Western Thistle: *Circium occidentale*

The plant profiled in this issue the *Obispoensis* is our common native thistle. It is *Circium occidentale*, that is commonly known as western or cobweb thistle. The genus name, *Circium*, is a Latinized version of the Greek word, *kirsion*, which also refers to a kind of thistle. *Occidentale* is Latin for "western" so the common name western thistle is simply a translation of its scientific name. Cobweb thistle is more interesting. It refers to the multitude of long, white, interwoven trichomes (hairs) with which the plant and especially the spiny bracts surrounding the head of flowers are coated. It makes the head appear to be held together by the work of many spiders. The name thistle is derived from Middle English, *thistel* which itself comes from the Old English, *distel* and is a direct cognitive from the German, *distel*. All these name variations can be used to refer to any spiny herb. There is also an implication that the referred to plant is worthless, i.e. weedy. However, this species is NOT a weed. Not only is it native, but it doesn't show any of the characteristics of weeds. It isn't prone to invade human modified habitats and it usually occurs in reasonable numbers even in its natural habitat of coastal dunes, grass and shrub lands as well as oak woodlands.

The genus *Circium* is one of the more difficult genera in which to identify species. Every recent flora mentions how difficult the genus is due to fact that the species are poorly defined, extremely variable, and/or engage in inter-specific hybridization. Dr. David Keil continues to work on the California thistles in an attempt to straighten them out. Cobweb or western thistle is one such taxonomic mess. It is extremely variable. The problem is that this variation tends to be continuous and overlapping which makes designation of variants somewhat arbitrary. The form used as a model for Bonnie's drawing is the coastal dune form. Its distinguishing characteristic is the tendency for the bracts surrounding the flower head to have their tips bent so far backward that they point downward (recurved). This is the variety *occidentale* whose type locality is Santa Barbara. A type locality is the place where the collection upon which a scientific name of the plant is based was collected. The more widespread interior varieties have their bracts spreading but not recurved.

We give the name thistles to many different kinds of often totally unrelated spiny plants. What they all have in common is their spines which say don't touch me. These spines are deterrent for large herbivores but not for smaller ones such as insects which simply crawl between the spines. Believe it or not, true thistles, such as the genus, *Circium*, have a history of being eaten by people. Of course, first the spines are removed by pealing the stems. Other references note the edible roots in some species. All indicate that thick stemmed and/or rooted species were most commonly used. Charlotte Bringle Clarke in her book, *Edible and Useful Plants of California*, states, "In general, I try all thistles that are large enough to gather." Thistles do have a famous cousin -- the artichoke (*Cynara cardunculus*). Here we eat the expanded receptacle to which all the flowers and bracts are attached.

— Dirk Walters, Illustration by Bonnie Walters

President’s Notes

Bryan LeNeve’s talk on the Clarkias of the west was very well received. Everybody found his simplified key to be really helpful, and his show was an illustration of how absolutely lovely the old-time 35mm slides can be. Next month’s talk will use digital photos of the flowers around the City of San Luis Obispo, and is also an unveiling of the material of a flower book being produced by the City with the help of several CNPS members. The photos are absolutely spectacular!

After June we don’t meet again until October, when we have a dessert potluck and spend the meeting looking at slides and digital photos brought in by members and guests. While we tend to concentrate on photos of plants, general natural history and ooh-haah scenery pictures are welcome. Details will come in the September newsletter. We are always looking for program ideas, so contact Matt Ritter or myself.

I know I said this last issue, but artists please note! Our chapter has a number of members who draw and paint plants, and we would like to find out who you are. I would like artists to bring their creations to the October meeting, but would enjoy hearing from you sooner. There is a possibility that we would have enough material for a show, possibly in association with the SLO Art Center. Call me or Mardi Niles.

My call for field trip plant lists still stands. I have talked to a couple of people, but not as many as I would have hoped. Get me the lists and we will get them up on the web.

— David Chipping
Chapter Meetings

Thursday, June 4, "Wildflowers of the San Luis Obispo Area." 7 - 7:30 p.m. enjoy social time, refreshments and browse our book table. The meeting begins at 7:30 with a little time for chapter business and announcements, followed by the presentation.

The City of San Luis Obispo and San Luis Obispo Chapter of CNPS have teamed up to produce a booklet entitled "Wildflowers of the San Luis Obispo Area." This booklet will describe over 250 species of wildflowers and flowering shrubs and trees that are found within about five miles of the City of San Luis Obispo. Several local CNPS members have freely given of their time and expertise in order to have a thorough offering of the many flowers that can be found around the city.

Neil Havlik, CNPS member and City Natural Resources Manager, and Terre Dunivant of Gaia Graphics will present a preview of the booklet, which is scheduled for publication this summer.

Meet at the SLO Veterans Hall, 801 Grand Avenue, San Luis Obispo.

This is the last meeting before summer break. The next meeting is October’s.

Thursday, October 1, 2009: Dessert Potluck and Members’ Slide Show. Bring a dessert to share and your 15 best photos, slides, and digital pictures that you have taken on your summer travels. Meet at the Veterans Hall, Grand Avenue & Monterey Street, San Luis Obispo.

Field Trip

Saturday, June 6, to Arroyo de la Cruz and Arroyo de los Chinos. This is a morning field trip to the coastal bluffs of northern SLO County. We will start at the Elephant Seal Overlook at 9:30 a.m., south of the Piedras Blancas Lighthouse, and travel as a group up Hwy 1 making stops at Arroyo de la Cruz (66.5), where the trails are good and at Arroyo de los Chinos (66.7), where there are no established trails and the terrain is uneven.

This area is home to a suite of rare species including the Arroyo de la Cruz Mariposa Lily, Calochortus gracilis ssp. recurvifolius, pocket dunes, and unique wind sculptured chaparral. Wear sturdy shoes, a hat, and windbreaker and bring plenty of water. Please, no dogs.

"Doc" from Cambria will be on hand to help us identify plants.

For information call Mardi Niles at 489-9274.

Conservation

The economy continues to put development projects on hold, with the only really scary thing being the plans of the City of Pismo Beach to annex much of Price Canyon. As that is an area in which the rare Pismo clarkia is located, we have a lot of concerns. The really great news was that the Regional Water Control Board came through with promised funding for the Wild Cherry Canyon purchase by the American Land Conservancy. CNPS wrote a letter to the Board in support of this funding. 

David Chipping

Fourth Annual SYVNHS Plant Sale Fundraiser

The Santa Ynez Valley Natural History Society is having its fourth annual plant sale this year at the Dunn School campus in Santa Ynez, Roblar Street Entrance. The plant sale will feature native plants, many of which have been propagated from materials of local origin. This includes native grasses and hard to find bulbs. Other plants that should thrive in the Valley will also be available, along with expert horticultural consultation.

Date: Saturday, October 31. SYVNHS members will be admitted at 9 a.m. The public is welcome at 10 a.m.

Cirsium occidentale var. compactum at Arroyo de la Cruz
The CNPS Education Program specializes in providing workshops for professional botanists, biologists, and ecologists to teach the skills and provide the tools and resources for conducting sound scientific surveys for rare plants, rare plant communities, vegetation, wetlands, and invasive plants.

June 9-11, 2009  
**Introduction to the second edition of A Manual of California Vegetation**  
*Primary Instructors and authors: Todd Keeler Wolf, John O. Sawyer, Julie Evens*  
*Location: A 3-day transect across the central Sierra Nevada, from the foothills to the eastern Sierra. We will begin at Calaveras Big Trees and end at Grover Hot Springs Valley, near Markleeville.*  
The authors will debut the greatly expanded second edition of *A Manual of California Vegetation*. They will provide an overview of additions and changes to the manual, including new vegetation types recognized or redefined across many habitats. You will learn how to use the new manual, in the field as we traverse a variety of vegetation types in the Sierra Nevada, as well as its uses for conservation and management.

June 23-26, 2009  
**Great Rivers of California: the American River**  
*Primary Instructors: Robert Holland and Virginia Dains*  
*Location: Headwaters, mid-elevation and valley sections of the American River.*  
Azonal vegetation is shaped by processes other than regional biota and climate. Riparian vegetation is shaped by the agency of flowing water, both during high flows (when the habitat is sculpted) and during low flows (providing late summer irrigation). This class will focus on how stream dynamics and sediment transport structure riparian habitats, taught from a floating classroom. The first day we will float from Fair Oaks to Goethe Park on the lower American River, observing how the current affects our boats, the river’s substrate, and the vegetation along a low-gradient valley stream. The second day we will repeat the process upstream, floating the South Fork American from Coloma to Lotus, a steepeland stream with all together different riparian vegetation. Licensed, professional guides will captain our rafts both days. For an optional overnight third leg we will goat pack into the American’s headwaters in Desolation Valley, where riparian vegetation manifests the additional complication of persistent winter snowpack. The emphasis throughout the class will be more on the processes that shape the vegetation and less on binomial nomenclature.

Aug 12-14, 2009  
**Vegetation Rapid Assessment**  
*Primary Instructors: Todd Keeler Wolf, Julie Evens, Jennifer Buck*  
*Location: Donner Summit*  
Course Description: The California Native Plant Society (CNPS), the California Department of Fish and Game (CDFG), present a Vegetation Rapid Assessment workshop near Donner Summit. The course will be a combination of lecture and field exercises in vegetation sampling. The course will focus on collecting data using the CNPS Rapid Assessment protocol. We will discuss applications of fine-scale vegetation sampling, classification and mapping, how to document rare natural communities, and how vegetation information fits into planning documents.

Cost: Members $365  
Non-members $390

Sept 29-Oct 1, 2009  
**Legends of the Fall: exploring the clandestine flora of early fall in the eastern Mojave Desert**  
*Primary Instructors: James M. Andre & Tasha La Doux*  
*Location: UC Granite Mountains Desert Research Center*  
Course Description: Few botanists journey out in the late summer or early fall in search of colorful blooms of California’s desert plants. Yet the early fall bloom in the eastern Mojave Desert can be more reliable than the more popular spring blooms. Approximately 10% of eastern Mojave annuals are considered “summer annuals”, species that germinate following the monsoonal cloudbursts of summer, grow rapidly, and complete the life cycle before temperatures decline sharply in fall. In addition, many perennial species flower in early fall, particularly those of the Asteraceae, Poaceae, and Polygonaceae. This course will introduce botanists to the ecology and taxonomy of the diverse flora of early fall in the eastern Mojave Desert, with special emphasis on rare or unique species. Participants should have moderate to advanced taxonomic skills. Field trips will include moderate to short day hikes.

**Vegetation Mapping**  
*Primary Instructors: Todd Keeler-Wolf, Julie Evens, Anne Klein, Jennifer Buck, Rachelle Boul*  
*Location: Mulford Hall, UC Berkeley and Marin Municipal Water District, Fairfax*  
Course Description: Please join CNPS and California Department of Fish and Game (CDFG for a three-day, vegetation mapping workshop, hosted by University of California Berkeley’s Geospatial Imaging and Informatics facility and Marin Municipal Watershed District (MMWD), Mount Tamalpais. This workshop will be a combination of field and computer exercises in fine-scale vegetation mapping. Participants will learn about vegetation sampling, classification, and photo interpretation. They will collect reconnaissance samples to support a Vegetation classification and map and practice techniques of photo interpretation, delineation, and attribution. They will use accuracy assessment to validate a vegetation map.

For more information and registration to to  http://www.cnps.org/cnps/education/workshops/index.php  
or contact Josie Crawford at (916) 447-2677 of jcrawford@cnps.org
Obisopensis is published October through June except January. Items for submittal to Obisopensis should be sent to rhotaling@charter.net. The deadline for the October issue is September 10. Botanical articles, news items, illustrations, photos, events and tidbits are welcome!

Visit the websites: www.cnps.org and www.slo-cnps.org

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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 quarterly journal, *Fremontia*, the quarterly *Bulletin*, which gives statewide news and announcements of the activities and conservation issues, and the chapter newsletter, *Obispoensis*.

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