Exploring the Central Mojave: Earthquakes, Volcanoes and Ice Age Lakes

**DATES AND TIMES OF MEETING:** April 8, 9, 10, 2011 beginning at 8:00 P.M. on Friday and ending at 3:00 P.M. on Sunday

**INSTRUCTOR:** Norman Meek

The region between Zzyzx and Victorville is an area with many interesting landscape features. In this course we will spend Saturday exploring the evidence for large ice age lakes (in the Manix and Harper basins), and look at evidence for rapid climate change. On Sunday, the group will continue exploring the area by venturing beneath a local volcano in a lava tube. To see the Landers earthquake ruptures and other interesting desert landforms you must have a high-clearance 4wd vehicle. We will probably not arrive in the Victorville area before about 3 P.M. on Sunday.

Botanical Illustration as a Visual Journal of Native Desert Flora

**DATES AND TIMES OF MEETING:** April 8, 9, 10, 2011 beginning at 8:00 P.M. on Friday and ending at 3:00 P.M. on Sunday

**INSTRUCTOR:** Donald Davidson

This class is a creative interdisciplinary approach to keeping a visual journal of experiences in a unique desert wildflower habitat. Lectures cover botanical terms and how they are used to describe and help identify flowering plants. Focus exercises, hand-eye coordination and comprehensive line drawing stressing contour, volume and perspective will be geared to each participant juiced up for a grand “adventure” with some of the region’s richest natural resources. Group sharing and individual attention will be employed to improve perception skills for interpreting natural floral treasures. Highlights range from exploring the very core of the inner structures of specimens using dissection scopes in a lab to full-scale drawings and watercolors of whole plants in *plein-air*. This unique opportunity for field work stresses how art and scientific skills work together to augment and enhance how each person experiences and records natural form.
Desert Birds of the Eastern Mojave – Spring Migration

DATES AND TIMES OF MEETING: April 15, 16, 17, 2011 beginning at 8 P.M. and ending at 3 P.M. on Sunday

INSTRUCTOR: Kurt Leuschner

The eastern Mojave Desert is very rich in bird species during the annual spring migration. Over 240 bird species have been recorded at the Desert Studies Center alone. Friday evening will be discussion on the diversity and natural history of birds in arid environments. On Saturday we will visit the oases at Baker, Salt Creek, Saratoga Springs (located in Death Valley National Park), and Tecopa Marsh. Numerous migrant and nesting species of waterfowl, shorebirds, waders, and colorful passerines in bright breeding plumage will be observed. Casual hikes around the Desert Studies Center will afford further opportunities to observe birds during early morning hours and at dusk. Conditions are usually quite pleasant this time of year and many desert animals are active. Beginners will learn field observation and identification techniques. Experienced birders can expand their life lists. Docents and teachers will enhance their knowledge of birds and desert ecology.

Natural History of the Mojave National Preserve – The Low Country

DATES AND TIMES OF MEETING: April 15, 16, 17, 2011 beginning at 8 P.M. and ending at 3 P.M. on Sunday

INSTRUCTOR: Robert Fulton

Class begins Friday evening with an introductory lecture and slide presentation on plants and animals of the MNP. Saturday’s field trip includes exploration of the western shore of Ice Age Lake Mojave (discovering traces of climate change and a fish which survives to today), discovering traces of over 10,000 years of human history (including ancient stone tool quarries, petroglyphs, a 19th century wagon road with associated graffiti, and an early 20th century railroad), and the historic Oro Fino mine site at the foot of Old Dad Mountain. Sunday’s trip will include exploring the Cima Volcanic Field (including a short hike up the youngest cinder cone and visiting an underground lava tube), and lunch at the historic Kelso railroad depot (1923). We will wrap up the trip at the massive Kelso Dunes, looking for animals and their tracks.
Insects and Other Arthropods of the East Mojave Desert

DATES AND TIMES OF MEETING:  May 13, 14, 15, 2011 beginning Friday at 8:00 P.M. and ending at 12:30 P.M. on Sunday

INSTRUCTOR:  Kurt Leuschner

Students will learn about the basic anatomy of insects and how to tell them apart from other desert arthropods. We will review the insect orders and families found in the E Mojave Desert region. Some of these have very interesting stories to tell! Specimens in a demonstration collection will be examined. Mimicry, the use of pheromones, phosphorescence, and other important survival traits will be discussed. We will spend time in the field to observe diurnal (day active) insects and examine them up close using a variety of different catch-and-release collecting methods such as pit traps, aerial nets and dip nets. After dark we will move outside and examine insects that are attracted to the lights that we set up earlier. Ultraviolet lights and mercury vapor lamps will be used on the border of two different habitats: riparian and desert. A power point presentation will introduce you to some of the more notable insects and other arthropods that are often encountered in the East Mojave Desert. Teachers and docents will find this information especially valuable. The fascinating world of insects awaits you!

Lizards & Snakes of the East Mojave

DATES AND TIMES OF MEETING:  May 27, 28, 29, 2011 beginning Friday at 7:30 P.M. and ending at 3:00 P.M. on Sunday

INSTRUCTOR:  Dr. William Presch

Lizards and snakes are among the most interesting and diverse but least known of the vertebrates that inhabit the desert southwest. These animals are easily studied and provide us with insights into many of the important characteristics which make existence in the harsh desert environment possible. This weekend we will examine and identify reptiles beginning with a short identification and natural history presentation in the laboratory Friday night before venturing into the habitats preferred by snakes and lizards on Saturday and Sunday.