Mountain Botany & Ecology



July 23-25, 2021 • Michèle Slaton

\$182 per person / \$167 for Committee members enrollment limited to 10 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 23, 6:45pm: Meet at the Solar Pavilion in Hess Park on Mattly Avenue. We'll introduce ourselves and then enjoy a short preview to our weekend seminar during an outdoor talk after course materials are provided. Bring a camp chair if you have one and dress for the cool evening. The precise locations we'll visit on Saturday and Sunday will depend upon the year's snowpack and the current weather.

Saturday, July 24, 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 plant guide/key if you have one. Optional: Bring a cell phone and/or GPS unit if you'd like to learn about and use technological applications like iNaturalist. We'll hike 2–3 miles each day in easy to moderate terrain. We'll return to Lee Vining around 5:00pm.

Sunday, July 25, 8:00am: Same procedure as Saturday. We usually end the day around 3:00pm so that folks have time to drive home.

COVID-19 PROTOCOLS

To prevent the spread of COVID-19, all seminars will be limited to ten participants and will take place entirely outside. Participants will caravan to each field location rather than carpool. All participants, including those who have been vaccinated, are expected to wear masks and socially distance for the duration of the seminar. Additionally, participants will need to complete a health screening before arriving in the Mono Basin and again at the start of the seminar. Keeping participants, instructors, and our staff safe is our highest priority.

ALTITUDE & DEHYDRATION CAUTIONS

Remember to bring (and drink!) lots of water because your body loses more water at the higher altitudes of the Mono Basin. Experts recommend that you begin drinking extra water as you drive to higher elevation in order to prevent dehydration and headaches. Also, the sun is rather fierce at high elevations, capable of burning even on cool and cloudy days, so be sure to protect yourself thoroughly using sunscreen, sunglasses, hat, and a bandanna to protect the back of your neck. If you have a history of heart or respiratory related problems, please consult with a doctor before joining this field seminar. Our walks will be at a leisurely pace, over level to moderately steep terrain, and 2–3 miles per day. We will spend most of our time at 9,000–10,000 feet in elevation; at least 24 hours of prior acclimation in Lee Vining is advised.

MEALS

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

TO BRING	
a face mask (no buffs as masks)	hat, bandanna
hand sanitizer	camera and binoculars (optional)
lunch, both days	10X hand lens
plenty of water	field guide
notebook or clipboard & paper	sunscreen

insect repellent	sunglasses
pens & pencils	

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.