GENERAL MEETING

Some principles of pollination with illustrations from California's native flora
Speaker: Alan Kaplan

Alan Kaplan is a naturalist with the East Bay Regional Park District at the Tilden Nature Area in Berkeley. He also directs Tilden's summer science programs. Alan, who has a degree in entomology from the University of California at Berkeley, published an article on this subject in the December 1994 issue of The Four Seasons, and was a speaker in the Wayne Roderick Lecture Series.

Flower forms have evolved to welcome or exclude specific pollinators; to reward pollinators with enough resources (in the form of nectar or pollen) to make the trip worthwhile; and to manipulate the pollinator, by means of lines, spots, ultraviolet patterns, or physical mechanisms of guidance or restraint, until the acts of either pollen attachment or pollen retrieval are accomplished. These principles were established to a great extent by the study of plants in the tropics, Europe and the eastern United States. Alan will illustrate the same principles using California's native plants.

HIDDEN VILLA: Our Chapter Nursery

On May 20 Hidden Villa staff, board and volunteers welcomed CNPS as a part of their family. We sealed our contract with them with a donation of $500, and planted a pink-flowering form of Aesculus californica at the visitor center. A short ceremony on the knoll overlooking the farm included an introduction to the goals and history of Josephine and Frank Duveneck and this wonderful piece of land.
The following day, May 21, we had our second work day. It was cool and windy but we managed to erect fifteen 4x4 posts and the shade cloth-supporting rafters over them. Our thanks to Ken Himes, David Struthers and Don Thomas for the hoisting, and Lottie Jenvy, Tanija and Jean Struthers for their support work.

Our next work day is July 9, 10 am. We will work on a watering system and attach the shade cloth (courtesy of Charlie Baccus) to the framework. Weeding and general cleanup is also needed. We especially need people who know something about irrigation systems. Bring your lunch. Call Jean Struthers for more information, 415 941-2586.

The nursery needs: small tool shed, watering system supplies and expertise, tools (shovel, trowel, old bleach bottles for scoops).

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**PLANT PROPAGATION RECOMMENDATIONS of things you can start yourself**

Our fall plant sale will be October 28. You can start plants at home right now by making cuttings of some of your favorite natives.

Starts can be made of most shrubs by taking four-inch cuttings of semi-hard, non-flowering branch tips and dipping them into roottone or other growth hormone. Keep the cuttings in a slightly moist (not soggy) mix of sterile material (1/2 part perlite, 1/4 peat, and 1/4 sand or vermiculite is a good mix), and check for roots in a month. **Don't forget to accurately label your plants.**

Try *Salvia* (Brenda Butner especially recommends *Salvia spathacea*), *Mimulus*, *Ceanothus*, *Eriogonum*, *Penstemon*, *Keckiella*, *Eriophyllum*, *Erigeron*, *Monardella*, *Garrya*, and others of your choice.

Now, too, is the time to gather and save seed. Keep it in a dry, cool place. Use paper envelopes; plastic bags and glass jars retain unwanted moisture. Again, **accurate labels are required.**

Jean Struthers

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**ANNOUNCEMENTS**

- **CALL FOR ENTRIES: CNPS GREETING CARDS.** Four images of a California poppy will be selected for a series of notecards to promote CNPS.
  - Media & size: watercolor, colored pencil; image should be exactly 8" x 12" with a 1" bleed border all around. Original work should be done on flexible paper, so that the art can be wrapped around a large drum to make the color separation.
  - Entry format: unlimited number of originals, color xerox, photo prints, or slides. All work will be carefully handled and, if requested, returned (include return postage and packaging).
  - Deadline & submission: August 1; send entries to Catherine Cort, P.O. Box 245, Three Rivers, CA 93271 (for UPS: 44141 Skyline Drive, Three Rivers, CA 93271). Call Cathy for more info: 209 561-4671.

- **SUBSCRIBE TO THE FOUR SEASONS:** an occasional journal devoted to natural history, biology, ecology, conservation, botany, and horticulture, with emphasis on California's native plants. Subscription price: $12 for four issues. Back issues are available at $3 per copy. Issue no. 3 of vol. 6 contains an index to the first five volumes. Make checks payable to East Bay Regional Park District, and send to The Four Seasons, Regional Parks Botanic Garden, Tilden Regional Park, Berkeley, CA 94708-2396.

- Join the CALIFORNIA LICHEN SOCIETY. The group has field trips, holds seminars, and puts out a quarterly newsletter. The trips and meetings take place at various locations around the state. Annual
dues are $10. Send a check to Janet Doell, President, 1200 Brickyard Way #302, Pt. Richmond, CA 94801. Information: call Janet at 510 236-0489.

- BOTANY CLASSES with the California Academy of Sciences. Registration information: 415 750-7100:
- THE COYOTE CREEK RIPARIAN STATION (CCRS) is entering another summer of data collection as a part of its Community Creek Watch program. Small teams of volunteers will conduct vegetation surveys and habitat assessments to document the presence and condition of wildlife habitat. CNPS members have been instrumental in helping CCRS develop data collection protocols and in leading and training the teams. This summer five new teams are being developed: Stevens Creek and Guadalupe River and its tributaries Ross, Santa Theresa, and Calero Creeks. All training and equipment is provided. The time commitment averages two to four mornings a month, generally weekends from 9 am to noon. For more information, please call Chris Fischer at (408) 262-9204 (email: creekfreak@aol.com).

FIELD TRIP REPORTS

Mt. Pinos with Ken Himes, June 16-18

This was a special event, marked by unusual weather and abundant wildflowers. By 10 am Friday morning much of the upper portion of Mt. Pinos as well as the initial rendezvous point were cloaked in several inches of snow. Several trip participants decided they had already experienced enough of southern California's wonderful spring weather and left to return home before the trip officially began.

Those remaining experienced a delightful drive through a winter wonderland to reach Valle Vista campground on the Cerro Noroeste Road where, beneath the snowline, a wide variety of flowers were enjoyed, including Calochortus venustus in a variety of shades of red, and Delphinium parryi. The sky cleared and the snow melted, allowing several stops as the group headed back toward Mt. Pinos. A vernal pool contained a mass of Downingia bella and the roadside was lined with Penstemon centranthifolius and P. grinnellii. For most, the day ended with a massive display of Lupinus microcarpus var. densiflorus lit by late afternoon sun.

Saturday morning took the group to the eastern portion of Lockwood Valley with a number of stops for plants. Calochortus kennedyi, Acanthomintha obovata ssp. obovata and Allium howellii were among the wildflowers enjoyed.

The summit of Mt. Pinos was visited Saturday afternoon, providing both extensive views and small but interesting wildflowers. Among the plants encountered were Pinus flexilis, Ivesia santolinoides, Fritillaria pinetorum, Astragalus whitneyi, and A. purshii.

Sunday morning featured a drive through the western portion of Lockwood Valley where Stanleya pinnata, Swertia neglecta, and several large stands of Eriodictyon crassifolium were seen. A short trip south on Route 33 provided encounters with Romneya tricocalyx as well as Calochortus palmeri var. palmeri and two Phacelias whose exact identities remain uncertain.

A final stop for many participants was Cuesta Ridge, north of San Luis Obispo, with two additional Calochortus sightings and some spectacular views.

The intense advance scouting by leader Ken Himes contributed greatly to the number and variety of flowers encountered. And East Bay Chapter members Jeff Greenhouse and John Game were instrumental in identifying plants unfamiliar to trip attendees.

Baohsun Yang and Stephen Buckhout
Armed with the extremely gratifying recent news that the American Land Conservancy will buy 15,000 acres of privately held land in this exceptional wildflower area located in Colusa and Lake counties, our group started our circle loop by heading north from highway 20 on the Bear Valley Road. We were also lucky to be armed with the recently published plant list compiled by George Clark and David Magney (Four Seasons, Vol. 9, #4, Dec. 1994). George accompanied us, and was able to add over forty species to the list. Our leader, Steve Edwards, had worked hard to preserve this area from development, and had recently published an article describing its botanical importance (Fremontia, Vol. 22, #3, Oct. 1994).

Plants of note blooming in the valley included Calochortus superbus and C. luteus (and their various permutations), Clarkia gracilis ssp. tracyi, the lovely Nassella cernua with many more nodding heads per clump that its close relative the purple needle grass, and two Calycadenia growing together, C. fremontii and C. pauciflora. Further along was a fine prairie grassland with Hordeum brachyantherum (our native meadow barley), and Steve pointed out to us the growing threat from the Mediterranean annual Medusahead, Taeniatherum caputmedusae. Star thistle, with its blue-tinged herbage, was also a visible scar on the landscape. He feels that a proper grazing regime will go a long way toward control of these two pests which are most often seen on the disturbed soils of ungrazed roadsides.

Near Bear Valley Buttes we headed west up the steep Brim Grade with a stop to see the Hesperolinon californicum and Navarretia squarrosa (skunkweed, with a skunk-like odor). Botanically, the whole area is influenced by the serpentine rock found on Walker Ridge, but the valley soils are deep, and the vegetation changes quickly as you gain altitude and get on the thinner soils of the BLM managed ridge (3,000 feet). Where Brim road crosses Walker Ridge we made two detours. One to the tower just a mile to the north to see, i> Lagophylla minor, Madia hallii, Silene campanulata ssp. glandulosa, Sidalcea hartwegii and Streptanthus breweri.

The second detour was a descent to the west of the ridge on the Bartlett Springs Road where we explored a lovely meadow with Calochortus splendens, Nemacladus montanus, and Trichostema laxum (the fine-smelling turpentine weed). Further along was Barrel Spring with Delphinium uliginosum, Cirsium douglasii var. breweri (swamp thistle), and Zigadenus venenosus. And further down the grade we visited a serpentine scree area with the coveted rock garden plant, Eriogonum nervulosum (Snow Mountain buckwheat).

Back on our circle we headed south along the ridge top getting spectacular views down into Bear Valley and to the peaks further afield. The serpentinite scree areas had the rare Collinsia greenei, Lewisia rediviva and Allium falcifolium, and a good part of the ridge was forested with the shrubby Macnab cypress. Along the way were fine stands of Balsamorhiza macrolepis. The road eventually descends back near where we started on highway 20.

Sara Timby

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**Carl W. Sharsmith memorial**: Saturday, September 9, 1995, 11 am, in the area of Parson's Lodge at Tuolumne Meadows in Yosemite National Park. RSVP by sending a postcard including the number of people attending to Georgia Stigall, P.O. Box 2152, Sunnyvale, CA 94087-0152.

**Sharsmith memorabilia**: Natalie Hopkins, curator of the Sharsmith Herbarium at San Jose State University, is collecting material about Carl for an album to be kept in the herbarium. She is looking for snapshots, clippings, notes, and anecdotes from his friends and admirers. Notes and stories should be typed up to fit the album format of 8 1/2" x 11", with three-hole glasine sheets. Natalie Hopkins, 585 High St., Santa Cruz, CA 95060. Phone: 408 459-6686, or at the herbarium, 408 924-4834.