



Redbud Review

Newsletter of the Redbud Chapter—Nevada and Placer Counties
California Native Plant Society

www.redbud-cnps.org

Fall 2016

A Beginner Creates a LOCAL Native Garden

When we moved to Grass Valley (part-time at first), we acquired thousands of square feet of lawn. Our first year, we converted 2500 square feet to a vegetable garden and small orchard surrounded by deer fencing.

At the same time, I discovered California native plants; we converted another 1500 square feet to natives. In this first effort, I planted drought-tolerant natives with origins from California's coastal foothills to subalpine areas.

By the following fall, having purchased some native-plant books and attended a few workshops and presentations, I had learned of the benefits of planting natives that are a natural part of the local ecological community. So, as we planned to convert another chunk of lawn to natives, I started to learn about the plant community around me.

Finding My Local Plant Communities

Fortunately, I discovered "*Designing California Native Gardens: The Plant Community Approach to Artful, Ecological Gardens*" by Glenn Keator and Alrie Middlebrook. Their book divides California into twelve plant communities, from deserts to mixed evergreen forests to chaparral to wetlands. Each chapter has an introduction describing the community's progression through the year, its attractions, and its ecology, both large and small scale.

Keator and Middlebrook provide inspiring advice about how to create a garden using the natives of each plant community, including an example of a design for an actual installation. I found the descriptions of specific plants for specific communities most useful, including preferences for light, water, and soil, as well as growth habit.

Here in Chicago Park, our plant community is mostly dominated by black oak. Part of where I intended to plant was under and around these oaks, which counts as oak woodland.

In the center of our yard, however, the oaks had died from lawn overwatering, victims of earlier residents' ignorance about the needs of oaks to avoid summer watering, so now the space was sunny and dry. This didn't seem like oak woodland.

Just down our gravel road, are manzanita, other low-growing

Evening Programs

Our community education "Passion for (Native) Plants Lecture Series" for 2016, are FREE to both members and non-members.

Mingle with fellow native plant enthusiasts, and hear from speakers who are passionate about our natives and eager to share their expertise with you. **Further details are on the back page of this newsletter.**

We generally alternate lectures between the Madeline Helling Library in Nevada City and the Auburn Library, 350 Nevada St., Auburn.

Here are two upcoming *combined* Redbud Chapter-CNPS General Membership meetings. The membership meeting *precedes* the general meetings. Please consider coming to both, we have important chapter business to discuss. Members will be *nominating* officers for the coming year (*voting* takes place at the next meeting), and proposed by-law changes. As always, your input is vital.

Thursday, September 29 at 6:30 pm, followed by slideshow-based presentation on "Welcoming Pollinators to Your California Garden" by Nancy Gilbert at 7:00 pm, at the Madelyn Helling Library, 980 Helling Street (next to the Rood Center), Nevada City, CA.

Friday, October 28 at 6:30 pm, followed by presentation on "The Wonders of Fall: How and Why Native Flora Display so Splendidly" by Sierra College Professor Shawna Martinez at 7:00 pm at the Placer County Library Community Room, 350 Nevada St., Auburn, CA.

Come meet other Redbud members, share light refreshments, participate in nominations for 2016-17 officers and vote for amendments to our chapter By-laws.

Your Board is required to inform the membership of any proposed changes to the by-laws, so you can comment and vote on them. Here goes!

Notice: Amendments to CNPS Redbud Chapter By-laws (<http://redbud-cnps.org/bylaws.htm>) are proposed as follows:

1. Amend Article III. Membership, Section 4. Meetings of the Membership, as follows: The Members of the Chapter shall hold meetings at such times and places as they deem

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dry shrubs, and occasional pines. A fire had burned that area about 50 years ago. Though the area likely had been black oak woodland before the fire, it had not had sufficient water to recover fully, and thus remained chaparral. I decided to classify the dry, sunny area in our yard as Chaparral community.

Fine-Tuning My Local Plant Communities

I discovered another source of information about plant communities that provided another perspective—Las Pilitas Nursery (<http://www.laspilitas.com/>). This southern CA native nursery offers an outstanding website for native plant gardeners.

Las Pilitas lists my entire Grass Valley zip code, 95945 as Yellow Pine Forest, yet my area has few if any pines or other evergreens. In fact, there is wide environmental variation within this zip code. So, I stuck with my own observations.

Las Pilitas more finely differentiates California into plant communities than does “*California Native Plants for the Garden*”. They have not one but three types of oak woodland, for instance. They note that a Northern Oak Woodland community is defined not just by its plants but that it occupies “the drier warmer slopes and canyon bottoms within the Mixed Evergreen Forest and the Douglas Fir Forest” (Griffin and Critchfield, 1976)]. Highway 174 from Grass Valley is lined by evergreens until my gravel road, which winds through chaparral marking the 50-year-old burn area. Once home, suddenly I’m in a Black Oak forest, covering the slopes around our house, clearly a Northern Oak Woodland community.

The nearby open area, however, has no oak-tree influence; it has full sun and is more chaparral than oak tree. At first, I hesitated to choose multiple plant communities for such a small bit of land as ours. An online publication from Cal Poly, however, described “ecotones,” or areas of overlap between adjacent plant communities, and stated that it can be “very difficult to tell exactly where one community ends and the other begins.” (<http://polyland.calpoly.edu/OVERVIEW/Archives/derome/communities.html>). This applied to some of our property—not deeply influenced by the oaks but not completely free of them either.

I may add some young Black Oaks to the Chaparral area, in the shade of shrubs, to start the process of succession. Over time, plants that need full summer sun would be shaded out, as would happen naturally in a Chaparral community.

Building Up a Collection of Plants I Might Want to Use

Now that I had my communities set, I wanted to track plants I might use, using index cards in a box, separated into sections for each planting area. For each plant I thought would work and found appealing, I started a 3 x 5 card, listing:

- Botanical name
- Common name
- CA. native, its plant community and associated plants (e.g., CA native; N. Oak Woodland; good with Black Oak)
- Water needs (e.g., drought tolerant, or richer foliage with regular water)

- Light needs (e.g., good under oaks – sun or shade)
- Size – to 3-5’, fast growing to 3’
- Pollinators – butterflies
- Flowers – very showy & fragrant – blue
- Dormancy, if notable (e.g., evergreen)
- Local to Nevada County?

I consulted numerous books and websites, adding to the cards as I went. I wrote in pencil, to make corrections easy.

I pored through “*California Native Plants for the Garden*” by Carol Bornstein, David Fross, and Bart O’Brien. This easy-to-use book, great for beginners such as myself, lists plants in alphabetical order by botanical name. Each entry has a photo, quick list of requirements for light, soil, water, and geographic growing areas. The generous coverage includes size, detailed description, recommendations for garden companion natives, and much more.

Living in the country, I was grateful for Carolyn Singer’s “*Deer in My Garden*” series. I added info about a plant’s deer resistance.

Scanning the invaluable Las Pilitas website under “Native Plants,” I found listings for dozens of natives, full of detailed info that I added to my cards. It’s easy to get lost on this site!

(Note: For a later project, I built my plant list using Excel; tracking the key plant attributes, such as water needs, in columns. You might like this better.)

I also used real life. As I walked or drove my own and nearby property, I identified plants that were listed in my 3 x 5 cards, such as manzanitas, redbuds, and Foothill Penstemon, I longed to plant *Ceanothus integerrimus* (deerbrush) against my fence abutting the wild land, in just the right place, with dappled sun and shade. Finding these examples of local plants that could help rebuild an ecosystem on our land was empowering!

As I created my landscape drawings, I observed and noted which areas under and around the oaks got the most afternoon light and which the least light all day as the sun traveled across the sky. Understanding these variations in light helped me determine which plants should go where.

Finding Plants That are LOCAL Natives

Thrilling as it was to have a list of natives that grow in an Oak Woodland or a Chaparral community, I needed to be selective. To help rebuild the ecology, to support the existing native plants and animals, I also had to know which plants were native to Nevada County.

Las Pilitas lists some trees in the Northern Oak Woodland community, such as Black Oaks, Redbuds, and Big Leaf Maples. (Because Big Leaf Maples need so much water, they were unsuitable for around the Black Oaks, much as I adore them!!).

The “Local Floras” pages on the Redbud Chapter’s website have links to lists of plants for specific local sites, put together by expert members; they are great sources for identifying

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plants that grow locally, in environments I could compare with my own. I found Rock Creek most applicable.

Most useful for identifying local natives were two features on CalFlora's website (www.calflora.org). First, simply select your county, plant community, status (e.g., "Native to California"), county, and then some plant characteristics to narrow the results (e.g., tree, shrub, etc. or (annual, perennial, etc.). For me, the intersection of plant community and county meant local.

Second, "*What Grows Here?*" (<http://www.calflora.org/entry/wgh.html>). It was a great discovery for a beginner. Just adjust the map to the area you want to focus on (I decided to think generously and include all Nevada County), draw a more precise polygon if you prefer, adjust the Plant Filter variables, and click Search.

In each case, very nice lists resulted. I spent hours here, updating my index cards to indicate which plants grew locally. This helped narrow the possibilities, not only eliminating non-locals but plants that required more than low water, couldn't stand up to deer, or had other picky characteristics.

The Plant Sale List Shows Up!

The day the Redbud Chapter posted the list of plants available at the Fall Native Plant Sale on their website, I printed it out and made a set of 3 x 5 cards that identified the plants I wanted, and the quantity of each I wanted. I prioritized plants I wanted most; I wanted to look for them first at the sale.

A day or two before the sale, I helped move plants to the sale site. It was fun and gave me a wonderful look at hundreds of plants in advance.

Preparing to Receive the Plants

Meanwhile, my husband and I had prepared for the plants. We'd mown the lawn very short and turned it over under the oak tree weeks earlier. We'd covered the area with cardboard from appliance boxes to prevent grass and weeds from returning. (I've since learned much more about best practice for lawn removal.) We'd had a couple of cubic yards of chips delivered, and a few gorgeous boulders installed.

I created a system to be able to water the plants as soon as I bought them, connecting 1/2" black drip tubing to a hose bib. We had to use well water, as summer NID water would be cut off soon. The tubing ran inside the garden deer fencing, so new little plants would be protected. Adjustable drippers were installed along the tubing, to be stuck into each pot.

Buying the Plants

The night before the Redbud Native Plant Sale, I was still poring over the list, deciding on the most critical plants to select first and contingency plans.

I prepared myself for the morning—water bottle, snack bars, hat, jacket, and empty boxes for plants in my car. I had my Redbud Plant List, with cards listing desired plants and number of each to get.

When I arrived at the plant sale, before it opened, I was happy I'd volunteered, because now I could get a few plants early. Once the sale began, I was glad I had my list prepared; I honed in on the plants I most wanted.

I wound up being able to buy most of my targeted plants. What I couldn't get mostly hadn't been listed as available.

I filled in the gaps with a trip to the Bay Area for a different native plant sale and a visit to East Bay Wilds, a charming native plant nursery in Oakland.

Since the Plant Sale

When I came home, I set each plant up with its own dripper. Later, because of this dripper system, I could take the time to do things well. I wasn't under pressure to plant everything as quickly as possible.

To water the *installed* plants until the rains began, I installed a drip system and hooked up the valve for that line to a hose connected to a hose bib fed by well water and controlled by a battery-operated timer. (To make sure no irrigation water got into the well water, I also installed a backflow-prevention device between the dripline and the valve.) In April, when NID water became available again, we switched over to NID water and our electric irrigation controller.

Flash forward several years later, and now the area under and around the oak trees looks like a magical forest, planted by nature, not people. I bet all my plant selections weren't quite correct; some weren't actually local natives for those plant communities. I had great native plant learning experiences along the way. I'm further along the path, literally and figuratively.

I've lost some plants by under-watering to a certain extent (and from deer). I think I've taken water conservation a bit too seriously, especially when it gets really hot. I'll have to do some re-planting this fall, but at least I know a bit more about plant communities, about how certain species fare through the seasons, and about plants and the hot summer weather here. This time, I'll water a bit more, very early in the morning on really hot days, though not a lot more. After all, it is an Oak community.

Additional Resources for Next Time

We have yet more lawn to transform into natives. In fact, we have a section of lawn covered with tarps right now. I've discovered more resources to consult this time:

- New pages on Las Pilitas website specifically about oaks. I can hardly wait to learn from them! For instance, there's one on what to plant under an oak: http://www.laspilitas.com/groups/oaks/Planting_under_oak_tree.html
- The Redbud book, "*Trees and Shrubs of Nevada & Placer Counties, California*", has come out since my last big landscaping project. Thanks, folks!
- CalScape, the CNPS site for identifying plants native to a specific California location. Just enter an address and CalScape provides a list of plants native to that area, and you can filter it lots of ways to get a really relevant, useful list. (See page 5 for more on CalScape.)

Chrissy Freeman 🌱

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suitable, necessary, or convenient to accomplish the purposes of the Chapter. In general, the Chapter will hold 2 or more general meetings annually.

This language replaces the former requirement of “at least six meetings annually (not including field trips) as required of each Chapter by the Bylaws of the California Native Plant Society” because the CNPS Bylaws no longer require any specific number of general chapter meetings.

2. Amend Article V. Elected Officers, to add a new Section 5 “Duties of the Secretary: Attend and take minutes of Board meetings, give notice of meetings, distribute minutes and copies of handouts, receive and respond to correspondence on behalf of organization as appropriate.”
3. Amend Article V. Elected Officers, to renumber current Sections 5, 6, 7, 8, and 9 to new Sections 6, 7, 8, 9, and 10, respectively.

4. Amend Article V. Elected Officers, Section 7 (formerly Section 6) to read as follows: “A nominating committee appointed by the Board of Directors will nominate Officers at a membership meeting of the Chapter (for example, August or September). Officers may also be nominated from the floor at the nominations meeting provided that nominees have consented. Members are notified of the slate of Officers by mail/email. Elections are held at the next Chapter membership meeting following the meeting at which nominations are made.”

This language simplifies the election requirements and removes the designation of specific months (October for nominations, November for elections). Winter weather can make November meetings problematic, so it is proposed to move elections to earlier in the Fall.

5. Amend Article VI, Committees, to add the following to the list of standing committees: Rare Plants, Plant Sale, Book Project, Hospitality, Propagation, Ethnobotany, and Publications (these are in addition to Membership, Conservation, Field Trips, Education, Publicity, Programs, Horticulture, and Events Committees which are already listed in By-laws).

If you have questions or comments about these proposed amendments to the By-laws, please email: president@redbud-cnps.org
Jeanne Wilson, President

Book Review: “Tahoe’s Spectacular Wildflower Trails”.

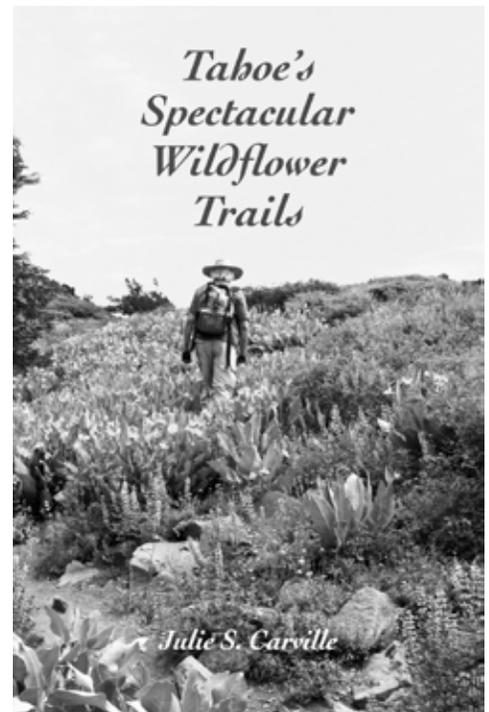
Back in the 1980s Julie Carville (a founding member of this chapter) had an idea for a new kind of wildflower book. She had lived in the Tahoe basin for many years and knew both the wildflowers and the trails intimately. Knowing how overwhelming it is for a beginner to learn the wildflowers of the Sierra Nevada, she decided to concentrate on the wildflowers of each trail, and wrote

a book entitled “Lingering in Tahoe’s Wild Gardens”. In this book, with the help of sketches, she introduced readers to various plants in specific areas along each trail. This unique approach appealed to both beginner and more experienced botanists.

Julie has just released another book based on this approach. It is entitled “Tahoe’s Spectacular Wildflower Trails”, and is just as spectacular as the wildflowers! It includes many trails from her first book, plus several new ones, along with glorious photographs of the plants to be found on each trail. In addition, in the front of the book are small images of the plants organized by color, which is a very useful addition! Julie has also updated all the plant names in accordance with the latest edition of The Jepson Manual.

Even if you have Julie’s previous book, I recommend that you add her new book to your library and day pack! It is on sale at local bookstores and the CNPS store in Sacramento.

- Tahoe’s 21 best scenic wildflower walks
- Color guides for easy flower identification
- Tree guide for quick reference
- Native American plant knowledge
- Hikes for all ages and abilities



Some other reviews:

“Prepare to be inspired! Julie’s knowledge, enthusiasm, and passion are contagious. She’ll teach you how to identify Sierra wildflowers, where to find them, the important ecological role they play—and you will have fun in the process! With Julie as your guide, countless hours of delightful meandering await you.”

David Edelson, The Nature Conservancy

“You’ll learn an amazing amount with Julie Carville’s fine book and at the same time fall in love with the individual flowers and trees found along the trails. Abundant, lovely photographs make plant identification easy, and the lively text make this book a delightful trail companion.”

Phyllis M. Faber, Natural History Editor U.C. Press, Former Editor for CNPS Fremontia

Roger McGehee

Tips for a Great Plant Sale Experience!

So, you've saved the date, and are all ready to transform your yard with lots of new plants? Not so fast! Here are some tips to make the whole process more enjoyable and more productive:

Before the Sale...

- Check out Redbud's publications: Ideas for Gardening with California Native Plants (http://www.redbud-cnps.org/PDF/Gardening_Ideas.pdf), Landscaping with California Native Plants: http://www.redbud-cnps.org/PDF/Landscaping_with_Natives.pdf, Xeriscaping with Drought-Tolerant California Native Plants: <http://www.redbud-cnps.org/PDF/Xeriscaping%20with%20Natives.pdf>
- Decide where you want new plants and why – to attract pollinators, establish drought tolerant ground cover, or?
- Research on CalScape calscape.cnps.org to find out about hundreds of plants native to your area (see Chrissy Freeman's article in this Newsletter)
- Make a preliminary "wish-list" of plants you want
- Check out Nancy Gilbert's presentation on "Welcoming Pollinators to your California Garden" on Thursday, September 29 at 7 PM at the Nevada City Library.
- Join Redbud or renew your membership before the sale and arrive early (8:30 for best selection). If you do join online, be sure bring a printed copy of your receipt to the sale. You can also join on the 29th at Nancy's presentation, or right there at the sale!

Once the Plant List is posted...

- Check your wish-list against the plants that will be available, and identify & prioritize the plants you want; note possible substitutes in case a first choice sells out.

At the sale...

- get advice from experts at the Information Table or talk to a Native Plant Advisor (with Redbud gardening apron).
- check out the books on growing native plants available to members at discounted prices at the sale.
- bring your own garden cart or wagon & boxes to make it easier to collect plants and get them to your car after purchase.
- keep track of the genus/species of your plant so you can get more information later about how to care for it.

After the sale...

- Be ready to plant when you get home—for example, have the spots ready for the plants, have garden soil or mulch available, and, if needed, be ready with protective cages to guard tender new plants from deer, rabbits, etc.
- If you can't plant right away, keep plants in a protected, shaded place so they don't get fried by the sun or pummeled by wind, rain, or hail, depending on the weather.
- If you have questions, go to calscape.org for information about your plant & how to grow it (address will be printed on the sales receipt); you can also email questions to 'nativeplanthelp@redbud-cnps.org'

Jeanne Wilson 🐾

When Less Is More

If you are considering adding some plants to your landscape, are you thinking about using California Native Plants? If so, then now is the time to make your list! A few good reasons:

- 1) Native plants are generally less available at local nurseries. On October 8th the Redbud Chapter of CNPS plant sale will allow you to travel less and find more plants to choose from (close to 1,000 plants from a wide selection of types and sizes).
- 2) Fall planting results in less chance of transplant shock and more successful establishment by next Spring.
- 3) Less water will be required for irrigation both now and in the future. Native plants are typically more water efficient than many other choices if selected for the right location.
- 4) Plants that are native are more easily adapted to local climate and soil conditions and less susceptible to weather and pest problems.
- 5) Since native plants place less impact on the environment, compared to more exotic selections, they are a more appropriate choice for California horticulture. Additionally, they contribute much needed habitat for all forms of wildlife and thereby increase biodiversity.

In summary, planting California native plants may be the least difficult way to achieve the most success in your landscape and garden. Plan now to attend the Fall plant sale on October 8th!

Tim Crowley, Chapter Board Member at Large 🐾

CalScape – The Quick Online Guide to Plants Native to Anywhere in California

CalScape is the CNPS site for finding plants native for a specific California location. It's quick and easy to use. Here are some steps to useful results.

Identify Plants Native to Your Location

- Navigate to <http://calscape.org/>
- Enter any California address to see plants native to that location.
- An appealing array of plant images appears. Each image represents a group of plants, with a label for that group and the number of plants in that group. The plants are divided into groups by plant type (trees, shrubs, annuals, grasses, succulents, vines, groundcovers), light condition (sun, shade, part-shade), and other conditions (drought-tolerant, riparian, very easy).
- For the selected area, it gives bioregion, elevation, and annual precipitation.
- Once you select a category, you can filter to show all plants or only plants found in nurseries.

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- You can sort by popularity (fascinating!), or by botanical or common name
- In Grid view, you see more plants at once; in List view, you see some of the description about each plant.
- Click any specific plant to see its page. The richest imaginable source of information about a plant—from a nicely written description of its notable features, where it grows, and how this varies across its range, to multiple photos, a map of estimated natural range, plant description, natural setting (with hot-linked companion plants), landscaping information, and, finally, a list of nurseries that typically carry it!

Build and Save a Plant List on CalScape

Not necessary, but a useful way to save your search results for future reference

- When you find a plant you like, make sure you're signed in on CalScape. If not, click "Sign Up" in bottom right.
- Once you're signed in, return to the page you were on before. Then mouse over "Add to plant list," and you'll see "Add to new list." Choose the name you want to call this new plant list ("Back Yard", "Julia's Front Meadow," etc.), and a location.
- The plant name will go onto Plant List—Text, but don't worry. The corresponding image and link automatically are entered on Plant List—Photos. Click "Save" to save that list.
- To return to your most recent address results, pull down the entries under your browser's Back button and select the phrase that describes that list.
- Click "My Plant Lists" in bottom right to see your plant list(s). Select desired list, then any specific plant. From here, you can export your list to Excel.

Chrissy Freeman 🌱

After The Bark Beetles...

In October, 2015, we discovered a group of brown, recently dead Ponderosa pines that had been infested by pine beetles. These quickly spread to include almost 100 pines, many 80 to 100' tall or more. In January, we were able to find help to start felling the dead trees as well as those not yet dead but heavily infested. We cut down the trees, immediately burned the slash, cleaned up tons of accumulated downed limbs, dead trees, and pine needles, and thinned out suppressed or sickly trees; the trunks we cut up into rounds to be used as firewood. We did this throughout our 10 acres. We also did broadcast burning in some areas under the trees to reduce the layer of duff and enable rain water and snow melt to penetrate the ground, so that the remaining trees could benefit from the normal rainfall after 4 years of drought.

In May, we began to see new signs of beetle infestation, despite hundreds of hours of work, and the removal and processing of over 300 trees (the original 100 plus some that later died after beetle infestation, as well as many smaller trees removed to thin out the forest and reduce

the overstocking and competition for resources). These newly infested trees quickly succumbed, sometimes turning blond and then brown within 3-4 weeks after the first signs of beetle infestation. Despite continuous work to remove newly infested trees, and extensive watering of trees in June and July, we have had almost 100% mortality of all the Ponderosas attacked by beetles on our property so far. An estimated 600 to 700 additional trees have died, and fewer than 300 remain uninfested at this time.

Lessons learned:

1) With major beetle outbreaks, clean-up and thinning that would normally help protect otherwise healthy trees cannot prevent the spread of beetles from surrounding property—we live on Frost Hill, where only a few acres of dead trees have spread to almost 100 acres just in the last 10 months.

2) The clean-up and thinning is still crucial, because the original overstocking and lack of diversity is what made the trees so vulnerable.

3) The beetles themselves do not kill the trees, it is the blue stain fungus that they transmit that is fatal; what we did not realize is that once a tree is infected with fungus at the time of the initial beetle infestation, both the tree's ability to move water from the roots to the crown and the ability to create and utilize pitch to fight the beetles, is seriously compromised almost immediately—within 10 to 14 days after the first signs of beetle attack. The movement of water in the tree drops to zero within 4-6 weeks, and the tree rapidly dies. This means that once beetles have attacked the tree, there is basically nothing that can be done to save it.

4) If at all possible, carefully cutting down the dead trees to preserve the surviving trees, shrubs, and perennials (oaks, firs, cedars, dogwoods, coffeeberry, wild rose, elderberry, gooseberry, ferns, grasses, iris, etc.) is essential. Once the thick overstory of Ponderosas has been removed, there has been an explosion of new growth in all of these species and more. One elderberry that had been overshadowed for years suddenly spurted to 8' tall and is now covered with berries.

We are still in process, and must now deal with hundreds more dead trees; fortunately, there is now recognition of the urgency and severity of the crisis, because the dead trees present an extreme fire danger. Funding is becoming more available to help private property owners. Contact your local Fire Safe Council or Tree Mortality Task Force (the Governor appointed a statewide Tree Mortality Task Force in October, but local communities are also mandated to have their own task forces) for information about possible sources of funding and recommendations for qualified, skilled tree removal experts.

Looking to the future, we will have a much more open, much more diverse, and much healthier forest. It will also

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be more alive with birds and other wildlife, because dense Ponderosa forests do not provide much food or shelter (other than to squirrels); there are few understory plants that produce flowers, seeds, berries, or grains, and the ground is covered with deep layers of pine needles. So while the loss of our trees has been heart-wrenching, it is also a lesson in the resiliency of nature.

Jeanne Wilson 🐿

Ames Gilbert adds:

After talking to local foresters with a lifetime of experience, I come away with the following impressions.

Many of the difficulties that our forests are experiencing are due to the heavy and misguided hand of man.

Foremost is the policy of fire suppression, especially since the 1920s. The result is that for decades the fuel load has been building up and the land is overloaded with trees. This means that when there are fires, enormous amounts of fuel ignite and the fires are much more severe. Even the more fire-resistant species are badly burned, and the intense heat kills the store of seeds in the seedbed, small animals, nematodes, worms, fungi, bacteria, micorhizae and a host of other organisms; in effect, sterilizing the soil. This makes truly healthy recovery problematic.

This is not to mention the effects of industrial forest monoculture after clear cut logging.

Another result is that an unnatural plant succession arises. For example, at our elevation of 2700 feet, prolific seeders like incense cedars produce carpets of seedlings that would formerly be winnowed by regular light fires. These seedlings outcompete slower growing species like oaks, and start to replace them in the landscape. The overcrowding, together with the immense build up of duff that would also have been thinned by regular light fires means that, in our area, between 40 to 70 percent of the rain that does fall never soaks into the actual earth. This is why last year's better rainfall did not make much difference. Add this to patterns of less rainfall in some years, and we have a recipe for intense stress. Trees under stress actually emit pheromones, which attract beetles. This is nature's way of reducing the overpopulated land.

So, the foresters tell us to expect that the wave of beetles moving northwards through the Sierras will continue to move in our direction; they have already reached El Dorado and Placer Counties, and will be in Nevada County next season. Note that this wave is a different phenomenon from the expanding local populations of beetles.

In my opinion, as native plant enthusiasts, we should understand that big changes are underway. The local mix of species will change regardless of what we do, but we can be stewards of our own properties by acting with foresight where possible. We can thin the trees on our properties as soon as possible (one forester told me that if

you look up in a healthy forest, the canopy of every large tree should be surrounded by sky; a guide to how far apart they should be). We can start to protect our lands from the most devastating fires by thinning, by removing exotics, by removing fire ladders, by doing controlled burns of the undergrowth and duff on suitable winter days. We can follow the Firesafe Council recommendations to protect our homes, and form Firewise Communities so we can cooperate with our neighbors and maybe save not only our landscapes, but our lives.

Horticulture Chair Report

The Plant Propagation Group did not meet over the summer. However, individual members of the group are propagating plants at their homes for plant trades among ourselves, as well as for our chapter's Oct. 8th fall plant sale. Our group is currently propagating local native plants from seed rather than cuttings, but some members are interested in trying their hand at cuttings and layering this year. We also plan to have our annual seed exchange party at the end of October, which is great fun, as we put all our seeds out in labeled containers on the counters and folks scurry about filling their containers and envelopes with the seeds they want.

The most exciting development this year is the potential for creating a regional native plant nursery at the CalFire facility in Davis, CA. This facility once had a fully operational native tree nursery, but was shut down several years ago due to lack of funding, along with all the state operated forestry nurseries. Rich Marovich, a Streamkeeper with the Solano County Water Agency as well as a horticulturalist with a degree in nursery management, lives close by. He saw the abandoned nursery facility as an opportunity to propagate native plants for revegetation projects. He formed an alliance with volunteers from the Putah Creek Council and environmental horticulture students at UC Davis to start up an all-volunteer run nursery at the location. They have revived the nursery shade house and greenhouse, and are having great success with propagating and growing local native plants. A group of us from our Redbud chapter visited the nursery, along with a delegation from the Sacramento Valley Chapter's Elderberry Farms Native Nursery and a member from El Dorado chapter, to meet Rich and discuss the potential for expanding the nursery into a regional native plant nursery where our CNPS chapters can volunteer time and contribute seeds and cuttings of native plants we would like to have at our plant sales each year. Rich was very welcoming and receptive to the idea and plans are underway to develop this cooperative venture, which will allow Rich and the Putah Creek Alliance to expand their plant palette and make locally sourced native plants more available to our participating CNPS chapters. A major advantage for our chapter is that this is a fully functioning nursery that meets state nursery standards and has an automated irrigation and fertilization system, so we only need give our time

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and energy to enjoy the fruits of a having a native plant nursery for our chapter. As a bonus, Rich and his band of enthusiastic volunteers have a great deal of shared expertise in plant propagation and an organized volunteer system we can plug into. Rich has generously donated a large number of extra trees and shrubs from the CalFire nursery for our fall plant sale this year. As for me, I have been madly collecting acorns and many other seeds to deliver to Rich in the hope that next year we will have successfully propagated these species for our 2017 fall plant sale.

Nancy Gilbert, Propagation Committee 🌱

Big Changes and Transitions

There sure is a lot happening around the patch!

Denise Della Santina has resigned as President of the chapter after three years of enthusiastic and effective leadership. She now has a full-time job, still runs her restoration plant nursery, and yet finds time to stay on as Conservation Chair and as a Chapter Delegate, representing our interests to the State CNPS. Thank you so much for your service, Denise, you pulled us through some tough times with your boundless energy and optimism.

Taking her place is Jeanne Wilson, formerly Vice-President. Luckily for us, she matches Denise ounce for ounce as an unbounded bundle of energy, sheer grit and hard work. Even though she has taken on the Presidency, she is still also Treasurer, AND is the head of the committee organizing our Fall Plant sale. Not only that, she has written several articles for this issue! And worked on the re-design of our T-shirts, to be introduced at the plant sale. And revised our by-laws. And—and—and... Fellow Redbud members, please rally round in any way you can to support her, we don't want her to burn out!

Taking her place as Vice-President is Sue Chalpin, who is also keeping her position as Hospitality Chair. Thanks so much, Sue.

Say 'hi' to new Board member Chrissy Freeman. As Publicity Chair, she is engaged right now in promoting our forthcoming plant sale with verve and enthusiasm. She brings many new and refreshing ideas to the table, and we welcome her expertise. She is also a great writer. Look out for her practical and engaging article in this issue to get a sense of how she contributes to our chapter.

Also joining the Board as Members At Large are Tim Crowley and Diane Wetzel. Tim has an lifetime background in horticulture, is working on the plant sale, and has contributed an article in this issue. Please keep them coming, Tim, you have a lot to share with us! Diane also took on the job of volunteer co-ordinator for the plant sale; more on that follows.

Any of you who have been on many of the walks the Chapter has offered over the last decade knows how

many have been led by the indefatigable, personable and knowledgeable Roger McGehee. You all know him and his wonderful smiling energy, so I can't tell you how sorry I am to inform you that he has led his last walk for us. Immediately after the plant sale, he is moving to be with his son and grandchildren in Colorado. Not only has he organized all those outings over the years, found many experts to illuminate them, and led many of them himself, he has taken on almost all responsibilities of the Board at one time or another, often simultaneously. He has taken on the roles of President, Vice-President, Co-President, Treasurer, Plant Sale Organizer, and many others. He is the quiet, soft-spoken one who prefers action rather than talk, yet can talk with charm and ease—a natural teacher, which was his former profession before retirement. He is the one who looks around, sees the holes that need to be plugged, and just gets on with it, calmly and competently. Thank you very much, Roger, we will sorely miss you—and please stay in touch.

Quietly, without any fuss, after serving as Chief Plant Sales organizer for many years, Chet Blackburn stepped back from those duties last year. There was no possible way to find one individual capable of taking over that job, so now the sales are run by a committee (though, necessarily, there is clear leadership: last year Cyndi Brinkhurst took it on, and this year Jeanne Wilson stepped forward—please give them a round of applause!). Chet also quietly relinquished the leadership of the Book Committee to Bill Wilson, having guided (herded?) the group of very diverse personalities through the planning, research, writing and production of our two incredibly successful books, over a period of *seven* years. Through the decades since the chapter formed, he also has taken on almost all jobs on the Board from President to Last Man Standing at our events. Of course, Chet is still an active member, always ready to impart knowledge and encouragement with a ready smile—and still the President of the Bromeliad Society too! We owe you so many heartfelt thanks as well, Chet!

Plans for the plant sale proceed apace. Volunteers have already driven as far as the Bay Area to collect plants, and many more trips are forthcoming. A big hand for Jeanne Wilson for leading the group who have done all the hard work: Bill Wilson, Roger McGehee, Nancy Gilbert, Tim Crowley, Chrissy Freeman, Karen Callaghan, Ames Gilbert, Bob Johnson, Karen Loro, Josie Crawford, Mary Cleary, Cindy Brinkhurst and Diane Wetzel, who has stepped forward (these words are too lame—has dived in at the deep end!) to take charge of organizing dozens of volunteers for the day of the plant sale this year. It takes hundreds and hundreds of volunteer hours to bring together all the ingredients for a successful sale, but on the actual day, it is her team that interacts with the public, engages and educates them, and makes sure that everyone is happy with their decisions and their purchases.

We hope to see you there, and be sure to bring all your friends!

Ames Gilbert 🌱

The Journey of a Citizen Scientist: From Discovery to Advocacy

Drum Powerhouse Road—Home to an Amazingly Diverse Flora

In May, 2013, a friend introduced me to Drum Powerhouse Road, a six-mile stretch of winding, narrow road with an amazing diversity of native plants, striking geological features, and views of canyons, mountains, snow and river. The road was originally built in 1912 so that a power house could be built and maintained on the Bear River; the power house is still in operation today.

On that first walk, I had no idea what to expect, but I had brought my phone with a built-in camera and took hundreds of pictures, trying to capture the fantastic displays of native flowers. I found over 50 species on that very first walk. In more than 30 years of hiking, backpacking, and amateur wildflower-hunting in California, I had never seen such beauty and diversity. I was struck by the abundance of native annuals and perennials, and the relative lack of non-natives (weeds & invasives).

Over the next three weeks, as spring turned to summer, I walked Drum Powerhouse Road several more times, took hundreds of photographs, and found several dozen additional species of native wildflowers, including just one small patch of lovely Purple Milkweed, covered with butterflies and other pollinators. Because I was aware of the special role of milkweed as a host and food for Monarch butterflies and their larva, I was excited to find them.

Intrigued and inspired, I did extensive research to identify each of the plants that I had photographed and began documenting their locations, habitats, and blooming seasons, using resources such as "*Wildflowers of Nevada and Placer Counties*" (Redbud Chapter's first book) and the classic "*Field Guide to Pacific States Wildflowers*", by Theodore Niehaus. I also relied on the online sites, Calflora and Calphotos.

Later, I bought and used the comprehensive (and weighty) Jepson Manual of California Flora. Through sheer stubborn persistence, I was eventually able to identify almost all of the plants I had photographed, sometimes spending hours researching just one plant, looking through descriptions and/or pictures of every plant in a genus or even a family that might be related to the unknown plant I had found. In some cases, I couldn't identify a plant until a year or more later, after I was able to see or revisit the flowers, foliage or fruit. And some of my helpful friends from Redbud who are botanists/plant experts solved a few mysteries by carefully keying out the plants for me.

Year One—Impact of Roadside Vegetation "Management"

In mid-June of 2013, I returned after a week's absence to find that the verges along Drum Powerhouse had been

scraped bare 5' to 10' from the edge of the pavement, decimating columbine and bleeding hearts, harlequin lupine and snake lily, larkspur and buckwheat, California Fuchsia and Purple Milkweed, among many others. The clearance was indiscriminate, sparing nothing, not even Stream Orchids, Bog Orchids, or Leopard Lilies at the edge of streams and several feet from the road.

My dismay over the devastation caused by the vegetation management practices spurred me to action! Over the next year, I returned to walk Drum Powerhouse Road many times, continuing to find new species and taking hundreds of photograph the flowers I found. I wanted to document the beauty and astounding diversity of the flora of this special place, in hopes that the evidence might support preservation efforts.

I also photographed the effects of the roadside clearance, which were exacerbated by drought. Because the native annuals and perennials had not been able to set seed, and the perennials had been cut to the ground at a time when lack of rain made recovery very slow, the weed and invasives populations exploded.

Year Two

The next spring (2014), the roadsides were cleared again in early June. Although the clearance was not as severe as the previous year, all wildflowers/shrubs/grasses next to the road were cut down/scraped away, in some places more than 4' from the pavement and up to a height of 5' or more on steep, rocky slopes.

Again, the Purple Milkweed was cut down before it could host any monarch caterpillars or produce seeds. Again, weeds and invasives flourished, including chickory, plantain, and hedge parsley; white and yellow sweet clover; prickly lettuce and curly dock; mullein and Klamath weed; vinca and Himalayan blackberry; rose clover and salsify; bull thistle and star thistle; and more —at the expense of native wildflowers. Significantly fewer native annuals and perennials grew and bloomed, and in some areas native plants I had seen the year before had completely disappeared.

Initial Attempt at Advocacy

In the summer of 2014, I contacted PG & E to ask about the roadside clearance practices. I reached a representative who said that while PG & E has an easement to use and maintain the road, the property along the road was generally not owned by PG & E but instead by private landowners and Forest Service. That meant there was little they could do about the roadside vegetation management practices.

When I informed PG & E that I had found spotted knapweed next to the road, they asked for information about the locations. They said they could take action on the knapweed because of its status as an invasive weed, and did so. The roadsides where knapweed was growing were scraped, graded, and re-paved in some places, and

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new gravel was scattered next to the road. For a time, there was no sign of the knapweed.

I decided to organize my thousands of photos and my research/identifications of Drum Powerhouse Road flora to make them available to others as a public record. In winter, 2014, my computer-savvy spouse and I developed a website to catalog the native floral wonders of Drum Powerhouse Road and our little community of Dutch Flat, eventually covering 176 native wildflowers: http://www.marable-family.net/DutchFlatWildflowers_db/

We also created a completely separate website exclusively for non-natives, so there would be no confusion about which 'wildflowers' were native and which were non-native: http://www.marable-family.net/DutchFlatWeeds_db/

Third Year

In late May, 2015, the roadsides were cleared again; the milkweed, buckwheat, woolly sunflower, penstemon, fork-toothed oocow, and other natives were cut to the ground, before they could flower and/or set seed, and before they could serve as hosts for native pollinators. Although some of the perennials, including the milkweed re-sprouted, the roadsides were cleared a second time, so there was no chance for them to mature. There were significantly fewer annuals such as Meadow Foam, Globe Gilia, Small White Nemophila, and Sticky Chinese Houses.

The non-natives, however, continued to spread, and it was clear that the gravels brought in to cut down on roadside vegetation had contained seeds of many non-natives—I began to see star thistle where I had never seen it before, and newly introduced invasives such as skeleton weed proliferated. Bike riders and hikers would find me pulling weeds along the road, as if I didn't have enough of them on my own 10 acres!

On the positive side, I continued to discover and photograph natives I had not previously seen, with the result that there are now more than 25 new entries to be added to the website.

Fourth Year—Renewed Advocacy

After the normal rainfall of this last winter, I was disheartened to see that the native wildflowers had continued to lose ground against the more aggressive non-natives. Ironically, heavy late rains and hail caused disease and damaged some natives, including Serviceberry and Leopard Lilies.

The late rains also resulted in a delay in roadside clearance operations, and on June 14, I discovered that for the first time in 4 years, the Purple Milkweed had not yet been cut down. Instead, it was thriving and was home to two healthy Monarch caterpillars. There were also milkweed seed pods, another first. (see photos)

Given what had happened the three previous years, I felt the situation was urgent; at any time, the milkweed could

be destroyed by mowing/blading. I contacted PG & E and was referred to a Senior Biologist on staff. He was very responsive, called me back even while he was still on vacation. He wasn't sure who was responsible for the vegetation management program along Drum Powerhouse Road, or even if it was a program managed by PG & E, Placer County, the Forest Service, or another agency.

He did, however, advise me that I could & should place brightly colored 'pin' flags (like those used around underground electric wires) to mark the site of the milkweeds), which I did.

He also gave me the name of another PG & E staff member who works with vegetation management in PG & E vegetation corridors under and around power lines, trying to improve pollinator habitat within those corridors. That staff member sent me two articles on Integrated Vegetation Management in Rights-of-Way (ROWs), and creating pollinator habitats in the "tens of millions of acres of ROWs along roads, utility transmission lines, and railroads across the U.S."

He said that PG & E was a founding member of the American Business Collaboration for Pollinator Conservation Action ("Business for Bees"). The "action plan" of Business for Bees "is to bring a "pollinator ethic" to land management at all landscape levels, challenging and collaboratively engaging stakeholders in both the private and public sectors to take action. The three key actions needed are:

- Landscape conservation and management for habitat;
- Research and monitoring; and
- Outreach and education in land management, pesticide use, and pollinator-beneficial plantings."

He advised me to work with the PG & E Natural Resources Management Team and the Land Consultant managing the area. I contacted these individuals and volunteered to hand weed around the milkweed until the end of the season, and requested that the small area in which the milkweed was located be spared from mowing/blading until after the caterpillars were gone and the seeds dispersed.

Although no formal agreement was reached, the door is open for further discussion—and the milkweed was not cut down.

By mid-August, the caterpillars were grown and gone, the seedpods had split open, the delicate seeds had floated away, and the leaves were withering and turning brown. There is hope that Monarchs will return to the area, if the milkweed spreads.

And there are more positive signs: On September 4, I found two Monarch caterpillars on young Showy Milkweed plants in a pot in my yard in Dutch Flat – I had only had the three small plants for a few months, and had never thought that they would become hosts for the

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caterpillars, especially not this late in the season. And yet there they were, brilliantly striped in black, yellow, and white, and eating the leaves with gusto.

It seems that if we plant the milkweed, the Monarchs will come, even in such an isolated location, miles from other milkweed plants. Nature, it seems, is resilient. I look forward to exploring Drum Powerhouse Road next Spring, and to finding new wonders.

“PG & E is a founding member of the American Business Collaboration for Pollinator Conservation Action, usually shortened to, ‘Business for Bees’.

Selecting Plants for Pollinators: A Regional Guide for Farmers, Land Managers, and Gardeners in the Sierran Steppe: Mixed Forrest, Coniferous Forest, Alpine Meadow Province

<http://www.pollinator.org/PDFs/SierranSteppe.rx3.pdf>

Join the Million Pollinator Garden Challenge

<http://pollinator.org/million-pollinator-garden-challenge.htm>

Jeanne Wilson, Citizen Scientist 🐝



Asclepias cordifolia seedpods Photo by Nancy Gilbert

Picky Eaters

Just like some two-year olds you may have been acquainted with, some butterfly caterpillars can be picky eaters.

The adult butterflies of most butterflies visit a variety of flowers to sip nectar, but when it comes to selecting the plant on which to lay their precious eggs, they are usually more selective. Most everyone knows that butterfly larvae are called caterpillars and that they are plant eaters, but it is not common knowledge that, while some butterflies will lay their eggs on a wide variety of larval food plants (often referred to larval host plants), others are ‘very picky’ about which plants they select for laying their eggs. I am going to discuss those butterflies that are very selective, so selective that they lay their eggs on only one species or genus of plant and their caterpillars therefore eat only one plant type during their lifetime.

The best known of these plant specific caterpillars are the Monarch butterflies. Monarch and Queen butterflies, which visually are quite similar, lay their eggs exclusively on plants in the Milkweed (*Asclepias*) genus. The Monarchs have received a lot of publicity lately because their numbers are declining rapidly across the country. One reason for this is that their larval host plant, the Milkweeds, have been decimated by herbicide treatments in agricultural and roadside areas. There is now a powerful public movement for agencies, farmers and private gardeners to plant the Milkweed species that are native to their area in order to bring back the Monarchs. It is important to plant *local* native species of Milkweeds rather than those from other parts of the country or tropical regions, to provide the right nutrients and toxic steroids (cardenolides) for the caterpillars and to avoid disrupting their normal migration patterns to their California coastal wintering sites. Monarch larvae/caterpillars ingest the cardenolides from the milkweed, which doesn’t harm them, and they become toxic to vertebrate predators. Their distinctive yellow, white and black stripes announce to these potential predators that they are bad-tasting and toxic; once a bird tries one, they immediately vomit, and learn the lesson. The best species of milkweeds to plant in our area are Showy Milkweed (*Asclepias speciosa*), Narrow-leaf Milkweed (*Asclepias fascicularis*), Purple Milkweed (*Asclepias cordifolia*), and Indian or Woollypod Milkweed (*Asclepias eriocarpa*). All of these grow in various habitats in Placer and Nevada Counties.

Another butterfly species that exclusively lays its eggs on one plant species is the Pipevine Swallowtail. As you may have guessed, its larval host plant is the California Pipevine (*Aristolochia californica*). Another common name for this species is Dutchman’s Pipe, and both names derive from the striking resemblance of the large flowers to a Dutchman’s pipe. The Pipevine Swallowtail caterpillars eat the leaves, flowers and seed pods, which contain the lethal toxin aristolochic acid, which is

Enjoying the Fall Season at Tahoe

Now, with fall approaching, is a great time to head up to Tahoe... the days are cooling down, the skies are turning a deeper blue, and the air is brisk and invigorating. Perhaps the sweetest of all is the late afternoon light or *alpenglow* that softly fades from pink to a golden, as the sun slowly sinks behind the mountain peaks.

Fall is also a time to enjoy the Quaking Aspens (*Populus tremuloides*), those glorious trees whose leaves quake in the slightest of breezes. In meadows by the aspens, autumn colored grasses move in late afternoon breezes, like waves gracefully rolling across an ocean. On the low growing shrubs of Sierra Bilberry (*Vaccinium caespitosum*) you'll find its tiny, blue berries hidden among its leaves, unless the animals have been there first. The nine to twelve foot shrubs of Mountain Ash (*Sorbus californica*) will be laden with clusters of bright red berries as its leaves turn into shades of yellow, orange or red. This year Western Prickly Currant (*Ribes montigenum*) is abundantly covered in some areas with its small, bright red berries, looking like tiny ornaments. These and the other fruit feed the animals, before they hunker down for the winter.

I love the feeling and colors of fall, but the fading of wildflowers at this time of year used to sadden me, but as I've grown older, I find myself rejoicing in all of Nature's cycles, because each season brings its own pleasures. I especially love fall, because it's the season that invites us to start to slow down and enjoy simple pleasures, as we pull out our warm sweaters and stack firewood to get ready for cozy winter evenings by a warm fire.

A nearby, beautiful place to enjoy the fall color is Loney Meadow at Grouse Ridge. It's in the Tahoe National Forest off Highway 20, relatively close to Nevada City, and is a wonderful place to enjoy the aspens and fall color. Its level, one mile loop trail around the meadow is a delightful walk for families with young children or for anyone who wants to experience the quiet and peacefulness of a fall day.

Quaking Aspens (*Populus tremuloides*) grow along the edges of this large, grassy meadow. They are one of Tahoe's most beloved trees for their fall color and fluttering leaves. Their flat leaves are attached at 90 degrees to the flattened stems, which causes the leaves to "dance with delight" in the tiniest of breezes. Aspens are unusual, because they carry out photosynthesis in the green tissue beneath their white bark. This allows them to begin photosynthesizing early in the springs before leafing out.

Aspen seeds don't successfully germinate in the arid forests of the west, so they primarily reproduce by sprouting from spreading roots to form large groves of trees that are clones or genetically identical to the mother tree. Individual aspens live for 150 years or so before they die, but the group of clones group is a single organism that lives much longer. According to the U.S. Forest Service,

"The largest and oldest known aspen clone is the 'Pando' clone on the Fishlake National Forest in southern Utah. It is over 100 acres in size... it has been aged at 80,000 years, although 5–10,000 year-old clones are more common."

Earlier in the season, a number of birds are found in the meadow, from the Pileated Woodpecker, Western Tanagers, Mountain Bluebirds, to the Red-breasted Sapsucker. The sapsucker feeds on the sap and cambium of aspens and cottonwoods. They drill horizontal holes into the trunks and branches and use a brush-like tongue to sip the sap as it flows out. They also consume insects caught in the sap or catch insects in flight. Loney Meadow is full of plant and bird life in spring and summer and is easily accessible from Nevada City, Grass Valley, and Auburn, but a high-clearance car is necessary to reach the meadow.

To find Loney Meadow, from Nevada City, continue east along Highway 20 at the intersection where Highway 49 heads north and Highway 20 heads east. Drive 25.5 miles and turn left onto Bowman Lake Road by the old brown shacks. Continue along blacktopped Bowman Lake Road, until it turns to dirt. At 10.4 miles, you'll pass the Loney Meadow sign and at 10.5 miles, turn right by the funky Lindsey Creek sign. Drive up the short hill and take a left at the split to avoid the steep road that is straight ahead. After a short uphill, you'll arrive at an old shack and dry meadow, where you'll veer right and then left to continue another 0.3 mile (don't take side roads to the right), until you reach an unsigned road on the left. Take that left and drive 0.4 mile to the Loney Meadow trailhead parking.

Two other easily accessible areas for those who live in Nevada City, Grass Valley or Auburn for aspen and fall color are the Mt. Judah & Barker Peak Loop Trail at Donner Summit and the Sagehen Creek trail, which is about 7.4 miles north of Truckee on Highway 89 heading north. All three of these trails are discussed in detail in my new book, "*Tahoe's Spectacular Wildflower Trails*". These last two hikes don't require high clearance, thus any car can whisk you to them. So I hope you'll grab someone special, pack a great lunch, and head out this fall to enjoy the aspens and fall color, before the trails are buried under snow.

Julie Carville 🐾

Deadline for Articles

Would you like to share your particular knowledge about native plants, gardens, or land management with fellow members? Are you inspired by the articles in this issue like those by Chrissy Freeman or Jeanne Wilson, who decided to share their hard-won knowledge and lessons learned with other members? Please consider sharing what *you* have learned along the way.

Whatever the subject, plan to have your article(s!) ready by March 21st, 2017—this would make an ideal winter project. Don't worry about picky things like style, that's the editor's job. Please, just go for it! 🐾

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harmless to them, but makes them and the adult butterflies toxic to vertebrate predators. The vines can be heavily chewed up by the caterpillars feeding, but they recover each spring with a burst of new growth. California Pipevine can climb up into trees and shrubs or be trained onto trellises, and it also can become a rambunctious groundcover. There will be California Pipevine plants for sale at this year's fall plant sale, so if you want to encourage Pipevine Swallowtails to show up in your garden, plant their larval host plant as well as a variety of pollen and nectar producing flowering native plants.

My favorite butterfly is the Clodius Parnassian (*Parnassius clodius*), which is a member of the Swallowtail family, even though it doesn't look much like a Swallowtail. This beautiful butterfly has nearly translucent, cream-colored wings and distinctive black, reddish-orange, gray and yellow wing and body markings that cannot be mistaken for any other species (see color painting). Parnassians are found in open woods, alpine areas, mountain meadows and around rock outcrops. It is almost always found flying where there are large colonies of Western Bleeding Heart (*Dicentra formosa*) or another member of the Bleeding Heart family, as Bleeding Hearts are its only larval food plant. Caterpillars feed at night at the base of host plant so it is quite lucky if you ever see one. Here again, we discover that by eating the toxic leaves of the Western Bleeding Heart, the caterpillars become poisonous as well.

The charismatic and endemic California Dogface Butterfly is our official state butterfly. It is a mostly dark yellow butterfly and its name derives from the black pattern on the upper surface wings which resembles the profile of a dog's face. Unfortunately, it is becoming less and less common, since its only larval food plant is declining, mostly due to residential and commercial development in foothill habitats. The Dogface butterflies lay their eggs on California False Indigo (*Amorpha californica*), a member of the pea family that is somewhere between shrub and vine, and which eventually forms colonies from spreading underground rootstock. False Indigo produces racemes of deep purple-maroon flowers with showy golden anthers which are unusual flowers for a pea, since the flowers lack the banner and keel parts of the typical pea flower. False Indigo grows in oak woodlands, often uphill from a creek or river. If you see California Dogface butterflies, then there must be patch of False Indigo somewhere in your area. As an added bonus, *Amorpha californica* is also a very good pollinator plant and especially attractive to bumblebees. It is difficult to propagate and grow up into saleable size, but we occasionally offer it at our plant sales. It is a native plant well-worth seeking out in nurseries or starting from seed if you can't locate it for sale.

Native grasses are probably not regarded as a butterfly larval host plant by most gardeners, but in fact they are

vital for Grass Skipper, Wood Nymph and California Ringlet butterfly caterpillars. The adults may feed on flower nectar, tree sap, or animal dung, but when it is time to reproduce, they must find healthy stands of grasses to lay their eggs. California is home to a large and diverse number of perennial bunchgrasses that make wonderful additions to garden borders and pollinator gardens, to rural and agricultural hedgerows, on banks for erosion control, and of course, should be included in any pollinator garden. Some excellent native grasses for landscaping are Deergrass (*Muhlenbergia rigens*), California and Idaho Fescue (*Festuca californica and idahoensis*), the various Needlegrasses (*Stipa spp.*), June Grass (*Koeleria macrantha*), Blue Wild Rye (*Elymus glaucus*), Tufted Hairgrass (*Deschampsia spp.*), Blue Grama Grass (*Bouteloua gracilis*) and Reed grasses (*Calamagrostis spp.*). These grasses can be difficult to find in nurseries, so there will be wide selection of California native grasses at this year's fall plant sale.

You can learn more about these and other butterfly larval food plants and how to support pollinators in your garden at the slide-based presentation I am giving at 7 PM on Sept. 29th at the Madelyn Helling Library in Nevada City. The presentation is titled "Welcoming Pollinators into your California Garden". And, you can purchase many, many outstanding pollinator and larval host plants at Redbud Chapter's fall plant sale on October 8th.

Nancy Gilbert, Education Chair 🐞



Monarch butterfly caterpillar Photo by Nancy Gilbert



California Ringlet on native grass, its larval food
Photo by Nancy Gilbert

What has Team Redbud Been Up To This Past Year?

Plenty—as you can see:

Each year, Redbud submits a formal report to the state CNPS office about our chapter's activities for the year. We thought you might enjoy finding out more about what we've been up to. So here's a summary of Annual Activities Report for April 1, 2015 through March 31, 2016

Redbud Chapter priorities include education, research & writing, service, conservation, and activism. The strength of the Redbud Chapter stems from an ability to mobilize a diverse membership having a wide variety of individual talents, knowledge, experience, interests, and expertise into an effective team. Collectively, Redbud members invested more than 2,500 volunteer hours in 2015–16, continued a number of long-term successful programs, and implemented several one-time and short-term projects & activities.

These included:

- Revising and updating Redbud's comprehensive book "*Wildflowers of Nevada and Placer Counties*" (revised edition to be published early in 2017) while continuing to offer both the first edition of *Wildflowers*, published in 2007, and *Trees and Shrubs of Nevada and Placer Counties*, published in 2014.
- Holding the Fall Plant Sale, this year combined with a Festival providing activities & displays for all ages, which attracted over 350 attendees. This event serves to educate the public, make available locally-adapted native plants, and raise funds for Redbud projects.
- Writing/distributing a newsletter for members (on paper & electronically) that is beautifully illustrated and packed with information about events and issues.
- Presenting an annual lecture series, "Passionate about [Native] Plants," featuring experts on topics such as public issues (Placer County Conservation Plan) to science

(physics of color), to gardening with natives (using native plants to attract/provide habitat for pollinators and birds), and more.

- Sponsoring and leading wildflower & native plant walks throughout the year.
- Sustaining active committees and Chairs, e.g., on Education, Rare Plants, Native Plant Propagation & Ethnobotany.
- Making grants and scholarships to non-profit organizations (schools, environmental organizations, & nature centers, etc.) and individuals (e.g., graduate students) to advance study and conservation of, and interest in, California native flora.
- Preserving and advocating for California native plants/habitats, including rare plants in Nevada & Placer Counties (e.g., the *Calystegia stebbinsii* project at Animal Shelter, and Hell's Half Acre outside of Grass Valley)
- Maintaining a website to publicize the chapter, our activities, and local native plants. The site is undergoing revision right now.

We welcome continuing members, new members, and visitors to actively support our programs and projects, and look forward to having you join us in our activities for 2016–17! If you have questions or would like more information, please email president@redbud-cnps.org
Jeanne Wilson, Redbud Chapter President 🐞

NEEDED: A FEW GOOD VOLUNTEERS

An organization is only as effective as its members. Do any of the OPEN or Acting positions on the next page appeal to you? If you are interested, come to any public meeting, Board meeting, or contact any officer listed on the last page, and find out more!

Are particular qualifications needed? NO (though your experience and expertise are certainly welcome!)—just a love of our native plants, enjoying working with like-minded folks, and the willingness to have fun! Most positions are very flexible, you can work on the schedule that suits you. For example, the Board meets about ten times a year (see actual dates on our website) to set goals and guide the direction of our chapter, but it is not necessary to come to every meeting. And you'll have great mentors!

Note: One of our most pressing needs is for **Newsletter Editor**, and another is for **Field Trips Chair**. The editor is one position where it might be useful to have a little prior experience; maybe already have a way with words, or some knowledge of a page layout program, but if you are a quick study, you could 'learn on the job'. That is what the present Acting Editor did! Note: this is Ames' last issue...

The Field Trips Chair organizes fun and educational trips for spring and early summer, and finds leaders to take charge of these. It's not so hard—if you have a list of favorite local hikes, beautiful places you'd love to share, or great locations for photography that you've discovered, you're halfway there! And, you'll have lots of help when you need it.

Welcome New Members (May 2016– August 2016)

We extend a warm welcome to the following new members:

Rebecca Herron
Teri Bueb
Suzanne Thomas
Ron Harton

Timothy Crowley
Chris Paulus
Linda Sheu
Jeannette Duff

Lauren Almond
Patricia Vannucci
Mariann Eitzman
Deva Forrester

And thank you to all of our loyal renewing members!

California Native Plant Society, Redbud Chapter Board of Directors

September, 2016

Officers

President: Jeanne Wilson (president[at]redbud-cnps.org) (530) 570-8009
Vice President: Susan Chalpin (sgchalpin[at]saber.net) (530) 277-3914
Treasurer: Jeanne Wilson (treasurer[at]redbud-cnps.org) (530) 570-8009
Secretary: Cyndi Brinkhurst (secretary[at]redbud-cnps.org) (530) 274-1924
Newsletter Editor: OPEN

Committee Chairs

Membership Chair: Bob Johnson (johnsonbb1524[at]gmail.com) (530) 262-7036
Membership Co-Chair: OPEN
Program Chair: Leslie Warren (leslie[at]wizwire.com) (530) 878-0738
Field Trips Chair: OPEN
Fall Plant Sale Chair: Jeanne Wilson (president[at]cnps.org) (530) 570-8009
Publicity Chair: Chrissy Freeman (cf[at]christinefreeman.net) (530) 271-0103
Education Chair: Nancy Gilbert (nancyames[at]spiralemail.com) (530) 272-4775
Rare Plant Specialist: Karen Callahan (penstemon[at]nccn.net) (530) 272-5532
Horticulture Chair: Nancy Gilbert (nancyames[at]spiralemail.com) (530) 272-4775
Invasive Plant Specialist: Dan Lubin (Dan.Lubin[at]parks.ca.gov) (530) 272-0298
Conservation Chair: Denise Della Santina (clearcreeknatives[at]gmail.com) (650) 888-6392
Ethnobotany Chair: Diane Cornwall (dancingwildflowers[at]me.com) (530) 888-1404
Book Project Chair: Bill Wilson (wilsonb[at]mjc.edu) (530) 265-8040
Book Marketing Chair: Julie Becker (jbecker[at]infostations.com) (530) 265-8197
Restoration Chair: OPEN
Webmaster: Bill Wilson (wilsonb[at]mjc.edu) (530) 265-8040
Chapter Council Delegate: Denise Della Santina (clearcreeknatives[at]gmail.com) (650) 888-6392
Hospitality Chair: Susan Chalpin (sgchalpin[at]saber.net) (530) 277-3914
Hospitality Co-Chair: OPEN
Publications Chair: OPEN
Member at Large: Tim Crowley (timcrowley[at]pacbell.net) (916) 645-7881
Member at Large: Diane Wetzel (dwetzel5018[at]gmail.com) (559) 999-0790
Member at Large: Carl Wishner (cbwishner[at]gmail.com) (530) 346-7131

Note: the images on the two color pages inserted in this issue illustrate the article by Julie Carville on Tahoe fall color, the one by Jeanne Wilson about Powerhouse Drum Road, and the ones by Nancy Gilbert on Caterpillar diets and the visit to the CalFire nursery. Enjoy!
Also note that this year's Plant Sale flyers feature the Purple Milkweed mentioned in Jeanne Wilson's article.

Clodius Parnassian foraging on Bistort Photo by Nancy Gilbert





CNPS-Redbud Chapter
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www.redbud-cnps.org

Membership Renewal

Your label shows your membership expiration date. You can renew your CNPS membership online—it's quick and easy, and reduces renewal mailing costs. Go to: CNPS.org and click on the JOIN button! 🐾

Passionate About (Native) Plants Lecture Series

Remember, there are still two lectures left in the 2016 series!

September 29, 7–9 p.m.

Welcoming Pollinators into your California Garden

Talk by Nancy Gilbert CNPS

A slide-based show that gives you the information you need to attract and support pollinators into your gardens and properties. Includes descriptions of the pollinators, and the varied habitats and essential elements that attract pollinators in our Sierra foothill region. Features many photos illustrating pollinators and habitat requirements, as well as a list of the best California native plants for creating pollinator-friendly landscapes. Also, there will be handouts for you to use.

Location: Madeline Helling Library, Rood Center, in Nevada City.

October 28, 7–9 p.m.

Wonders of Fall: How and why Native Flora Display So Splendidly

Talk by Professor Shawna Martinez, Botanist, Educator

Location: Placer County Library, Nevada St. in Auburn

Redbud Chapter, California Native Plant Society
NATIVE PLANT SALE
Restoring nature one garden at a time

**Saturday
Oct. 8**

Fall is the best time for planting!

8:30–9:30 AM
CNPS members only
— join at the door for best selection!

9:30 AM to 1:00 PM
open to all

North Star House
12075 Auburn Rd
Grass Valley
Follow signs to Farmer's Market