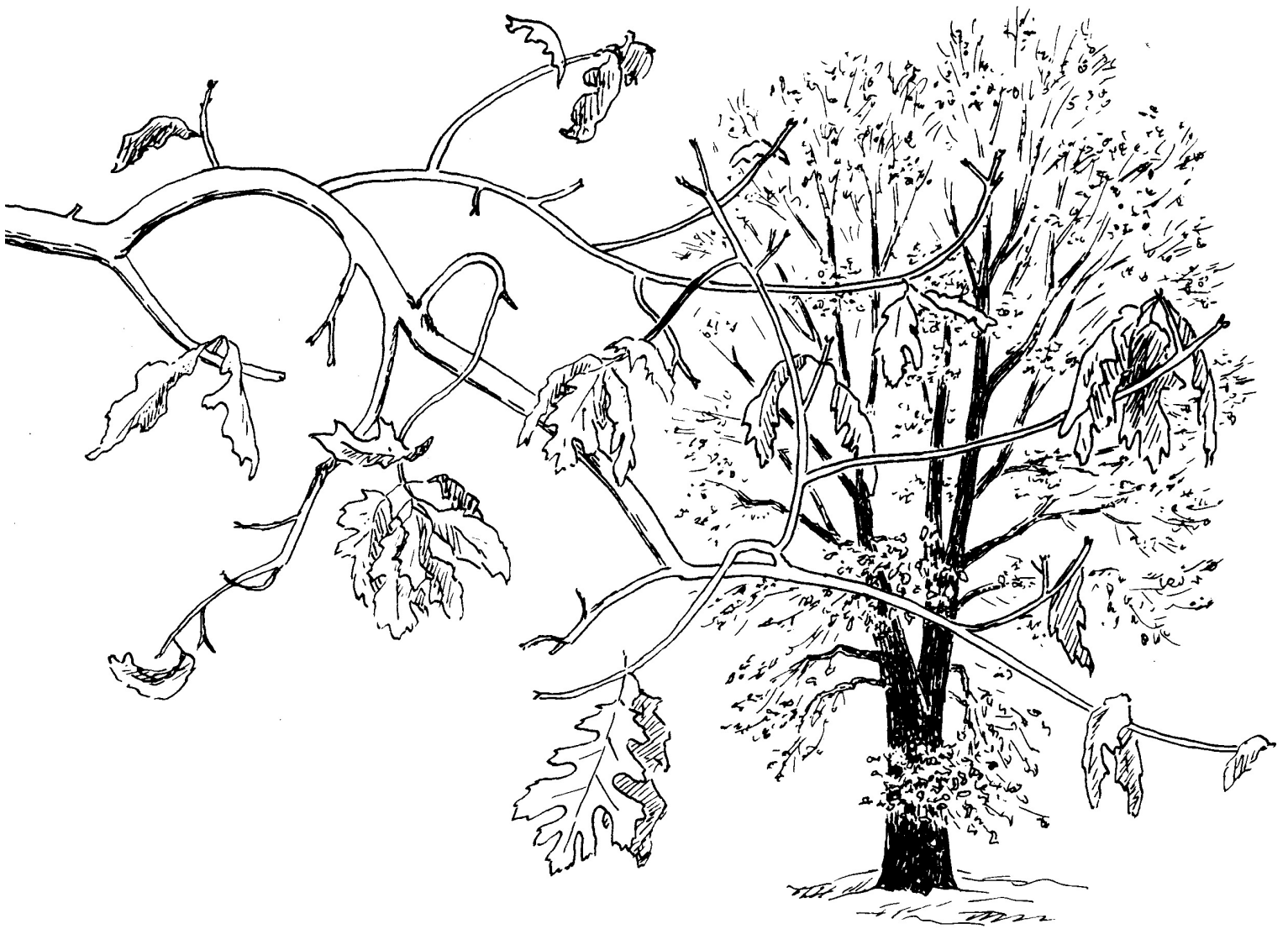


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# *Obispoensis*

Newsletter of the San Luis Obispo Chapter of the California Native Plant Society

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December 2015

## Kellogg Oak (*Quercus Kelloggii*)

The following is an article from February 1993. It was chosen by the editor to spare me the choice since Bonnie and I were away in late October. We totally agree with his choice; we had totally forgotten about it.

The repeat of this article reminds me that many species of oaks have been producing fewer and fewer offspring primarily due to habitat modification and outright habitat loss. They are also probably being impacted by rising temperatures due to global climate change. It is also important to remember that oaks have been extremely important in the history of the human race. Various oak species have provided food, cork, charcoal, and lumber. A few species still do.

### Dried Leaf Retention in Black Oaks

The idea for the cover was hatched out of a statement made by Bonnie while we were traveling to Yosemite Valley just before Christmas. She remarked that the dry, brown leaves and black trucks of the Sierra black oak (*Quercus kelloggii*) made a beautiful counterpoint to the white snow. This got me to thinking about the advantages that might accrue to a tree to keep its old, dead, dry leaves until spring of the following year. I had noticed this same phenomenon first in the eastern black oak of my youth in Illinois (*Quercus nigra*). Two ideas came readily to mind. First, it might provide some advantage to the plant that would aid its survival in the Montane Mixed Coniferous Forest where the Sierra black oak most often occurs. Some herbaceous plants produce hard leaves (e.g., bracken fern, *Pteridium aquilinum*) that last through the winter; these have been shown to shade out seedlings of competing plants during early spring growth. Last season's bracken leaves begin to break down shortly after the new, young shoots get a foot or so tall. However, it is hard for me to accept a similar explanation to account for trees retaining dead leaves. I can think of a number of disadvantages such as increasing wind resistance and holding more snow on the branches. Both should result in more broken branches.

Retaining dead leaves could merely be an artifact of its history. Its closest relatives are all evergreen oaks and include the island scrub oak (*Q. parvula*) and the coast and interior live oaks (*Q. agrifolia* and *Q. wislizeni*). This group of oaks is called the red or black oak group (Erythrobalanus) and differs from the other major group, the white oaks (Lepidobalanus), primarily by having the leaf veins extending beyond the margin of the leaf as fairly heavy, tawny bristles or spines, possessing dark gray to blackish smooth bark, having thin flat acorn scales,

generally taking two years to mature their acorn (exception the coast live oak) and having reddish-brown wood. A third group of oaks is also found in California and these possess characters in combinations not found in the two major groups. All three groups include species of evergreen and deciduous oaks, but, as far as I know, only the deciduous black oaks retain many of their dead leaves for so long a time period. Could it merely be a trait indicating a relatively recent origin of deciduous habit from the more general evergreen habit of the group? If my memory serves me right, both eastern and Sierran black oak leaves seem thicker and more leathery than one would expect for a deciduous tree.

What about the advantage of flowering trees and shrubs from evergreen habit? Primarily it is due to the fact that the off season (cold and/or dry) is not always so cold and/or dry as to preclude a leaf from functioning. There are short periods, even in the most severe of seasons, when conditions are favorable for metabolism and growth. Evergreen plants can take advantage of these short periods because their leaves are in place, whereas deciduous trees must forgo them since, by the time they could produce new leaves, the favorable period would have been long gone. Of course, evergreen plants must pay the cost of maintaining and protecting these living leaves during times when conditions prevent them from functioning, a cost not required of deciduous trees and shrubs. In other words, whether a flowering tree or shrub is evergreen or deciduous depends on the balance between cost of maintaining non-functional leaves versus the gain from being able to take advantage of short periods of moderate conditions. Thus, evergreen flowering trees and shrubs tend toward coastal and/or low to mid elevations where severe conditions tend to be rare and of short duration. Evergreen conifers, on the other hand, are a different story which will have wait for another time. ☼ Dirk Walters

Illustration by Bonnie Walters

*Obispoensis* is the newsletter of the San Luis Obispo Chapter of CNPS. It is published October through June except January. Items for submittal to *Obispoensis* should be sent to [rhotaling@charter.net](mailto:rhotaling@charter.net). The deadline for the next issue is January 10, 2016. Botanical articles, news items, illustrations, events, and tidbits are welcome!

To find out more about the California Native Plant society visit the websites:

[www.cnps.org](http://www.cnps.org) and [www.cnpsslo.org](http://www.cnpsslo.org)



## Chapter Meeting

**Bryophyte Workshop.** The CNPS monthly meeting Thursday, December 3 at the San Luis Obispo Veterans Hall will kick off with a workshop from 6:10 to 7:00 pm on bryophyte identification led by Dr. Ben Carter. Our county is very rich in these often-overlooked little plants, and this will be a chance for you to learn their distinctive features. Ben plans to cover differences among mosses, liverworts, and hornworts, important characters of their gametophytes and sporophytes, and provide field characters for identifying several of the most commonly encountered genera in SLO County. We'll have a few microscopes, but bring your hand lenses!

**Social and Business Meeting.** From 7:00 to 7:30 pm we will have the usual social part of our monthly meeting, followed at 7:30 by a chapter business meeting, including election of officers for the coming year.

**Our Guest Speaker.** Dr. Ben Carter is Director of the Carl Sharsmith Herbarium at San Jose State University.

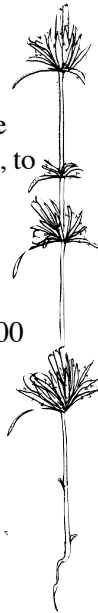
Ben will give a presentation entitled "Bryology: a big role for small plants in enhancing our understanding of the California flora." For those of us who don't know very much about bryophytes, Ben's talk will introduce characteristic features of mosses, liverworts, and hornworts and important differences between bryophytes and vascular plants. Ben plans to share about the new CNPS Bryophyte Chapter. And he will detail some research he's been doing that illustrates the role of bryophytes in understanding biogeography of the California Floristic Province.

### Annual Potluck Banquet

Our banquet speaker this year will be Dr. Gordon Franke of the University of California. He is co-author of *California Bees and Blooms* (<http://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=15602>). Banquet date: January 23, 2016

## Field Trips

**Sunday, December 13, 8:30 am, Morro Bay State Park.** This outing will feature a look at the eastern half of Morro Bay State Park. Meet at the Quarry Trail trailhead on South Bay Boulevard, 1.4 miles south of Hwy 1 or 0.4 miles north of Turri Road. We will hike the Live Oak Trail, to the Park Ridge Trail, to the Chumash Trail, to the Crespi Trail, to the Canet Trail, to the Quarry Trail, and back to the parking area. There will be an option to ascend Cerro Cabrillo, as we near the end of the hike. This is a moderate hike of 5 miles, a total elevation gain of 300 ft. (for Cerro Cabrillo add another 500 ft.), with a total hiking time of about 3 hours. Make sure to bring water, snacks or lunch. Sturdy shoes, sunscreen, hats, and jackets are recommended. No RSVP needed. Rain cancels. The local plants and animals will be discussed during the hike. For more information, contact Bill Waycott (805) 459-2103, [bill.waycott@gmail.com](mailto:bill.waycott@gmail.com).



The California garden is designed to resemble many of the natural plant communities found throughout California. Here, you may walk through a lush redwood grove, view a grass meadow, or overlook a restoration bank that demonstrates the strength and adaptability of our state's native flora. The *Ceanothus* collection produces a must see show of blue flowers in the spring, while some of the other collections include *Agave*, *Arctostaphylos*, *Quercus*, and *Salvia*.

**Directions:** From 101 north or south, exit at Hwy 1/ Santa Rosa Street and go in the direction of Morro Bay. Turn east (right) off of Hwy 1 onto Highland Drive and then left onto Via Carta (at the third stop). Drive up the hill and park in the last parking lot on the left. Walk across Via Carta to the Environmental Horticultural Science facilities and follow the green signs to the *Leaning Pine* Arboretum.

**Parking:** Visitors must buy a parking permit at the vending machine by turning into the pullout on the right hand side of Highland Drive, shortly after entering campus, or at the Visitor Information Center near the Grand Avenue entrance to campus.

For more information, contact [bill.waycott@gmail.com](mailto:bill.waycott@gmail.com), (805) 459-2103. For Information about the *Leaning Pine* Arboretum: [http://leaningpinearboretum.calpoly.edu/the\\_gardens.html](http://leaningpinearboretum.calpoly.edu/the_gardens.html). Rain or the threat of rain cancels this field trip.

**Saturday, January 9, 2016, 9:00 am, Cal Poly Arboretum.** The gardens at *Leaning Pine* Arboretum focus primarily on the world's five Mediterranean climate regions: Australia, California, Chile, the Mediterranean basin, and South Africa. Additionally, there is an Entry garden, a New Zealand garden, a Dwarf and Unusual Conifer garden, a Formal garden, a Primitive garden, and a Palm and Aloe garden. Featuring a varied assortment of trees, shrubs, and other landscape plants, each garden is unique while continuing the cohesive experience of the entire arboretum.



## Conservation

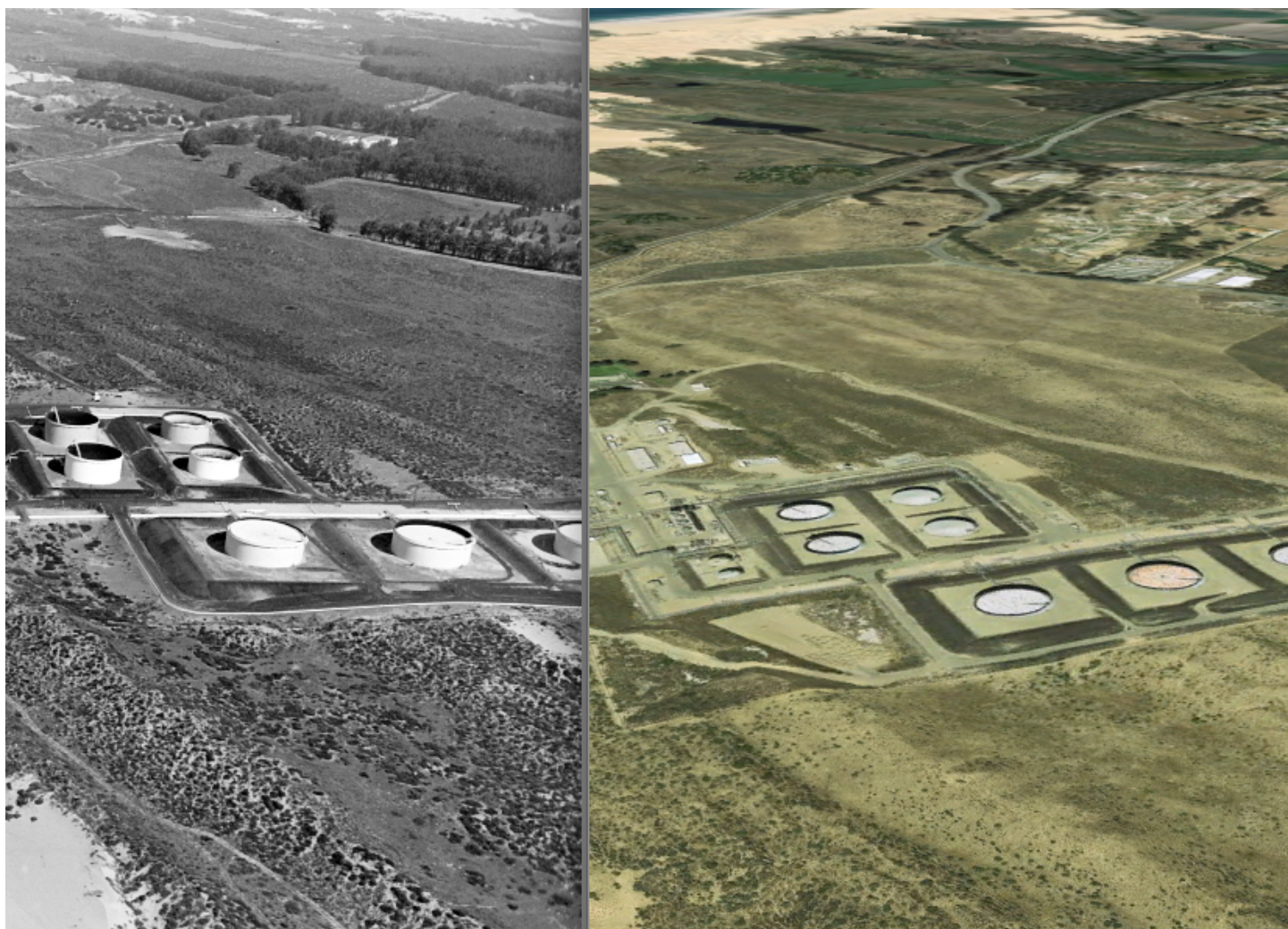
November was quiet as far as specific projects up for CNPS review, but there are several issues growing in the background that will require our wary eye. I attended and gave input to a scoping meeting for a proposed trail through Price Canyon from Edna to Pismo Beach. This will be a section of the bi-state Anza Trail, and would have to pass through the Arroyo Grande Oil Field. I commented against sections of trail that went through relatively undisturbed oak woodland and the habitat of Pismo clarkia rather than staying in areas that are currently disturbed. I find that there is a conflict between potential trail users wanting a pleasant “nature experience” and the need of nature to avoid the “human experience” as much as possible. The SLO Council of Governments are taking the lead, and at this time there is no money for any trail development and right-of-way issues are significant.

It is possible that the rampant development that has destroyed much of the older dune surfaces of the Nipomo Mesa might slow, due to newly revealed

issues associated with water supply. The Northern Cities Management Area (basically the Five Cities minus Avila) are challenging Nipomo CSD’s continued issuance of building permits on the basis that the CSD is intercepting groundwater that would normally percolate from the Santa Maria valley toward the NCMA. Recently water tables in the area are dropping to the extent that sea water intrusion is a distinct possibility.

### Historical Photos Reveal Veldt Grass Impacts

A circa 1970 photo of the Nipomo Mesa oil refinery reveals the eucalyptus groves since removed for the Woodlands Development and the once vibrant dune scrub community seen above and below the tank farm. The area above the tank farm was the pride of the ‘Dune Mother’, Kathleen Goddard Jones, who called it Wild Almond Meadows. Dark dune shrubs cover the land in 1970 (left), almost vanished in the Google Earth 2013 image (right) due to competition with veldt grass and attempts to control it using livestock. ❁ David Chipping



## Horticultural Notes

Great News! Fall is here and the rains have finally started. There are so many things we could discuss this month but I would like to focus on how to prepare for what could be a very wet winter. First, if you have any steep slopes in your garden, you might be wondering about erosion problems. Covering slopes with mulch would be a good idea. There are basically two types of mulch out there. Some let rain water penetrate such as fresh tree chips, recycled wood chips, and walk on bark. Other mulches such as gorilla hair or cedar bark, hold water tightly and do not allow it to penetrate, hence stopping soil erosion. Just remember, if you have plants on a steep slope, remove gorilla hair two feet from around the plants' trunks. This will allow rainwater to penetrate the area and water the plants' roots. If your plans are to suppress weed growth on a level area, apply any other mulch four inches thick. It is not necessary to use gorilla hair. Remember to keep chips one foot away from trunks to prevent root rot.

Second, I would like to talk about water molds and root fungi control during the rainy months. There's a higher likelihood of having water borne pathogens affect drought-stricken plants during rainy months. These

pathogens are easily spread by excess water so it's important to remember that pooling water can spread a pathogen from a sick plant to a healthy one. If you have any plants that appear to be dying from drought stress, you would be wise to not allow water to run or pool there. Come spring, if the plant appears to be completely dead remove it immediately. If green growth appears, wait and see if it recovers.

Lastly, I would like to discuss pruning. Winter storms usually bring quite a bit of wind. A tree's or shrub's branches must allow the wind to pass through or it will blow over. If you have any plants in need of thinning, fall is a great time. The nights have gotten cooler and plants are starting to go dormant. Consult gardening books for tips on how to thin your trees and shrubs. The goal is to allow wind to penetrate and blow through the branches without destroying the general shape of your tree or shrub.

From Suzette and me, thanks to all of you who came and volunteered at this year's plant sale. We had a great time and we really appreciated your help. Until I see you at our next meeting, Happy Gardening! John Nowak

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### Plant Update for the Dune Mother's Wildflower Guide

For those of you who own our chapter published book, *Dune Mother's Wildflower Guide*, you will want an Errata and New Nomenclature Conforming to the 2nd edition of *The Jepson Manual*. Our excellent botanist member, Lauren Brown, took time this past summer to do this information update. You can download the Errata at our chapter web site, or email me and I will forward a copy to you, [lindachipping@yahoo.com](mailto:lindachipping@yahoo.com) - Linda Chipping

### Newsletter Editor

The Chapter is looking for a new Obispoensis editor. If you like to write, edit and do a little page layout design, this position is perfect for you. The news-letter is published monthly October through June except January. No previous experience is necessary. Contact Bob Hotaling, [rhotaling@charter.net](mailto:rhotaling@charter.net) or Bill Waycott, [bill.waycott@gmail.com](mailto:bill.waycott@gmail.com)

### CNPS is Hiring: Associate Director!

As you may have heard, CNPS is hiring an Associate Director! Please help us get the word out to find someone special who will help continue the great momentum we've built. Due to the great response so far, the hiring committee will begin reviewing applications early this month, so potential candidates should apply as soon as possible. View the job announcement [here](#).

### Call for Native Landscape Design Photos

The CNPS Horticulture Program is working on building a library of native landscape design photos to be used for horticultural education, and needs your help! If you have photos of a native garden, before and after photos of a converted lawn, or just a beautifully designed native landscape, please send them to Caroline Garland, CNPS Horticulture Coordinator, at [cgarland@cnps.org](mailto:cgarland@cnps.org).

## *Dedicated to the Preservation of the California Native Flora*

The California Native Plant Society is a statewide non-profit organization of amateurs and professionals with a common interest in California's 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 and conservation. Membership is open to all. Membership includes the journal, *Fremontia*, the quarterly *Bulletin*, which gives statewide news and announcements of the activities and conservation issues, and the chapter newsletter, *Obispoensis*.



*San Luis Obispo Chapter of the  
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### **SAVE THE DATE!**

#### **Next Chapter Council Weekend:**

December 4-6, 2015

San Carlos, CA

*Hosted by the Santa Clara Valley Chapter*

<https://sites.google.com/site/cnpschaptercouncildec2015/home>

#### ***Why should I attend Chapter Council?***

1. You will connect with, and learn from, other CNPS members from around the state
2. You get to contribute to important decisions that impact our organization
3. Through social events and field trips, you will meet like-minded people and get to know a new area of the state - ***it's fun!***