



In Memoriam

We recently lost two good friends...



Bob Davis

Bob Davis supported Lois' fondness for native plants and helped surround the beautiful architecture of their house with many native species. Bob would also kindly corral Tipper the dog on numerous occasions when our local subchapter was graciously invited to their home for program meetings.



Dr. Robert West

Dr. Robert West discovered the threatened *Calochortus tiburonensis* on Ring Mountain near Tiburon. He was happy to share information about this strikingly beautiful Mariposa lily and let us know the best time to make our annual pilgrimage to view its splendor.

Our condolences to the Davis and West families. Bob Davis and Dr. Robert West are greatly missed.

THE GIANT SEQUOIA



by David Marraccini

The giant sequoia (*Sequoiadendron giganteum*) is the world's largest tree. It is a rugged and massively beautiful tree. Calaveras Big Trees State Park, located on Highway 4 near Arnold has two very nice groves of ancient giant sequoias. They are beautiful trees with cinnamon red bark and large stout upcurving branches. The bark is thick, fibrous and fire-retardant (enabling the tree to survive numerous fires). The tree also resists other damage by being insect-proof. The giant sequoia goes by two other common names, the sierra redwood and big tree. The giant sequoia is found growing in valleys on the western side of the Sierra Nevada mountains. The soil they are found growing in is often deep and very fertile. A tremendous amount of moisture falls in these areas usually in the form of snow. The giant sequoia can grow as tall as 270 feet and can obtain a diameter at breast height of 27 feet. The giant sequoias are found in Sequoia and King's Canyon National Parks. Yosemite has some groves of big trees too. Calaveras Big Trees State Park has its two groves, which can be viewed by hiking the north grove and south grove trails. A small grove on Highway 50, owned by the U.S. Forest Service is secluded and cannot be accessed without permit. This is the most northerly grove of giant sequoias. John Muir did a lengthy study of the giant sequoia groves, travelling from grove to grove with a mule and a pack full of stale bread (dried out so that it wouldn't mold).

In the landscape the giant sequoia is less commonly used than the coast redwood, although I think it is a beautiful tree and believe it deserves to be used more frequently. When young, the trees are conical or pyramid-shaped and they have bluish-green foliage. The leaves are scale-like and lance-shaped, widely spaced on the upper branches and 1/4" long in crowded overlapping spirals on lower branches. The young cones are egg-shaped and green until maturing to brown with flattened diamond-shaped scales that have wrinkles radiating from a central fold. In landscaping the giant sequoia grows from seed but not from sprouts as the coast redwood does. The giant sequoia prefers loamy well-drained soil and frequent watering.

In Stockton one can find giant sequoia specimens up to 30 or 40 feet in height. A few can be found near the intersection of March Lane and Pershing Avenue. Others can be found just north of Hammer Lane on the east side in a front yard. San Joaquin Delta College has a nice grove near the Cunningham building parking lot.

Possible Field Trips

Saturday, June 16. Hetch Hetchy Reservoir. A short hike to Tueeulala or Wapama Falls.

June 21, 23 or 24. Duck Lake near Lake Alpine.

June 29 – July 1. A full moon over the Mono Lake tufa and wildflowers galore up Lundy Canyon.



For Stockton sub-chapter information about any events, trips, memberships, article/photo submissions and other issues please contact either:

Martha Mallery or Bob Stahmer
Representative Editor
(209) 477-3966 (209) 943-2277
vbromper@aol.com

Travelogue: The California Flora Class Desert Field Trip, 19-21 April 2007

by Dr. Mark Brunell

This spring, the UOP California Flora class took a 3-night, 4-day trip to the desert to seek out wildflowers under the guidance of Dr. Dale McNeal. As everyone knows, the winter of 2006-2007 was dry and the wildflower shows were expected to be underwhelming. This proved very true for the deserts. Before the trip I had checked the general conditions at the Antelope Valley California Poppy Reserve near Lancaster, CA. Their web site states "The 2007 wildflower season was over before it really began. The wet season's precipitation was less than 15% of normal creating severe drought conditions, so any occasional wildflower we had was stunted, chewed up, and bloomed very briefly". That statement very well describes what we encountered in the Mojave Desert. Below is a brief description of the places visited and the things we saw.

At 6:00 am Thursday morning we convened at UOP with two vans and a pickup, all loaded with groggy students and faculty. The faculty were impressed with one student who arrived without a sleeping bag. As the nighttime temperatures were expected to be near freezing, we knew this student would be having a memorable experience. We traveled south on the I-5 to Hwy 58, then east to Hwy 99, then continued east on Hwy 58 over the Tehachapi Pass down to the city of Mojave, and then further on to Barstow. We turned south on Barstow Road (Hwy 247), and entered Stoddard Valley. We made a brief stop and got the students out of the vans. Not a single plant was in flower. The few cacti in view excited the students, and then we proceeded down the 247 to Old Woman Springs Road, which runs east-west through the Lucerne Valley. An impressive site was a view of Hwy 18 zigzagging its way up the back of the San Bernardino Mountains on its way to Big Bear Lake, and also the large limestone quarries on the upper slopes east of Hwy 18. We proceeded east and south to Hwy 62 (29 Palms Highway) in Yucca Valley. We then proceeded east on the 62 to Indian Cove Campground in Joshua Tree National Park. We settled in to one of the beautiful group campgrounds which has a broad vista to the north over the 29 Palms Marine base.

Our first night of camping was a bit cool and windy, with the students constructing a tent-city in a large open flat spot in the center of the campground. The professors knew better and sought out wind-sheltered nooks and crannies among the bouldery hillside. Three of the four professors slept in the open without tents and had peaceful sleep. I personally slept next to a boulder and under a Catclaw Acacia (*Acacia greggii*). The students, however, learned about wind and cold that night. In the morning, we discovered that two or three tents collapsed completely and that students needed to make new sleeping arrangements at some point during the wee-hours. Prior to bedtime I tried to find a Yucca Night Lizard (*Xantusia vigilis vigilis*) among the dead trunks of the Mojave Yucca (*Yucca schidigera*) and was successful. These small lizards are unusual in that they have no eyelids and therefore cannot blink (similar to snakes), and their pupil is a vertical slit (as in cats). In the morning we could get a good look at the vegetation. There was a notable lack of annuals, and it appeared that the seeds had never germinated. The perennials were doing better. The Creosote Bush (*Larrea tridentata*) was common and was generally heavy with flower buds but only a few flowers. I had expected this species to be finishing its flowering period and to have lots of fuzzy fruits, but that wasn't the case. The Bladder Sage (*Salazaria mexicana*) was also in full flower, but with few fruits.

Joshua tree - *Yucca brevifolia*

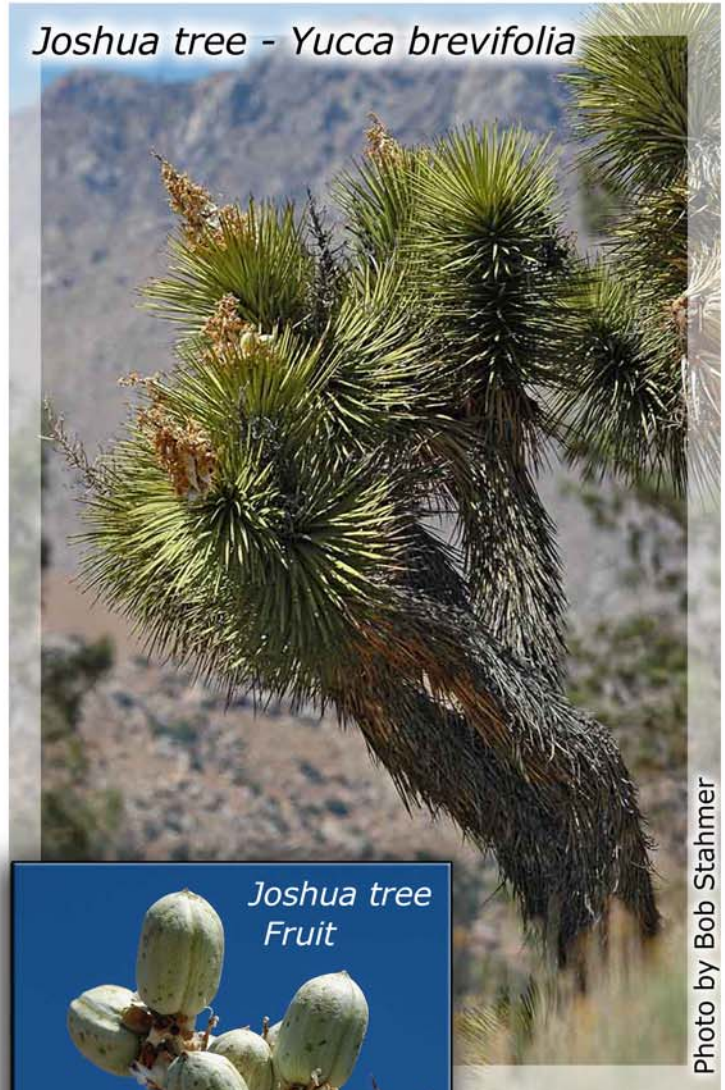


Photo by Bob Stahmer

Joshua tree
Fruit



Desert Tea (*Ephedra californica*) was very abundant and in full "flower", with both male and female shrubs common. Joshua Tree (*Yucca brevifolia*) was abundant with occasional plants in bloom, although they were mostly finished. As mentioned previ-

ously, Mojave Yucca was also abundant but not in flower. Several specimens of Silver Cholla (*Cylindropuntia echinocarpa*) were present but not in flower (note: many of the non-flattened opuntias have been reclassified into the Genus *Cylindropuntia* for the upcoming edition of the Jepson manual).

(cont'd. page 3...)



UOP Desert Botany Trip Travelogue (cont'd from Page 2)

After taking down camp we proceeded further east on the 62 to the town of 29 Palms, where we turned south on Utah Trail Road and entered the northern edge of the park. The road wound south and turned into El Dorado Mine Road, and continued winding south through beautiful pristine desert. As we entered Pinto Basin we encountered the Cholla Cactus Garden, which is an unusually dense stand of Teddy-Bear Cholla (aka Jumping Cholla; *Cylindropuntia bigelovii*). The number of individuals present at this site is incredible. These cacti are shrubs that are as tall or taller than a man and wider. The spines are retrorsely barbed, meaning that their minute barbs point backward, rendering an embedded spine almost impossible to remove. The stems are jointed, causing short stem segments to drop off the plant and accumulate on the ground around the trunk. These "cactus balls" are treacherous to any person with feet, as they stick to shoes and work their way through the thickest soles. Despite these dangers, the park has provided a parking area and a nice trail complete with color signage. Our class wandered the trail and Dr. McNeal pointed out cactus fruits and flowers. As he spoke I noticed a yellow-flowered subshrub growing next to the trail. It turned out to be the American Threefold (*Trixis californica* var. *californica*), a plant that I had only seen in botanical gardens. The reason this plant is so unusual is that it belongs to a mostly tropical tribe (Mutiseae) of the sunflower family that has few representatives in the state (this may be the only member of that tribe in California). Also present and in flower was the beautiful Desert-Lavender (*Hyptis emoryi*). We left the Cholla Garden and continued south until we encountered the "Ocotillo Patch". Many Ocotillo (*Fouquieria splendens*) were present and in flower. We continued south and the road changed to Cottonwood Spring Road, which continued south to the Cottonwood Spring area. We drove to the Cottonwood Spring oasis and viewed the beautiful California Fan Palms (*Washingtonia filifera*) and large populations of Honey Mesquite (*Prosopis glandulosa* var. *torreyana*). I was excited to see this oasis however we read on a plaque that it was planted by settlers (not a natural oasis – try Corn Springs south of Desert Center for a real one). We then stopped at Cottonwood Spring Campground for lunch. At lunch we saw a Black-throated Sparrow (*Amphispiza bilineata*) darting around the picnic tables, and a White Antelope Squirrel (*Ammospermophilus leucurus leucurus*) amused students by popping in and out of a hole.

We then continued south and left the park, eventually crossing the I-10 and continuing south on Box Canyon Road into the Mecca Hills. We had dropped a lot in elevation: Cottonwood Spring was about 3000 feet high, but the Mecca Hills area is about 700 feet high. We had therefore moved from the high desert to the low desert. We stopped at a dry wash along the road about 10 miles south of the I-10 to look for plants. Large masses of Desert-Willow (*Chilopsis linearis* subsp. *arcuata*) were in bloom, and occasional individuals of Ironwood (*Olneya tesota*) were also present but not in bloom. Otherwise, flowers and plants were sparse. At this point we decided to go back to the I-10 and make our way to the next campsite: Saddleback Butte near Lancaster. We drove west on the I-10, passing by the Coachella Valley and through the Palm Springs area, and then into the incredible San Gorgonio Pass with the 10,804 foot-high Mt. San Jacinto immediately to our left. In the pass the rain started and continued for about two hours. Located in the center of the pass is the town of Cabazon, famous for its Hadley Fruit Orchard Store which sells the popular "Date Shake". We sampled the shakes and other local delicacies and then continued west to the I-215. Going north on the I-215 led us through San Bernardino, Muscoy,

and other cities and eventually to the Cajon Pass, which at about 4300 feet is the gateway into the high desert. Just before the pass we turned on Hwy 138 (Pearblossom Highway) and headed northwest and then west, behind the San Gabriel Mountains, to enter the Antelope Valley. We turned north onto 165th Street and made our way to Saddleback Butte State Park. As we approached the park the rain stopped and our spirits brightened. It was still light and it was dry, perfect for setting up camp. The group campground has in years past been carpeted with flowers, however this year it resembled the lunar surface. Creosote Bush and Joshua Trees dotted the landscape, with the Saddleback Butte ridgeline in the background. That night all slept in tents as the temperature was very cool, however there was no wind. In the morning, all tents were covered in frost. We heard at breakfast that the sleeping-bag-less student had bailed from his tent sometime around 3:00 am and hobbled on his numb foot to a van where he continued to freeze until sunrise. Animal life was observed: early that morning at sunrise a Cactus Wren (*Campylorhynchus brunneicapillus*) was briefly seen hopping around the bases of Creosote Bushes near camp.

After packing up we headed west on Avenue J until we reached Lancaster. We took Hwy 14 (Antelope Valley Freeway) north toward the southern Sierras. We traveled to the Walker Pass region where Hwy 14 ends and continued north on Hwy 395. We turned left at County Hwy J41, proceeding west up Nine Mile Canyon into the southern Sierra Nevada. Nine Mile Canyon is a steep rocky canyon that transitions from desert to Pinyon Pine forest, and is usually a hot-spot for wildflowers. It has vast populations of Joshua Trees climbing up the slopes (in my opinion this is the best place to see this species).

(cont'd on page 4)



photo by Bob Stahmer

Creosote bush - *Larrea tridentata*



UOP Desert Botany Trip Travelogue (cont'd from Page 3)

This year there were very few wildflowers, however the perennial Grinnell's Beardtongue (*Penstemon grinnellii* subsp. *scrophularioides*) was in flower, as was Cooper's Goldenbush (*Ericameria cooperi* var. *cooperi*). Silver Lupine (*Lupinus albifrons*) was present however not all plants were in flower. The abundant Desert Olive (*Forestiera pubescens*) was already past flower. Clusters of Antelope Bitterbrush (*Purshia tridentata*) were in bloom however their flowers are quite inconspicuous. Like other locations we had visited, annuals were largely absent. We continued up the canyon until we reached the pinyon forest and Canebrake Road. We took Canebrake Road south and stopped several times. This forest is composed largely of Singleleaf Pinyon Pine (*Pinus monophylla*), however Jeffrey Pine (*Pinus jeffreyi*) and Sugar Pine (*Pinus lambertiana*) are present in small numbers. Scale Bud (*Anisocoma acaulis*), a beautiful yellow composite, was found flowering in the loose decomposed granite soil along the road. Further down the road, as we started descending the hill down to Canebrake Flat, we saw the burgundy-red Jewelflower (*Caulanthus* sp.), bright yellow masses of Bigelow's Tickseed (*Coreopsis bigelovii*), and other annual species. Eventually we encountered the Desert Sage (*Salvia dorrii*) in flower, and several shrubs of Silk Tassel Bush (*Garrya flavescens*), however these were not yet in flower. We made our way to Hwy 178 at Canebrake Flat and proceeded west to the Kern River Canyon. We were heading to our last campsite, located on Hwy 155: Pioneer Point Campground on the west edge of Lake Isabella. The weather was mild but some rain fell during the night. The next morning we tried to travel over Greenhorn Summit via Hwy 155 however chains were required so we headed back to Hwy 178. On the way down the mountain we found several wildflower patches, dominated by Popcornflower (*Plagiobothrys nothofulvus*), Bluehead Gilia (*Gilia capitata*), Two-seeded Milkvetch (*Astragalus didymocarpus*), and even a nice population of Broomrape (*Orobanche californica*) in full flower.

We traveled out of the canyon via Hwy 178 and along the way saw many species of annuals and perennials in flower, however we didn't stop long to investigate. As Bakersfield approached on the horizon we knew the trip was over. According to Dr. McNeal, this was the driest spring he can remember in decades of desert botanizing. Perhaps next year we will see a better show. Perhaps all of those annual seeds that never germinated will be waiting to go for next spring!

Souvenir Photos from Owl Creek Ranch - 2007



Photos by Bob Stahmer

