Next Chapter Meeting: Tuesday, September 13. 7:00 p.m.

The Sequoia Chapter does not meet during the months of June, July, and August to allow members to spend a little time going dormant during hot summer days and freshening up a bit during the evenings. The year’s remaining slate of speakers will be published in the September newsletter.

Meeting and speaker at 7:00 pm. Unitarian Universalist Church, 4144 N. Millbrook (S of Ashlan Avenue). The public is welcome!

China Creek Update

Once again Vulcan Materials has provided a tractor and driver to mow tremendous stands of yellow star thistle in the park. Paul and Madeleine Mitchell have been diligently pulling and cutting YST the tractor can’t get to. We expect to have to mow at least two more times before fall sets in, given this year’s extra rainfall.

The cattle provided by neighbor (?) Steve McDonald have done a good job—despite not being allowed into the trial area until May—so we decided that area need not be mowed. Now we’re hoping to work with the county and Vulcan to repair fences and otherwise prepare another section of the park for spring grazing. This will be a big job (we’ll be asking for your help), but seems more responsible and energy efficient, and less labor intensive than mowing.

And then, of course, there are all those other invasives to deal with too…..

Book Sale

We are planning a Used Book Sale as a fundraiser in November. We can use those books you were considering giving away!

Bring books you no longer use to either the September or October chapter meetings.

Redbud (Cercis occidentalis)

Fall Plant Sale

This year’s plant sale will be held at the Clovis Botanical Garden on Saturday, October 1, 2005.

Here’s how you can participate:

- Mark your calendar and attend the Native Plant Sale.
- Volunteer to make signs or placards for the plants for sale.
- Invite your friends, family, co-workers, and neighbors to attend the Native Plant Sale.
- Think now about native plants you can put in the ground in the Fall and then plan to purchase them at the Plant Sale.
- Volunteer for a couple of hours to help customers take their plant purchases back to their cars or to help customers find plants suitable for their need. You’ll learn a lot by being part of this event.
- For more information or to volunteer, contact Marian Orvis at < mforvet@earthlink.net >
Science and Poetry?

The after-dinner program at the June Chapter Council meeting sounded strange. A poet (Gary Snyder) and a Biology professor (Michael Barbour) were going to do parallel readings. This didn’t sound promising. Science is facts—poetry imagination; ne’er the twain shall meet. Right?

The surprise was that it worked. Each read 10 selections—in pairs. Each pair involved a poem relevant in some way to a California native plant. Each poem was followed—by Dr. Barbour, with a reading from a scientific reference work—slightly adapted to match the rhythm and phrasing of poetry. Lovely!

I suppose it shouldn’t have been a surprise. The essence of poetry whatever its melodic form, is imagery—words producing mental pictures. The essence of scientific writing is description, which—when successful—produces mental pictures—so that the pairs of readings complimented and reinforced each other nicely.

It’s kind of like the way CNPS combines a diverse collection of botanists and romantics.

-Warren Shaw

Vernal Pools vs. Subdivisions

A Fresno Bee article on June 29,2005 entitled "Habitat plan's economic loss $1b. Vernal pools' protection to prevent construction of 1,600 homes...". The total estimate over the next 20 years is for 260,000 homes in the Central Valley and the Coast. July 31 is the deadline for a decision from US Fish & Wildlife for priceless habitat to be destroyed for upscale homes. It's like trying to compare apples to oranges.

A classified add in The Fresno Bee on May 3, 2005 was offering 78.8 acres of undeveloped land directly adjacent to UCM at $360,000/acre. That won't make for very affordable housing.

Some very important vernal pools are along the west and east side of Friant-Kern canal south of Millerton Road in Fresno County. A recent drive up Millerton road noted some significant grading on the southeast side of the canal. We assume the developer was confident that USFW would remove the protection and an early start would bring the bucks flowing faster.

When the Brighton Crest Golf Course was constructed some years back there was an effort to save as many oaks as possible. But mansions envisioned for Millerton New Town, and the accompanying water consumptive lawns and non-native landscaping, will be as big a bight on the foothills as Table Mountain Casino. That's not quite as bad, some time ago, when a developer wanted to put a tire dump on Big Table Mountain.

It is too bad that some inventive cluster housing for the foothills that would leave open land for a wildlife corridor can't be planned. Better yet, what about developing all the empty parcels in urban Fresno and Clovis that wouldn't require long commutes to work.

-Jeanne Larson, Co Conservation Chair

"And the day came when the risk to remain tight in a bud was more painful than the risk it took to blossom."

-Anais Nin
This newsletter’s “Observations” period covers a two-month period and this year those months’ temperatures varied widely. June and early July were unseasonably cool and most native plants did exactly what residents did – they took advantage of these cooler temperatures and extended their blooming and growing period.

Years of above normal rainfall always produce some surprises. Jeanne Larson reports, “I was late getting out this year (over the most pot-holed Forest Service Road east of Bass Lake). Perhaps it was the 15-mph max travel speed that made for better roadside botanizing, but there were plants in bloom in places I hadn’t seen in 30 years.

Harlequin lupine (L. stiversii, which has a yellow banner, magenta wings and almost invisible white keel) was abundant at several different elevations. Foothill penstemon (P. laetus) was especially verdant and darker blue, and among the Farewell to Spring (still in full bloom) was a spectacular sight. The patch of white Chinese Houses (Collinsia heterophyllus) was still doing well. Then there were Fairy Lanterns (Calochortus amoenus) peaking out above the Mountain Misery (Chamebata foliolosa) on roadside berms. Where had they been all this time?

At the end of the trip I was expecting the wonderful perfume from blooming roadside Azaleas, but there was only a sparse number of blooms. Perhaps the late melting snowpack interfered with their flowering cycle.

Late season in the upper mixed conifer forest should bring more great viewing.”

In the foothills by late June the grasses were mostly brown and any green on open slopes was generally aromatic tarweed. Most blue oaks had acquired their characteristic coloring. Still, there were some pretty stands of clarkia but waning. Occasional bright pink patches (centaury?) provided some contrast, and milkweed and wavy-leafed soap plant were just starting to bloom.

June in the open pre-foothill area east of Clovis was very green with non-native annual grasses. Harvest brodiaea was in full bloom as the grasses turned yellow and subsided.

Then July arrived along with the reliable heat and a reminder to slow down. Plants understand this; they need no reminder. Except, of course, those heat loving plants that each year I welcome and admire: Vinegar Weed (Trichostema lanceolatum) seems to grow daily once temperatures reach 95 degrees. They won’t reach their full bloom until early August. Brush by it with your boot and their pungent odor fills the air.

Dove Weed looks beautiful and lush as though it was carefully nurtured. A Fremontodendron planted in November with nary a drop of water after the rain stops continued to put out new bright green leaves. Not everyone wilts in 107 degree temperatures!

--- Editor

“The grand show is eternal. It is always sunrise somewhere; the dew is never all dried at once; a shower is forever falling; vapor is ever rising.”

- John Muir

Chapter Council Meeting Membership Chair Breakout Session June 11, 2005
By Helen Shaw

I attended a Breakout session for Membership Chairs at the June Chapter Council meeting in Grass Valley. During that time Sandy McCoy, CNPS VP and Board Chair of Membership and Fundraising, led a discussion that will culminate with specific recommendations, after a similar meeting is held at the September Chapter Council meeting.

Topics addressed included development of a handbook for membership chairs, encouraging active participation, and using events for recruiting. I came from the meeting with a number of ideas, one of which I shall put into practice with this newsletter: namely, a “thank you” to new and renewing members. Membership chairs also requested that the state help us identify long-time members so we could give them special thanks.

CNPS California Native Grass Posters

If you didn’t have a chance to purchase the posters at April’s meeting, come to the September meeting where they will be for sale again.

The artwork is beautiful and the posters are suitable for hanging. You can laminate them yourself (or purchase already-laminated posters at a slightly higher price) and use them as place mats or educational tools.

On the back of each is information on grasses: the anatomy of a grass, grasses in general, California’s native grasslands, and the effects of invasive non-native grasses.

You can purchase these at the chapter meetings. Unlaminated they are $13.00 (includes tax) for CNPS members and $16.00 (includes tax) for non-members. This is a better deal than you can get by purchasing them directly from the state CNPS.

Some Resources

For beautiful California wildflower in post card and prints, visit www.sierranatureprints.com

For excellent advice, visit www.growingnative.com

For excellent research, visit www.calflora.org
Pam Muick is the Executive Director of California Native Plant Society and is a widely recognized expert on California’s oaks. When she was here in May, she spoke specifically about the oaks in our area. Earlier in the day she spent time with Warren Shaw at China Creek, observing the progress we’ve made there and enjoying, of course, the Valley Oaks.

Although not a substitute for Pam’s talk, here are some highlights.

Of the approximately 300-600 species of oaks in the world, about 20-22 species are native to California and are found in every county in California, including the islands, covering about 30% of the state in oak landscapes. Approximately half of that those 20 species are trees and half are shrubs.

Birds, insects, humans, and other mammals make use of oaks each in their own way. Of the 75 species of birds that are found in oak habitats, only three bird species plant oaks: Scrub jays, steller’s jays, and magpies. Acorn woodpeckers do not plant; they don’t even eat acorns. They move acorns around in impressive granaries mainly for courtship. These granaries are passed down from generation to generation.

Of course, humans use oaks and the bounty of oak habitats for tools, firewood, and food (Native Americans across the country ate acorns as a major staple in their diet.) Deer and approximately one-third of other wildlife use oak habitats for food.

3 main groups of oaks reside in our area: Black/Red Oak group, Intermediate Oak Group, and White Oak Group. In the Black/Red Oak group are the Interior Live Oak (Quercus wislizenii), which appears as either a tree or a shrub and hybridizes easily with the Coast Live Oak, and the Black Oak (Q. kelloggii), a tree that reaches 50-70 feet and is often used commercially. Black Oak acorns are the most popular for eating perhaps due to their high fat content.

The Intermediate Oak Group includes the Canyon Live Oak (Q. chrysolepis), a hardy tree that can grow straight up or be more shrub-like with contorted growth. It has one of the largest acorns of our regional oaks with golden hairs, giving it an overall golden color. Interestingly, the leaves appear both smooth or spiny edges.

In the White Oak Group are the Blue Oak (Q. douglasii) whose leaves are green when young, turning to a blue waxy cuticle as they mature. Blue Oaks are widespread throughout the Central Valley foothills. Their acorns mature in a single year as opposed to most others previously mentioned which mature in 2 years.

Also in the White Oak Group is the Valley Oak (Q. lobata), the largest native oak in the United States. And those galls that develop on Valley Oaks? One wasp lays her eggs on the tree. Then a second wasp lays her eggs on the first wasp’s larvae. A third wasp lays her eggs on the second’s larvae. It’s like a condominium!

And after all this education and appreciation of these remarkable trees, a bit of information needed to keep them healthy. The Black Oak Group is the only group currently affected by Sudden Oak Death Syndrome. But oaks have many other diseases. Healthy oaks have a fungus that is part of their systems but if things go out of balance, the fungus can kill it.

Since only jays and magpies plant oaks (in the wild), it’s yet to be seen how the impact of West Nile Virus on these birds will eventually impact the oaks. If West Nile kills large numbers of jays, that leave fewer to plant new oaks.

It’s also good to understand that mature oaks have the majority of their root system in the top two feet of soil. Initially the tap root sinks as deeply as possible, but then the lateral root appear, then the sinkers off the lateral roots, and then the feeder roots. Eventually the root system reaches twice the width of the tree, not just under the canopy.

The Jepson Herbarium Public Programs
Workshops are taught by recognized authorities in their field. Most workshops are designed to accommodate beginners as well as professionals. For a full schedule, descriptions, and registration, visit <http://ucjeps.berkeley.edu/jepwkshp.html>.

Sierra Nevada Plants: An Introduction to Species and Communities
Sierra Nevada Aquatic Research Lab, Mono County
July 28 – 31, 2005 with Linda Ann Vorobik

This is an introductory level workshop on keying Sierran wildflowers and identifying communities and their indicator species. We will visit the great variety of major plant communities found in the eastern Sierra, including desert scrub, sagebrush, forest, riparian, and the alpine fellfields.

While in the field and during evening lab sessions, plants will be identified using The Jepson Manual. Each day will include field trips to a variety of localities where basic field etiquette will be emphasized (no collecting), with an evening lecture and keying back in the lab. Participants should be physically fit and prepared for heat or inclement weather, and some vigorous hiking.
Considering Summer Watering of Natives

Dan Songster of the Orange County Chapter of CNPS wrote a very helpful article on summer watering. Although the Central Valley is not Southern California, we share many of the same climate and soil conditions. And his perspective is generally useful regardless of locale. The article has been edited.

Advice is always a two-edged sword, something that should be dispensed and received with caution. No supposed expert is ever the last word on matters, especially when these issues relate to our wondrous native plants. One question I have often been asked is about watering natives — especially in the summer months. Rather than write a book on the subject, I direct you to the very informative Tree of Life Nursery (www.treeoflifenursery.com) catalog, which gives you much detailed and needed information regarding watering times per week or month and whether a particular plant has the desired potential to naturalize in our landscape. (I did not see catalog availability, but a section titled “Sage Advice” contains a long list of short, helpful guides. Ed.)

Still, here are a few (hopefully helpful) hints on summer watering of natives, sometimes a tricky concept. It is certainly a tricky concept to discuss with every gardener having slightly (or greatly) different soils, exposures, techniques, and levels of success that seem to transcend logic. This advice will probably be all right as long as you remember that there are no hard and fast rules that apply in all situations. There is no magic formula for treatment of all native plants. Now that you have been warned and read the disclaimer, let’s consider some seemingly disjointed factors that may directly influence our watering practices during the hot months.

Basic Concepts

A few words about root rot. Almost everyone’s soil has various species of root rot pathogens swarming around it, even yours. They aid in the decomposition of sick plants and such, but also are enemies of a few of our favorite natives such as manzanita, wooly blue curls, fremontodendron, etc. The pathogen itself can’t do much unless given the right conditions — at which point it can infect and devastate your favorite plant, seemingly overnight. Root rot pathogens need warm, moist soils, preferably heavy soils. And if you have natives planted in clay-based soils and it’s summertime and you water, what do you have? A prime hunting ground for the various plant-killing fungus pathogens.

And since you cannot change the soil you have (well, not really, see ‘Soils?’), then you can try to limit summer water at least for those sensitive natives you really want.

Root to shoot ratio. Lush growth in late spring can lead to summer trouble. Even if plants are able to handle more water than they need without root rot pathogens attacking, it often leads to more growth than a plant’s young root system can later provide water for, especially during hot summer months. The proportion of root mass to foliage is called the root to shoot ratio. Envision a small root system, only slightly larger than the root ball you planted in November, with just a few adventitious roots probing more than half an inch into the surrounding native soils. Also envision the above ground portion of the plant. A pleasure to the eye, twice or three times its original size when you installed it just a few months ago, due in large part to your thorough watering. You may have a problem. Why? Most water leaves a plant in one way – evaporation from leaf surfaces. There are other factors to consider, humidity (or lack of), wind, exposure to sun, etc., but basically the more foliage there is the more water a plant loses and thereby the more water a plant needs. If that moisture is not provided, cell structure breaks down and leaves and even small stems are abandoned, dying and drying. Sometimes a plant will put on new leaves and if water is made available it may survive, but oftentimes with young plants that first big shock is too much and the plant never recovers. It’s not a healthy way to grow a plant; better a moderate rate of growth.

Where do you live? The more extreme the climate (hot days and cold nights) the greater the need for picking plants that can take those conditions and still do well, without lots of additional summer water. Plant selection becomes key and logically, local natives often have an edge.

Other considerations

When did you plant? Hopefully in the late fall or early winter giving your new native the best possible start towards life in your garden — allowing roots to penetrate surrounding soil just a bit before summer hits. Those small silvery-white root hairs moving outward from the original root ball mean a great deal when considering a new plant’s abilities to gather water.

Where did the plant originally come from? Plants from riparian, redwood, mixed evergreen forest, north oak woodlands, and even several of the foothill woodland species do fine with summer watering of reasonable proportions. Even a lot of the coastal sage scrub plants do fine with summer watering, especially that first summer season, to help them become established. Watering a young sage, buckwheat, lemonade berry, or bladderpod once or twice a month that first summer is expected (and appreciated). Some chaparral plants are not bothered by moderate water during the summer (mountain mahogany, toyon, ceanothus); while others such as manzanita, wooly blue curls, or fremontodendron, are extremely sensitive to fungus pathogens and can perish from a single summer watering. With such plants you should strive to limit watering in summer if possible, especially in the heavy clay soils, and after the first year avoid summer water entirely unless in that heaven of perfect drainability mentioned below in ‘Soils.’

Soils? It may not be fair but clay soils have poor drainage and you may be walking the tightrope that first summer with some plants, trying to water as little as possible and still keeping the plant alive if you have clay. Too little water and the cells break down. Too much and root rot pathogens have a chance to attack susceptible natives in the warm and heavy soils. Clay does have some advantages, but better draining soils are almost always preferred.

How old is the plant? A plant that has been in the ground for a few years is much more likely to do OK without needing too much in the way of summer water. That does not mean you would deliberately withhold water from natives that appreciate summer watering. Deergrass, Douglas iris, yarrow and many others could probably make it through a summer without irrigation but do much better with that added water.

Sun or Shade? Often just the amount of sun a plant gets means you will need to water it a bit more (if it can tolerate it). Also of note: a piece of shade screen staked on the southwest side of a wooly blue curls may not look great but could help it through that first critical summer by slowing evaporation of water from sun-heated leaf surfaces, thereby lessening the need of water from you.

Mulching benefits. As long as it’s kept a few inches away from the plant’s main stem or trunk, mulch is highly desired in keeping water evaporation (from the soil itself) to a minimum. Also is the added benefit of keeping the soil temperatures somewhat balanced. If you must water, when is best? To improve the success rate with watering natives, do it infrequently, at the coolest time of the day (early morning), on days that are expected to be cool, and as a rather deep soaking normally accomplished by a slow drip.

Conclusion

Talk to people. If you read this, and are more confused than ever, my apologies. In that case, ask someone who also grows natives and you will often find someone willing to share experiences and knowledge.

Fear is the enemy, knowledge is your friend. Don’t feel thwarted by the possibility of a plant not doing so well if you water too much or too little. Learn what you can and give it a try!

Get to know your garden. Unlike conventional landscapes demanding copious amounts of water at most times of the year, a native landscape asks that you get to know its citizens and its seasonality and not provide what it cannot use. Realize that the summer downtime most natives enjoy is also a respite for you. Take a break yourself and enjoy a garden in seasonal transition.
New & Renewing members

Thanks to the following new and renewing members for May-June: (for privacy, I have listed last names only).

New members:
Welcome to: Urbach (Sanger), Hill & Pitts (Fowler)

Renewing members:
Arroues (Hanford), Colton (Ahwahnee), Eckenrod (Friant), Juarez (Clovis), Gorman (Prather), Hartesveldt, Richie (North Fork), Pitman (Merced), Mallory, Penman, Rowe (Fresno), Oldham (Coarsegold).

If any of the above information is incorrect, please contact me Helen Shaw, Membership Chair at < helshaw@netptc.net > or 559/855-4519

September Newsletter

Send your perspectives, thoughts, poetry, or drawings to me. Have you visited a great Web site recently? How are those native plants you planted last fall doing with our wonderful winter rains? Would you like to see more of / less of a topic? Do you know of hikes or other activities in your area?

The Observations section also welcomes your input. The Sequoia Chapter covers a wide range of climates and topography. And you don’t have to be a gardener to appreciate California’s incredible plant diversity. Indeed, gardeners should be sure to get out and learn from nature.

Send newsletter contributions, corrections, or suggestions to Thelma Valdez at < nmtv@att.net >. The next newsletter will be the September issue. Contributions are due by Friday, September 2.

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JOIN THE CALIFORNIA NATIVE PLANT SOCIETY

Membership includes the quarterly CNPS journal, *Fremontia*; the quarterly *Bulletin* which gives statewide news and announcements of Society activities and conservation issues; and our chapter newsletter, *Carpenteria*.

- Student/Retired/Limited Income………$20
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- Bristlecone ……………………...$1000

I wish to affiliate with the Sequoia Chapter.

Name: __________________________________________
Address: __________________________________________
City: __________________________________________
State: ______ Zip: ______

Make your check payable to “CNPS” and mail with this form to:

California Native Plant Society  
2707 K Street, Suite 1  
Sacramento, CA 95816-5113

The California Native Plant Society is a statewide nonprofit organization of amateurs and professionals with a common interest in California's native plants. The mission of the Society is to increase understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, science, and conservation.
Soap Plant

Chlorogalum pomeridianum is known as Soap Plant (also known as Amole) and is found throughout most of California on dry, open hills. It blooms from May through August and you can see it blooming now in the foothills. The flowers open in the evening and are extra fragrant during this time to aid their pollination by moths. They close by the following morning.

Native California Indians used the raw bulbs for soap (personal and laundry), to prepare hides, and as a fishing aid (the bulb was crushed then mixed into the water of a quiet pool to stupefy the fish). The lather-producing substance is saponin, which is often poisonous if taken internally, hence its use to stupefy fish.

Its fibrous coating was made into hair and cleaning brushes and the young shoots and bulbs were roasted and eaten.

Soap plant makes an attractive addition at the front of garden beds, dry gardens, rock gardens & meadows. The bulb forms as a 1” wide, basal rosette of wavy margined leaves that return each winter. It is typically deer proof and is tolerant of both heat and poor soil.