

at Joshua Tree National Park

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Geology of the San Andreas Fault

Information

Date/ Time: Saturday, November 20, 9:00 AM – 4:00 PM
Meet at: [Coachella Valley Preserve](#) (click on the link for a map of the meeting site)
29200 Thousand Palms Canyon Rd, Thousand Palms, CA 92241
Instructor: Ted Reeves, B.A., Biology Instructor: University of the Pacific

Overview

California is a state defined by plate tectonics, motion, continental drift, and subduction zones. Join Ted Reeves as he explains the origin and effects of the San Andreas Fault system. Reeves will unfold the geologic story of the Indio Hills, the Mecca Hills and the Salton Trough in this all-day field class. Participants will meet at the Coachella Valley Preserve and walk a short distance to see fault features. We will then travel to Box canyon and Painted Canyon and observe spectacular faults and folds where the Pacific plate is forcing up the Mecca Hills. Reeves will illuminate fault-related features in the field with special emphasis on physical deformations of the landscape. Don't miss this unique opportunity to explore the San Andreas Fault zone and the palm oases!

Itinerary

Saturday, November 20, 9:00 AM – 4:00 PM

Coachella Valley Preserve

- 9:00 AM Meet at Coachella Valley Preserve Visitor Parking area. Short walk.
- 11:00AM Drive to Box Canyon just east of the town of Mecca.
- 12:00 PM Lunch. **Bring your own food and water.**
- 1:00 PM Drive though Box Canyon with stops along the way. Very short walks.
- 3:00 PM Tour Painted Canyon. Flat walk of about 1 mile.
- 4-5:00 PM End of day.

What to Bring to the Course

Optional Equipment

- Hiking Poles

The 10 Essentials: Everyday in the Desert

- Day pack
- 4 quarts of water
- Hiking boots with traction soles
- Lunch and snacks
- Clothing layers
- Hat
- Sun glasses
- Sunscreen
- Notebook and pencil/pen
- Whistle

Fitness Requirements

Participants must be in good physical condition for courses/activities in a desert that may be hot, dry, windy, and sometimes surprisingly cold.

Hike Level

Moderate

Guidelines

- You are responsible for your safety.
- Park your car in designated areas only. Parking along the side of the road is dangerous to you and the environment.
- Rattlesnakes are present in the park. Avoid contact with wildlife. Put your hands and feet only where you can see.
- Only you know your limits, please let the instructor or Desert Institute Representative know if you do not want to continue.
- Stay with the group. If you get lost, stay put.
- Drink plenty of water. If you run out, notify the instructor or the Desert Institute Representative.
- Before leaving the class, check out with the Desert Institute Representative.

Instructor Biography

Ted Reeves taught Geology and Biology at Chaffey High School for 37 years. He is presently teaching for University of the Pacific and believes that a relevant Natural History class requires an outdoor experience. In 2000, he received the National Association of Geology Teachers Outstanding Earth Science Teacher award.

Suggested Reading

Roadside Geology of Southern California by Art Sylvester and Libby Gans

Field Guide to the San Andres Fault, by David K. Lynch

Finding Fault in California, By Susan Elizabeth Hough

Rough Hewn Land, by Keith Heyer Meldahl

* The Desert Institute staff/instructors will attempt to accommodate participant's needs; however we reserve the right to deny a student participation in the course due to concerns regarding health and safety issues.