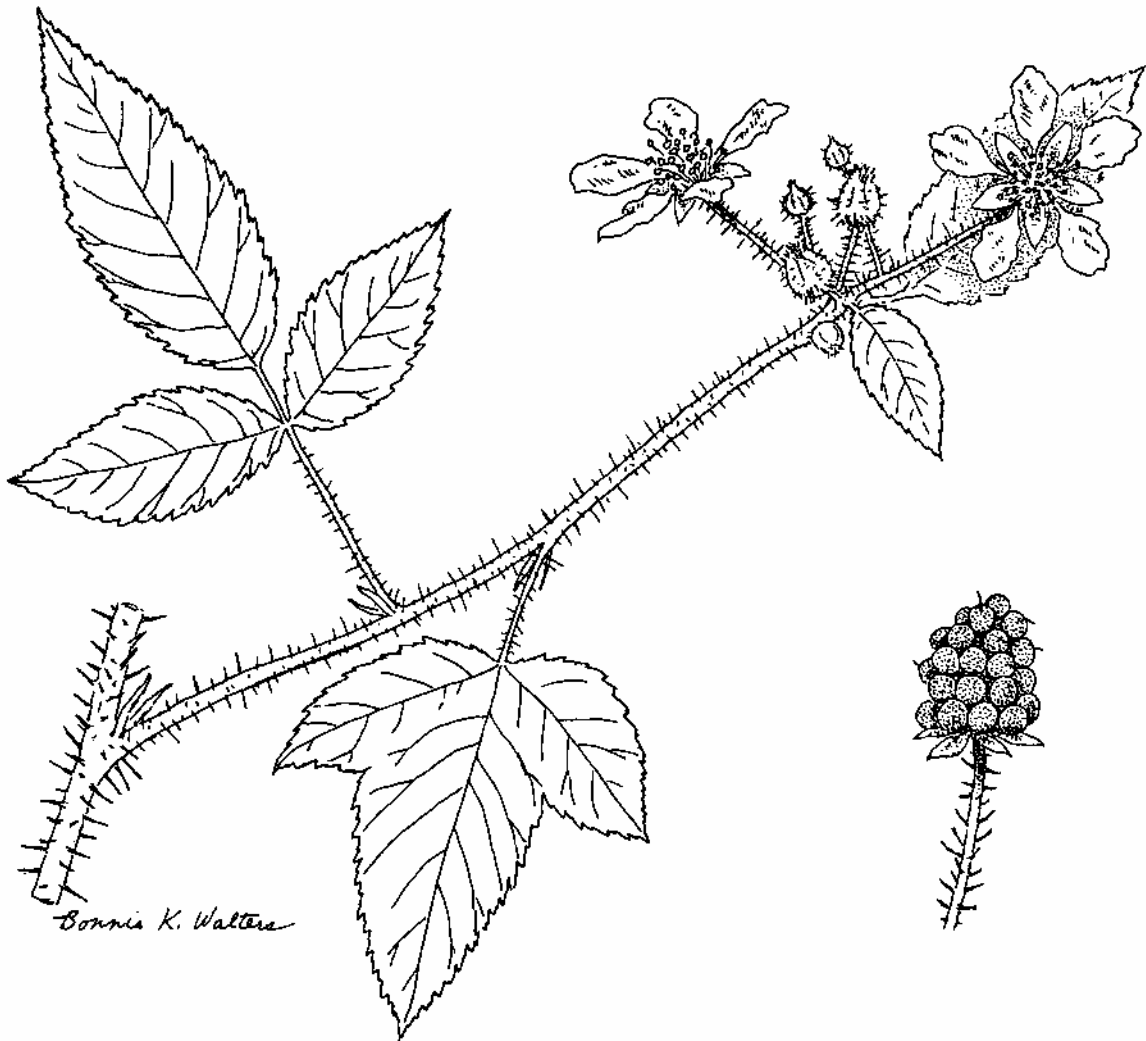


OBISPOENSIS

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



About the Cover

Bonnie's drawing used for the cover of this *Obispoensis* is usually listed as a shrub but it is more often a tallish ground cover. It is the California blackberry (*Rubus ursinus*). This species is easy to recognize because it is one of only three common species with prominent "ouchies." Botanically, there are three kinds of "ouchies." Prickles are hard, sharp pointed outgrowths of the epidermis. They are identified by their distribution that is more or less uniform over the entire stem. It should be obvious from Bonnie's drawing that the blackberry stem is coated with prickles. On the other hand, thorns and spines are found only near where the leaves are attached to the stem (nodes). The fuchsia-flowered gooseberry and the California rose are the other two common species with "ouchies." Of these, the fuchsia-flowered gooseberry is the easier to distinguish. It is a tall shrub with red flowers, leaves consisting of a single blade bearing paired spines from either sides of each leaf attachment. California rose produces pink flowers and leaves that generally consist of at least five leaflets. In contrast, California blackberry bears white flowers and produces leaves that vary from simple (consisting of a single blade) or more commonly compound with no more than three leaflets.

California blackberry is extremely widespread. It is found primarily along streams and as an under story in open woods or shrub lands from sea level to 4000 feet throughout the Pacific States. As its common name implies, it produces edible berries. However, like many other widespread species, it is extremely variable. Several references indicated that this variability includes fruit quality and quantity. For example, Dr. Hoover, in his *Vascular Plants of San Luis Obispo County*, noted that plants growing this far south rarely produce "good" crops. In fact, I have seen only a few berries and these were in the Turri Road marsh area. If you want to find fruit, head north. Individuals growing in Northern California produce abundant crops of berries. Why do our plants fail to

produce abundantly? I can offer two untested theories. First, and more likely, would be the higher average temperatures and less precipitation we experience this far south. Many members of the rose family (Rosaceae) require a period of cold weather to produce flowers and fruit.

Another explanation is much more far-fetched but easier to test. It derives from two observations. First, *Rubus ursinus* usually produces unisexual (imperfect) flowers on separate plants (dioecious). Only rarely do they produce bisexual (perfect) flowers. Second, male (staminate) flowers require much less investment in resources to produce than female (pistillate) ones since pistillate flowers and plants must also provision seeds. Since blackberries spread vegetatively as well as by seed, male plants should have more resources left to invest in vegetative growth. Therefore, I would predict that most of the native California blackberry plants found in our area would be male plants and male plants don't produce fruit. How can we test this hypothesis? If one can readily observe the many stamens, the flower is male. If, on the other hand, stamens are visible only upon very close examination, they have likely aborted, and the flower is female. Hopefully, some of us will want to see whether our Central Coast plants are predominately male or female.

California blackberry is the ancestor of a couple of our garden berries. Several references indicate that it is the ancestor of the Loganberry, Olalla berry, and possibly several other varieties of blackberry. Blackberries are those that are made up of a number of separate small fruits

units (drupelets) fused together. They are in the same genus as the raspberry.

Blackberries differ from raspberries in that the structure to which the drupelets attach (receptacle) stays inside the cluster of drupelets in the



blackberry and remains attached to the flower in the raspberry.

– Dirk Walters

Botanical Illustration Art Show

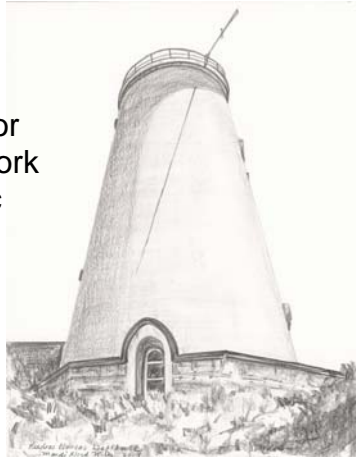
The Dunes Center, Guadalupe. Reception: September 24, 2004, 6:30pm-8:30pm. Proceeds will benefit The Dunes Center. Illustrations of California native plants will be represented in this show. For more information contact The Dunes Center, (805) 343-2455.

Calendar of Events

Thursday, October 7, 6:30 p.m., San Luis Obispo Chapter Meeting, Vets Hall, Members' Slide Show and Desert Potluck: Bring ten to twenty of your best slides, transparencies or digital pictures, and a dessert to share at our first, fall Chapter Meeting. The Vets Hall is at Grand Avenue & Monterey Street, near the Grand Avenue off-ramp. Call Dirk Walters, 543-7051, or Charles Blair, 733-3189, for details.

Saturday, October 2, 9 a.m. – 3 p.m., Nipomo Native Garden Plant Sale, Jim O. Miller Park: The Nipomo Native Garden is having its Fall Plant Sale at Jim O Miller park, on Tefft Avenue between US 101 and Thompson Avenue. A good selection of plants. Call Larry Vierheilg, 929-6710, for further information.

Sunday, October 17, Piedras Blancas Lighthouse: Join us for this iceplant removal work party and bring a picnic lunch. We will pull iceplant for a couple of hours. After lunch we will get a tour of this historic lighthouse that is being restored by BLM. The iceplant



removal is the first step in restoring the native plants on the site. Wear your gardening clothes. Bring your picnic lunch, hat, sunscreen, windbreaker, water, gloves, pruners or loppers, and kneeling pads (if you wish). Phone Jack

Beigle, 773-2147, for reservation, time and complete details.

Thursday, November 4, 7:00 p.m., San Luis Obispo CNPS Native Gardening Program: In conjunction with our Plant Sale, the November topic is horticulture. Peigi Duvall, the state CNPS Program Chair is the speaker. SLO 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.

Saturday, November 6, 9 a.m. - 2 p.m., CNPS Annual Native Plant Sale, Madonna Plaza: Come to the Heritage Oak Bank parking lot (297 Madonna Road) from 9 a.m.-2 p.m. for the SLO Chapter, California Native Plant Society Plant Sale. A wide variety of plants, posters, books, and gardening literature will be available along with many knowledgeable and helpful people. Contact John Nowak, 464-0717, Charlie Blair, 733-3189, or Dirk Walters, 543-7051, for more information.

Sunday, November 7, 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 a.m., east end of Burton Mesa Boulevard. (1550 E. Burton Mesa Boulevard) in Mission Hills. From the north, take the Constellation Road off-ramp from SR 1, heading left, then turn right on Burton Mesa Boulevard. From the south, Burton Mesa Boulevard can be accessed from either Harris Grade Road or Rucker Road, again turn right. Call Charlie Blair, 733-3189 for details.

Saturday, November 20, 9 a.m. -12 p.m., Hancock College Chaparral Preserve Clean-up LVBHS: The Lompoc Valley Botanic and Horticultural Society will do an additional "grooming" of the Burton Mesa Chaparral Preserve in conjunction with the La Purisima Audubon Chapter at the Lompoc Center of Allan Hancock College. It will take place on Saturday the 20th of November from 9 – 12. The focus will be trail maintenance and removal of dead material. To reach the area, turn right upon entering the campus, and continue along the periphery to the preserve's parking area. Bring hand tools, and snacks for an optional picnic. Call Mimi Erland, 736-5454, or Charles Blair, 733-3189, for details.

Sunday, November 21, 1:00 p.m., LVBHS Fall Plant Exchange, Lompoc Methodist Church: Please join us for our Fall Plant Exchange and Tool

Sharpening session. Come share those extra favorite plants that are too good to throw away. We will also have tips on planting and pruning. We meet at the Methodist Church in Lompoc corner of N. F

Vern Human Anthology

THE BIG NEWS of the summer has got to be the arrival of the anthology of Vernon Human's writings. A committee of the Lompoc Valley Botanic and Horticultural Society has worked on it for the last several years. This handsome book, *A Naturalist at Play in Coastal California and Beyond*, is a collection of nearly thirty year's worth of Vern's delightful and accurate essays found in many local publications. The shipment was delivered nearly four years to the day after this stalwart crew sat around Bess Christensen's table, and embarked on the Herculean task of sorting and editing this truly monumental body of work.

Had we realized the magnitude of the task before us, we might not have been so sanguine in undertaking it. 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. In my opinion, they are comparable with those of Steven Jay Gould and E.O. White. This has been a labor of love that has enriched the lives of those involved in this project.

The book sells for \$26.88 with sales tax. We are exploring distribution through local bookstores and natural history outlets. For more information, contact C. Warren Arnold, (805) 736-7633, cwarnold@sbeco.org or Charles Blair, (805) 733-3189, blairce@sbceo.org.

Charles Blair

HORTICULTURE

Semiripe Wood and Hardwood Cuttings

by Larry Vierheilig

Semiripe Wood: During the late summer, stem growth slows considerably and the stems become harder. Cuttings taken at this time are

and E. North Streets at 2:00 p.m. Call Rosemary Holmes, 735-3974, or Charlie Blair, 733-3189, for more information.

called semiripe cuttings. As they are thicker and harder than softwood and greenwood cuttings, they have greater capability of survival. They are, however, subject to the same water loss problems. Due to their higher levels of stored food, they can survive and produce roots even in poor light.

1. To begin this process, prune the parent plant at the start of the dormant season. This results in strong, fast-grown stems for use in propagation the following season. These will have a greater ability to produce roots than cuttings taken from unpruned stems.

2. Now that it is late summer, fill the desired number of containers with your rooting compost. Use a mix of 1/3 coarse, sharp sand (washed), 1/3 peat moss, and 1/3 perlite (the small stuff). Make sure the mixture is moist but not soggy. Fill the containers and firm to within 1-1/2 inch of the rim. Add a 1 inch layer of fine (builder's) sand, washed and firm.

3. Take the semiripe cuttings from a main stem with all the current season's growth. If the stem has branched, remove the side-branches.

4. Remove the tip of the stem if it is soft, but leave it if the apical bud has set and growth has stopped for the year. Shorten the cutting to 4 to 6 inches long. Remove the lower leaves so that about 2 inches of stem is clear at the base. The remaining leaves should be cut back by one-third. Treat the cut at the base of the stem with a rooting hormone powder.

5. Make a hole in the sand layer with a pointed pencil or dowel about 1-1/2 inch deep so the base of the cutting enters the rooting compost below. Space the cuttings as close as possible, most likely 1-1/2 to 2 inches apart. This will allow the plants to shade each other and maintain a higher humidity in the leaf area.

6. Water the cuttings with a dilute fungicidal solution. This also helps to firm the sand around the cuttings. Place the containers in a polyethylene tent to help retain moisture and provide a high humidity level. My idea of a polyethylene tent is a one gallon food storage bag placed over the container with 3 to 4 long bamboo skewers in the container to keep the

bag off the tops of the cuttings. Secure the bag to the container with a rubber band around the container top. Place the container(s) next to a window with bright, indirect light.

7. Check the containers periodically and water sufficiently to rewet the sand/rooting compost should the containers become dry. Remove all fallen leaves to prevent any disease/fungus build-up.

8. Rooting may start fairly rapidly or may wait until late winter or spring. In either case, leave the cuttings in the containers for the following growing season. Feed them on a regular basis with a liquid fertilizer and water when dry. Once the danger of any late frost has passed, the containers can be moved outside and the polyethylene tent removed. If placing them outside, put them in an area that receives filtered sun only.

9. After leaf fall in the autumn, the cuttings may be transplanted to the garden.

Hardwood: This is among the easiest techniques for vegetative propagation of plants. The hardwood cutting(s) are made during the dormant season from fully mature stems. Because the stem has no leaves, for deciduous plants, or is in a dormant state, for evergreens, the amount of environmental control required for successful propagation is minimal.

As with all methods of propagation, the single most important factor is to rigorously prune the parent plant the year before the cuttings are to be taken. This will produce stems with the greatest capability of producing roots.

Stems grow at various rates during the growing season with the greatest growth rate at the start. Even by the end of the season, the base of the growth that was produced has the greatest capability of producing roots and should be used for most hardwood cuttings.

Hardwood cuttings can be taken at any time during the dormant season but have the greatest potential for root development when taken at leaf fall or just before the buds break in the spring. Cuttings taken just before bud break will need a protected environment such as a cold frame and timed very carefully to avoid leaf development prior to root formation.

This will lead to excessive water loss and death of the cuttings. With the above said, let's start the process:

1. Prune the parent plant rigorously during

the dormant season. Allow to grow without pruning during the next year.

2. In early autumn, gently run your hand down one of the stems you will use for propagation. If the leaves fall off, the stem is ready for use as a cutting. Plants form a corky abscission layer to isolate the leaf from the stem. This is the plant's "leaf fall". Most leaves, however, don't fall off until helped by wind or rain. Don't wait until this happens, do the hand test.

3. Hardwood cuttings may be up to 14 inches in length but 6 inches is usually more successful. Keep in mind also that hardwood cuttings are still susceptible to water loss. Don't let them dry out in the propagation process.

4. Cut the stem(s) with all the current year's growth flush with the parent stem. Make a sloping cut about 3/16 inch above the proposed top bud. Make a horizontal cut exactly 6 inches below the top bud. Ignore any buds below the top bud when making this cut.

5. Treat only the cut base with rooting hormone and not the stem.

6. Bundle the cuttings into desired quantities (6 to 10) and place them into a sandbox, almost to their full depth. The sandbox should contain coarse, sharp sand that has been thoroughly washed. Leave the cuttings in the sandbox for the duration of the dormant season.

7. Just before bud break, prepare the planting area thoroughly by incorporating a mixture of 50% compost and 50% peat moss. Dig a furrow 5 inches deep. Place the cuttings vertically in the furrow at 4 to 6 inch intervals. Firm back the soil leaving about 1 inch of the cutting exposed.

8. Irrigate and fertilize the cuttings throughout the growing season. In the fall, after leaf drop, the cuttings can be relocated to their permanent locations

After reading through these two processes and the time required, remember; you will be a year older in a year whether you propagate in this fashion or not. Give it a try and enjoy more of your favorite plants, native and non-native.

Plant Sale November 6

Its that time again for our annual Plant Sale and I hope that those of you who have been so helpful in the past will be able to help again. The plant sale is our largest source of income and it is very important that we do well so tell all your friends. There are many reasons why growing natives in our gardens is beneficial, such as creating habitat for the animals, birds and invertebrates, sharing the enjoyment of planting and watching a plant grow with our children, helping to educate others about the beauty of native plants and why it is so important to protect them. I could go on for ever.

We need your help! There are many different jobs at the sale and I am sure there is one that is just right for you. Please sign up as soon as possible and return the form below to me, John Nowak, at 8605 San Gabriel Road, Atascadero, CA 93422. If you are unable to help at the sale then please come by and buy some plants, seeds or maybe a tee-shirt. Its not too early to start thinking about gifts for Christmas. We plan our sale for fall because it is the best time of year to plant with winter rains just around the corner. If you do not need plants, perhaps you know of someone who does. Please tell all your friends and remember that gardening with natives is fun, good for the environment and will bring you many years of enjoyment. Thanks, Hope to hear from you.

John Nowak



Annual Native Plant Sale Volunteer Sign Up

Heritage Oaks Bank, Madonna Plaza, San Luis Obispo, Saturday, November 6

Name: _____ Telephone: _____

Please mark the hours and tasks you can help with.

Hours Available

7 - 8 a.m.

8 - 9 a.m.

Tasks

9 - 10 a.m.

10 - 11 a.m.

11 - 12 a.m.

12 - 1 p.m.

1 - 2 p.m.

- | | |
|---|---|
| <input type="checkbox"/> Help as needed | <input type="checkbox"/> Sell Plants |
| <input type="checkbox"/> Unload & set up plants | <input type="checkbox"/> Sell seeds |
| <input type="checkbox"/> Set up tables | <input type="checkbox"/> Cashier's table |
| <input type="checkbox"/> Sell books and posters | <input type="checkbox"/> Load customers' plants |
| <input type="checkbox"/> Sit at sales table | <input type="checkbox"/> Clean up |

