

Obispoensis

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



APRIL 2010

Phacelia distans Common Phacelia

The plant featured on the cover is a species from one of the largest genera in California. The genus is *Phacelia* and it contains over 90 species, many of which have several varieties. Dr. Hoover in his SLO County flora recognized 18 species growing in the county. The generic name *Phacelia* is derived from the Greek word, *Phakelos*, which means a cluster. The cluster referred to is the flower cluster or inflorescence. This particular one is the most easily recognized of all due to its resemblance to the coiled tail of a scorpion. Botanists call it a scorpioid cyme. Cyme, is a technical term referring to how the flowers initiate relative to the growing inflorescence tip. In a cyme, the inflorescence tip or apical meristem transforms itself into the first flower, which is then followed by flowers produced from trailing growing regions or meristem. Unfortunately, in a scorpioid cyme, this development pattern is totally obscured without careful developmental study. Phacelias have also been called scorpion weed. Most California phacelia species have no common names listed. The one Bonnie drew for Dr. David Keil and my 4th ed. Taxonomy Text is not the most showy, but is certainly one of the more common and variable species in our area. It is *Phacelia distans*. In wildflower books it is given the common names of common or fern phacelia and wild heliotrope. Heliotrope refers to a group of garden plant species in the genus, *Heliotropium*, which share the same general inflorescence type. Common phacelia leaves vary from deeply pinnate lobed to twice compound and thus resembling typical fern leaves. Flower color varies from dirty white through pale purple to blue. The species is found in almost every open habitat in the county. It can even be found occasionally in oak woods, but is definitely rarer there.

Some of you might be wondering why I haven't mentioned the plant family to which phacelia belongs. This is because it has been changed relatively recently. As some of you may know, comparisons of DNA sequences have become more and more efficient in recent years. This has led to a new set of characters with which to assess relationships. Unfortunately, DNA sequencing is still not a field procedure, so often relationships recognized by this method are not obvious in field types. Up until recently, phacelias have been placed in the water leaf family or Hydrophyllaceae. This family was easily recognized by its conspicuous scorpioid cyme, symmetrical flowers, capsule fruits and usually compound leaves. Unfortunately the scorpioid cyme and symmetrical flowers were shared with the borage or forget-me-not family (Boraginaceae). Again, in classical taxonomy books, the Borages were placed close to the mint family (Labiatae or Lamiaceae). Borages and mints produce only four seeds in their ovary. The ovary then matures by shrinking around each seed like shrink-wrapped vegetables in the produce section of a

supermarket. In the past, botanists assumed that flower characters were more important in assessing relationships than were inflorescence characters. As you might be guessing, the new DNA work indicates that the inflorescence is the more important and the waterleaf family is more closely related to the borage family. Not only that, DNA evidence indicates that the waterleaf genera should be totally integrated into the borage family. So, in spite of what you read in any flower book older than five years, phacelia is in the borage family.

Dirk Walters, Illustration by Bonnie Walters



President's Notes

Spring is sprung. I have already found outstanding masses of chocolate lilies in Morro Bay State Park and on the serpentinite outcrop along the East Boundary Trail in Montana de Oro. The shooting stars on at Red Hill Road and Highway 58 are outstanding, and color is already starting on the Carrizo Plain. Delphiniums are on the serpentinite behind Lizzie Street in SLO City. I am nearly through some teaching obligations at Cal Poly and will be running everywhere recording the flowers. If you would like to join a midweek ad-hoc flower seeker group call me or email me and we can self organize weekday excursions. On a more serious note, the program to monitor rare plants on the Carrizo is getting organized, and we will need people with portable GPS to locate and record populations of rare plants. Again, call me.

That darned Cuesta Grade. We took our monthly meeting up to Atascadero Lake Pavilion, and as expected, we lost a lot of our regulars. What was surprising was that the northerners didn't show up in force, unlike the 2009 program which was SRO, and we found our room half empty. Our Board really does want to encourage greater member participation, through programs and activities in the northern and southern reaches of our area. I would welcome advice as to how we can do that, and I would love to add a "North County Rep" to our Board to help with a 2-way communication. Look for us on Sunday April 18th when we will have a table at Atascadero's Earth Day celebration.

Remember that our April meeting is a field meeting in celebration of Malcolm McLeod, and I expect that the flowers will be magnificent.

David Chipping

∞ Field Trips ∞

Saturday, April 3, Annual Malcolm McLeod Memorial Field Trip Meeting to Shell Creek led by Dirk Walters and David Chipping. Meet at the SLO Vets Hall at 8:30 a.m. and Santa Margarita Park & Ride, on the south side of Hwy 58, just east of Hwy 101 intersection, at 9:00 a.m. (Continued on page 3)

Field Trips continued

Our first stop will be at the Santa Margarita Park to use the bathrooms, there will be no other bathrooms available after that point. We will then drive east on Hwy 58, about 18.5 miles, and make a left hand turn on to Shell Creek Road. Park there and the group will meet somewhere near the windmill. We will walk through the fields along both sides of Shell Creek Road looking at wildflowers. We will visit spots with shell fossils, that gives this area its name. We will meet as a group for lunch somewhere along Shell Creek Road. This will end the morning part of the trip. In the afternoon some people may wish to explore other spots in the area, while others may want to return to town. Consider the afternoon options when making travel arrangements. Bring water, lunch, cameras, dress in layers and don't forget your "Wildflowers of Highway 58" plant guide by Dr. Malcolm McLeod or plan to purchase one on the trip. For more information call Dirk Walters at 543-7051 or Mardi Niles at 489-9274.

Saturday, April 10, 9:00 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 for this annual spring tour of the beauties of the Burton Mesa Chaparral. This wet year may turn out to be a good 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, 735-2292.

Sunday, April 11, 10:00 a.m. This special event is a Field Trip to the Tejon Ranch for our SLO-CNPS chapter members and friends. Tejon Ranch Conservancy, led by one of their conservation staff members, will host a 3 to 4 hour hike, choosing the best location to see the spring wildflower bloom within the 240,000 acres Tejon Ranch in the Tehachapi Range. To decide if this trip is for you please visit the website: <http://www.tejonconservancy.org/>, then go to Events, 2010 Community Hike Program, and Under General Information scroll down to "For more information on what to bring and restrictions, click here."

Traveling to the Tejon Ranch: It is about a three hour drive from SLO to the Tejon Ranch taking Hwy 101, Hwy 166 and Hwy I-5. Specific traveling instructions will be emailed to registered participants once the location for the best spring bloom is determined by the Tejon Ranch Conservancy leader.

To Register: Because SLO-CNPS has made special arrangements with the Tejon Ranch Conservancy all participants must register prior to this event. Please contact Lynne Peterson, email: lynne1112@hotmail.com, or by phone: 706-0301, to make your reservations. For additional information: Contact Mardi Niles, email: mlniles@sbcglobal.net, or by phone: 489-9274.

Saturday, April 17, 9:00 a.m. Los Padres National Forest, Santa Lucia District, in conjunction with the California Native Plant Society, holds its annual **Wildflower Weekend on Figueroa Mountain.** Meet at 9 a.m. at the Fire Station on Figueroa Mountain Road. Turn left at the SR 154-Figueroa Mountain Road intersection near Los Olivos, and proceed to the Fire Station parking lot. This is a "drive and stroll" tour of this year's spectacular 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.

Sunday, May 2. The collaborative MCAS and CNPS picnic at Santa Margarita. Save This Date! Details about this day of boating, wildflower hikes and bird watching walks will follow in the May Obispoensis. Lunch is a joint pot luck celebration with lots of good food and plenty of desserts. Admission is free to Santa Margarita Lake for all participants. Families are encouraged to attend. For more information contact Mardi Niles at 489-9274 or mlniles@sbcglobal.net.

Saturday, May 8. A morning spring visit to Holly and Doug Anderson's property on the northern slopes of the Santa Lucia Range. We will start at 9:30 a.m. at 4849 See Ranch Lane, Templeton and be finished by 12:30 p.m. Here is an opportunity to visit and walk on a 20 acre parcel of land that has been owned by the Andersons for twenty years. This secluded spot with oak and bay laurel woodlands, an open field with wildflowers and a seasonal creek with Salinian bedrock mortars. When the Andersons acquired this property much of it was covered with a variety of thistles, mustard, and hemlock. The property now has wild rye, California brome, meadow barley as well as yerba buena, wood ferns, poison oak and a variety of wildflowers. In May we can expect to see Chinese houses, hedge nettle, checker lilies and fairy lanterns along the ½ mile loop trail that goes into the woodlands and back to the meadow. We will visit the bedrock mortars in the seasonal creek and view the Anderson's vegetable garden and chickens along the way. In making your travel plans try to arrive at the parking area by 9:15, before walking to the Anderson's meadow. **Coming from the south:** take Hwy 101 to Vineyard Drive/Templeton Exit and turn left onto Vineyard Drive. Follow Vineyard to intersection on Hwy 46. Turn left on to Hwy 46 and drive 2 miles west to Jack Creek. **Coming from the north:** Take Hwy 46 west 2 miles past Vineyard Drive to Jack Creek. **From all directions:** Turn right onto Jack Creek and a SHARP LEFT at the mailboxes. Take a right over a bridge and on to a dirt road and continue less than ½ mile to a vineyard gate. Follow the signs for parking and directions to the Anderson's property. Plan to make your own travel arrangements. For additional information please contact Mardi Niles at 489-9274 or email her at: mlniles@sbcglobal.net.

In Celebration of Malcolm McLeod

I attended Cal Poly SLO from January 1980 to June 1982. My very first term, I was thrilled to take Plant Taxonomy, the lecture from Dr. Keil, the lab from Dr. McLeod. Dr. Keil ran a rigorous and fascinating course. Dr. McLeod was laid back and very supportive; he knew that some students had a hard time with identification keys and gave them extra help. Not me; I bought my copy of P.A. Munz's *Flora of Southern California* when I was 15 and did my best to learn and memorize it. I thoroughly enjoyed both aspects of the course. I even helped some of the students learn the keys. We had interesting and hardworking students in that class. My lab partner, Joel Miller, was bongo player for "Weird Al" Yankovic. I met Al through Joel. Al went on to become a popular entertainer. Joel became a horticulturalist for a movie studio (he populates outdoor sets with plants & runs their nursery). Dr. McLeod realized that we were advanced students and took a liking to us.

One day in lab, we were keying out something in the Liliaceae. In the family treatment, I noticed a species called *Fritillaria biflora*, chocolate lily, something I'd never seen. I asked Dr. McLeod if he knew the species. Not only did he know it, he said it was in flower right now in Poly Canyon. It was pouring rain all day but he graciously offered to lead me and another interested student to see it! The three of us met after class, umbrellas in hand, and walked from Fisher Hall to the end of Poly Canyon, then a right turn onto a trail that skirted a hill. There on the hill were the chocolate lilies in full wondrous flower. I got down low in order to look up inside the flower - wow! It was worth the walk in the rain.

I will never forget this charming man and his very kind personal introduction to this lovely wildflower. I think of him every time I see the plant.

Bob Allen

Research Associate, Rancho Santa Ana Botanic Garden



Horticulture

With spring just around the corner it's a good time to go over a check list for April's garden activities. The first and most important is to mulch for weed control. Weeds are highly susceptible to mulch when it is applied about three inches thick. Covering the tops of tall weeds can be accomplished by smashing them down first with your feet before covering. Hand pull weeds within nine inches of all newly planted trees and shrubs. It's best to keep mulch one foot away from all plant trunks. Second, remove dead wood from trees and shrubs. Dead wood is any branch which is not green when you scrape its bark with a sharp knife. Cut branches back all the way to the main trunk. This way you don't leave any stumps (I call these coat hangers). Cutting dead wood is especially important in areas with high fire hazards. Cut natives such as Ceanothus and Manzanita after they are done blooming. When you trim blooming trees and shrubs it takes away food sources for birds and insects and should not be done.

Next on the list, watch for insects. Insects are just waiting for the warm weather to arrive and with a little investigating you can use a soap and garlic spray to kill mites, aphids, and thrips before they get a foot hold. These insects love native plants and can cause a lot of problems later in the summer. Walking around the garden at night can be great for your health and it also is a good time to

spot night crawling insects such as weevils, certain caterpillars and snails.

April is also a good time to take plant cuttings. The warmer nights bring on new tip growth. This new growth is perfect for taking soft wood cuttings. If you have a cold frame or a sunny room you can try your luck at it. Use Rootone® to help root formation. Rootone® is a synthetic plant hormone available at garden centers. Dip the cut tips of the cutting in the Rootone® Then plant the cuttings into a flat of perlite. You can also start seeds of your favorite perennial natives.

April is a good month to sow seeds of perennials such as buckwheat, lupine, or wallflower. Use a well drained potting soil to sow seeds on. Cover seeds with a half sand and half soil mix. Water weekly and keep it in a very sunny place. Fertilize certain native plants. Some natives such as penstemon or pacific coast iris like a shot of slow release fertilizer such as fish emulsion.

Lastly get out the pencil and paper and draw down some new ideas. Some suggestions are: create new paths, reduce grass areas and re-landscape with a grass substitute, or design some new rock retaining walls.

Well, I hope this information helps you to get off to a good start this year. Until I see you again, happy spring and happy gardening.

John 

BOOK NEWS----



We've added a new book "Carrizo Plain National Monument" to our book table offerings. This is a natural history guide by Robert and Jan Sisk. Recommended by George Butterworth, our CNPS Carrizo expert. The book covers the geology, animals, habitats, night sky, human activity, wildflowers, birds and even the San Andreas fault. If you enjoy visits to the Carrizo, you'll find this to be a great addition to your bookshelves. \$25

And of course this is the time of year to mention our OWN guide to the Wildflowers of the Carrizo. Only \$10 and the BEST wildflower guide ever!
-Heather

CNPS Education and Book Booth

CNPS will be participating in the following activities during April. Be sure to attend some of these events and show your support. Earth Day at Atascadero Lake on Sunday, April 18 from 11:00 a.m. to 4:00 p.m. and Earth Day in San Luis Obispo Mission Plaza on Saturday, April 24. Linda Chipping

Sixth Annual Cambria Wildflower Show

Friends of the Fiscalini Ranch Preserve will sponsor the Cambria Wildflower Show on Saturday, April 24 from noon to 5 p.m. and Sunday, April 25 from 10 a.m. to 5 p.m. You can come see a display of fresh wildflowers collected on the day before. The purpose of the show is to enhance the enjoyment and knowledge of wildflowers all under one roof. Each flower sample will be labeled with its botanical name and family, along with its common name.

Trained collectors have permits and collect only from areas that have an abundance of each type of flower. Each year the show is different depending on growing conditions.

The show will be free to students, but for others a \$3 donation at the door to is asked to help cover costs. A bibliography will be provided to everyone attending. This will be a valuable aid to those who would like to continue investigating the wildflowers they see at the show and in nature.

A species list of over 400 different plants, plant identification books, wildflower seeds, wildflower photo cards and other items will be for sale.

The Wildflower Café will also be selling coffee, water, sweets and other goodies to add to your enjoyment as you walk through the display or sit awhile at a table. Contact: Jo Ellen Butler, (805) 927-2856,



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



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

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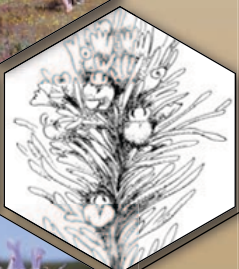
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April Meeting
Shell Creek
April 3

