

Mountain Botany & Ecology



July 29–31, 2022 • Michèle Slaton

\$250 per person / \$235 for Committee members
enrollment limited to 12 participants

Join an exploration of the diverse plant communities from the shore of Mono Lake to the forests and meadows in high elevations of Lee Vining Canyon. We will explore elevations from 6,000–10,000 feet, and seek out forest, meadow, and streamside blooms, and dozens of shrub and tree species.

We will begin by identifying common wildflowers, starting with common traits used to recognize plant families. You'll learn the basics of flower and plant anatomy and how to use a plant key. We'll discuss soils and geology, and examine the adaptations that enable plants to tolerate the extremes of mountain environments. We'll talk about forest health and causes and recent progression of forest mortality across the Sierra Nevada.

Land managers use a broad variety of mapping and inventory methods to monitor both rare and common plants and their communities. You'll participate in an overview of these methods and learn about opportunities to contribute your own observations or join ongoing studies to help inform science and the conservation of public lands.

Michèle Slaton is an Ecologist with the US Forest Service, Pacific Southwest Region Remote Sensing Lab. She earned her Ph.D. in Botany from the University of Wyoming, and taught Botany, Plant Ecology, and Plant Physiology in Colorado before arriving in the Eastern Sierra in 2001. She worked as a botanist for Death Valley National Park and the Inyo National Forest before joining the Remote Sensing Lab, where she focuses on vegetation mapping by combining ground techniques with novel technologies.

ITINERARY

Friday, July 29, 6:45pm: Meet at the Mono Lake Committee Information Center & Bookstore (51365 Highway 395) in Lee Vining. We'll introduce ourselves, distribute course materials, and then enjoy a short slideshow to preview our weekend seminar. The precise locations we'll visit on Saturday and Sunday will depend upon the year's snowpack and the current weather.

Saturday, July 30, 8:00am: Meet at a location we will discuss on Friday night. Bring everything you need for a full day in the field, including water, lunch, snacks, and sun and rain protection. All instructional materials will be provided, but bring a hand lens or magnifying glass, and Jepson Manual plant key (any version) if you have one. We'll hike 2–3 miles in easy to moderate terrain, and spend about an hour in an indoor lesson on plant anatomy and ecology. We'll end our day in Lee Vining around 5:00pm.

Sunday, July 31, 8:00am: Same procedure as Saturday. We will end the day around 3:00pm so that folks have time to drive home.

ACTIVITY LEVEL: MODERATE

This seminar's activity level: *moderate*. We will be walking up to two miles a day at a leisurely pace, much of which will be over uneven terrain and off trail. This seminar includes ample crouching, squatting, kneeling, and sitting on the ground to see flowers up close with a hand lens. Participants should expect to be getting up and down most of the day, which is surprisingly tiring.

WEATHER & ALTITUDE

Temperatures in summer will be hot during the day and drop to chilly at night, with possible windy conditions and afternoon thunderstorms. Average temperatures in July in Lee Vining are 84°F (max) and 53°F (min).

This seminar will take place at elevations ranging from about 6,000 to 10,000 feet above sea level. It is a good idea to acclimate at the elevation of Lee Vining for at least 24 hours prior to the start of the seminar. Those with a history of heart, ear, or respiratory problems should consult their doctors before attending. Anyone restricted to lower elevations should not enroll. *Note: If you have residual respiratory effects from having Covid-19, activities at altitude may be particularly difficult for you.

Remember to bring (and drink!) lots of water because your body loses more water at the higher altitudes of the Mono Basin. Begin drinking extra water as you drive to higher elevation in order to prevent dehydration and headaches. Also, the sun is intense at high elevations, capable of burning even on cool and cloudy days, so be sure to protect yourself thoroughly using sunscreen, sunglasses, and hat.

MEALS

Please bring picnic lunches and snacks for both days. Bring plenty of water.

TO BRING

- a face mask (N95 or KN95 recommended)
- hand sanitizer
- lunch, both days
- plenty of water
- notebook or clipboard & paper

- ___ hat, bandanna
- ___ camera and binoculars (optional)
- ___ 10X hand lens
- ___ field guide
- ___ sunscreen
- ___ insect repellent
- ___ pens & pencils
- ___ sunglasses

RECOMMENDED READING

Blackwell, Laird R. *Wildflowers of the Eastern Sierra & Adjoining Mojave Desert & Great Basin*. Lone Pine Publishing, 2002.

Some like this book for its broad habitat coverage and information on how plants get their names. Species arranged by habitat. Photos are of varying quality.

Flannery, Tim. *The Weather Makers*. Atlantic Monthly Press, 2005.

An introduction to climate change and its impacts, written in a style that is informative, accessible, and insightful. Although written more than ten years ago, the facts it presents are still current. Also includes suggestions for things we can all do to slow the rate of change.

Laws, John Muir. *The Laws Field Guide to the Sierra Nevada*. California Academy of Sciences, 2007.

This beautifully illustrated guide has it all: trees, shrubs, wildflowers, ferns, fungi, lichens, fish, reptiles, amphibians, birds, mammals, insects, weather, and constellations. Includes many of the plants, birds and butterflies we will see, with lots of ecology tidbits and “fun facts.”

Smith, Genny. *Sierra East*. UC Press, 2000.

A well-illustrated, thorough introduction to the geology, weather and climate, plants, insects, fishes, amphibians, reptiles, birds and mammals, and places to see them, of the Eastern Sierra. Now available in paperback.

Weeden, Norman F. *A Sierra Nevada Flora*. Wilderness Press, 1996.

No photos but useful for those who have keying experience. Includes almost all plants we will see in the high country. Recently reprinted, so date may differ. Plant names are out-of-date.

Wenk, Elizabeth. *Wildflowers of the High Sierra and John Muir Trail*. 2015.

Interesting ecological stories about plants; 340 species are covered, arranged by flower color. Photos are of varying quality in focus and composition; color representation is good.

Wiese, Karen. *Sierra Nevada Wildflowers*. Falcon Guide, 2000.

Good photos, arranged by flower color. Includes many of the plants we will see on our walks.

COVID-19 REQUIREMENTS FOR 2022

All participants and instructors must be fully vaccinated and boosted. Proof of vaccination will be required after you register for a seminar.

Please minimize your exposure to Covid in the time leading up to your seminar. We recommend obtaining a negative PCR test result within 72 hours prior to your seminar starting.* If your PCR test comes back positive for Covid, you

must cancel your registration and stay home. If you begin to feel sick in the days leading up to your seminar, you must cancel your registration and stay home. You will receive a full refund in either case.

*Depending on the regional Covid situation we may need to *require* a negative PCR test result within 72 hours prior to your seminar starting.

During the seminars masks will be required indoors and in carpools/Mono Lake Committee van in accordance with Mono County requirements (N95 or KN95 masks offer the best protection). If Mono County has lifted the mask requirement, masks will not be required indoors and in vehicles during the seminars. (You may wear a mask at any time if you wish to.)

If you begin to feel ill with Covid symptoms at any time during the seminar, you must immediately notify the instructor or staff member accompanying the group and leave the seminar.

Please keep in mind that conditions may change at any time and we may have to change our procedures in order to provide the opportunity for everyone involved with the Field Seminars to safely participate. Depending on the Covid situation in the weeks leading up to your seminar, we may have to plan to hold the seminar completely outdoors. Mask requirements may change. There's a chance we may have to cancel seminars altogether. We will communicate with you about any of these changes, and you can always get in touch with us if you have questions or need more clarification about specific circumstances, by emailing fieldseminars@monolake.org or by calling (760) 647-6595.



Mono Lake Committee Field Seminars

P.O. Box 29 • Lee Vining, CA 93541 • (760) 647-6595 • monolake.org/seminars