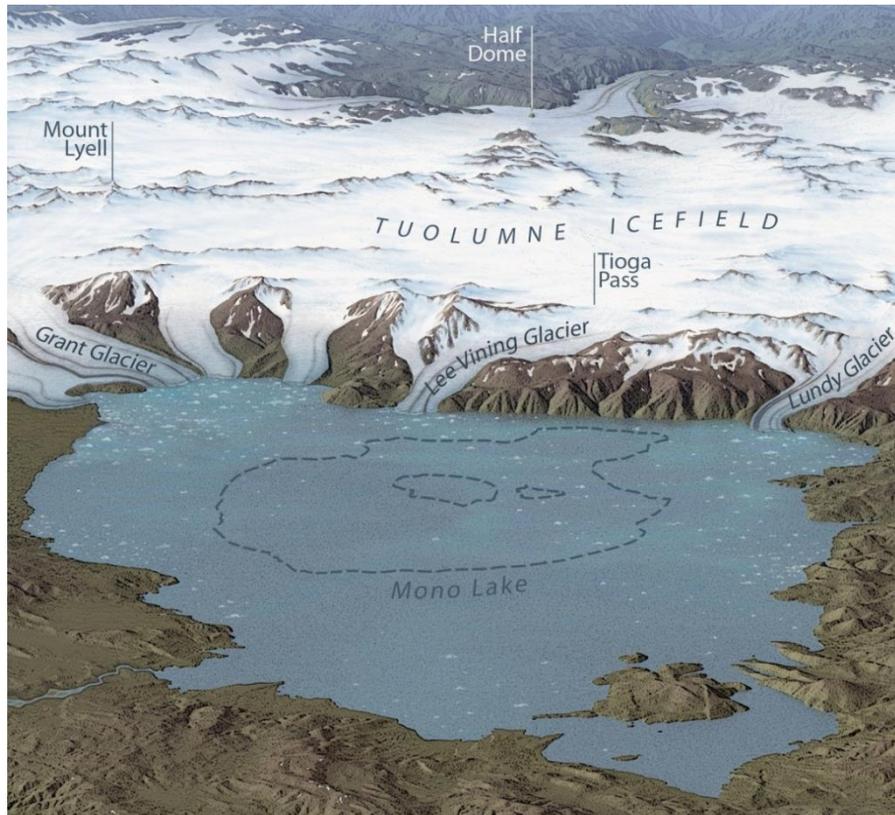


# Geology of the Mono Basin: Land of Fire & Ice



*The Mono Basin as it might have looked circa 120,000 years ago. Illustration by Eric Knight.*

**July 22–24, 2022 • Greg Stock**

\$250 per person / \$235 for Mono Lake Committee members  
enrollment limited to 15 participants

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. This seminar, consisting mostly of field visits to the premier sites, will present in understandable fashion the geologic stories of the Mono Basin. The seminar will visit and explain such scenic wonders as Mono Lake, the Mono Craters, Black Point, Lee Vining Canyon, and Tioga Pass. If you've ever wanted to know more about the geologic forces that formed the diverse landscapes of the Mono Basin, this trip is for you.

Greg Stock is the first-ever Yosemite National Park geologist. He has a BS in geology from Humboldt State University and a PhD in earth sciences from UC Santa Cruz. A near-lifelong resident of the Sierra Nevada, Greg has studied and interpreted the geology of the Sierra Nevada for more than 20 years. He has authored or co-authored over 100 papers and abstracts on Sierra Nevada geology, and is co-author of the book *Geology Underfoot in Yosemite National Park*. Greg is excited to share his knowledge of, and passion for, the outstanding geology of the Mono Basin!

**ITINERARY** (The itinerary for this seminar will be flexible in order to respond to local conditions and class participant interest.)

**Friday, July 22, 7:00pm:** Meet in the gallery at the Mono Lake Committee Information Center & Bookstore. After introductions, we will view a slideshow presentation that will review basic geologic concepts and provide some background on the Mono Basin sites that we will visit in the following days.

**Saturday, July 23, 8:00am:** We will meet at the Mono Lake Committee and carpool to stops in Tioga Pass, Bennettville, Ellery Lake, and Lee Vining Canyon. We will finish the day about 5:00pm.

**Sunday, July 24, 8:00am:** We will meet at the Mono Lake Committee and carpool to stops at Panum Crater, South Tufa, the Aeolian Buttes, Old Marina, Black Point, and possibly others, finishing the day by about 4:00pm.

### **ACTIVITY LEVEL: DIFFICULT**

This seminar's activity level: *difficult*. We will be walking up to three miles a day, some of which will be over uneven terrain, off trail, and will include stepping up and over obstacles. This type of walking requires good balance, some agility, and stamina. Be prepared for short, steep sections of trail. This seminar includes a short but challenging hike at altitude.

### **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.

### **TO BRING**

- face mask (N95 or KN95 recommended)
- hand lens
- notebook and pen/pencil
- camera
- binoculars (optional)
- trekking poles (optional)

- \_\_\_ appropriate field clothing: sun hat, sunglasses, warm layers, raingear
- \_\_\_ day pack including plenty of water, sunscreen, insect repellent, etc.
- \_\_\_ packed lunch for each day

## RECOMMENDED BOOKS

- Glazner, Allen, and Greg Stock, *Geology Underfoot in Yosemite National Park*, Mountain Press, 2010.
- Hill, Carol, *Geology of the Sierra Nevada, Revised Edition*, California Natural History Guides Series No. 80, University of California Press, Berkeley, 2006.
- Tierney, Timothy, *Geology of the Mono Basin*, Mono Lake Committee Field Guide Series, Kutsavi Press, 1995.

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## 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](mailto: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](http://monolake.org/seminars)