Spring Plant Sale 2021: 
What’s on Your Gardening Wish List?

By Jeanne Wilson, Redbud President

If you’ve been dreaming about spring gardening plans, you’ll love our Redbud Spring Native Plant Sale. On April 26 through 29 (Monday through Thursday), we’ll hold an online sale. We’ll have pick-up on Saturday, May 1.

We look forward to offering pollinator plants such as hummingbird fuchsia (Epilobium canum) and Western blue flax (Linum lewisii) when they are looking quite enticing!
Would you like more shade, a privacy screen, an accent plant, or bright splashes of color through the seasons? Ground cover or bank stabilization? Deer-resistant, easy-care, maybe low-water plants? Plants that support pollinators and other beneficial insects? Plants that will draw birds and other wildlife to your garden? Fire-resilient plants that will help reduce risk and improve your home’s safety? Edible wild plants you can grow yourself? Maybe natives you can grow in containers? Plants suited to the idiosyncrasies of your property?
What are you dreaming about adding to your garden?

Whatever your landscaping interest, the Redbud Chapter is working hard to grow and offer plants native to Nevada and Placer Counties that will meet your needs. Because of COVID, we are relying primarily on home growers and Nevada County Native Plants nursery. We will also have some choice native plants from Floral Native Nursery, mostly local natives but also a few cultivars that grow well here.

As you’ll read elsewhere in this newsletter, we’re also in the process of building and operating our own native plant nursery, thanks to the generosity of members Lauren Almond and Loren Willman; we hope to have it up and running in time for the Redbud fall sale.

Focus on Locally Native Plants
Because the majority of the plants we’ll be selling are locally native, they’re adapted to the climate, soils, insects, birds, and wildlife of this area. The plants are also versatile, so you can meet multiple goals with just a few species.

For example, California fuchsia (*Epilobium canum*) (shown on preceding page) is a perennial with multitudes of brilliant orange-red blossoms in the late summer through mid-fall. It needs little water, grows rapidly (not fussy), and spreads readily, which makes it nice as a ground cover. You can use it to help stabilize slopes and also as a bedding or accent plant. It is low-growing and not resinous, so it is suitable to a fire-resilient garden.

Welcome the Spring Plant Sale Again
We’re excited to be able to offer the first spring sale we’ve held in many years. If all goes well, we’ll have a wide selection of perennials, shrubs, and trees. We also will have a sampling of a few species of annuals to plant in May so they can flower, go to seed, and provide a perpetual spring show.

Keep your fingers crossed — this past winter was hard on our seedlings and baby plants; they received little rain and periods of warm weather interspersed with snow and hard freezes. The changeable weather has slowed down the growth of the plants, but with luck they will sprint to a strong finish in sunny April.

Buy Your Plants Online
Being able to sell plants via an online store, as we did a couple of times during 2020, makes holding a sale much easier. Customers also tell us they like being able to shop and purchase online, and not have to dodge crowds on sale day.
We’ll be offering our plants for sale using the new CNPS online store, which includes the capacity for processing online credit card transactions. As in our previous online sales, we’ll open the store for window shopping and planning some days before the sale begins. As mentioned, the sale will run from April 26 at 10 a.m. through April 29 at 3 p.m. (Monday through Thursday). Of course, the early birds will get the best selection. Pick-up will be May 1, 11 a.m. to 2 p.m.

We’ll post all details in advance on the Redbud Plant Sale page of our website. We’ll also post a plant list as the opening date approaches.

**This Sale’s Member Benefit**

Unfortunately, the CNPS online sales platform precludes a separate shopping time for members. Instead, CNPS members who buy plants (or other items) will receive a free packet of a locally-sourced, specially selected wildflower seed mix. The mix is an enhanced version of the Shilling Seed Pollinator Mix for Nevada and Placer Counties (which has 20 species) with which we’ve mixed in an additional 11 local wildflower species. Many are annuals, but the mix also contains at least a dozen perennials, including showy milkweed, columbine, California fuchsia, penstemon, goldenrod, Humboldt lily, and blue-eyed grass.

We look forward to seeing you when you come to pick up your plants!

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**Appealing Plants Coming to Spring Sale**

*By Nancy Gilbert, Redbud Horticulture Chair*

We expect to offer dozens of species of attractive and useful native plants at our upcoming Spring Plant Sale. We thought you’d enjoy hearing about several. Maybe you’ll find a place for at least one of these in your garden this season!

**Primula (formerly Dodecatheon) hendersonii** — Henderson’s shooting star or mosquito bills; Family: Primulaceae (Primrose)

Henderson’s shooting star (Primula hendersonii), a spring wonder. In nature, it occurs most frequently in open woodlands; it also lives in summer-dry meadows, grasslands, even chaparral in the shade of taller plants.
The lovely perennial Henderson’s shooting star is rarely available at nurseries and native plant sales, probably because it’s summer dormant. Shooting stars are considered geophytes, because they produce fleshy rhizomes and also bulblet offsets. The rhizome stores foods/starches that the plant requires to live more than one season and also allows them to slowly colonize an area. The ground-hugging rosette of leaves dies back by summertime and emerges fresh between February through March. The word *Primula* comes from Latin ‘primus’ meaning first, referring to its early-flowering habit.

The flowers of shooting stars resemble a shooting star, or a bird with upward-facing wings (the five petals) and a downward-facing beak (comprised of the style and stamens). The petals are a deep magenta color with bands of yellow and white at the base; the beak is magenta to dark blue. Shooting stars produce no nectar but plenty of pollen and must be buzz-pollinated by bees. That is, a bee must shake the pollen out of the beak, much the same as with tomato flowers, which are also buzz pollinated.

Henderson’s shooting star is native to valley grasslands, open oak woodlands and pine forests of the Coast Ranges, Cascade Range, Siskiyous and the Sierra Nevada foothill regions. It is widespread; when seen blooming in profusion, it is a very eye-catching sight. You can see them locally at the South Yuba State Park, Bridgeport, along the Hoyt Trail and the Independence Trail, at Spenceville Wildlife Area, and Loma Rica Preserve.

*Lupinus albifrons* — silver bush lupine; Family: Fabaceae (Pea)

Silver bush lupine is a woody perennial three to five ft tall, found growing in sunny locations of the yellow pine forest, foothill woodlands, chaparral, and many other plant communities. It has silky, gray-green, evergreen leaves, and it sports fragrant, blue-purple flowers on 12- to 18-inch spikes from early-mid spring. When in bloom, it is a showstopper.

The silver bush lupine works well in sunny garden locations on well drained soils and with no to low summertime supplemental watering. Overwatering in clay soils will usually lead to its demise; so, if you have heavy soils, give this plant very good drainage by planting it on a sloping bank or a mound. Bush lupine makes a wonderful addition to native mixed borders and pollinator gardens, where it is buzzing with bees all spring. Being a member of the pea family, it fixes nitrogen in the soil.

Silver bush lupine is fast-growing and often reseeds in the garden. It is deer resistant and the seeds, leaves and stems are toxic. This is a butterfly host plant for several blues, hairstreaks and the northern cloudy-wing butterfly. You can see it on many local hiking trails, such as at Swan Preserve, along the Independence Trail, and at the South Yuba State Park at Bridgeport.

*Heuchera micrantha* — crevice alum root or small-flowered alum root; Family: Saxifragaceae (Saxifrage)

Crevice alum root is the most commonly seen *Heuchera* in our region, often found growing on steep, rocky banks that are shady and moist. It is an evergreen perennial with reddish green leaves forming clumps one to two ft wide. Leaves are rounded to heart-shaped with three to seven shallow lobes.
Spikes of dainty white and pink-tinged flowers rise along red stalks to about a foot above the foliage. It blooms in late spring to early summer, depending on elevation. Hummingbirds and bees frequent the flowers.

In the garden, it likes partial to full afternoon shade. It likes regular water (about once a week), and good drainage to look its best but will tolerate some drought. It makes a lovely impression when planted in large clumps. Remove dead leaves to keep the plants neat and green.

Heucheras spread slowly by rhizomes and should be divided every three to four years to keep them robust. Look for it along the Independence Trail, at the Hwy 49 crossing of the South Yuba River, and along Drum Powerhouse Road near Dutch Flat.

Amorpha californica — California false indigo; Family Fabaceae (Pea)

Rarely available in the nursery trade, Amorpha californica is a slow-growing native plant but well worth having in your garden, as it is a beautiful and important pollinator and larval host plant. It is the only known larval food plant for our state insect, the California dogface butterfly. If you see California dogfaces flying, there may be a patch of false indigo in the area.

This Amorpha is a deciduous, open shrub, spreading slowly by creeping rootstocks to form colonies. Its compound leaves have a fern-like appearance and the flower spikes are quite distinctive, bearing numerous dark purple flowers with conspicuous golden stamens. Native bees are very fond this plant.

It is usually found growing in river canyons and appreciates occasional summer water to look its best, though it is considered drought tolerant. It prefers partial or broken shade, such as in the understory of deciduous oaks or California buckeyes.
California false indigo can be found growing in abundance at Shutamul Bear River Preserve (reserved walks only through the Placer Land Trust) and along the Quarry Trail at the American River Canyon, at Hidden Falls Regional Park, and on the Rattlesnake Bar trail near Folsom Lake.

Volunteer for Our Nursery or for the Plant Sale!

In our not-yet-finished nursery area, we’re already raising hundreds of plants for the spring plant sale. If you’d like to see the whole process as these plants grow, maybe you’d like to learn how to start and grow native plants, or you’re just willing to help water and do other tending activities, we’d love some nursery volunteers.

We’ll have scheduled workdays later. For right now, we have specific volunteer needs, both for the nursery and for the plant sale. We need long-term volunteers (who can commit to a schedule of a few hours per week) and those who can help out for limited-time events (helping with sale-day) or specialized tasks (installing an irrigation system in the greenhouse and shade areas). All helpers will receive training in how to maintain a sanitized, healthy, pathogen-free growing environment.

Newbies and experienced growers welcome — we’d love to have your help! Volunteers are needed to:

**Maintain Plants**
Hand water, fertilize, pot up plants, pest detection and control, etc.

**Prepare Plants for Sale**
Do labels for plants, apply pricing stickers, groom plants, etc.

**Work on Sale Day** (May 1, perhaps May 2)
Arrange plants, pull plants for individual orders, label orders, etc.

**Propagate Plants**
Collect and clean seeds and cuttings. Stratify, scarify and otherwise prepare seeds. Start seeds and cuttings.

**Specialized Tasks**
Install irrigation in greenhouse and/or shade structures; work on deer fencing, constructing gates, and erect structures.

To volunteer, or for more information, email nativeplanthelp@redbud-cnps.org. If you’re not available now, but might be interested in volunteering at the nursery later, just let us know. This is an opportunity for hands-on involvement, enjoyable, rewarding, and close to our plant-loving hearts!
Extending Your Perspective: An Interview with Grayson Coney
By Shane Hanofee

Grayson Coney grew up in Placer County at 2000 ft in the Bear River Canyon west of Highway 49. He is a burly man who walks steadily and deliberately through the landscape, often trailed by his faithful canine companion, a Wheaten Terrier named Neky. His voice is gentle and patient as he weaves tales that forgo the cold, emotionless prose of scientific jargon for carefully chosen words that get at the underlying nature of nature.

He is of Northern California indigenous ancestry but doesn't associate with a specific tribe. He explains, “When we speak of ‘tribes,’ there are no ‘tribes.’ We're speaking about families.”

He spent his youth exploring the 4000 acres of wild land just outside his back door. The canyon was his education, along with a handful of elders who offered their guidance and told him stories. Some indigenous people still lived off those lands in those days. He “got a lot of dirt time” as he put it, hanging his shoes on a branch on the trail and exploring barefoot. Eight or nine hours later he'd return to gather his shoes and head home.

The areas where he cut his teeth are now preserved by the Placer Land Trust, via conservation projects he helped secure. He is a retired horticulturalist but forever a naturalist and cultural historian; he now openly shares his experiences through stories about the native plants of our area.

Shane Hanofee sat down with Grayson via Zoom to ask him some questions and introduce CNPS members to his brand of education and storytelling.

What's your earliest memory with native plants?

I know I had a sugar pine cone collection when I was three. I had a whole garden collection of sugar cones. I remember the smell of tarweeds in the summer, walking through the open dry meadows. Even today, every time I walk through a meadow I feel like I'm five years old. That smell was my clue to take my shoes off. The resins persisted on your feet, but it wasn't as bad as them persisting on your shoes.

What is your favorite California native plant, if you had to choose one?

I would say it's Calycanthus (spicebush). The reason being because the plant is unisex, if you will; it has parts for men and parts for women. In the old days, that wasn’t true of many plants. There were women's plants and there were men's plants, as far as medicinal uses and so on. Calycanthus breaks that tradition; the entire plant was used by men and women.

The men would use the roots. You'd get a soapstone bowl and heat it up real good. You'd wash the root, pound it up, and put it in the bowl with some water and let it boil and steam. This would be done typically in a sweat house where the men slept. It wasn't a steam lodge. It was dry heat. It was more like a men's club than anything else. That spicebush aroma would sharpen your senses.
before sunrise, as you're getting ready to go out and hunt. For clearing your mind, it's the best that's ever been. The men also used the wood for field arrows, one-piece arrows. You'd need 10 willow arrows to equal one Calycanthus arrow in value. They're so durable. They're so easy to keep straight. They don't warp in the changing humidity. They last for years.

The women pulled Calycanthus sticks through their hair. They actually made combs from them. The fragrance of the dried stem is wonderful. The floral tubes were dried and used as decoration on all sorts of things.

As they exist in nature, there are many, many stories about the floral tubes as they hang upside down being homes for creepies, earwigs and things — things that come out at night and will wreck your world. They live in the floral tubes. If you ever knock on their door, they'll fall right out.

Calycanthus is a climax species, so finding it means an ecosystem has quite some longevity. Even if the dirt is falling away, the environment isn't changing. That's why you find them under a waterfall or the cut bank of a creek where people would scrub clothes clean. Come back in 600 years, you're gonna see the same scenario. That plant was famous for picking a spot and holding its ground. So you don't see Calycanthus just growing anywhere; it's very, very selective. But when it knows it can live somewhere for 600 years straight, it lives there. It's a plant that should be looked up to.

You mentioned that most other plants were either men's plants or women's plants. That's a really interesting concept. Could you give us some other examples of plants that were one or the other?

You walk outside, you open your eyes, you look at the world, and here's how you look at it: What is edible and what is not? What is useful and what is not? Who eats a plant and who is not eating a plant? Then you look at the plant and you also say, “What’s useful for women, what’s useful for men?” And again you look at the plant and you want to know when is the time I should be using it? Is it a woman’s time to visit this plant, or is it the men's time to visit it?

Some plants people of one sex touch more often than the other sex does, which determines whether it's a women's plant or a men's plant. Soaproot is traditionally a women's plant. It was used every day in women's work. Not too many men digging up soaproot. Not too many women straightening willow arrows. Women used willow but they used it at a different time of year than the men. The men would visit the willow in June when the bark slips. That's when they would be making traps. The women used the willow a little later when the bark is nearly completely formed. The men come back again and use the willow later in the year when it is all completely formed and that's the wood they would use for arrows.
Manzanita was considered a woman's plant. Men had to ask permission to make hard cider with it. They were in control of it. Acorns were a women's thing.

Angelica was a men's plant all the way. We would chew the root, and it takes the human scent out of your breath, among other things. It was used while hunting and gambling. There wasn't anyone walking around who didn't have angelica root on them. Medicines would be made of it for use by women but the plant was considered a man's plant.

Many Redbud members are interested in ethnobotany. As an indigenous person, how do you feel about non-indigenous people immersing themselves in indigenous culture? Is there a line to be drawn?

I think that any form of gaining information without harm is commendable. I think that repeating what is learned from books isn't a replacement for hands-on learning. Answering the first part of this question is difficult. It's really difficult to get close to tribe because, in some sense, we're talking about families. We're not talking about large groups of people who are in great association with each other.

Asking native people to tell stories about plants is easy to do if you're in the right place and it's the right situation. It's my opinion that asking if you can eat it, and not asking about how you can process it is a bad way to ask the question. I get it all the time. I feel bad when food is not processed correctly.

Read more of this extended interview, via a PDF on our website.

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Our Redbud Nursery Project, Part 2
By Ames Gilbert

In the last issue, we promised you a conclusion to the story of the creation of the Redbud nursery. In reality, this is an interim report; though the site has been greatly transformed, we still have much to accomplish before we can start full-time operations at our Redbud nursery.

Layout for Redbud nursery. See larger version.
We left off this tale with Redbud members Loren Willman and Lauren Almond finding a corner of their East Bennett Street Business Park for the Redbud nursery.

**Getting A Firm Footing**
Soon after, in early March 2020, Loren himself graded the site, compacted the fill with a huge sheep’s foot roller, and dug service trenches for water and electricity. He laid the electric and water lines, with risers at suitable intervals, filled the trenches, and then laid out the foundations for a large concrete pour. The idea was to provide a permanent surface for storing potting-soil mix, a station for cleaning pots, and a place for outdoor meetings. Within the pad, centered around existing trees, Loren left two islands, which we will later plant to natives. The whole pad was reinforced with steel and heavy mesh.

Pouring and leveling the concrete. What a crew – many thanks to Loren, his sons, his team, and Redbud volunteers!

Early on March 11, we started the pour. It took most of a day, with delivery by four full concrete trucks spaced out at intervals, a total of about 32 cubic yards of concrete. Pulling this off successfully required a sizable team. Not only did Loren and Lauren, with their two teenage/young adult sons, and volunteers work hard all day, they also provided an extra crew to ensure everything ran smoothly!

**Loren Masterminds Site Amenities**
During the summer, Loren laid tons of gravel around the site and its approaches. He also acquired and placed two 20-ft-long shipping containers, with their doors adjacent to the big pad. The idea is to store all the equipment and supplies the nursery will need, as well as transfer the contents of the present Redbud storage...
container (which holds materials and supplies for Redbud plant sales), so everything “Redbud” is close together.

Loren also found time to acquire a used commercial stainless-steel three–bowl restaurant sink setup, complete with industrial spray hose, plumbed this, and added drains that run underground off the site.

Loren situated a small office trailer for our use, perched at the edge of the large pad. He has already replaced it with another, better one before we even got to use the first one properly!

In November 2020, Loren laid out a 20 ft x 31 ft pad for the shade structure, adjoining the pad poured in March, 2020. He dug holes and poured footings for steel posts to hold up the shade cloth; when the concrete cured, he formed the pad and laid the reinforcing steel. This time, electrical service risers were also incorporated into the pad, together with pressure–treated lumber posts for the controller and valves (part of the forthcoming irrigation system).

At the same time, he formed the pad for the greenhouse, set much further to the north to avoid winter shadows from trees. This, too, he reinforced with steel, as well as placing service risers inside the footprint of the greenhouse.

After another workday pouring and smoothing the concrete, Loren and Lauren’s family, crew and volunteers, had completed that phase of the nursery project.

The next part in this saga will cover the arrival of the very complicated greenhouse kit, its assembly by volunteers, the building of 21 full-size and 16 half-size plant tables for the shade house, the construction of four potting benches, the experimental pot sanitizer, and the temporary set-up as we prepare for Redbud’s Spring Plant Sale.

The large pad completed, and the shadehouse framework completed, newly constructed fiberglass-topped tables for plants and potting up begin to arrive.
Western Monarchs – Is Extinction Inevitable?
By Bonnie Bradt

Monarch Joint Venture, December 15, 2020:
"This morning, the US Fish and Wildlife Service (USFWS) concluded that listing the monarch butterfly under the Endangered Species Act (ESA) is “warranted but precluded..."

“The rule that listing monarch butterflies is “warranted but precluded” means that while monarch butterflies would benefit from protections granted under the ESA, there are currently higher priority listing actions that take precedence. With this announcement, monarch butterflies become a candidate species. While candidate species do not have legal protections under the Endangered Species Act, candidate species status highlights the need for continued monitoring, voluntary conservation, and support of the monarch population. To support candidate conservation efforts, the USFWS works with partners to improve habitat and address threats to the population, while also continuing to review the status of the species. The monarch will remain a candidate species until they are listed under the ESA, or until the population recovers and special protections are no longer needed. The status of candidate species is re-evaluated annually..."

Monarch Joint Venture. Access full article.

Chance of Western Monarch Extinction Predicted at Over 90 Percent
Later in the Monarch Joint Venture article, the authors shared a few scary statistics for those of us here in the West who watch our milkweed plants for monarchs. Scientists have predicted, to the best of their statistical ability, that, under current conditions, the chance that the Eastern monarch population will decline to the
levels of inevitable extinction are less than 10 percent within the next 10 years. For the Western population, however, the chances for the same fate are 60 to 68 percent within the same 10 years.

If that time frame is pushed out to 30 years, with current conditions, the extinction likelihood for the Eastern population rises to 24 to 46 percent while, sadly, the Western population sits at greater than 90 percent chance of reaching the point of inevitable extinction.

Annual Count of Western Monarchs Drops Below 2,000
On January 19, 2021, the Xerces Society for Invertebrate Conservation announced the results of their annual Thanksgiving Count for the year 2020, for Western Monarchs along the coast of California from Mexico to Oregon. With over 240 sites included in the count, observers found a total of only 1,914 butterflies in the entire West Coast counting area.

In counts from the last two years Western Monarchs were teetering on the brink of 30,000 each year; the year before that, the count was over 200,000, in the same overwintering area. Our beautiful monarchs, little poster kids of the term "endangered," are almost gone. So many factors are working against them that scientists find almost impossible to say, at least at this time, what happened especially in the last four years to bring their wintering population precipitously down from hundreds of thousands to less than 2,000 individuals.

But for us Westerners, who have watched and studied and spread the word and planted native milkweed and nectar plants, it will be a sad goodbye. All we can really do is make a heartfelt effort to support all pollinators with nectar flower gardens and as many native plants as possible. And keep away from pesticide use in those gardens.

The Mexican population counts for the Eastern monarchs is not yet available, but we can hope for a better outcome for those little beauties.

Bonnie Bradt is a local entomologist, retired from a 40-year biochemical research career, and a 16-year member of the Nevada County Master Gardeners.

Upcoming Events

Redbud is planning for our virtual programs, including presentations on biological impacts of the proposed reopening of Idaho Maryland Mine, Calochortus (bulbs native to California and elsewhere in North America), and fairy moths, their host plants, and their role as pollinators. Stay tuned for more info in our newsletters, events page of our website, Facebook pages, and email bulletins.

Our “Passionate about “Native) Plant” Public Lecture Series – Online
All programs are virtual. For more information, see our Redbud Upcoming Events page. Each live session will include time for audience questions. Closer to the event date, we’ll post information on how to view each specific program.

April 22, Thu., 6 p.m. So Many Columbines: Connecting Genetic and Ecological Factors Spurring Speciation.
Dr. Evangeline Ballerini, CSU Sacramento. Earth Day is April 22, and April 19-24 is Native Plant Week. Let’s celebrate together (virtually) on Earth Day!
Who isn’t enchanted by our local columbine, *Aquilegia formosa*, with its bright orange, yellow and white flowers lighting up partially shaded woodland spots, and the frequency with which hummingbirds delight in its nectar? The genus *Aquilegia* has undergone a rapid radiation, evolving 70 to 80 species worldwide with diverse floral morphologies and habitats, in the past 5 to 7 million years. Dr. Evangeline Ballerini will explore with us the ecological factors promoting this radiation, the genetic factors that helped facilitate this radiation, and how these ecological and genetic factors may interact to generate new species. Dr. Ballerini, an assistant professor at Cal State University Sacramento, has done extensive research on *Aquilegia formosa* and other columbines.

**July 22, Thu. Calochortus.** Jeff Bisbee. Spend a gorgeous evening with renowned botanist and photographer Jeff Bisbee enjoying and discussing this genus of bulbs native to California and elsewhere on our continent. *Calochortus* is divided into three sections—*Calochortus*, *Mariposa*, and *Cyclobothra*. Botanists divided each section into four subsections. Jeff will share about each subsection, including distinguishing characteristics of each. Jeff has previously delivered programs to Redbud on *Arctostaphylos* (manzanita) and *Ceanothus*.

Date TBD. **Ecology of Proposed Re-Opening of Idaho Maryland Mine.** Roundtable.

Date TBD. **Fairy Moths and Their Host Native Plants.** Al Ludtke.

April 26-29. Our online **Redbud Spring Native Plant Sale.** Order online April 26 – 29. Pick up May 1. See details in separate article on plant sale in this issue.

**Upcoming Events from Other Organizations**

**Virtual Programs From Other CNPS Chapters**
- **Apr. 14, Wed.** 7 p.m. Laurie Wayburn of the Pacific Forest Trust will talk about the **role of forests in saving the world** and how we can manage them to let them do it. North Coast Chapter. [Register](#).
• Apr. 15, Thu. 7:30 p.m. **Plant for Birds: Using Native California Plants to Create Habitat at Home.** Scot Pipkin, Director of Education and Engagement at Santa Barbara Botanic Garden. Orange County Chapter. Look at the important role appropriate native plants play in providing local birds with the food, shelter, and nesting materials necessary for survival. Register at occnps.org the week of the meeting.

• May 12, Wed. 7 p.m. **Serpentine Ecology: Wacky soils build glorious Places.** Kristi Mergenthaler talks about *serpentinite soils and their special plants* in southwest Oregon. North Coast Chapter. Register.

**Bring Back the Natives Garden Tours**

**April 25, May 2, 9, 16, Sun, 10 – 3,** [Virtual tours of Bay Area native gardens](https://example.com). Every day is unique, with a talk accompanying each garden tour. Doug Tallamy is keynote speaker at 10 a.m. on April 25. Ask garden hosts and experts all your questions! Plus, sessions on plant selection, garden design and more. Hosted on Zoom and livestreamed on YouTube. Free. [Register](https://example.com).

**The Center for the Arts**

Apr. 25, 4 p.m. **In Conversation with Shane Hanofee: Wildflower Walk & Identification.** Come learn about some of the plants that can be found in your backyard or along your favorite hike, how to identify them, and how they fit into the grand tapestry of life. Online. $10; Center members free.

**Master Gardeners of Nevada County**

All programs are live on Zoom and are recorded for later viewing.

• **Apr. 17,** Sat. 9 a.m. **Functional Irrigation – Part 1.** Now in 2 parts, this Functional Irrigation workshop will focus on how to tackle the webs of pipe and hose that may be a mystery to some home gardeners. This workshop is designed to demonstrate to home and property owners the steps involved in building an efficient irrigation system — concepts of water flow, water pressure, determining the length of hoses and the number of emitters needed for a system; hydrozoning (grouping plants according to water needs); starting at the initial water outlet, every phase of establishing an irrigation system; products and tools.

• **Apr. 24,** Sat. 9 a.m. **Functional Irrigation – Part 2.** (See preceding listing for description.)

**Master Gardeners of Placer County**

All programs are live on Zoom and are recorded for later viewing.

• **Apr. 10,** Sat. 10:30 a.m. **Gardening in a Changing Climate.** As our climate continues to change, gardeners must adapt to these changes. Find out how our gardening climate is changing and what we can do to respond to those changes.

• **May 8,** Sat. 10:30 a.m. **Principles of Propagation.** Propagation is the term for the multiplication of plants, either by natural means or by the actions of the nurseryman or gardener. This introductory workshop will show you some of the many ways you can propagate plants.

• **May 22,** Sat. 10:30 a.m. **Plant It and They Will Come: Planning for Pollinators.** Learn how to attract and support bees, butterflies and other pollinators by choosing a palette of plants that provide a living...
landscape which offers nourishment and nesting places for these creatures that enliven our gardens, as well as provide pollination services. It’s a win-win for humans and pollinators!

**Sierra Streams Institute**
Spring 2021 Science Speaker Series. All events are free and virtual. [Register](#) to receive link.
- **April 13**, Tue. 6:30 p.m. **A Tale of Two Experiments: How the CA Drought Affected Natural Populations of an Endemic Monkeyflower**. By Lillie Pennington, PhD Candidate at UC Merced. Studying the impact of climate change on California native plants.

**UC Davis, Tahoe Environmental Research Center (TERC)**
Science Speaks Series. All lectures will eventually be on the [TERC YouTube channel](#).
- **May 13**, Thu. 12 p.m. **Rethinking Fire: Cultural Burning and the Art of Not Fighting Fire**. A conversation about the Native American practice of cultural burning, with Beth R.M. Manning, Professor of Native American Studies at U.C. Davis, and Honorable Ron W. Goode, Tribal Chair of the North Fork Mono Tribe.

**Summary Calendar of Events**
Details in listing for each organization. * indicates a Redbud event.
- **Apr. 10**, Sat. 10:30 a.m. **Gardening in a Changing Climate**, Master Gardeners of Placer County.
- **April 13**, Tue. 6:30 p.m. **A Tale of Two Experiments: How the CA Drought Affected Natural Populations of an Endemic Monkeyflower**. By Lillie Pennington. Sierra Streams Institute. Register here: [https://forms.gle/WvQ4q28qnBc1wmmL8](https://forms.gle/WvQ4q28qnBc1wmmL8)
- **Apr. 14**, Wed. 7 p.m. Laurie Wayburn of the Pacific Forest Trust will talk about the role of forests in saving the world and how we can manage them to let them do it. North Coast Chapter. [Register](#).
- **Apr. 15**, Thu. 7:30 p.m. **Plant for Birds: Using Native California Plants to Create Habitat at Home**. Scot Pipkin, Director of Education and Engagement at Santa Barbara Botanic Garden. Orange County Chapter. Look at the important role appropriate native plants play in providing local birds with the food, shelter, and nesting materials necessary for survival. Register at occnps.org the week of the meeting.
- **Apr. 17**, Sat. 9 a.m. **Functional Irrigation – Part 1**, Master Gardeners of Nevada County.
- *** Apr 22**, Thu. 6 p.m. **So Many Columbines: Connecting Genetic and Ecological Factors Spurring Speciation**. Dr. Evangeline Ballerini. Redbud CNPS.
- **Apr. 24**, Sat. 9 a.m. **Functional Irrigation – Part 2**, Master Gardeners of Nevada County.
- **April 26-29**. **Redbud's online Spring Native Plant Sale**. Redbud CNPS.
- **Apr. 25**, 4 p.m. **In Conversation with Shane Hanofee: Wildflower Walk & Identification**. The Center for the Arts
- **April 25, May 2, 9, 16**, Sundays, 10a.m. – 3 p.m. **Bring Back the Natives Garden Tours**
- **May 8**, Sat. 10:30 a.m. **Principles of Propagation**, Master Gardeners of Placer County.
- **May 12**, Wed. 7 p.m. **Serpentine Ecology: Wacky soils build glorious Places**. Kristi Mergenthaler talks about serpentine soils and their special plants in southwest Oregon. North Coast Chapter. [Register](#).
- **May 13**, Thu. 12 p.m. **Rethinking Fire: Cultural Burning and the Art of Not Fighting Fire**. UC Davis, Tahoe Environmental Research Center.
- **May 22**, Sat. 10:30 a.m. **Plant It and They Will Come: Planning for Pollinators**. Master Gardeners of Placer County.
Spring on our Redbud YouTube Channel

Spring is budding out, and what would spring be without a trip to the wildflower wonders (and more!) of the Bridgeport Bend Trail? Whether it’s your first time or you’ve enjoyed this trail in the past, treat yourself to some local springtime exuberance.

- **Buttermilk Bend Trail.** It’s the first virtual hike of 2021! We visit the Buttermilk Bend Trail at Bridgeport in South Yuba River State Park to learn about the wildflowers to be found at this popular destination. This year there will be no docent-led wildflower hikes here; in lieu of that, Shane shares his native plant tidbits for your enjoyment!

As with all our virtual hikes, this new video is on our Redbud YouTube channel. To keep in the know, click the red “Subscribe” button on that page; then click the bell to get a notification when we post a new Redbud video.

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**News to Know: News About Native Plants and their Ecosystems**

**Pollinators Need Your Voice!**

Please join the Xerces Society in asking your U.S. senators and representative to pass two bills that will provide critical protections for pollinators. The Monarch and Pollinator Highway Act of 2021 would provide grants supporting efforts to benefit pollinators on roadsides and highway rights-of-way. The Monarch Act of 2021 will provide funding for conservation activities to restore, enhance, and manage overwintering and breeding habitats of monarch populations in the western U.S.

**Insect Populations Suffering Death by 1,000 Cuts, Say Scientists**

Insects face multiple, overlapping threats including the destruction and conversion of wild habitats to farming and urban development; use of pesticides; and light pollution. Twelve new studies have been published in the journal *Proceedings of the National Academy of Sciences*. “Nature is under siege [and] most biologists agree that the world has entered its sixth mass extinction event,” concludes the lead analysis in the package.

Prof David Wagner of the University of Connecticut, the lead author of the analysis, said the abundance of many insect populations was falling by 1-2% a year, a rate that should not be seen as small: “You’re losing 10-20% of your animals over a single decade and that is just absolutely frightening. You’re tearing apart the tapestry of life.” As noted in another article in this newsletter, some losses have been even more catastrophic; Western Monarch counts have fallen from 200,000 to under 2,000 in just 4 years, a ten-fold loss.

For full story, see *The Guardian, January 11, 2021*.

**Soil Carbon Sequestration Accelerated by Restoration of Grassland Biodiversity**

Researchers reported the results of a 22-year study in which they found that restoration of grassland plant diversity leads to accelerating annual carbon storage rates. They studied the results of using greater plant diversity in otherwise-abandoned agricultural land. Among other variables, they measured the amount of...
carbon in plants and the soil, above-ground biomass, and the mass of their roots. These measures were all higher with greater plant diversity. That’s something to think about applying in our own efforts.

Is This the End of Forests as We’ve Known Them?
Trees lost to drought and wildfires are not returning. Climate change is taking a toll on the world’s forests — and radically changing the environment before our eyes. Some locations where forests would have grown now appear too dry or hot to support them. Since 2010, 129 million trees are estimated to have died in California’s national forests, as a result of a hotter climate, insects and other factors. Astonishingly, 48.9 percent of all trees in a comprehensive study of the southern Sierra Nevada mountain range had perished.


Make a Difference for Bees Today
Join thousands of Californians in sending a message to our state legislators to cultivate bee-friendly habitat on public lands. (This message campaign is organized by Environment California.)

Climate change, urbanization, mining and drilling are costing bees their habitat. As temperatures rise and human development alters landscapes, the range of habitat suitable for bees has shifted and shrunk. This loss is contributing to an unsustainable decline among our most important pollinators.

Fortunately, small spaces can do wonders. By planting native vegetation, to which local bees are well adapted, along roadsides, parkways and other public lands, our state officials can mitigate habitat loss.