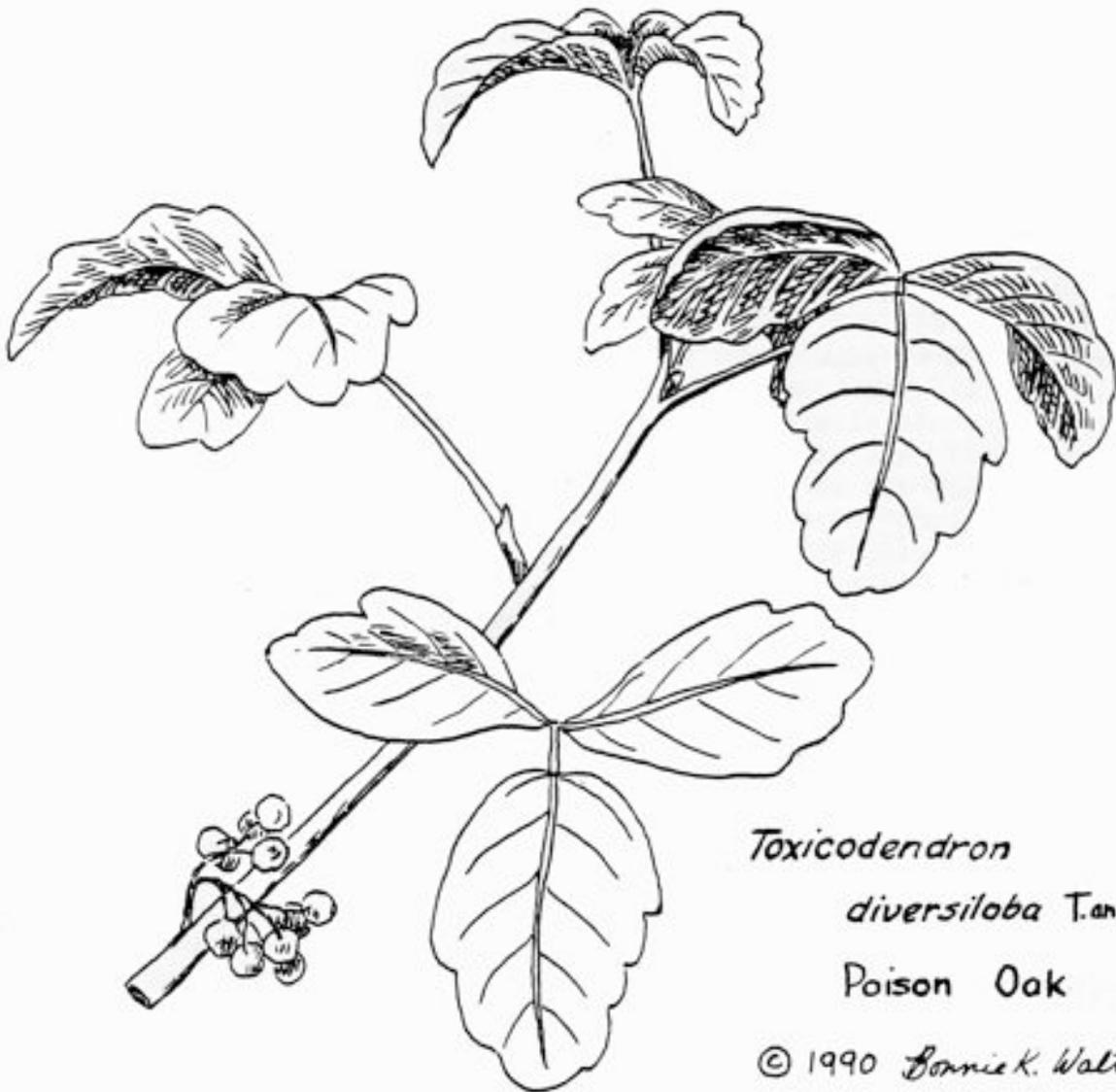


Obispoensis

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



*Toxicodendron
diversiloba* T. and G.
Poison Oak

© 1990 Bonnie K. Walters

Toxicodendron diversilobum

Poison Oak

I realize that this is a repeat plant done for *Obispoensis* back in 1990 & 1992. I also suspect it is a plant that everyone already knows. If you don't know it and you spend any time at all in our local "wilds" you better learn it because it causes a mild to severe skin rash (or worse) in approximately 85% of us. It's poison oak (*Toxicodendron diversilobum*). The repeat is the result of question I recently got from a friend. He asked, what should have been an easy question to answer and that was, "is there any poison ivy in our area?" I do not know what precisely prompted the question, I didn't ask. My guess is that he had recently learned of a new way to either get rid of the plant (it grows in profusion around his home) or of a new product to treat its symptoms. My answer was "probably not." I then added, whether or not it's here, any product countering poison ivy will work on poison oak as well, since their biochemistry is identical. I should have simply said, "no," since none of our past and recent state or regional floras list poison ivy (*Toxicodendron radicans*) either as an introduced or native plant growing in California. Why might there be a question? If I set up a display of a typical poison ivy plant from the deciduous woodlands of the Eastern U.S. next to a typical poison oak plant from our area, everyone would easily tell the difference between them because they look so different. Most would also conclude they must be separate species. Most trained plant taxonomists (botanists that specialized in plant identification & relationships) would also agree that they are different species. So what's the problem? Unfortunately, poison oak and poison ivy are both quite variable. Poison ivy is usually a woody vine with large glossy green leaves (up to 15 inches long) whereas poison oak is commonly a woody shrub with smaller dull green leaves (usually less than 5 inches long). Flowers and fruits of both "species" are nearly identical. Unfortunately, habit and leaf size are subject to local environmental conditions. Poison oak in our shady canyons is clearly a vine with larger leaves while poison ivy growing out in pastures back East is shrubby with smaller leaves. I.e., there is overlap in their most diagnostic characteristics. This overlap has led a minority of taxonomists to group the two forms as subspecies of a single species. I admit, I sort of lean toward this interpretation. How can there be differences in interpretation among experts? Aren't all species equal and readily separable? The problem is three-fold. First, not all experts see the world the same. Some are super sensitive to the slightest variation between species while others require that variation to be indisputable before they

recognize it. Secondly, different experts have different definitions for species. The best and most inclusive definition of a species I know is "a group of organisms that is morphologically, evolutionarily and ecologically distinct from all other groups." This simply means different species are different in appearance, are unable to interbreed with and live in a habitat distinct from any other species. Unfortunately, only appearance is readily discernible in the field by us casual botanists, since the other two criteria require laboratory and garden study. Lastly, some plants look different (e.g., Asiatic & Eastern U.S. sycamores) but can still interbreed while other plant individuals are essentially identical in appearance but can't interbreed (various nightshades). There is the problem of inconsistency among the three criteria that are used to define what a species is.

A second reason for the repeat came out of my informal review of poison oak & ivy. It led me to conclude you need to be careful about accepting what you read. I ran across a story in the introduction to a 1978 *Carolina Tips*, an informational & advertisement publication designed for high school biology teachers. Here's the story.

Poison ivy hasn't always been a nemesis, but once thrived as an ordinary species of ivy beside a beautiful narcissus. Located next to a brook, the two plants flourished. When a drought struck, the brook dried and the ivy's roots, in search of water, strangled the narcissus. Venus, the god of love, became so infuriated that she punished the ivy (and us as well) by making it poisonous.



What is wrong with this quaint story? It's not possible, even if one accepts Venus as the Goddess of Love. This is because poison ivy and oak are new world plants and Narcissus (daffodils) are old world. And I can't imagine that any person living in the old world would willingly introduce poison ivy (or oak) to a new hemisphere. (While in graduate school, I did see a photo of small poison ivy plant growing in a Botanic Garden in Sweden accompanied by a very large sign telling of the consequences of touching the plant).
(continued on page 3)

Toxicodendron diversilobum

Lastly, I recently read that poison ivy (and presumably poison oak) grow better and produce more of the dermatitis causing oil (urushiol) the warmer the temperature. This is not good news for a world experiencing global warming.

Dirk Walters, Illustration by Bonnie Walters

Conservation: CNPS Inventory Plant Lists

I have just returned from a CNPS meeting where the protection of CNPS List 2 species was discussed. If you are not familiar with the CNPS *Inventory of Rare & Endangered Plants*, it has become the accepted authority on the status of plants, and is addressed in environmental assessment of projects. List 1A plants are considered extinct, List 1B plants are rare, threatened, or endangered in California and elsewhere, and List 2 plants are rare, threatened, or endangered in California, but more common elsewhere. See a fuller account of lists at <http://www.cnps.org/cnps/rareplants/ranking.php>. The CNPS argument for protecting List 2 plants is that our populations are by definition at the edge of the range for the plant, or even a distant outlier of the plant. This would frequently involve some genetic adaption to the habitat that would otherwise be marginal to a species, and for that reason may hold the keys to the long-term survival of the species in a changed environment. Thus heat-adapted species might fare better in a warmer world. Variety is indeed the spice of life. CNPS maintains a searchable web site of the inventory at <http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi>, and it shows that San Luis Obispo County only has five List 2 plants. This is in spite of the fact that we have the westernmost extensions of Mojave Desert species, the most southerly extensions of northern Coast Range plants, and the most northerly extensions of many southern plants such as our much admired *Coreopsis gigantea* from the Oso Flaco Lake area. This indicates that the rationale justifying List 2 should be applied within California, so that plants that are rare in SLO but common elsewhere should be given some sort of protection, as the same edge-of-range values would apply. The value of locally rare species is inconsistently applied, is not recognized in either State or Federal Endangered Species Acts, but is recognized under the California Environmental Quality Act. Our chapter will be assessing all of the "edge-of-range" and "outlier" species with the aim of getting better protection at the County and City planning level. Please contribute your knowledge to this effort.

David Chipping

President's Notes

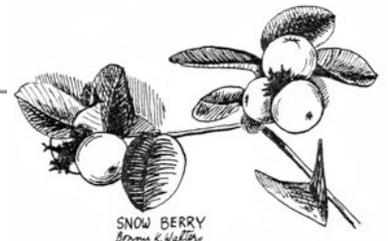
Welcome back to another nine months of Chapter programs, field trips, garden visits and other fun activities for you and your family. Our first meeting is the dessert potluck and contributory slide show, and we welcome any and all OOOOH-AAAH pictures. Linda and I will bring in some grizzly bears and other Alaskan goodies. This year will have changes. We are working on a much improved web site, a Facebook presence and other new fangled stuff. We are debating changes in the newsletter, and those of you with e-mail will receive messages from us regarding use of that medium in receiving a full color PDF version of our newsletter. Our plant sale will be at the same time (November 6) but the location will move from the "traditional" site on Madonna Road. Thanks to Assembly Member Evans and many co-authors that included Sam Blakeslee, Assembly Concurrent Resolution 173 has declared the 3rd week in April as California Native Plant Week. This will set the stage for a big effort by our chapter to celebrate the week and introduce as many people as possible to our wonderful native flora. Send me your ideas.

David Chipping

San Luis Obispo Chapter Meeting

Dessert Potluck and Members' Slide Show

Thursday, October 7, 7:00 p.m. Bring a dessert to share and your 15 best photos, slides, video, and digital pictures. Meet at the Veterans Hall, 801 Grand Avenue, San Luis Obispo. Call Dirk Walters, 543-7051, for information.



Field Trips

Saturday, 23 October, 9:00 a.m. Fall Plant Walk, La Purisima Mission: Charlie Blair will be leading a tour of fall-blooming plants of the Burton Mesa Chaparral. Come and see what is out at this sometimes forgotten time of the year. Meet at 9:00 a.m., east end of Burton Mesa Blvd. (1550 E Burton Mesa Blvd.) in Mission Hills at the Community Service District Office. From the north, take the Constellation Rd. off-ramp from SR 1, heading left, then turn right on Burton Mesa Blvd. From the South, Burton Mesa Blvd. can be accessed from either Harris Grade Rd. or Rucker Rd.; again turn right. Call Charlie Blair 733-3189 for details.

Horticulture

This month I am writing about one of my most favorite coastal native plants, *Horkelia cuneata*. This small perennial plant is a member of the rose family and is known by its common name, wedgeleaf. It is commonly found in coastal chaparral communities and favors sandy areas but can also grow in clay soils. Horkelia has a clumping, low growing habit, which makes it a great choice as a ground cover in a sunny or semi-sunny location. It has a fern like appearance and is sometimes mistaken as a member of the yarrow family. This mistake is quickly straightened out when you see it flower. Covered with small, five petaled white inflorescence, horkelia has a spectacular display that attracts both bees and butterflies. Its drought tolerance is well known and it lends itself well to drip or overhead watering systems. It has very few insect enemies and is highly deer resistant. It can be easily propagated by divisions. Simply dig up the plant during the rainy season and rip it into pieces. Make sure to leave some of the main stem with a little bit of the root ball. Plant the divisions into one gallon containers with well drained soil. Keep the containers in a semi shady area for about a month. Slowly move them out into full sunlight. Once well rooted, plant your divisions out in a sunny or semi-sunny area and water weekly for the first two months. After well established, water monthly to insure a fresh look and a larger bloom display.

Horkelia can also be propagated from seed. The seeds are collected when ripe, usually at the end of June or mid July. Cut flower heads and place the inflorescence into a paper sack. Let the flowers dry and grind them up between you hands over a piece of newspaper. Separate the stems from the seeds and prepare a seeding flat with well drained soil. Place the seeds on top of the soil and cover with about a quarter of an inch of sand and soil mix. Keep the seed flat in a sunny location and water enough to keep the soil moist. After the seedlings are one inch high, transplant them into small containers. Plant seedlings outside in November and keep moist until the rains come.

In closing, horkelia is a great choice for any gardener looking for a bulletproof plant with a great flower display and lots of adaptivity. I hope you find horkelia to be a good choice for your garden, and as always if you have any questions please feel free to call me. Good luck and good gardening. John

A Botanical Trail

By Bill Shepard

A Botanical trail is in the process of construction only a half mile from the center of Atascadero. It is located at the entrance to a little known city park called Stadium Park. It is an entirely wild area comprising a bowl surrounded by a ridge line. A forest of mainly blue oaks surrounds it. There are a few hiking trails, but otherwise the area is undeveloped. In time past it was used by the early citizens of Atascadero as a meeting place where plays, concerts and picnics were held. It is, indeed, a diamond in the rough.

The entrance is a rough road, closed off to vehicles by a locked gate. There is, however, a stile to allow pedestrian access. A small group of environmentally-minded residents named the Atascadero Land Preservation Society (ALPS), owns about five acres at the entrance. This was acquired several years ago as an effort to prevent development in the property which was then privately owned. The group has maintained a stewardship of this property since, and has erected several benches and a Kiosk there.

In addition, it has made an effort to enhance the area by constructing a trail which zigzags up the hillside on one side of the entrance, ending under a large oak at the top of the ridge. In the triangular spaces between the switch backs, a variety of native plants have been established. Most of these were obtained by the efforts of another local group, the Atascadero Native Tree Association. The first planting of 30 plants was in the fall of 2008, the second in the fall of 2009. A variety of species are represented, with minimal duplication. Failure rate has been quite small. Ultimately, when the plants reach sufficient size, a signage system will be established, as well as information posters in the kiosk.

The purpose of the Trail, of course, is to attract people to this under appreciated area, and to educate, by example, what mature native plants look like. Hopefully this will encourage people to use them in their gardens and to come to appreciate these truly remarkable parts of our natural world.

Native Plant Sale Volunteers Needed !

Hello everyone, I hope you have enjoyed your summer and are now looking forward to the fall. I'm hoping that I can plan on all of you coming out to help this November 6. Please fill out the volunteer form on the back page and mail or hand deliver to me at the October meeting.

It's a lot of fun to work the sale because you will get first pick of the best plants and meet lots of interesting people. And it's a chance to socialize with others in the group, kind of a big get together. So get out your favorite pen and sign up today.
~ John Nowak

BOOK NEWS

Hello to all you book lovers. We've added two new titles to our October meeting table. The first is *Landscape Plants for California Gardens* by Bob Perry. Dr. Perry is a Professor Emeritus at Cal Poly Pomona and this book is the result of his 30 plus years in the field. I bought his first book 30 years ago and still have it and each of his subsequent books, but this one is amazing and HUGE. It is for landscapers and plant nuts like myself and covers natives and mediterranean plants. Come take a look.
\$85.00

Our second new book is Susan Van Atta's *The Southern California Native Flower Garden*. This is a spiral-bound book which allows the reader to flip pages and sections to mix and match plants by size, bloom time, color, foliage and cultural requirements. It also mentions wildlife that will be attracted to each plant. Easy to use and a great buy at \$20.00. See you at the book table!

~ Heather

A Very Warm Welcome to Our Chapter's

New Members: Ian Hoover, Chris and Kyra Kitts,

Sandra & Louis Pitelka

Thank You for Your Continued Support, Renewing Members:

Janine Arie, Ray Bedford, Gifford Bland, Colby Boggs, Marilyn Britz, Bobby Jo Close, Jasper Colebank, Dagmar Collins, Meg Crockett, Greg Frugoli, Connie Geiger, Esther & John Gowan, Helen Grossman, Susan Grimaud, Joyce Hall, Jim Healy & Leslie Mosson, Susan and J.M. Hood, Diane & John Hood, David Horwitz, Lionel Johnson, Dave Keil, Mary King, Jacqueline Knowlton, Jean Kuntze, Teresa Lees, Steven Marx, Janine Rands, Lois & Peter Richerson, Steve Schubert, Bill Shearer, Joel Shennum, James Smith, Holly Slettland, Nancy & John Stephens, Don & Lonnie Struble, Jan Surbey, Julie Thomas, Donald Waller, Patricia Wells, Jean Wheeler

Native Plant Week

At its meeting last weekend, the CNPS Chapter Council approved a motion to form a special ad hoc committee which will be responsible for coordinating events and media surrounding **Native Plant Week 2011**. If you or someone you know in the chapter is able to serve on this new committee, please contact Kevin Bryant at mtngreen17@verizon.net or Larry Levine at LevineL@northcoast.com as soon as possible.

The web page on the State website for Native Plant Week is up at the following link: <http://www.cnps.org/cnps/conservation/nativeplantweek/>.

Obispoensis is published October through June except January. Items for submittal to *Obispoensis* should be sent to rhotaling@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 and www.cnps-slo.org

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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 activities and conservation issues, and the chapter newsletter, *Obispoensis*.



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San Luis Obispo, CA 93406

ADDRESS SERVICE REQUESTED

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CNPS Native Plant Sale Volunteer Sign Up

Location to be determined
Saturday, November 6, 2010

Name: _____ Telephone: _____

Please mark the hours you can help

- | | | |
|---------------------------------------|------------------|--------------------------|
| <input type="checkbox"/> 7 - 8 a.m. | • Help as needed | • Unload & set up plants |
| <input type="checkbox"/> 8 - 9 a.m. | • Set up tables | • Sit at sales table |
| <input type="checkbox"/> 9 - 10 a.m. | • Hang Signs | • Sell plants |
| <input type="checkbox"/> 10 - 11 a.m. | • Sell seeds | • Load customers' plants |
| <input type="checkbox"/> 11 - 12 p.m. | • Cashier | • Sell books & posters |
| <input type="checkbox"/> 12 - 1 p.m. | | |
| <input type="checkbox"/> 1 - 2 p.m. | | |

Please complete this form and bring it to the October meeting for John Nowak or mail it to him at 8605 San Gabriel Road, Atascadero, CA 93422.