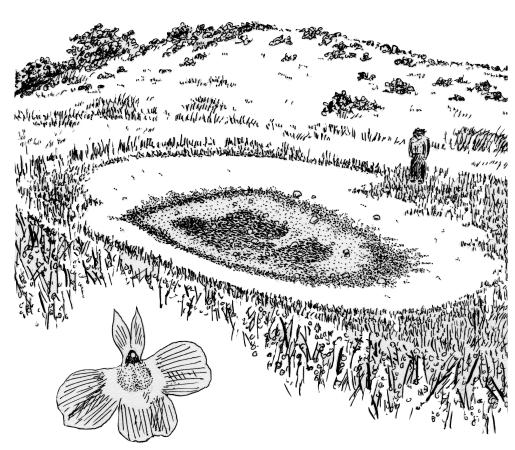
Obispoensis

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



@ 1993 Bource K. Walters

Vernal Pool with Downingia

About the Cover: For the second *Obispoensis* of this year, we are doing a repeat of a drawing Bonnie did for the banquet cover back in 1993. We're repeating this particular drawing because of the drought and in the hope that it will serve as sign that we really, really need rain! It was originally done in honor of Dr. Wayne Ferren's (then Curator of the Herbarium at U.C. Santa Barbara) program entitled "Creation and Restoration of Vernal Pools at Del Sur Reserve near Isla Vista, California." The vernal pool in Bonnie's drawing is one that occurs off the road to leading to Cerro Noroeste from California State Highway 166. It is on a shelf in the otherwise steep slopes of that mountain's foothills. This particular pool is a favorite stop for the Chapter, especially when there has been enough rainfall to fill it.

Vernal Pools occur where there is moderate to large sized "natural" depression with no outlet. The depression has to be large enough to capture enough rainfall to fill the pond to some depth. The water collects in the lowest point in the depression. There also must be an impervious layer under the pond that prevents the water from seeping deep into the soil. This impervious layer is usually a layer of calcium carbonate that forms where water seeping downward due to gravity is balanced by pull upward caused by evaporation. True vernal pools are a desert or semi-desert phenomenon. I suspect it goes without saying that not all temporary pools are vernal pools. For example, in San Simeon State Park there are extensive interlocking shallow pools surrounding small hillocks that are filled up by winter rains and are gone by summer. These are formed by animals that dig out the depressions and pile up the excavated dirt to form the mounds. This allows the animals a drier den during the rainy season. Back East, where it rains or snows most of the year, you will find temporary ponds that will last from many months. These are colonized by ordinary species more or less identical to those that inhabit the forest around them. Vernal pools will only last anywhere from a few days to a few weeks depending on their size and the amount of rainfall.

It is when the vernal pool lasts for weeks that they become particularly interesting. For plants, vernal pools are a particular challenge. The first plants to appear are those that can stand total emersion in the water. These are aquatic plants that usually live totally submerged in the water. Because the water is going to last for a very short time, these aquatic plants must have an accelerated life cycle to get from germination to fruiting. As the pool begins to dry up, plants that can tolerate saturated soils begin to germinate in a ring just inside and upslope from the water's edge. Again these plants have a difficult environment. They begin life with too much water and end up high and dry as the pool constricts away from them. The end result of this process is a series of bands produced by various

species that get their start under different soil water conditions. This banding is easily visible in Bonnie's drawing. One genus that is particularly typical of vernal pools *Downingia*. It is they that form a spectacular bluish band around the pool. Bonnie included a drawing of the flower of the common *Downingia* species found in this particular pond. It is *Downingia cuspidata*.

Bonnie's drawing was taken from a photograph, lost many years ago, that was taken on a Chapter field trip to Mount Able and Mt. Pinos. Although the person shown in the drawing is drawn much too small to be recognized, notes from the time indicate that it is Sybil McLeod who served the Chapter in many different ways. Yes, she was also the wife of Dr. Malcolm McLeod who was a past Chapter President, Historian, and for many years the Rare Plant Committee Chairman. To be a committee chair in this Chapter usually means you do all the committee's work. & Dirk Walters, illustration by Bonnie Walters

President's Note

Last month I voiced concern about the drought. Since that time we have only a tiny rain, and we are seeing real consequences. Of great concern in the fate of the Morro manzanita populations in Montana de Oro State Park. Those opposite the entrance to the sandspit parking lot are extremely stressed, and so are populations along the Bloody Nose Trail. Increased mortality of Monterey pine is being observed in Cambria. If this continues there is a very real possibility of local extirpation, and another completely dry year could snuff the species. I am holding out hope for a "pineapple express" to hit us, but we are running out of time.

As there is a significant chance that March will not produce much rain, we need to think seriously about sustaining native plant gardens. Our horticultural experts will be developing lists of the least-water-demanding plants and what they look like, and we are hoping that members will provide some information on their most successful drought resistant plantings. Las Pilitas Nursery has some excellent web-based information. As local water supplies are in jeopardy, we also must learn how to harvest grey water from laundry and bathroom and use it effectively in deep watering shrubs. My shower tool kit is a plastic (no scratch) dust pan and rectangular plastic wastebasket for scooping water from the floor of the plugged shower, which I then pour into buckets. Having several half filled buckets is easier to carry into the yard that filled buckets. Mold a basin around the base of the plant to be watered to enable deep watering. \$\mathbb{R}\$

David Chipping

Conservation

The big worry of the month is the scoping for the EIR on the expansion of the Arroyo Grande Oil Field in Price Canyon. Freeport McMoran Oil & Gas, formerly PXP, has submitted a Conditional Use Permit to allow for Phase V development, which would be to expand production of an existing oil field. It includes the following elements: addition of 8 new well pads, modification of 33 existing pads and the use of other existing pads to provide for up to 450 new wells (oil, steam injection, re-injection, replacement); 100 of these new wells would be 'replacement' wells; installation of additional production and steam lines to the new wells; expansion of existing electrical power system; and replacement of one existing pipe bridge over Pismo Creek. This expansion is expected to increase daily oil production from the currently approved 5,000 barrels to 10,000 barrels. No hydraulic fracturing is proposed. Completion of previously approved Phase IV development is ongoing, and there is no public information on the degree to which required mitigation to that and earlier phases of the project has been successful or will be undone by the current project.

The project will destroy up to 1,650 oaks, perhaps far more if CDF fire buffers were not included as part of the project. CNPS believes replacement habitat for destroyed oaks must be ensured. Such habitat will be difficult to find, and full ecosystem mitigation will be impossible as county mitigation can be a pathetic four tiny oaks for every mature oak, It appears over an acre of the Federally Endangered, California Rare, Pismo Clarkia will be destroyed, as well as the List 1B San Luis Obispo lupine (our chapter emblem), Santa Margarita manzanita, Brewer's spineflower, and also a strong possibility of impacting Indian Knob mountain balm, black flowered figwort, mesa horkelia, and San Luis mariposa lily. That is more 1B species in a single project that I have ever seen. The cumulative impacts of Phase V on each of these plants must be viewed in the light of the previous damage from earlier phases. ** David Chipping

Chapter Meeting

Thursday, 7:00 p.m., March 6, 2014, AARP Center, adjacent to the Atascadero Lake Pavilion, Atascadero.

Wild at Heart: Secrets of a Good Natured Gardener (and Garden) by Sharon Lovejoy

Discover the magic of gardening with natives and the nature they will entice into your yard. It's all about working hand in hand with mother nature. Author Sharon Lovejoy depends on a team of birds, bees, bugs, worms, and native plants to keep her garden healthy. Sharon will introduce you to some often overlooked and under-appreciated critters who can help transform your soil and garden into a verdant and bountiful landscape.

Sharon Lovejoy is an award winning, best selling author and illustrator of ten books, including *Trowel & Error:* Over 700 Shortcuts, Tips and Remedies for the Gardener, A Blessing of Toads: A Gardener's Guide to Living with Nature, and gardening classics Roots, Shoots, Buckets & Boots and Sunflower Houses. Her newest book is My First Bird Book and Bird Feeder.

In addition to her own books, Sharon has contributed to *The Butterfly Gardener's Guide* by the Brooklyn Botanic Gardens and *Growing Fruits and Vegetables Organically* by Rodale Press. For 13 years, she was a contributing editor for Country Living GARDENER magazine with a regular nature and garden column named "Heart's Ease" after the garden shop she founded in Cambria.

Among other honors, Sharon has received the National Outdoor Book Award and has been a guest on NBC's Today, The Victory Garden on PBS, numerous programs on HGTV, and on public and regional radio and television shows from coast to coast.



Our March meet-

ing is in Atascadero in the Atascadero Association of Retired People building adjacent to the Lake Pavilion at Atascadero Lake Park. From 41-West turn on Pismo (immediately southwest of the zoo) to the lake, or those of you coming from the south can take the Santa Rosa off-ramp and go west to the lake, turning right (north) at the fork onto Marchant Way. Pismo and Marchant meet at the Pavilion and AARP building. If you are on Hwy. 41, don't park in the main parking area as AARP is on the other side of the park, but you can walk south along the lakeshore to the Pavilion if you wish.

Field Trips

Chaparral CNPS Field Trip at the La Purisima Mission: The California Native Plant Society and Lompoc Valley Botanic and Horticultural Society will hold their annual winter field trip to the Burton Mesa Chaparral on the La Purisima Mission grounds. Meet at the east end of Burton Mesa Blvd. (1550 E) in Mission Hills at 9 a.m. for a chance to see the early bloomers and interesting scenery. To reach Burton Mesa Blvd. go to State Route 1 north of Lompoc

Saturday, March 1, 2014, 9 a.m. Late Winter BMC

to see the early bloomers and interesting scenery. To reach Burton Mesa Blvd., go to State Route 1 north of Lompoc. At the signal where SR 1 turns down hill towards Lompoc, take Harris Grade Road north to Burton Mesa Blvd., and turn right (east). For more information call Charlie Blair at 733-3189.

Saturday, March 1, 9 a.m., Lopez Lake. Join Audubon and the California Native Plants Society on a bird and plant walk. Expect to hike about 4 miles with a 200 foot elevation gain. We will be looking for waterfowl, which should be plentiful and visible along the trail. If we are blessed with some decent rainfall, we may also see early spring flowers. Meet at the Mabel French Boy Scout Camp. Directions: From Arroyo Grande, follow the signs towards Lopez Lake. After crossing the dam, but before entering Lopez Lake County Park, turn right on Hi Mountain Road and proceed 0.8 miles to the junction of Upper Lopez Canyon Road. Bear left on Canyon Road and proceed 3.6 miles to the entrance of the Boy Scout Camp, on the left (west) side of the road. Park in the parking lot, where restrooms are available. No day use fees are charged as this area is outside of the fee area. Bring water and snacks, and dress in layers for changing weather. A hat, sunscreen, and sturdy shoes are recommended. For more information, call Bill at (805) 459-2103 or email bill.waycott@gmail.com. Rain or the threat of rain cancels.

Sunday, March 23, 2014 Annual Hike to Coreopsis Hill, 9:30 to 12:30, sponsored by CNPS, The Dunes Center, and California State Parks; led by Lauren Brown, Dirk Walters, and other local botanists. The hike will leave from the State Parks Parking Lot at the end Of Oso Flaco Lake Road. We will have parking passes for the hike, courtesy of State Parks. We will walk back up Oso Flaco Lake Road to Beigle Road and access the dunes through private property. The access is through an active agricultural field; in appreciation of being allowed to use this access, we will review and follow the all procedures requested by the field manager on our way into and exiting the dunes.

This will be a casual walk through the dunes to the top of Coreopsis Hill. This is a moderate hike, about 3 hours round-trip. Dress in layers, bring water and sun screen, and have your "Dune Mother's Wildflower Guide" by Dr. Malcolm McLeod for the trip. For more information call Lauren Brown at 460-6329 or 570-7993. Heavy rain cancels this trip (light rain, bring appropriate clothing).

Directions: If you are in the SLO area or points north, we will meet at 8:30 a.m.outside the SLO Veterans Hall then head south (see directions below).

Coreopsis Hill continued

Directions from the north: Take Hwy 101 south from SLO. 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, road ends at the parking lot.

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.

Parking and Access: Please park in the Oso Flaco Lake State Park lot as parking along Oso Flaco Lake Road is hazardous and should be avoided. Rest rooms are available in the parking lot (there are none along the hike route). Pets are not allowed in State parks and should <u>not</u> be left in cars in the parking area.

Saturday, April 5, 2014, Malcolm McLeod Annual Field Trip Meeting to Shell Creek co-lead by Dirk Walters and David Chipping. This will be our monthly meeting for April. Meet at the SLO Vets Hall, 801 Grand Ave. (corner of Grand & Monterey Blvd) at 8:30am and/or Santa Margarita at 9:00am. Bring your "Wildflowers of Highway 58" plant guide by Dr. Malcolm McLeod or plan to purchase one for \$10.00 on the trip. For more information call Dirk Walters at 543-7051 or Lauren Brown at 438-4645.

Sunday, April 6, 2014, 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 Rd. 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

Saturday, April 12, 2014 9:00 a.m., Wildflower, Native Plant Week, and Earth Day Weekend at Figueroa Mountain: The Santa Lucia District, Los Padres National Forest will hold one of its Wildflower Weekends on Figueroa Mountain in conjunction with the California Native Plant Society. This tour will feature a local celebration of the third California Native Plant Week (3rd week in April, the 14th - 21st this year). Meet at 9 a.m. at the Fire Station on Figueroa Mountain Road. Turn left at the SR 154-Figueroa Mtn. Road intersection near Los Olivos, and proceed to the Fire Station parking lot. This will be a "drive and stroll" tour of this year's display.

Sturdy shoes, lunch and liquids, and camera and binoculars recommended. Call Helen Tarbet at 925-9538 ext. 246 or Charles Blair 733-3189 for details.

Hoover Award

This Year's Hoover award recipient, Suzette Girouard, grew up in the La Crescenta area located east of Los Angeles. Suzette got her love of gardening from her mother and also her uncle Ed who had an extensive vegetable garden in his backyard. While still in high school she worked at Descano Gardens in La Cañada Flintridge solidifying her love of plants. During these early years Suzette knew she wanted to study horticulture and especially viticulture. Suzette started her dream by attending Fresno State University where she graduated in 1986 with a degree in Horticulture / Viticulture and a minor in Agriculture Business. Around 1994 she moved to Pennsylvania where she lived for about ten years. During the fall of 2004 she returned to California and moved to San Luis Obispo. After searching the web for plant groups in our area, she became interested in the California Native Plant Society. After attending her first meeting she was hooked and joined. It was not long before this hard worker started volunteering for many projects including ,weed removal, banquet preparations, meeting clean up, and plant sale coordinating. As all of our previous Hoover award recipients, Suzette has gone the extra mile with her commitment to help better the society and our local chapter. Congratulations to Suzette Girouard.



Natalie Rossington



Suzette Girouard

Malcolm McLeod Scholarship

Natalie Rossington has been chosen to receive the Malcolm McLeod Scholarship by the SLO CNPS board of directors and has been awarded the \$850.

Natalie Rossington is a Masters student studying Biology at Cal Poly where she also received an undergraduate degree in Soil Science. She enjoys botanizing in the spring, photography, and cooking in her free time. She grew up in Santa Barbara and currently lives in Morro Bay.

Natalie will be studying the distribution and ecology of native populations of *Layia jonesii* and *Layia platyglossa* in Reservoir Canyon by using a reciprocal transplant. She will also investigate the pre-zygotic and post-zygotic barriers between the two species by performing a hybridization study. She hopes to find new populations of *L. jonesii* throughout San Luis Obispo County during spring 2014 and 2015.

Obispoensis is published October through June except January. Items for submittal to *Obispoensis* should be sent to rhotaliing@charter.net. The deadline is the 10th of each month. Botanical articles, news items, illustrations, photos, events and tidbits are welcome! Visit the websites:

www.cnps.org & www.cnpsslo.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*.



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Fuchsia flowered gooseberry Ribes speciosum

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