-by-step guidelines for growing native oaks, from both acorns and seedlings. In addition to demonstrating planting methods and techniques for seedling protection from predators, we'll cover some basic issues for oak seedling care. All participants will be able to take home their own seedling and/ or freshly potted acorns.

After the planting, there is an optional short walk to identify the three arboreal oak species that grow on the Reserve. We'll briefly discuss the role of oaks in California's woodlands and look at the causes of poor oak regeneration and recruitment.

Participants should bring gloves and wear sturdy walking shoes. Tools and materials will be provided.

John Evarts is co-editor and publisher of *Oaks of California,* and since 1985 he has been planting and main-

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Comparing three species of oaks in close proximity during a workshop at Sedgwick, 2016. Photo by John Evarts.

taining a wide variety of native oak species on his property near Ballard. **Brenda Juarez** is a docent at Sedgwick Reserve, a graduate of the California Naturalist certification program and a co-founder of the "Oakies," a volunteer oak-planting group at Sedgwick involved in oak restoration at the Reserve during the last decade. **Gary Nett** is a Sedgwick docent devoted to protecting and restoring local native oak populations.

President's Message from Marion Schlinger

Dear SYVNHS Members and Friends:

It's hard to believe we are about half way between the Winter Solstice and Spring Solstice. Soon after the Winter Solstice, the sunset times slowly get later, but the sunrise also keeps getting later. That is, until the second week in January, when sunrise finally turns around and rises earlier, specifically on January 17 this year. This phenomenon of the orbit and tilt of the Earth's axis of rotation contributes to this uneven change in times of sunrise and sunset. Regardless, for some reason, I always look forward to that later sunrise in January. Now both sunrise and sunset times are lengthening the days which is great for all those of us who thrive on being outside to hike, walk, bike, garden, or whatever daylight activity you enjoy and get out early to do so.

In this winter/spring newsletter we have some fascinating lecture presentations that I hope you, too, will find interesting and educational. Your Board members have quite diverse backgrounds that enable us to tap into connections that result in these presentations. As we are not out of the woods (no pun intended) on the whole Covid-19 issue and its variants, your Board feels it best we continue with a majority of Webinar/Zoom formats for the immediate future. (We will be testing a camera system that will enable us to livestream future lectures—when we can host them again—to enable us to reach in-person and at-home audiences.) Be sure to review our boxed list of Upcoming Lectures and Field Trips. Also check our website and your emails for the possibility of a couple of pop-up field trips.

A huge thank you goes to all of our members who so generously donated to our end-of-year appeal. We are so fortunate to have your support as we continue our mission to provide environmental education to enhance the knowledge of our local, and sometimes not-so-local, natural world around us. Finally, I would like to share some of my winter nature notes from my walks up until the end of January, when I fractured my left ankle. These were observations made enjoying walks with my

Effects of Wildfire on Stream and Riparian Ecosystems Free Zoom Lecture with Dr. Breeanne Jackson Wednesday, Feb 23, 2022 7:00 to 8:30 p.m. This Zoom webinar included a live presentation followed by a Q & A. The presentation recording will be posted online after the event.

Yosemite and Sequoia Field Stations Director Breeanne Jackson spoke about a particular segment of her work as an ecologist, how wildfire affects stream and riparian ecosystems. This is a subject of particular interest locally as we all watch our creeks with gripped concern following wildfires (and ensuing mudflows) that have ravaged landscapes around Santa Barbara County's most pristine and biodiverse watersheds.

Breeanne Jackson ("Breezy") holds a PhD in Ecosystem Ecology from Ohio State University and MA degrees from University of Idaho - one in Environmental Science and the other in Outdoor Leadership. Prior to joining the UC Natural Reserve System, Breezy worked as a Wildlife Biologist in the Terrestrial Biodiversity Program at Yosemite National Park. Breezy has studied everything from riparian invertebrates such as spiders and butterflies, to the American Dipper, which can fly underwater to hunt invertebrates. young Labrador in my favorite SYV area. Since late December the Canyon gooseberry, Ribes menziesii, has been blooming and never lost last year's leaves. A western pond turtle frequently basks in its favorite pool in the creek. A group of seven male wild turkeys put on quite a show one morning, ignoring us, and jostling and kicking (impact sound was impressive) at each other trying to establish dominance. A California thrasher has its favorite tree top perch and sings forth a lovely melody. A raucous Steller's jay and tuxedoed yellow billed magpies are always a delight to see and hear. Occasionally a wary coyote and a flyover by a golden eagle are always fun to see. And just before my ankle episode there were buttercups and milkmaids dotting the shady embankment. So much for my continuing to see the progression of spring wildflowers blooming. I will leave that up to all of you fellow nature enthusiasts to get out there and find your own special area and watch spring bud forth and hope, too, we get more rain.

Your President, Marion Schlinger





Above: North Fork Tuolumne River. Photo by Bill Bushnell CC SA-BY 3.0.

Left: Ecologist Breezy Jackson. Photo courtesy of the speaker.

Magpie Calls

2022 Members Meeting of the SYVNHS Wednesday, March 9, at 7:00 p.m. prior to the evening's Zoom lecture

Please join us for our brief annual Members Meeting. This very brief meeting will precede the lecture by Dr. Fraser Shilling, "Wildlife Crossings in California." The meeting and Dr. Shilling's lecture will be presented via Zoom's webinar format. Our short meeting agenda includes an announcement about returning board members and a short financial update by our Treasurer. You'll be able to send questions or comments to us in real time via the Q & A function of the webinar.

Wildlife Crossings in California: Barriers and Opportunities Free Zoom lecture with Dr. Fraser Shilling

Wednesday, March 9, 7:00 to 8:30 p.m.

This Zoom webinar includes a live presentation followed by a Q & A. A Zoom link will be emailed to SYVNHS members and posted online prior to the program. A recording of the presentation will be posted online after the event.

Wildlife-Vehicle-Collisions (WVC) or "roadkill" can result in death of the animal and vehicle damage and injury to the driver and passengers with significant ecological and economic impacts. According to analyses of the Road Ecology Center at UC Davis, California has incurred 1 to 2 billion dollars in costs related to WVC over the last 5 years. Collisions recorded by the CHP numbered over 44,000 during that same period. The Santa Ynez Valley Natural History Society will host a Zoom-based lecture by the Director of the Road Ecology Center, Fraser Schilling, on March 9, 2022 at 7:00 PM. Dr. Shilling will discuss the history of crossings in California, including where they are and what they do. He will present what we know and what we don't



Artist Rendering of Bridge Crossing on SR 62. Image courtesy of Contech.

know about developing wildlife crossings and the decision process for their location and funding. There are many opportunities for the public to influence development of a wildlife crossing system in the state in what can be called a "win-win" opportunity.

Dr. Fraser Shilling is the director of the Road Ecology Center at UC Davis. He received his PhD from USC. Dr. Shilling has three main research areas in transportation ecology:

1) environmental disruption (e.g., climate change, pandemics) impacts on transportation and other systems, 2) impacts of traffic noise and light on wildlife use of habitat and wildlife crossing structures, and 3) interaction of transportation systems with natural processes. He also studies equity and justice in water sustainability and climate change.



Dr. Fraser Shilling. Photo courtesy of Dr. Shilling.

Birding at Las Cruzitas Ranch

Field Trip with Cruz Phillips Thursday, March 17, 9 a.m. to noon

Participation is limited to 15; the limit will be increased to 20 pending up-to-date covid protocols. Advance registration opens at 9:00 a.m. for Members on March 3 and on March 10 for Nonmembers at syvnhs@syvnature.org or 805/ 693-5683.

Members \$10 / Nonmembers \$25 / Children \$5 Masks are optional for those who have been vaccinated (subject to change).

This trip will introduce the rich bird life at Las Cruzitas, a 1500-acre ranch on the north side of Lake Cachuma. Our outing will entail easy strolling to view birds in the wild



Yellow-billed magpie visits Las Cruzitas. Photo by Cruz Phillips.

and around feeders. This can be a fulfilling trip for those with limited mobility, as there are multiple easy access bird feeders and great diversity and numbers at the feeders. Individuals or a small group are welcome to stay at the feeders. This will be a great opportunity for both novice and experienced birders to see our valley's spring avifauna. The ranch also has occasional fly-overs from nearby Cachuma Lake, including bald and golden eagles.

Bring binoculars and cameras and expect to see over 40 species of birds. You can bring a sack lunch and stay longer to eat in the yard near the feeders.

Cruz Phillips is a life-long birder and third-generation valley resident. She has led many field trips over the years for Audubon and other organizations.



Left: Male black-headed grosbeak. Photo by Cruz Phillips.

Sea Turtles to Sidewinders: A Tour of the Reptiles and Amphibians of the American West

Free Zoom Lecture with Charles Hood, Erin Westeen, and Jose Gabriel Martinez Fonseca

Tuesday, March 22, 7:00 to 8:30 p.m.

This Zoom webinar includes a live presentation followed by Q & A. A Zoom link will be emailed to SYVNHS members and posted online prior to the program. A recording of the presentation will be posted online after the event.

California is home to almost 80 species of "herps" in a variety of sizes and shapes. This talk will provide an overview to some of our common and uncommon neighbors, and give a preview of groundbreaking research in how lizards communicate (and explore the world) in wavelengths of color invisible to the human eye. From Gila monsters to the common fence lizard of your backyard, the world



Collared lizard. Photo courtesy of the speakers.

of reptiles and amphibians will come alive during this presentation.

Charles Hood, author A Californian's Guide to the Birds Among Us and its companion title A Californian's Guide to the Mammals Among Us (Heyday Books) will team up with PhD candidates and co-authors **Erin Westeen** (UC Berkeley) and **Jose Gabriel Martinez Fonseca** (Northern Arizona University) to discuss a selection of species featured in their new book, Sea Turtles to Sidewinders: A guide to the most fascinating reptiles and amphibians of the American west (Timber Press).







Above: Charles Hood and Erin Westeen, Left: Jose Gabriel Martinez Fonseca. Photos courtesy of the speakers.

Where Snow Isn't White

Free Zoom lecture with Dr. Ned Bair Tuesday, April 5, 7:00 to 8:30 p.m. This Zoom webinar includes a live presentation followed by Q & A. The Zoom link will be emailed to SYVNHS members and posted online prior to the program. A recording of the presentation will be posted online after the event.

Clean snow/ice is only white in the visible wavelengths. It's dark and even black in shortwave infrared regions, and pollution can darken it substantially in the visible wavelengths. This unique spectral signature forms the basis of optical remote sensing of snow. In the Western US and many other mountainous parts of the world, snow albedo controls snow melt rates, and affects global climate.

In his talk, snow researcher Ned Bair will define albedo and explain the distinction between intrinsic and apparent albedo. He'll give an overview of how snow albedo is usually poorly measured and modeled, both in the field and from satellites and present new research to address these challenges. Using an example from his research, he'll show how during the COVID-19 lockdowns, water supplies were dramatically affected in the Indus River Basin as the snow/ ice surface became 30% cleaner due to pollution reductions.



Snowpack landscape. Photo courtesy of the speaker.

Dr. Ned Bair is an Associate Researcher at the Earth Research Institute at UCSB. He uses remote sensing and field techniques to study the cryosphere. He has worked for the US Army Corps of Engineers, as a consultant, a ski patroller, and a climbing guide. He is the Research Chair for the American Avalanche Association and lives in Mammoth Lakes, California.



Ned Bair buried in his work. Photo courtesy of the speaker.



Researcher Ned Bair. Photo courtesy of the speaker.

Earth Day Exploration: Hike the Live Oak Trail Field trip with Society and area naturalists Friday, April 22, 8:30 a.m. to 1:00 p.m. Participation is limited to 15. Advance registration opens at 9:00 a.m. for Members on March 22 and for Nonmembers on April 12 at syvnhs@syvnature.org or 805/ 693-5683. Members \$10 / Nonmembers \$25/ Children \$5 Masks are optional for those who have been vaccinated (Subject to change).

Spend Earth Day exploring the Cachuma Live Oak Trail—a first hiking excursion for the Santa Ynez Valley Natural History Society since the trail opened in April 2021. Society board members and area naturalists will combine efforts to guide and interpret features of the landscape and trailside. Several geologic formations are easily observed in the area, ranging in age from perhaps 15,000 years (the latest deposits of the Paso Robles Formation) to 10 to 20 million years (the earliest deposits of the Monterey Formation). Several formations can be distinguished from others—at times from one step on the trail to the next, for example, the diatom-rich Sisquoc Formation (the same as found in Lompoc). The fine dust of some formations reveal

daily commutes of the abundant animal life of the area, including jack rabbits, snakes, darkling beetles, lizards, deer, mountain lions, and more.

We'll pass through several plant communities; traverse expansive river terraces of valley oak savannas, cross slopes of coastal sage scrub, and stall in shady oak woodland habitat. We may walk as far as the Santa Cruz Creek watershed, where Gray Pine reach their lowest elevation from further inland.

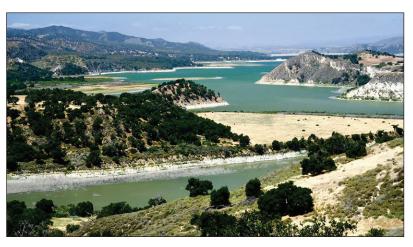
The Live Oak trail system is extensive, and our naturalists will scout easy-to-moderate routes four to six miles long and having maximum ecological diversity. Equip yourselves with typical hiking supplies: Water, sack lunch, hat, sunscreen,

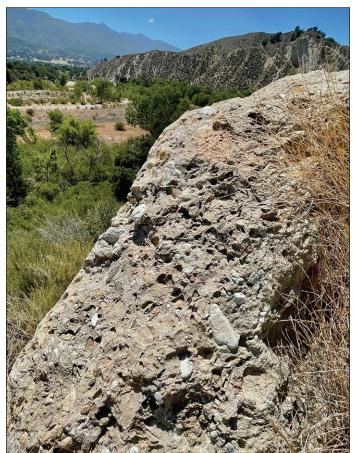


A possible lunch stop in the oak woodland. Photo by John Evarts.

walking poles, layered clothing. Meeting and trip details will be provided to trip registrants.

County Park Notes: Live Oak trails are through an active cattle and horse ranch where you may come in contact with grazing cattle and horses. Parking is below Live Oak camp, east of Cachuma Lake and accessible from Hwy 154. A \$10 Cachuma day use pass per vehicle or a County Parks annual pass can be purchased at Cachuma Lake or at the cash-only iron pay station at the trailhead. Payment for Live Oak includes access to Cachuma Lake for the day.





Top: East end of Cachuma from the high point. Bottom: Close-up of fossils on the trail. Photos by John Evarts.

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The San Rafael Mountains Mélange: How to Reconstruct Chaos Live lecture with Art Wahl Friday, May 20, 2022 7:00 to 8:30 p.m. Location to be determined. Registration is not required.

The Santa Ynez Valley is bounded on the north and east by the San Rafael Mountains and includes rock formations that have fascinated geologists, their students, and the public for generations. Often referred to as the San Rafael Mountains Mélange, this chaotic collection of rock has been slowly revealing itself by the combined effects of erosion, tectonic forces, and time. At first glance the mélange appears as shattered and ground-up chaos. Detailed study, however, has revealed a structural order. For example, the Franciscan mélange within the greater mélange displays the California state rock, serpentinite. Art Wahl, a UCSB alumnus, will enlighten our understanding of the strange reality that is the San Rafael Mountains Mélange, and follow up with a caravan field trip the next day (see below).

Art Wahl mapped the Franciscan mélange located in Santa Cruz Creek and published his research in the USGS Bulletin. Seeing that today's leading interpretations of the mélange did not apply to what he thought he had found, Wahl revisited the area. His new findings and map will be published by the California Geological Survey in the summer of 2022. He was awarded a BS in Geosciences from the University of Houston and an MA in Geological Sciences from UCSB. He's a long-time member and leader of the South Coast Geological Society.





Top: Art Wahl pondering a chert boulder on UC Sedgewick Reserve during a 2021 visit. Photo by Sam Spaulding. Bottom: Fellow mappers during the 1991 South Coast Geological Society Field Trip to the San Rafael Mts. Mélange. Left to right: Geologists Helmut Ehrenspeck, Tom Dibblee, Matt Warner, and speaker Art Wahl. Photo by Art Sylvester.

A Visit to the San Rafael Mountains Mélange Auto caravan field trip with Art Wahl Saturday, May 21, 8:30 a.m. to 1:30 p.m.



Participation is limited to 15; the limit will be increased to 20 pending up-to-date covid protocols. Advance registration opens at 9:00 a.m. for Members on April 21 and on May 11 for Nonmembers at syvnhs@syvnature.org or 805/ 693-5683. Members \$10 / Nonmembers \$25 / Children \$5 Masks are optional for those who have been vaccinated (subject to change).

We are most fortunate to have **Art Wahl** follow his lecture on the San Rafael Mountains mélange with a hands-on visit to representative sites in our backcountry. We will venture into the Mesozoic subduction zone that is world famous for its mélanges that contain high pressure-low temperature blueschist. Detailed instructions for the time and place of the starting point of the auto caravan will be provided to the registrants.

Left: This Franciscan blueschist block is a popular stop on a visit to the mélange. Photo by Art Wahl.

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