Obispoensis

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



Common Dandelion (*Taraxacum officinale*)

First, let's make it perfectly clear. The plant pictured on the cover of this *Obispoensis* is **NOT** a native plant! Everyone (all experts as well as lay people) agrees on this. It has a very long documented history of interactions with humans. Before the 16th century all these interactions were old world. So, it's not hard to conclude the common dandelion originated somewhere in Eurasia. It is probably southern Europe as that is where plants capable of normal sexual reproduction occur. In northern Europe and most of the rest of the world, common dandelions usually have three sets of chromosomes and thus can't reproduce sexually as meiosis is messed up (i.e., normal gamete production is impossible) so they must reproduce asexually. As a result, specific taxonomy of common dandelions is confusing. However, I suspect there aren't many who don't already recognize it from the cover drawing. Yes, it's the common dandelion (Taraxacum officinale). Bonnie's drawing was used on a poster from the early 1970s advertising a short lived experimental course in Economic or Ethno- botany at Cal Poly. (Budget cuts occurred even back then.) The poster and drawing got buried in a pile of my other junk and hadn't been seen since.

Today dandelions are found essentially wherever human beings are found although one web source indicated it was rarer in the Southern Hemisphere. Unless you're a finicky gardener or one who relishes a perfect grass lawn, this plant is actually just an innocuous weed. I haven't noticed it being common in any plant community that would be considered natural. There are California native *Taraxacum* relatives, but they are mostly alpine meadow species. Common dandelions are ubiquitous in California in disturbed ground such as fallow fields, vacant lots, roadsides, and yes, people's yards and gardens. It prefers moist soils, so it doesn't do well in deserts. I suspect that its bright yellow flowers produce the very first bouquets gathered by children. I'm also sure that every one has at one time or another blown the "parachute" fruits into which the flower heads turn when mature. Dandelions belong to a relatively distinctive group in the sunflower family (Asteraceae or Compositae). This means the tiny flowers are aggregated into heads. All the flowers in a dandelion head are the same. They consist of a strapshaped corolla, consisting of five joined petals, topping an inferior ovary. The pappus (sepals) is not green and leaf-like but consists of dry bristles. It is these bristles that turn into the fluffy parachutes. One last

characteristic of dandelions as well as most of its close relatives is the presence of milky sap or latex which can be easily observed by simply breaking one of its leaves. It's hard to break or bruise its stem because its stem is reduced to a crown on top of its fleshy root.

How did people use the common dandelion? They ate its young leaves raw or its older leaves cooked. Its roots were ground and roasted to make a coffee substitute. They soaked the flower heads in water and then fermented them into wine. The white latex can be turned into a rubber substitute. It showed enough promise that during World War II there was research into making the process economical. It was abandoned after the war when ample supplies of regular rubber latex became available from the tropics. Could you be here today reading this note, because of the lowly common dandelion? I remember reading a story a long time ago that suggested that those of us whose ancestry is from northern Eurasia probably are. Before refrigeration (which is most of human history) and after the formation of larger cities (especially walled ones) the poor didn't have an adequate source of vitamins and minerals that come from fruits and vegetables during the winter months. They lived on bread and beans, neither of which is particularly high in essential vitamins and minerals, especially vitamin C. Therefore, It was common practice (especially in the Middle Ages) to let the poor scrounge the private agricultural lands surrounding the city for food in the early spring. One of the more common plants picked and eaten was the common dandelion which is high in those required vitamins and minerals. Since the land was privately owned by the rich and plants are owned by the land owner, such scrounging was against the law the rest of the year. So our northern Eurasian ancestors were saved from death by malnutrition by being able to scrounge and eat the common dandelion. The name dandelion is derived from the French, dent de lion, which translates as lion tooth and refers to the large sharp-pointed lobes on the leaves. According to the Web, the genus name, *Taraxacum*, is derived from the Greek taraxos (disorder), and akos (remedy), on account of the curative action of the plant. A possible alternative derivation of *Taraxacum* is suggested in *The Treasury of* Botany: The generic name is possibly derived from the Greek taraxo ("I have excited" or "caused") and achos (pain), in allusion to the medicinal effects of the plant. Officinale translates as "of the shops or from the pharmacy" referring to its being sold in health or drug stores of the day. This brings us to a use that I haven't mentioned. A search of Taraxacum officinale on the web Continued on page 3

Dandelion continued

will yield many, many sites touting (and selling) the medicinal uses of the common dandelion. Let's just say there are many different uses. Apparently it is also commonly sold in health food stores presently. It is of some note that at least one "scientific" site noted that there has been little testing of dandelion remedies on humans and where it has been done, effectiveness was found to be questionable. The site recommended caution. Dirk Walters, illustration by Bonnie Walters

President's Input

The results of our membership survey are now available for review. Interestingly, the topic that received the most responses by far was plant lists for popular trails and local parks. There was a group of topics that clustered in the middle. These included: trainings to identify rare, invasive, medicinal and edible plants and the milkweed project, followed by public native gardens and plant conservation projects.

Now that we are clear about our preferences, we will continue to plan for the engagement of our membership in related activities. With regard to plant lists, a number of these lists exist in a semi-finished form. Going forward, we will create groups of volunteers to review and verify the lists by walking the trails and taking inventories. Dr. David Keil or Cal Poly University has agreed to keep the lists updated and monitor them for accuracy.

Regarding plant identification training, we have a strong relationship with the Rare Plant Program statewide. The coordinator for the Rare Plant Treasure Hunts, Danny Slakey has presented two training sessions for our chapter in the past four months. A group of volunteers is now forming to help monitor and describe rare plant populations in the central coast region.

Interest in invasive plant ID and eradication has been brought to the attention of CNPS by local governmental agencies and will be developed later this year. Members interested in working with these agencies will be trained to assist in field identification and control.

As far as public native gardens and the milkweed project go, a number of our members are already active in these areas. With the drought continuing for another year and the monarch butterflies under attack, CNPS will bolster these efforts as we participate in demonstration gardens and exhibits by advocating the numerous benefits of diverse native plant landscapes.

Lastly, our chapter will continue its efforts to monitor land development projects in our region to insure adequate environmental review. CNPS has vast resources that can be utilized when assessing potential land development and disturbance. Volunteers will be needed to work with our conservation committee to thoroughly vet projects prior to approval and to voice their opinions when these project come up for public comment. Bill Waycott

The Book Table

On Saturday, March 7, June Krystoff-Jones, our new CNPS-SLO Chairperson for General Sales - Books, T-shirts and Posters arranged for our chapter to have a booth at the Dana Adobe Spring Vendor Faire in Nipomo. By doing this she was able to reach people in the southern part of SLO Co. and Northern Santa Barbara Co. It was a warm day, the fields were green, the sky blue and there was a gentle breeze blowing. Book sales were slow but the new selection of colorful T-shirts were selling. I went along to help out and I had a terrific time. I want to encourage members who may be interested in our community outreach to join June and help her out with sales. It is really quite rewarding talking up California native plants with the general public and a lot of fun too. Mardi Niles



June at the CNPS booth at the Dana Adobe Spring Vendor Faire

Conservation

CNPS addressed the SLO County Planning Commission three times, and the Board of Supervisors once regarding plans to change local zoning to allow solar and wind projects to be 'fast-tracked'. As a result it seems CNPS will be notified when a project enters the fast track system, and in a surprise move, County said it let us look at botanic reports. We also got the maximum acreage to be considered by a ministerial position to be reduced from 160 acres to 40 acres. How much of this will stick when the Board of Supervisors make a decision on March 24th, but I don't expect to get much more in the way of concessions.

As I stated last month, CNPS is strongly for alternative energy, but just want to avoid needless destruction of valuable habitat in the process. We had requested that the requirement that land be "disturbed" before entering Fast Track be extended to 40 acres rather than the current cap of 20 acres. CNPS has been hanging out all on its lonesome in this issue, so there does not be much political pressure to give us what we want.

Given that CNPS, upon being notified about a project, could warn of the potential presence of rare plants, we are going to try to locate the positions of all plants of CEQA significance that may exist in herbarium records. That way, when we are notified, we can make an intelligent response.

I was asked to go on a tour of the Topaz Solar Farm with a group of people to look at the conditions inside the panel array blocks. I am happy to report that they were surprisingly good, with grass and fiddleneck being more robust under the panels that in open areas. As several people have addressed possible negative impacts to carbon sequestration when grazing land is converted to panel fields, it would seem that the way the panels have been designed won't have significant impact in this regard. It seems reduced evaporative stress counters the reduced light under the panels. Topaz will use sheep to graze under the panels, so much of their land has gone from dry grain farming to sheep meadow. One suspects that weedy native annuals such as fiddleneck and phacelia will persist on the site. Attempts to introduce native bunch grasses under the panels seem to be of their land has gone from dry grain farming to sheep meadow. One suspects that weedy native annuals such as fiddleneck and phacelia will persist on the site. Attempts to introduce native bunch grasses under the panels seem to be successful. **David Chipping**

Chapter Meeting

The April Chapter meeting is the **Malcolm McLeod Annual Field Trip to Shell Creek**, Saturday, April 4. See Field Trips.

Tenth Annual Cambria Wildflower Show

Saturday, April 25, 12:00-5:00 Sunday, April 26, 10:00-4:00

Try to imagine the visual feast of more than 500 bouquets of wildflowers – and all under one roof! The Cambria Veterans' Building, at Main Street and Cambria Drive, will be the venue for a display of Fresh Wildflowers collected from the Monterey County line to the Morro Bay Estuary and from the coastal bluffs to the ridge of the Santa Lucia Mountains. Each year Friends of the Fiscalini Ranch Preserve and volunteers put on a bigger and better show than the years before, in the past drawing over 400 visitors and showing over 500 specimens. CNPS will again be there with a large assortment of wildflower and plant literature. This year's show will be dedicated to Nolan Coogan, photographer and one of the founders, who died of pulmonary fibrosis at the end of 2014. For more information or to volunteer to help, call 927-2856 or e-mail ffrpcambria@sbcglobal.net. Do you like to talk about native plants with like-minded people? Your chance is coming up!

CNPS could use a few people to help staff our book and information booth on Saturday the 25th. If you could support us for two hours or more please contact June Krystoff-Jones @ junerecycles@charter.net or 772-4235.

Field Trips & Events

Saturday, April 4, 2015, Malcolm McLeod Annual Field Trip Meeting at Shell Creek. Join us to explore and appreciate the remarkable and unique display of annual and perennial spring wildflowers in eastern San Luis Obispo County. Meet at the SLO Vets Hall, 801 Grand Ave. (corner of Grand & Monterey Blvd) at 8:30 a.m. and/or the Santa Margarita park and ride (freeway exit, State Route 58 at Hwy 101) 9:00 a.m. We will caravan from there. It is recommended you arrange your ride ahead of time. Be sure to bring water, food, sturdy shoes, sunscreen, a hat, and layered clothing for warmth, if needed. For more information call Bill Waycott, (805) 459-2103, bill.waycott@gmail.com. Rain cancels.

Sunday, April 12, 2015, 9 a.m., CNPS and Sierra Club Spring La Purisima Burton Mesa Wildflower Walk: Meet at the La Purisima Mission Parking Lot, corner of Purisima and Mission Gate Roads (2295 Purisima Road, Lompoc) at 9 a.m.for this annual California Native Plant Society and Sierra Club spring tour of the beauties of the Burton Mesa Chaparral. This is turning out to be a fair year for wildflowers, annuals as well as shrubs. Optional afternoon tour. Sturdy shoes, lunch & liquids, camera and binoculars advised. For more information, call Charlie at 733-3189 or Connie at 735-2292.

Sunday, April 12, 2015. The Annual Hike to Coreopsis Hill (in the Guadalupe-Nipomo Dunes), 9 a.m. to **around noon.** This hike is sponsored by the San Luis Obispo Chapter of CNPS, the US Fish and Wildlife Service, and The Dunes Center, and led by Lauren Brown and Dirk Walters. Please arrive between 8:45 and 9:00. we are leaving from the south end of Beigle Road at the USFWS access road (fenced road). This is a moderate hike to the top of Coreopsis Hill, about 3 hours roundtrip. Dress in layers, bring water and snacks, and have your "Dune Mother's Wildflower Guide" by Dr. Malcolm McLeod for the trip. Long pants and closed shoes are recommended as the habitat is coastal dune scrub and there is the possibility of poison oak and ticks in the natural dune areas. For more information call Lauren Brown at 460-6329 or 570-7993. Heavy rain cancels this trip (light rain, bring appropriate clothing).

Directions from the north: Take Hwy 101 south from San Luis Obispo. Turn right (west) at the new Willow Road off ramp (Exit 180). Proceed west on Willow Road for about 4.3 miles, to Highway 1. Turn left (south) on Highway 1 and proceed for 2.7 miles, to Oso Flaco Lake Road. Turn right (west) on Oso Flaco Lake Road.

Proceed west on Oso Flaco Lake Road for 2.5 miles to Beigle Road. Look for a 6 foot tall wire mesh fence and galvanized steel gate.

Directions from the south: Take 101 north to Santa Maria and take the Main Street exit toward the town of Guadalupe. Turn right onto Highway 1 and head north to Oso Flaco Lake Road (about 3 miles north of Guadalupe), turn left onto Oso Flaco Lake Road and proceed 2.5 miles to Beigle Road (on left).

Parking: The gate will be open around 8:30. Please do not park on Oso Flaco Lake Road near the gate as there is not much room and it could be hazardous. There should be plenty of room to park along the USFWS access road. The Oso Flaco Lake State Park lot is another ¾ miles west of Beigle Road, if you need to use a restroom before the hike (there are none along the hike route). Note: Pets, tobacco products, or alcohol are not allowed on the Refuge, including the parking area. Pets may <u>not</u> be left in cars in the parking areas.

Thursday, April 16, 2015, 7:00 pm, Dr. David Keil, Wildflowers and Wildflower Places in San Luis Obispo County, Vets Hall, San Luis Obispo. Join us in celebration of California native Plant Week for Dr. Keil's captivating presentation demonstrating the broad botanical spectrum of flowering plants in our county. Come prepared with your notebooks to record the names of your favorite species.

Saturday, April 18, 2015, 9 a.m., Pine Mountain / Stadium Park, Atascadero.

This field trip will be an easy to moderate three mile hike with a 500 foot elevation climb on Pine Mountain in Atascadero. This is an excellent area to learn common trees, shrubs, and wildflowers in oak woodland and chaparral habitats. The walk leader will explain how to note different features on trees and shrubs to aid in identification such as leaves, bark, fruit, buds, tree shape and habitat. . Participants will be given a list of over 25 common trees, shrubs and wildflowers with key identifying features. Meet at the Stadium Park trailhead at the corner of Capistrano Avenue and Hospital Drive, below the Hwy 41 bridge. Be sure to bring water, snacks, sturdy shoes, sunscreen, a hat, and layered clothing for warmth, if needed. For more information call David Ledger at (530) 355-8542 (walk leader) or Bill Waycott at (805) 459-2103, bill.waycott@gmail.com. Rain cancels.

Field Trips & Events

Sunday, May 17, 9:00 a.m., Arroyo De La Cruz, North SLO County Join us to visit one of the "hottest" spots for botanical diversity in San Luis Obispo Co. Our leader D.R. "Doc" Miller will take us to see many of the unique species located on the coastal bluffs. The Arroyo De La Cruz area features a variety of plant communities and a number of endemics, found only in this relatively small area, full of rare and endangered plants. Meet at the parking lot of Spencer's Market in Morro Bay, 2650 Main Street, at 9:00 a.m. From there we will drive north with a brief stop at the Elephant Seal Overlook (9:30 a.m), to pick up any participants form Cambria and the North County, and then proceed on to Arroyo De La Cruz site. The field trip will last about 3 hours. For more information, contact Bill Waycott, (805) 459-2103, bill.waycott@gmail.com.

Friday evening, Saturday, and Sunday, May 15, 16, and 17, 2015, Sudden Oak Death Biltz

"Save the Date" – The SLO Chapter Sudden Oak Death Blitz will be the week-end of May 15 to 17, 2015. Training will be Friday, May 15 beginning at 6 p.m. Sample collection will be on your own time Saturday and Sunday, May 16 and 17. A bin in a central location (likely San Luis Obispo) will be set up for sample drop off by 6 p.m., Sunday May 17. Additional information will be posted on our chapter website (cnps-slo.org) and in the May newsletter, or you can contact Lauren for additional information (lbrown805@charter.net, 805-460-6329).

