(cover) Clarkia unguiculata

Elegant Clarkia

About the Cover: The plant on the cover of this issue of the Obispoensis is the elegant clarkia or mountain garland (Clarkia unguiculata). It’s another drawing by Mardi Niles, using Prismacolor Verithin color pencils. When I first saw Mardi’s work, they were a fantastic study of the development of an inflorescence and the opening of flowers. I remember them as pencil sketches. Later, I saw them as beautiful finished watercolors. Unfortunately, our mailed chapter newsletter often has a grey-scale print on the cover. If your copy of the Obispoensis is in grey and white go to the Chapter web site to see it in its fantastic colors.

Now let’s talk about elegant clarkia. It gets that name because its flowers are beautiful (and elegant) and the plant stands tall (up to 3 feet or more) which adds to its elegance. As can be seen, the 4 petals have an unusual shape. They have a long, narrow base and a broad triangular tip. Botanists call this shape ‘spatulate’. The sepals are fused into a disk that’s attached below the attachment of the 8 stamens. Note that only four of the stamens look like normal, functioning stamens with large anthers and the other four have tiny anthers. I don’t know if they have any function or not. Note the single flower bud shown in the picture. It is deflexed or has its tip pointing downward. This is an important character used to separate groups of species in the genus, Clarkia.

Elegant clarkia is endemic to California where it ranges throughout the foothills of the Coast and Sierra Nevada ranges. It seems to be rare or absent away from hills. The distribution map for the species in California resembles a big ‘O’ with the Central Valley inside the ‘O’. I find that the easiest place to find elegant clarkia growing is on roadsides, especially roadsides passing through hilly country. It is especially noticeable growing with thistle sage at Shell Creek.

Dr. Keil’s SLO County Flora (in preparation) will be recognizing a close relative of the Clarkia unguiculata, C. tembloriensis. C. tembloriensis, as its name implies was probably described from plants growing in Temblor Range. Dr. Robert F. Hoover, in the original San Luis Obispo County Flora, has a relatively long discussion of the two species that ends in his concluding that the two species intergrade so much in eastern San Luis Obispo County that it would not be productive to try and separate them. Well, we’ll have to wait to read what Dr. Keil has to say about them when his new County Flora is available.

Elegant clarkia makes a wonderful addition to a native plant garden; especially in a flower bed set aside for annuals. I first became acquainted with the plant in Ralph Baker’s Shell Beach front yard. Ralph was the acting Chapter President when I joined the Chapter back in 1970. It was Ralph’s clarkias that inspired me to see if it would grow for me despite my very brown thumb. Since it is said to grow readily from seed, I obtained my first seed at a Chapter Plant Sale many years ago. Today, it now grows luxuriantly in my front yard in San Luis Obispo adobe clay despite most of my horticultural sources recommending well drained soils. Seed from my adobe grown plants were at the SEED EXCHANGE set up before our October Meeting and will also be available at the upcoming PLANT SALE the first Saturday in November.

DIRK WALTERS

Photos of Cal Poly herbarium sheets showing C. tembloriensis on the left (with calyx and ovary with tiny little hairs), and C. unguiculata on the right, with calyx and ovary bearing long spreading hairs.

Moving? No Newsletter? Please Let Us Know Your New Address. Contact <dchippin@calpoly.edu> or write us at California Native Plant Society, P.O. Box 784, San Luis Obispo, CA 93406
Please join us on Thursday November 7 for a talk titled "Can you be a Sprouting Pine Nut?" about a plant community with some notoriety in our neck of the woods: Monterey Pine Forest. The story isn’t about the trees, which seem to grow everywhere in the California landscape and are found around the world in vast plantations – the story is about the natural Monterey Pine Forests of the Central Coast and the biological, economic and inspirational values these plant communities sustain. Nikki is a Central Coast native who will share the ecological story about Monterey Pine Forests and how a small group of pine enthusiasts in Carmel came together nearly 30 years ago to advocate for the conservation of native forest habitat.

Nikki Nedeff is a Monterey County native with an enduring love of wild places and open spaces. Her professional experience spans more than three decades with non-profit conservation organizations and public resource management agencies in land acquisition and stewardship positions. Nikki’s academic background includes degrees in Biogeography from UC Berkeley, where her graduate work focused on riparian plant ecology. She teaches plant community ecology each spring at California State University Monterey Bay and works with the Big Sur Land Trust as Associate Director of Conservation.

Email: nikki@ventanaview.net

Member Corner
Welcome New and Renewing Members: Thank you.. For membership-related issues, contact LynneDee@althouseandmeade.com

Charles Blair, Linda Robertson and Michael Kurland, Liz Gasper, Diana and William Waycott

WANT COLOR? The latest and past editions of our monthly newsletter Obispoensis is available for download as a PDF file from the link below. Find out about upcoming events, field trips, local issues impacting native plants, invasives to be on the watch for, horticulture tips for growing natives, contact info and more in each issue: http://cnpslso.org

Having trouble opening the file? You need to have Adobe Acrobat Reader installed on your device. It can be downloaded here: https://get.adobe.com/reader
The Garden Corner

Spider mites, aphids, thrips, oh my! Sadly, along with fall colors comes an invasion of these pesky insects. And trust me, when it comes to bugs, things can go south real fast! Fall’s warm weather, often times referred to as “The Indian Summer”, creates the perfect condition for these destructive creatures to explode overnight. Before you know it, there could be a full fledged war happening in your backyard. Luckily I have some tricks up my sleeve to keep these bugs at bay.

Now there’s a few things to keep in mind when it comes to repelling insects. This first thing to remember is that you’ll never be able to kill every single bug. Not to worry though, plants are able to tolerate a few insects here and there. Secondly, it’s highly important to be mindful of bees. The rule is: When flowers are present, there’s likely to be bees present. That’s why fall is an optimal time to spray for pests, as most plants are in a somewhat dormant state waiting for the winter rain.

When the bugs attack, the first thing I’d recommend is Neem oil. This organic pest repellent is made from the seeds of the Neem tree, and available at most nursery centers. Neem oil works by covering the insects’ breathing holes, and is also effective against leaf fungi on manzanita and toyon. Next on the list are soap sprays. I would suggest a simple soap spray made of potassium salts, which like Neem oil, smothers the bugs’ breathing holes. Lastly is Bacillus thuringiensis. This spray works exclusively on caterpillar insects like the ones that eat oak trees, and should only be applied in the evenings as it breaks down in the sunlight.

I hope this gave you a bit of insight on how to prepare for Fall’s creepy crawlers. Until next time, happy gardening! If you have any questions, please contact me at: gritlys@gmail.com

John Nowak

Ethnobotany Notes: Catalina Cherry

What should I plant in my yard this fall before the rains begin? People are often asking me this. I like to consider what Doug Tallamy told us at the CNPS state conservation conference a couple of years ago about planting trees and shrubs that are foraging hubs for insects and birds. He mentioned several genera that fed lots of caterpillars, which in turn feed lots of birds.

One of these was the genus Prunus. You may recognize this as a fruit tree genus including cherries, apricots, plums, and peaches. It attracts butterflies, bees, and pollinating flies. One of my favorites is the Prunus lyonii, or Catalina cherry. It has beautiful green foliage, is drought tolerant, and according to Las Pilitas nursery, it tolerates clay soils well. It is closely related to the native shrub called Islay (Prunus ilicifolia). Islay was harvested for the kernels inside of the pit. Jan Timbrook notes in Chumash Ethnobotany that one hat of islay was worth two hats of acorns.

The kernel of the cherry needs to be removed from the pit (you may eat the thin skin of fruit in the process if it is ripe first). Then you must boil the kernels and rinse the water several times, then smash the kernels and then leach like acorns to remove the cyanide that naturally occurs in the kernels.

Since the native Islay was not available at the time, I decided to try this with the Catalina cherry growing in my Mom’s yard. (Catalina cherry is used in the horticultural trade and can be bought and planted easily). I gathered the pits that had accumulated on the ground, cracked them open, boiled and leached the kernels, then made little balls out of them. They kind of tasted like cooked beans, bland but nutritious. My curiosity was satisfied. I’m not crazy about the kernels as food, but I love the shrub with its gorgeous bright green foliage. The pictures below are from Morro Bay State park where it was planted between the campsites.

As I am writing this, I am thinking about the fact that we have our annual native plant sale coming up on November 2. I have been planting the plants that I have written about over the last year in my own garden, and I hope that you find some that will be perfect for yours as well. I’ll see you there on November 2.

Cathy Chambers
President’s notes – October 2019

As a passionate supporter of California’s native plants, from within my heart I often hear a voice that calls me towards the greater humanitarian perspective, one that encompasses an even larger need for conservation and protection. Here are the opening remarks made by Dr. Martin Luther King, Jr. when accepting the Nobel Peace Prize on December 11th, 1964, as a call to acknowledge this greater perspective.

“This evening I would like to use this lofty and historic platform to discuss what appears to me to be the most pressing problem confronting mankind today. Modern man has brought this whole world to an awe-inspiring threshold of the future. He has reached new and astonishing peaks of scientific success. He has produced machines that think and instruments that peer into the unfathomable ranges of interstellar space. He has built gigantic bridges to span the seas and gargantuan buildings to kiss the skies. His airplanes and spaceships have dwarfed distance, placed time in chains, and carved highways through the stratosphere. This is a dazzling picture of modern man’s scientific and technological progress.

Yet, in spite of these spectacular strides in science and technology, and still unlimited ones to come, something basic is missing. There is a sort of poverty of the spirit which stands in glaring contrast to our scientific and technological abundance. The richer we have become materially, the poorer we have become morally and spiritually. We have learned to fly the air like birds and swim the sea like fish, but we have not learned the simple art of living together as brothers (and sisters).

The time has come for an all-out world war against poverty. The rich nations must use their vast resources of wealth to develop the underdeveloped, school the unschooled, and feed the unfed. Ultimately a great nation is a compassionate nation.”

Bill Waycott

FIELD TRIPS

Saturday. Nov. 23rd, 10:00 am, Fall Bike Outing on Santa Rosa Creek Road, Cambria. Join us for a view of Fall colors along this beautiful coastal canyon. This will be an out and back ride of about 2 hours with a one-way distance of about 8-10 miles on a paved road. There are moderate hills along the way. Bring your bike, helmet, other appropriate gear, and water/snacks. Meet in the Coast Union High School parking lot, near the tennis courts, at 2950 Santa Rosa Creek Road, Cambria. Contact Bill Waycott, 805-459-2103. Rain or threat of rain cancels.

Sunday. Nov. 24th, 2:00 pm, Intertidal flora and fauna at Montaña de Oro St. Park. Join us for an afternoon, during a super low tide, with Faylla Chapman, Central Coast Natural History Museum docent and intertidal expert. Faylla will point out and discuss the great diversity of kelp species that inhabit that zone, and talk about the fauna that co-exist among them. Meet at the Hazard Canyon parking among the eucalyptus trees, at the big curve. Wear waterproof shoes, dress in layers for changing weather. Contact Bill Waycott, 805-459-2103. Rain or threat of rain cancels.

Wildland Fire Buffers

The impact on plant communities due to mandated vegetation clearance at the Wildland-Urban Interface appears to be extremely variable, even along individual sites such as the pine forest in Cambria. In some areas we have been told that all small trees and shrubs were removed, and in others they were selectively preserved. CNPS urges members to photograph treatment areas, so that we can better estimate the long term ecological effects.

David Krause took these photos of untreated (left) and treated (right) areas in Cambria. Clearly the ‘fire ladder’ has been reduced, lessening the chance of crown fires, but wildlife habitat has been eliminated.
On Saturday, August 17, 2019, Greenspace unveiled the Native Plant Demonstration Garden at Pocahontas Park. Located at the corner of Wilton and Newton in Cambria, this once vacant lot now flourishes with native plants ranging from California fuchsia to Bishop manzanita. Greenspace board member Amanda Darling Gowdy, who headed the development of the garden, wanted to raise awareness of the importance and beauty that native plants can bring to a garden. “It was exciting to share my passion and it was wonderful to see the support of our members and community,” said Gowdy.

As community members arrived to the opening, they were met with a thriving garden filled with beautiful native plants, most of which are primarily native to the Cambria area. Throughout the garden, each plant is accompanied by its own sign. Each sign displays the plant’s name, its common and scientific name, the habitat in which it grows, and the amount of sunlight that the plant requires.

Amanda Darling Gowdy stated “By exhibiting native plant growth, we hope to show Cambrians that a beautiful garden can be achieved with the addition of native plants. This inspiration scales to a larger audience through education events and volunteer involvement. What’s so great about native plants? Well, for starters, these plants are well-equipped to thrive in conditions where traditional garden plants struggle. Most are drought tolerant, deer resistant, and thrive in poor soil with little maintenance. Bringing native plants into gardens brings about the added benefit of increasing biodiversity. Native plants attract native insects (“good bugs”), pollinators (birds, bees, butterflies), lizards and small mammals. These plants also have many uses which have been demonstrated by the Native Americans, who lived in harmony with them. Some are edible, some have medicinal properties, and all are uniquely made to grow and thrive in this area.”

The garden will be open on Saturdays from 1-3pm during October 2019. Beginning in November, the garden will be open on Sundays from 12-2pm.

Driving Instructions
Drive north on Hwy 1 to the Burton Drive stoplight (the second light), turn right and immediately left. The garden is at the fork in the road between Wilton Dr. and Ramsey Rd.
CNPS has concerns about the estimated impacts to Morro manzanita that are described in the DHCP. On Table 4-1, page 4-37, the impact of development on residential parcels greater than 1 acre is given as 1 acre per parcel. However the area within the DHCP includes core manzanita habitat south, east and west of the southern edge of the Cabrillo Estates subdivision. The DHCP shows no recognition that this parcel was the target of a large scale subdivision in 1998. This was Vesting Tentative Tract Map 1873, which was approved by the SLO County Board of Supervisors, but defeated on appeal by CNPS and others to the California Coastal Commission, which recognized that area as ESHA (Environmentally Sensitive Habitat Area).

The 1998 project was described as the division of 124 acres into 41 residential lots and 3 open space lots, the latter totaling 88 acres, and therefore indicating that the 41 lots and roads would consume 124-88 = 36 acres. The 1996 subdivision described the developable envelope and associated buffer for each lot as being limited to 20,000 sq.ft., with a cumulative footprint of 18.82 acres. When fire clearances are considered at the Wildland-Urban Interface, acreage impacts are more severe. Manzanita is considered flammable by fire departments, and vegetation clearances of a minimum of 50 feet, and as much as 100 feet could remove as much as 1.5 acres of the plant around a single lot.

It must be remembered that this was actually approved by the Board of Supervisors, and only stopped at the Coastal Commission as a violation of the local coastal plan’s protection of an Environmentally Sensitive Habitat Area (ESHA).

We have some other concerns as well. The DHCP requires a fee to be paid into a conservation fund by anyone seeking to ‘take’ of a covered species. The other species are Indian Knob mountain balm, whose populations are already protected, and two animals, the Morro Bay kangaroo rat and the Banded dune snail. The idea is to spend the collected funds on habitat enhancement, such as veldt grass removal, and the purchase of mitigation lands. One of the problems is that there are plenty of people ready to pay fees as the cost of doing business, but willing sellers of mitigation lands are hard to find. In addition, most of the core manzanita habitat is in pretty good shape, although becoming senescent, so that there is really not much mitigation that can be done, and for the manzanita, the DHCP appears to be a negative-sum game. The DHCP appears to underestimate the impacts to the plant, particularly as the protection of federally listed plants is weak relative to that of animals, and that could dictate where limited mitigation funds will be spent.

I can send you a copy of the DHCP if you email me at <dchippin@calpoly.edu>. The files can be downloaded from the Ventura office of the U.S. Fish and Wildlife Service <https://www.fws.gov/ventura/>. Comments are accepted up to November 18th.
Protecting California’s Native Flora since 1965
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 *Flora*, which gives statewide news and announcements of the activities and conservation issues, and the chapter newsletter, *Obispoensis*.

San Luis Obispo Chapter of the
California Native Plant Society
P.O. Box 784
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