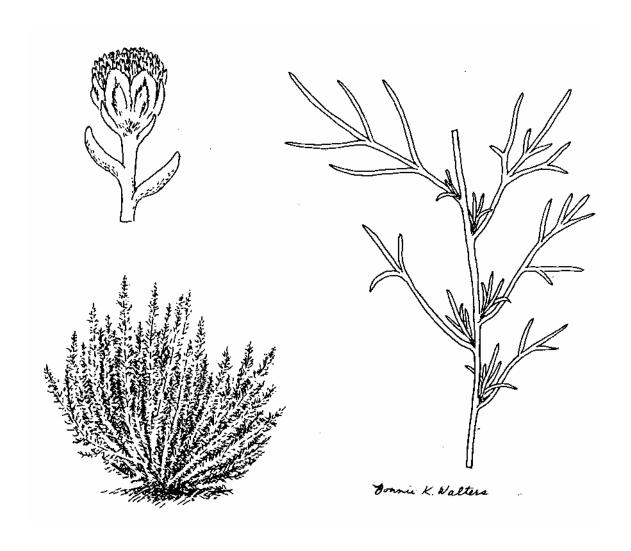
OBISPOENSIS

The San Luis Obispo Chapter of the California Native Plant Society for San Luis Obispo and Northern Santa Barbara Counties



ABOUT THE COVER

onnie's cover drawing represents one of our Chapter Region's most common shrubs. It is found from coast to the eastern boundary. It is easy to overlook especially when it is growing as isolated individuals. However, the species can be either a dominant in single species stands, as a co-dominant with black sage (Salvia melifera) or coyote bush (Baccharis pilularis) or as a secondary species with chamise (Adenostemma fasciculatum) and other chaparral shrubs. The plant is Coast or California sagebrush (Artemisia californica). As can be seen from Bonnie's drawing, its leaves appear to be simple or branched needles. Actually, the leaves only appear needle-like because their edges are rolled under. The leaves are so flexible that they can be bent double without breaking. During late winter through early summer, the stems are more or less completely covered by their gray leaves. Buds produced with the first and longest leaves grow into short spurs that can also be clothed in usually shorter leaves. The result is a gray, shaggy cluster of more or less vertical shoots. However, after the rain stops and the soil begins to dry out, most of the leaves die and many fall off their twigs. This leaves a straggly mass of grayish sticks. Plants, like CA sagebrush, that lose most or all their leaves during the summer and fall dry seasons are said to summer deciduous. The major difference between coastal scrub or soft chaparral and true or hard chaparral is that the dominant species in the coastal scrub are summer deciduous while the dominant species of true chaparral are evergreen year round. Because CA sagebrush spends half the year mostly devoid of leaves, it has not been used much as a landscaping plant. Having said that, the species is extremely variable throughout its mostly coastal range. It ranges from just north of San Francisco Bay south into Baja, Mexico. It can also be found as far east as the Sierra Nevada foothills and the edge of the Sonoran Desert. Some of the northern foms from the immediate coast grow as a mound or ground cover. These varieties are gaining some popularity as landscape plants. However, our typically leggy forms found in our area are decidedly not.

CA sagebrush is a member of Sunflower or Aster family (Asteraceae or Compositae) and like most members of the family produces sessile (stalk-less) tiny flowers (florets) in heads. The tiny heads are produced from July through September. However, the fruiting heads, which look identical from a distance, stay on the plant well into December or January. The individual heads are only 5 mm in diameter or less and are the same gray-green or brownish-green color as the leaves. If you're adventurous and you have a magnifying lens, you might try to dissect a head. Within the head, you will find two very tiny but different functioning flowers. The 6-10 outermost flowers found just inside the several spirals of gray bracts consist of an ovary, a single style that branches into two just above

a very narrow, and a quite form-fitting petal tube that surrounds the style. There are no stamens in these flowers as these flowers are pistillate or female only. More recent experts in the taxonomy of this family call these flowers disciform flowers. Older references to this type of flower confusedly call them ray flowers. It is confusing because these outer flowers do not produce a tongue-like ligule. Stamens are found in the rest of the 15-30 flowers in the head. These latter flowers contain both functional stamens and pistils (perfect).

The origin of the genus name, *Artemisia*, is probably from the Greek (Artemis) who was the Greek goddess of the Hunt, whom the Romans named Diana. However, other references indicate the name is derived from the herbalist wife of Mausolus, king of Caria or Anatolia, an ancient region of Asia Minor. As an aside, our modern term, mausoleum is derived from name given King Mausoleus' tomb. Which is right, goddess or wife? I don't know. The Jepson Manual gives both derivations. CA sagebrush has also been called CA wormwood. It gets this name because several species in the genus, especially old world species, have significant amounts of a chemical 'santonin' which is an effective remedy for intestinal roundworms. Many native people around the world wove *Artemisia* branches into the walls of their granaries in order to repel grain - Dirk Walters feeding worms and insects.

CONSERVATION

As I write, less than two weeks after the election, the assault on the Endangered Species Act has already intensified with anti-conservation riders on some budget bills. It is going to be a tough year for any species that stands in the way of big bucks and their influence on the political process. We are also facing a court challenge to the concept of Critical Habitat, which I suspect is a "set up" to allow a so-called settlement agreement to be forged that will give it all away to developers without the messy exposure in Congress. Let's drop that subject, providing y'all promise to write a few angry letters when the time comes.

There is a somewhat muted silver lining behind the dark clouds. Bill Tietje from U.C. Extension kindly provided me with a draft preprint of a paper by J. Spero that examined the impacts of development on relatively undeveloped lands. These were defined as "wildland" areas with under 32 houses per square mile, while "developed" was any denser housing value. Spero measured the changes of acreage of forest and rangeland from wildland to developed for different categories of wildland from the years 1990 to 2000. Throughout California conifer forests lost 0.5% of area, deserts 0.4%, hardwoods 1.7%, grasslands 1.4%, shrublands 1.2%, and wetlands 0.9%. Aggregate losses were 0.9% for the

decade. I know... no silver lining in those figures. Here it comes. Taking all of California's counties, the losses from San Luis Obispo county were the second lowest in the state , tying with Mendocino County at 0.3% loss for the decade. That is a good number when you look at Santa Cruz County and Orange County that lost 9.2% and 6.4% of their wildland in a single decade. Yes Folks... things can be worse (see, that was the silver lining).

The Estero Plan Update has been approved by the Supervisors and is off to the Coastal Commission. Eric Greening, (who can be heard every Tuesday on KCBX keeping the SLO County Supervisors honest) informs me of a strange development. Apparently a large mass of papers from developers who want to develop the hills south of Los Osos was presented to the Board, and was accepted into the record sight unseen and against the advice of County Counsel. In another piece of Los Osos news, the so-called Powell 3 parcel has been brought into the Greenbelt. This is just south of the parking lot for the Middle School, and, although infested with veldt grass, has some remarkable lichen species according to David Magney of Channel Islands Chapter.

Because there was essentially no rain last year, there were no vernal pools to map in the Carrizo Plain, but so far, this year is looking good so set aside some time in the Spring for this continuing endeavor. Also, if any of you have exceptionally good or interesting digital pictures pertinent to our mission, and want to share them, you can send them as attachments to 'dchippin@calpoly.edu'. They are a good tool for evidence of evil doings acts such as illegal grading, oak tree clear cutting and the rest, but also good for showing the world what we are trying to protect. I like 'pretty' as much as forensic evidence.

- David Chipping

Burton Mesa Fall Plant Walk

Our 7 November Fall Burton Mesa Fieldtrip was successful, with around ten participants, some of them new to us. Since fall came early this year, there were fewer Fall Bloomers than usual, some of them having gone to seed. Conversely, with the early rains followed by some sun, some Spring activity was evident. Some of the plants had this season's older stalks and new sprouting at the same time. Mock Heather and Golden Yarrow had a few flowers showing. It wasn't clear if they were this season's final showing or a very early Spring start. Prickly Phlox had some leaf sprouting, blossoms weren't seen. Some of the Shagbark/Sand Mesa Manzanitas were in robust bloom, along with a good crop of seeds. Vern Human has remarked that "on the Burton Mesa Chaparral, Spring often begins with the first Fall rains." He has reported Manzanitas blooming in late October; these may have been in that cohort. One of his essays on Manzanitas describes

their importance as a nectar source for Anna's hummingbirds, and their fruits as an early food supply for other critters (A Naturalist at Play in Coastal California and Beyond, pp. 3 & 9). With our mild Mediterranean winters, we are fortunate that these early "false spring" ventures aren't then killed by harsh winters as in other

Speaking of Vern Human's anthology, A Naturalist at Play in Coastal California and Beyond has many such delightful and informative essays. Each essay is like a finely polished gem. Taken together, they form several comprehensive pictures of the complex web of life that surrounds us, awaiting Vern's keen insight to guide us to their intricate beauty. This book was published by the Lompoc Valley Botanic and Horticultural Society in September of this year, and has been very well received. Our Chapter has several copies for sale. It is also available from the LVBHS and at several bookstores in the Lompoc Area, the La Purisima Mission, the Cal Poly Bookstore, the Santa Barbara Botanic Garden and the Natural History Museum. – Charles Blair

Executive Board Members & Committee Chairs

President

Dirk Walters (805) 543-7051 dwalters@calpoly.edu Vice President

Charles Blair (805) 733-3189 blairce@sbceo.org

Recording Secretary

Linda Chipping (805) 528-0914

Corresponding Secretary

David Chipping (805) 528-0914 dchippin@calpoly.edu

David Krause (805) 927-5182 dkincmbria@aol.com Membership

Eleanor Williams (805) 528-7202

Conservation

David Chipping (805) 528-0914 dchippin@calpoly.edu

Rare Plant Coordinator

John Chesnut (805) 528-0833

Exotics Control

Lauren Brown (805) 438-4645 brownla@saic.com

Legislation

David Chipping (805) 528-0914 dchippin@calpoly.edu Education

Susi Bernstein (805) 349-7180

Historian

Malcolm McLeod (805) 543-8736

Horticulture & Plant Sales

John Nowak (805) 464-0717

Publicity

Debra Dight (805) 462-3116

Field Trips

Mardi Niles (805) 489-9274 mlniles@slonet.org.

General Sales & Inventory

Linda Chipping (805) 528-0914

Plant Sales

Karen Kawczynski (805) 481-0148

Poster Sales

Dorothea Rible (805) 543-6105

Photography

Craig Cunningham (805) 466-1427

Newsletter Editor

Robert Hotaling (805) 238-6044 rahotaling@aol.com

Santa Barbara County Liaison

Charles Blair (805) 733-3189 blairce@sbceo.org

80 MEETING 08

Thursday, December 2, 7:00 p.m., San Luis Obispo Chapter Meeting. Dr. Wally Mark and his research associate, Amy Jirka, from the Natural Resources Management Department have agreed to talk about their work on Sudden Oak Death. San Luis Obispo Vets Hall, corner of Grand Avenue (801 Grand) & Monterey. Contact John Nowak 464-0717, Charlie Blair 733-3189, or Dirk Walters 543-7051 for details.

Dedicated to the Preservation of the Califronia Native Flora

The California Native Plant Society is a statewide nonprofit organization of amateurs and professionals with a common interest in California's native 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 throughscientific 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 Society activities and conservation issues, and the chapter newsletter, *Obispoensis*.



San Luis Obispo Chapter of the California Native Plant Society P.O. Box 784 San Luis Obispo, CA 93406

Return Service Requested Nonprofit Organization U.S. Postage Paid San Luis Obispo, CA Permit No. 114