
Obispoensis

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



June 2014

Calandrinia ciliata - Red Maids

Bonnie's drawing for this issue of *OBISPOENSIS* is of a plant that is found throughout the western United States as well as spreading north into British Columbia. It has also been recorded in a couple of South American countries. It is especially common in coastal California. It is generally given the common name of red or pink maids (*Calandrinia ciliata*) although I've also seen it called fringed red maids and desert rock purslane on the web. Although common and displaying easily seen bright pinkish-red, or is it reddish-pink flowers, it is often overlooked. This is because it tends to grow with its leaves and branches flat against the ground or flat against surrounding plants. One sees it best when looking straight down on it. This is how the photo was taken upon which Bonnie's drawing is based. The flower in the picture has its stamens just emerging from deep in the flower. It also has to be admitted that Bonnie's drawing portrays a phase in the life of this wildflower that is fleeting.

What has been drawn is only the initial tight spiral cluster of leaves attached to a stem less than ¼ or so inches tall. Botanists call this a basal rosette. In order for the next statement to make sense, one must remember that stems grow longer only from their tips. This growth point contains cells capable of dividing to produce more cells that can then differentiate into the various types of adult cells. (They are called stem cells in animals such as humans). This region is called the apical meristem. In the plant drawn the apical meristem has produced a single, just opened flower. Flowers are genetically limited to parts that are set in size and shape; once they attain that configuration they stop growing. If this is true, then the central axis of the rosette is blocked from growing taller. In order for a plant to expand, it must produce branches from the lateral meristems (found in the upper angle between leaf and the stem to which it is attached). Unlike the initial vertical rosette axis, these branches grow out horizontally and the leaves are produced far apart. Additional flowers can be produced along the sides of these branches in an arrangement (inflorescence) called a raceme. Oh, I suspect it goes without saying that these secondary branches can themselves produce more branches. David Chipping and I had never seen this plant produce a carpet of color visible from a speeding car until this year. It was a fallow field. The color was so different from anything we had ever seen. We had to stop and take a closer look. It was a carpet of red maids. I suspect that it was able to grow in such profusion due to the drought. All the larger, showier plants were either absent or extremely stunted. Red maids is a native plant, but it is one that actually thrives with a little human disturbance. For this reason, it is also classified as a weed, but only a slightly nuisance one.

Some might wonder why I haven't mentioned to which plant family red maids belong. This is because there has apparently been a recent change. In ALL my "older" reference books this species is listed in the purslane family or Portulacaceae. This family contains miner's lettuce and the beautiful Lewisias. The old Portulacaceae was easily characterized by its only two sepals and + succulent leaves. But the new *Jepson Manual* recognizes all the California genera but one (*Portulaca* – true purslane) that were in the Portulacaceae to be now in the family Montiaceae. None of my plant taxonomy references recognize the Montiaceae so none of them indicate how to distinguish the new family from the old one. A quick perusal of the keys in *The Jepson Manual* did not yield any obvious distinctions. Why was the Montiaceae separated out? In systematics, any recognized taxon (order, family, genus) should be derived from a single ancestor. Such a taxon is said to be "monophyletic." However, modern classification procedures called cladistics indicate that the genera of the old Portulacaceae separate into different clusters with different ancestors. Such a group is said to be polyphyletic and is a no-no! Unfortunately many characters used to produce modern classification systems are not readily apparent in the field or even without a well equipped laboratory as they are DNA or physiologically based.

Consistent with its weedy designation, red maids would be expected to be found in disturbed ground. And this is where it is most often found. It is especially common after fires and along trails. And, as mentioned above, it is not adverse to growing in human created fallow fields and other agricultural lands.☼ Dirk Walters, Illustration by Bonnie Walters

[See also: <http://vnps.org/princewilliamwildflowersociety/botanizing-with-marion/history-of-classification-of-claytonia-virginica-spring-beauty/>
http://www.zora.uzh.ch/42651/4/Nyffeler_Taxon_2010_V.pdf —ed.]

President's Notes

Thanks to everybody who has contributed to our "season", which has been successful in spite of the drought. We start up again in October with our annual member-contributed slide show and dessert potluck. At that meeting we hope to have our sales table up and running again, as it has been on hiatus due to the retirement of the wonderful Heather Johnson. We are still looking for volunteers to rotate the job of tending book sales, so call me if you would like to help out once and a while. Now is the time to really worry about where your garden's water supply will come from. Some county reservoirs lost volume between 2013 and 2014 that is

President's Notes *continued*

approximately equal to the remaining water supply within the reservoir (Nacimiento went from 46% to 22%, Salinas from 58% to 36%). We urge you to maximize grey water use, and to water only in the immediate vicinity of each plant where roots might be encountered. NOAA expects drought in the West to intensify through this summer, although the probability of El Niño conditions is increasing for the 2014-2015 water year. However this may not mean rain. The LA Times states "A potent El Niño in the winter of 1997-98 doubled rainfall in Southern California, but other episodes, including strong El Niños in 1965-66 and 1991-92, resulted in below-normal rainfall."

Richard Hawley is stepping down from the Executive Directorship of Greenspace in Cambria. CNPS would like to thank him for his long service in the conservation of the unique Cambria pine forest. ☼ David Chipping

Conservation

The county is preparing to "fast track" alternative energy projects. The details can be found at (<http://www.slocounty.ca.gov/planning/RESP.htm>). They have done a GIS based constraints analysis which point toward "least constraints" being our remaining natural lands. The presence of known locations of "listed" plants is a constraint, but CNPS will be insisting that full biological analysis should not be by-passed in the fast-tracking, as most private lands have never been surveyed. Project evaluation should require both pre-approval surveys by project proponents and the studies made during CEQA evaluation, as well as the cumulative impact analysis of each project. Comments on the scope of the proposed EIR are due by May 28. Many hitherto unknown localities of DFW/CNPS listed plants are discovered during the biological surveys associated with CEQA review of projects through the EIR process. The biological constraints map shows one of their "best" areas in critical habitat for Nipomo lupine, our chapter's iconic symbol.

We have reviewed BLM has issued Final Supplemental Regulations for Carrizo Plain National Monument, and have found no significant issues with its limited content. However, in dealing with OHV use in the southern Temblor Range, we should be ensuring sufficient insulation between CPNM and the OHV play areas near Taft. This is an area requiring further work on our part.

We are expecting a number of "drought emergency" projects to arise and will keep a careful watch on them over the summer. For example, within the County Water Resources Advisory Committee it was revealed that there is insufficient fresh water remaining in Cambria to fight a wildfire in the pine forest, and thus the most probable fire fighting scenarios suggest that ocean water will be dumped. ☼ David Chipping

Chapter Meeting

Thursday, June 5, 2014 at the Veterans Hall, 801 Grand Avenue, San Luis Obispo.

Pre-Meeting Workshop: At 6:30 p.m. Jenn Yost will be leading a workshop on how to collect plants in the field and properly preserve them for scientific research. You will learn how to properly collect specimens while on field trips, how to press them, mount them, and make the information available to the public. Mounting plants and working in the herbarium is a great way to experience California's plant diversity. No experience is necessary for this workshop and all supplies will be provided. Please come and learn and enjoy yourself while learning how to make a valuable contribution to plant science in San Luis Obispo County.

Program Presentation: 7 p.m.

Dead Plants are Good Too: How herbaria work, and why they are more important than ever.

Jenn Yost (right) will be exploring California's plant diversity from a historical perspective based on plant collections housed in herbaria. Jenn will talk about the Hoover Herbarium at Cal Poly and some of the treasures it contains. Prior to the talk Jenn will be offering a workshop where you can learn the methods of plant preservation for scientific collections.

Jenn Yost was an undergraduate at Cal Poly and now has returned

as a new faculty member in the Biology department. She will be taking over directorship of the Hoover Herbarium at Cal Poly. She teaches general botany courses and the upper division plant taxonomy and field botany courses. She studies the genus *Dudleya*, little succulent plants found on rocky outcrops, and the genus *Lasthenia*, or goldfields. She is an evolutionary biologist who tries to understand how new species are generated. Jenn received her PhD from UC Santa Cruz where she studied cryptic species on serpentine outcrops throughout California.

The next Chapter meeting is the October "Dessert Potluck," Thursday, October 2, 2014. Bring a dessert and photos and videos of your summer travels to share.



Rare Plant Treasure Hunt

It took a while for us to nail down some dates and details, but here we have a list of our Rare Plant Treasure Hunt trips and trainings scheduled for June 2014 on the Central Coast, there are more in other parts of the state. A few details and trips have changed since trips were published in Chapter newsletters, so please use the RPTH event calendar for the most up-to-date details. We have a lot more trips this year that involve backpacking to remote sites, but also have a few trips involving easier day hikes. We hope you can join us for a trip, and if you don't see one in your area, write back for help with planning your own trip!

Check out details for each of these trips on the Rare Plant Treasure Hunt event calendar: <http://www.cnps.org/cnps/rareplants/treasurehunt/calendar.php>

- ◆ **June 2nd-4th - Tassajara Hot Springs Backpacking (Monterey County)**
- ◆ **June 13th - 15th - Lottie Potrero Backpacking (Monterey/SLO County)**
- ◆ **June 21st - 22nd - Silver Peak Wilderness Downhill-Only Day Hike (Monterey/SLO County)**

Hope to see you out in the field this season!
Danny Slakey, California Native Plant Society
dslakey@cnps.org

CNPS Workshops

June 2-5

Introduction to Plant Identification

with special emphasis on Riparian/Wetland, Invasives, and Rare Plant Species

Instructors: Michelle Balk, Fred Roberts, and Vince Scheidt

Location: Pala Fire Station, Pala, in northern San Diego County

June 10-12

Vegetation Rapid Assessment/ Relevé

Lead instructors: Todd Keeler-Wolf and Jennifer Buck-Diaz

Location: Crystal Cove State Park, Laguna Beach, CA

Cost: CNPS Members \$335; Non-members \$370

To register or for more information, contact Josie Crawford at (916) 447-2677, jcrawford@cnps.org or <http://www.cnps.org/cnps/education/workshops/>

Note that some details, including price and exact locations, are subject to change.

May 4, Santa Margarita Lake Field Trip
Photos by Mardi Niles



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www.cnps.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*.



San Luis Obispo Chapter of the California Native Plant Society

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Permit No. 114

Mounting plants and working in the herbarium is a great way to experience California's plant diversity. Jenn Yost will lead a workshop on how to collect plants in the field and properly preserve them for scientific research. Thursday, June 5 at 6:30 before the Chapter meeting.

HERBARIUM OF THE UNIVERSITY OF CALIFORNIA

Lasthenia macrantha (Gray) Greene

subsp. bakeri (J. T. Howell) Omdurff

Robert Omdurff 12/68

Lasthenia macrantha (A. Gray) Greene
subsp. *bakeri* (J. T. Howell) Omdurff

San Luis Obispo County, California