Homegrown Habitat

By Jeanne Wilson
President, Redbud Chapter, CNPS

The Sacramento Valley Chapter of CNPS has championed a “Homegrown Habitat” initiative based on the research and writings of Douglas Tallamy, researcher and faculty member in the Department of Entomology and Wildlife Ecology at the University of Delaware.
Redbud Will Support Homegrown Habitat Via Fall Native Plant Sale

Inspired by this program, Redbud has joined the Sacramento Chapter and other CNPS chapters in Homegrown Habitat efforts. As you’ll see, part of promoting Homegrown Habitat is providing local native plants for the public. Despite uncertainties caused by the pandemic, the **Redbud Chapter will definitely have a native plant sale in October.** We will offer a range of local and locally adapted native species, from ground covers to perennials to shrubs to trees, from drought tolerant to riparian species.

Because we don’t yet know whether we can safely hold an in-person sale, we are planning a virtual Fall Plant Sale in early October with arranged pick-up by appointment. We will feature a wide variety of local native plants through an online ‘portal’ providing information about and photos of available plants.

Stay tuned for more plant-sale details on our new website and on our FaceBook page and in upcoming issues of *Redbud News.*

Locally Native Plants Sustain Biodiversity

In his article “**Giving Ecological Purpose to Your Landscape,**” Dr. Tallamy explains that if each of us includes a majority of locally native plants in our landscapes and gardens, we can help sustain the biodiversity that is essential to our ecosystem.

In May, 2019, the United Nations published a global report on the world’s biodiversity concluding that more than one million species are at risk of extinction. Redbud is joining the Sacramento Valley and other CNPS chapters to meet this threat by growing locally native plants and making them available to Nevada and Placer County residents through our plant sales.

Dr. Tallamy’s research into the relationships between insects and native plants has illuminated why we must create much needed habitat for birds, pollinators, and other wildlife in our urban and suburban gardens and landscaping. His research demonstrates that by incorporating sufficient native plants to provide food and habitat for locally native beneficial insects with which these plants co-evolved, we can help sustain wildlife.

As mentioned in a prior *Redbud News,* some of Tallamy’s research indicates that gardens containing at least 70 percent locally native plants can provide the insect food that bird species need to successfully raise their young. In addition to planting native plants, we must stop using toxic insecticides, fungicides, herbicides, and artificial fertilizers that destroy biodiversity by breaking the complex relationships of natural ecosystems, making them no longer sustainable.

Homegrown Habitat Slows Loss of Wildland Habitat

Both Nevada and Placer Counties face increasing development pressure, and large swaths of open space are being lost to commercial, industrial, and housing developments and associated infrastructure. Wildlife habitat is shrinking and increasingly scattered and degraded.

The goal of “Homegrown Habitat” is to slow the loss of wildland habitat by creating new habitat in suburban gardens and in public and commercial landscaping.
Though creating homegrown habitat cannot replace wildlands, growing locally native plants can help sustain our wildlife and biodiversity; connect isolated islands of native plant communities currently confined to parks, forest service lands, and preserves; and meet the needs of wildlife for food, water, and shelter.

In addition, planting local natives reduces water use and eliminates the need for costly insecticides and artificial fertilizers. Local native plants are more than drought-tolerant — they are adapted to the region’s natural features, including climate, soil, and water efficiency. To provide meaningful habitat, we must do much more than plant a few random native plants here and there.

**Homegrown Habitat— What It Is and How We Grow It**
Redbud, other CNPS Chapters, and CNPS strive to support and promote homegrown habitat; the more community members participate in such efforts, the greater we difference we can make to our local ecosystems. Here’s how it works:

1. **Redbud and other CNPS chapters identify plants locally native to their region** that can be successful in garden conditions. These are native plants that grow easily with minimal resources, have high habitat value, and won’t harm wild local native plant populations. See our Redbud Chapter’s [Native Landscape Planting Guide](#) and [Recommended California Native Plants for Western Nevada and Placer County Landscapes](#). If you live at lower elevation, see [Sacramento Valley Chapter’s Local Native Plant List](#).

2. **CNPS maintains and updates Calscape**, its California native plant database that provides access to knowledge about the over 7000 plants native to our state. With Calscape, you can identify which plants are truly native to where you live by entering your address or zip code. You can then search those plants by type (annual, perennial, grass, shrub, vine, tree) and by cultivation requirements (sun/shade and water needs), and find nurseries that carry those plants. See [Redbud’s guide to using Calscape](#) to discover local natives and how to grow them.

3. **Local chapters prioritize growing and/or purchasing locally native plants** to ensure a sufficient supply.

4. **Chapters work with local governments, water and transportation agencies, fire-safe councils, and conservation districts** (e.g., city and county planning departments, Nevada Irrigation District, Placer Water Authority) to revise commercial/public landscaping requirements to favor the use of locally native plants, create plant lists, and provide expertise regarding cultivation requirements for native plants that need significantly less water than non-natives, and so forth.

To get involved in any of these activities with Redbud, please contact [nativeplanthelp@redbud-cnps.org](mailto:nativeplanthelp@redbud-cnps.org).

**Redbud Offers Homegrown Habitat Right Now**
Even before our Fall Plant Sale, we have plants for sale that can be planted now (they need or can take summer water). By October, some of these will be dormant. Here are some species we have available:

- Scarlet Monkeyflower (*Erythranthe cardinalis*) (perennial)
- Columbine (*Aquilegia formosa*) (perennial)
- Western Bleeding Heart (*Dicentra Formosa*) (perennial to 18” tall)
- Sulphur Pea (*Lathyrus sulphureus*) (perennial deciduous vine)
- Elk Clover/California Aralia (*Aralia californica*) (large deciduous perennial)

*Western Columbine (Aquilegia Formosa) – gorgeous deciduous perennial that needs some water and prefers part shade, available now!*
• Red-flowered Buckwheat (*Eriogonum grande var. rubescens*) (perennial to 2’ tall, evergreen)
• Spice Bush (*Calycanthus occidentalis*) (shrub)
• False Indigo (*Amorpha fruticosa*) (shrub)
• California Snowdrop Bush (*Styrax redivivus*) (shrub)
• Nevin’s Barberry (*Berberis nevinii*) (shrub)
• Western Azalea (*Rhododendron occidentale*) (shrub)
• Big Leaf Maple (*Acer macrophyllum*) (tree)

We also have Cliff Maids (*Lewisia cotyledon*), a succulent with brilliant colored flowers, which can be grown in a pot.

If you’re interested in buying any of these plants, are looking for other plants, or have questions, please email nativeplanthelp@redbud-cnps.org. Also, we’d love to see your “wish list” of native plants so we can do our best to make them available; please send them to nativeplanthelp@redbud-cnps.org.

Finally, if you have examples of “homegrown habitat” in your garden you’d like to share, please post them to our Redbud Facebook Forum.

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**Transforming Your Barren Slope into a Flourishing Hillside Garden**

By Nancy Gilbert

Here in foothill country, many homes are constructed on sloping sites of various degrees. More often than not, after ruthless cut and fill operations, the new home sits on a nice flat site, but with a steep, bare bank at the rear, sometimes with a retaining wall at the toe of the slope. More often than not, the builder/developer did not strip, save and replace the topsoil on this bank. So the new homeowner is left with the challenge of vegetating this barren, often hot and sunny, infertile bank, now an eyesore and potential erosion problem.

**Right Plant, Right Place**

The key to success in developing a steep hillside garden is combining knowledge, patience and hard work with selecting the right native plants for a fast-draining, low-fertility, and often hot and sunny habitat. The first task is to find out about the composition of your soil and what you need to do to correct any deficiencies or imbalances. This requires a soil test and analysis.

**Figure Out How You’ll Stabilize and Access Your Slope**

The second step is to decide what strategies you are going to use to stabilize that steep bank and prevent erosion during the rainy season, as well as how you are going to access the slope for planting and what type of irrigation are you going to employ. The results of your research and decisions will affect your entire design, including the plant palette. The last and most exciting phase is the actual planting and mulching of your hillside garden.

The steeper the slope, the more difficult it will be to successfully establish vegetation and prevent erosion. The bank behind our home slopes between 25 and 30 percent and has been challenging but workable.
If your slope is greater than 40 percent, then, whether you hire a landscape contractor or are a do-it-yourselfer, you should consider employing a civil engineer or landscape architect to design a series of retaining terrace walls; otherwise, you face possible collapse of your bank. You also need to find out about local County and City codes and regulations and adhere to them. Retaining walls not only hold back a hillside; they can also create lovely outdoor living spaces and landscaping terraces.

Low-Tech Ways to Establish Healthy Plant Community
Retaining walls are quite expensive, so we decided against this and to adopt low-tech methods for establishing a healthy native plant community on our bank. We had the site contractor save the topsoil from where the land was made level for the house; later we spread it thinly over the bank.

We first tried installing some jute mesh over this soil, but the squirrels decided it was perfect nesting material. So, instead we installed Incense Cedar logs, which we had in great supply from thinning our forest, on contour at several levels across the bank. We anchored them in place with stakes.

Coir or straw wattles will also work, but they deteriorate quickly. The logs helped keep the mulch we applied from washing out and slowed runoff so water sank in. Adding some large boulders here and there also helps stabilize the slope, adds interest, and creates planting pockets.

We wanted to occasionally deep irrigate our bank during summer to keep it fresh looking and fire safe, and we knew that maintaining drip irrigation on such a steep slope would be tedious and difficult. We chose to install rotator overhead irrigation heads at the top of the bank, as these deliver the water slowly so it sinks in, minimize run-off, and are reliable and quiet.

Creating Berms and Basins

Another approach to stabilizing and creating planting opportunities on a bank is by creating what are termed berms and basins. This involves some grading work in which you create on-contour berms by excavating on-contour shallow basins and moving the excess soil to the downhill side of basins to make berms. This creates low areas where runoff can accumulate in the basins and sink into the soil, while mulch is retained. This approach makes for varied planting opportunities on your bank or hillside, with plants that prefer more moisture in the basins and plants that need dry, fast-draining soils planted on the berms.
Planting on Hillsides
We purchased top-quality organic compost (no manures!), rock phosphate, oyster shell lime, and greensand for our soil amendments. We then worked a mix of these into the backfill of the planting holes.

For the best survival rate on hillsides and banks, I recommend installing plants that are in one-gallon pots, tree pots and deep pots. When planted in these sizes, plants develop deep root systems to hold the soil in place and establish well.

Also, dig the holes two times wider and of equal depth to the plant pots and ‘lightly’ amend the backfill soil for woodland species; for chaparral plants, skip the compost. You can spread a bit of compost on the surface around the outer edge of the rootball of the plants.

If you have a large area to plant, you might plant in phases over a few years, and plant in November so the plants have all winter to grow roots and begin to establish. After planting, the area should be mulched with a 2- to 3-inch layer of shredded bark, wood chips, coarse, sharp rock, or shredded native tree leaves and needles. Large bark chips float, so they are unstable on slopes.

Plant Selections to Consider
Our bank has portions that are in full sun most of the day; other areas have partial, filtered shade. So we selected native plants suited to those conditions that would accept occasional, deep summer water. We also didn’t want to block our sprinklers, so we had to select plants that remained lower growing or had an open structure and then locate them strategically.

Ideally you want a mix of small trees, shrubs, groundcovers, bunchgrasses, and perennials on banks, as this gives you different rooting types and depths and attracts pollinators, birds and other wildlife.

Tough and attractive native plant species suited to **sunnier** bank areas include:

**Small Tree or Large Shrub**
- Western Redbud (*Cercis occidentalis*) (Can be tree with pruning)

**Shrubs**
- Hearst’s Ceanothus (*Ceanothus hearstiorum*)
- Maritime Ceanothus (*Ceanothus maritimus*)
- *Ceanothus gloriosus* cultivars

**Perennials**
- California Fuchsia (*Epilobium canum*)
- California Buckwheat (*Eriogonum fasciculatum*)
- Naked Buckwheat (*Eriogonum nudum*)
- Common Aster (*Symphostrychum chilense*)
- ‘Margarita BOP’ Penstemon (*Penstemon heterophyllus*)
- Yarrow (*Achillea millefolium*)
Ground Covers
- Pigeon Pt. Dwarf Coyote Bush (*Baccharis pilularis ssp. pilularis ‘Pigeon Pt.’)

Bulbs
- Camas Lily (*Camassia quamash*)

Grasses
- Idaho Fescue (*Festuca idahoensis*)
- Deer Grass (*Muhlenbergia rigens*)

For partially shaded areas, consider:
Small Trees or Large Shrubs
- Tree with pruning/training)
- Western Hoptree (*Ptelea crenulata*)

Shrubs
- Western Azalea (*Rhodedendron occidentale*)
- California Snowdrop Bush (*Styrax redivivus*)
- Flowering Currants (*Ribes*, various species)
- Snowberry (*Symphoricarpos albus*)
- Carmel Sur Manzanita (*Arctostaphylos edmundsii ‘Carmel Sur’*)
- Western Columbine (*Aquilegia formosa*)

Perennials
- Crevice Alumroot and hybrids (*Heuchera micranthra* and hybrids)
- Beach Aster (*Erigeron glaucus*)

Ground Cover
- Kinnikinnick (*Arctostaphylos uva-ursi*)
- Creeping Barberry (*Berberis aquifolium var. repens*)
- Hummingbird Sage (*Salvia spathacea*)
- Woodland Strawberry (*Fragaria vesca*)

Bulbs
- Pacific Coast Hybrid iris (*Iris ‘Pacific Coast hybrid’*)

Grasses
- California Fescue (*Festuca californica*)
- Deerbrush (*Ceanothus integerrimus*)

These plants will need deep watering about once every 1 to 2 weeks throughout their first summer, then once every 2 to 4 weeks once established. We now gaze out our dining room window at a sloping bank covered in a mosaic of native plants with colorful blooms and a myriad of insects, birds, reptiles, and small mammals, such as pesky voles and an occasional fox in pursuit. If I stealthily slide open the window, I can often get some great photos of these wildlife inhabitants.

Some Useful Internet Links on This Topic
https://www.laspilitas.com/garden/howto/slope.html
https://www.laspilitas.com/advanced/advamendments.htm
https://calscape.org/planting-guide.php
Featured Redbud: Bill Wilson

By Karen Callahan

In our “Featured Redbud” series we focus on a Redbud member who has made noteworthy contributions to Redbud and to native plants.

E. William Wilson, known to us as Bill, grew up in Orosi, in the heart of the San Joaquin Valley, a third-generation Californian. During his school years, he explored the southern Sierra Nevada Mountains — especially Kings Canyon and Sequoia National Park but also Yosemite.

He graduated from California State University at Chico with a biology major. As an ecology research assistant, he studied vernal pools, and mammalian taxonomy was the focus of his master’s degree. Bill’s professional career was teaching high-school science (11 yrs) and community college (26 yrs). The first 10 years of community college, he taught energy conservation and solar energy, then went into computer science.

Many Roles in Redbud

When Bill and his wife, Diane, retired from their teaching careers, they settled in Nevada City. Since arriving here, Bill has been very active with native plants and with Redbud Chapter in particular.

He has served as Chapter president, webmaster, plant sale organizer, and editor and technical director for our chapter’s three native plant guidebooks. Over the years, he has devoted much energy and time to leading conservation activities of Redbud Chapter. He’s done everything from masterminding the setup of Redbud plant sales to fixing the projector at our public programs.

Bill’s Contributions to Redbud’s Books

One of Bill’s most enduring contributions to Redbud has been as a major contributor and organizer for our very popular Wildflowers of Nevada and Placer Counties (1st and 2nd Editions) and Trees and Shrubs of Nevada and Placer Counties. These books have spread knowledge about identifying our local native plants to hundreds of readers. The books also provide an important source of funds for our chapter.

In addition to his own authorship and editing work on each book, Bill and Diane hosted the meetings of the authors for all three books in their garage loft. Having this space, a consistent comfortable workspace with a large table and digital projector, really made the fine honing of the science, writing, graphics, and layout of each book possible. For each book, the book team held about 50 meetings at Bill and Diane’s, a total of 150 meetings from 2005 to 2017.

Bill was infinitely patient with the technical aspects of organizing hundreds of photographs and dozens of chapters of text for the Redbud books. He patiently sat through the edit meetings, listening to our group of authors full of opinions and eager to debate ideas of how to interest the public in locally native plants. Bill...
always graciously answered questions about using computers. Bill says, “I give credit to Chet Blackburn as an example of how to learn to pull together a group with varying interests and goals.”

Supporting SFSU’s Sierra Nevada Field Station
During the summer season, Bill is dedicated to supporting the San Francisco State University’s (SFSU) Sierra Nevada Field Station in Sierra County. At the Field Station, excellent teachers give dozens of fascinating classes on topics such as botany, art, and natural history. Bill pursues “camera trapping” to photograph the higher elevation mammals and birds at the Field Station. Through Bill’s efforts, the Redbud Chapter has twice had inspiring, flower-filled two-day Sierra Wildflower Weekends at this field station.

Bill is a genuine “people person” who enjoys chatting with his many friends and getting acquainted with other nature lovers of all of backgrounds and interests. He’s well worth getting to know!

Redbud Has Cool New Website!

We have an exciting announcement to make! Redbud has a brand new website — https://chapters.cnps.org/redbud/! Please visit it and update your bookmarks.

With this new website, we can offer much more dynamic content, such as blog posts and ongoing series such as info on gardening with natives, plant profiles, trail listings and much, much more! It also has a completely new look and feel, including attractive layouts and font and additional plant images.

In the coming months, we plan to expand site content offerings. You’ll already see new material here now, compared with our former site. We’re still in the process of bringing over some existing material, so if you feel we’re missing something, bear with us as we keep ramping up.
Many thanks to Shane Hanofee for spearheading this project. Jeanne Wilson and Chrissy Freeman also worked on it, and other members, such as Nancy Gilbert, contributed photography as well as writing done for other Redbud publications. We welcome photography and blog post submissions. Please send to nativeplanthelp@rebad-cnps.org.

We hope you like the new website!

**Triumph Over Star Thistle — Without Using Herbicides**

*by Linda Conklin*

When I moved to Lake of the Pines, I faced a yard full of star thistle. I knew its reputation as a terrible invasive plant, and it hurts when you walk through it. At first, the prospect of what would be involved in turning this property into a native landscape seemed overwhelming. But I asked many people what to do, sorted out what made sense to me, and took it one step at a time.

Here are the steps I followed from star thistles to native garden. If you have an area full of tough non-natives, you can adapt these steps to suit your own project, and to create your own native sanctuary! Remember, patience makes progress!

**Steps From Star Thistles To Native Landscape**

*2012 to 2015*

- I used and needed all the following methods — pulled it out, dug it out, mowed it to the ground, and solarized it with clear plastic for several weeks until it was dead. Then raked away the dead star thistle.
- I would also have tried vinegar spray if I had known about it then.

![Star thistle in yard before project began](https://example.com/star-thistle-before.png)

![Solarizing with clear plastic to kill star thistle](https://example.com/solarizing.png)

**May 2015**

Sowed 3500 sq ft with four perennial fescues — Hard, Chewings, Sheep, Creeping Red
- Mixed with 7 kinds of wildflowers, to compete with star thistle.
- Covered with fir fines.
- Bought the seed from John Schilling.
- Watered daily with overhead sprinklers.
Summer 2015
Kept grass cut and removed clippings.

August 25, 2015
After the grasses were 12 inches tall, we began keeping it cut to 6 inches, reduced the daily watering schedule to 2 times a week, and watered for a longer period of time (deep watering).

2015 to present
The methods I used completely eradicated the star thistle! It has not returned. Some of the star thistle area still has some of the original grasses along with annual weeds that are green in the winter and spring and brown in the summer and fall. I will let it stay that way.

Here’s what I do for fescue maintenance:
- I use no fertilizer.
- When grasses are 10 inches tall, I have them mowed and raked.
- You could aerate and power rake the deep thatch, but I no longer do this.
- I no longer water; the grasses/weeds turn brown in summer and green up in the spring.

Because I could afford only a certain amount of money, we designed and planted a portion of the landscape every fall and spring. We did our first plantings in areas where we added mushroom soil mixed with native soil and used drip irrigation. We began planting in the front yard, as there was never star thistle there (only crab grass, which we still battle in the entire yard as well as an invasive sedge). We started with trees, then large flowering shrubs, then small flowering shrubs, and then perennials and iris.

We observed that these native plants grew to be very large and healthy. So we added mushroom soil to other areas when we were going to plant. Over the years we’ve converted virtually all my yard to California natives, most of which was star thistle when I moved in. The accompanying plant list gives you a more detailed view of what we’ve accomplished — listing natives plants in each landscaped area. I hope it inspires you!

My Plant Lists — For Transformation From Star Thistle To Native Landscape

<table>
<thead>
<tr>
<th>2012 - Front Planter</th>
<th>2015</th>
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<tbody>
<tr>
<td>Redwoods (<em>Sequoia sempervirens</em>)</td>
<td>Fescue and wildflowers (See article for fescue species.)</td>
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<thead>
<tr>
<th>2013</th>
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<tr>
<td>Incense Cedars (<em>Calocedrus decurrens</em>)</td>
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<th>2014</th>
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<tr>
<td>Douglas Firs (<em>Pseudotsuga menziesii</em>)</td>
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<tr>
<td>Ponderosa pine (<em>Pinus ponderosa</em>)</td>
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<th>2016</th>
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<td>Back sod lawn</td>
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### My Plant Lists — For Transformation From Star Thistle To Native Landscape, continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Season</th>
<th>Location</th>
<th>Plants</th>
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<tbody>
<tr>
<td>2017 Spring - Front planter</td>
<td>'Heart's Desire' Ceanothus, 3 ft (<em>Ceanothus gloriosus</em>)&lt;br&gt;Emerald Carpet Manzanita (<em>Arctostaphylos ‘Emerald Carpet’</em>)&lt;br&gt;Creeping Barberry (<em>Berberis repens</em>)&lt;br&gt;Hummingbird Sage (<em>Salvia spathacea</em>)&lt;br&gt;Anchor Bay Ceanothus, ground cover (<em>Ceanothus gloriosus ‘Anchor Bay’</em>)&lt;br&gt;Douglas Iris (<em>Iris douglasiana</em>)&lt;br&gt;‘Canyon Snow’ Iris (<em>Iris douglasiana ‘Canyon Snow’</em>)&lt;br&gt;Wall Germander (<em>Teucrium chamaedrys</em>) (non-native)&lt;br&gt;English Lavender (<em>Lavender angustifolia</em>) (non-native)</td>
<td>'Bee’s Bliss’ Sage (<em>Salvia sonomensis ‘Bee’s Bliss’</em>)&lt;br&gt;Idaho Fescue, a bunchgrass (<em>Festuca idahoensis</em>)&lt;br&gt;Milkweed, Showy or Narrow Leaf (<em>Asclepias speciosa</em> or <em>Ascelpias fascicularis</em>)&lt;br&gt;Whitehead Mule’s Ear (<em>Wyethia helenioides</em>)&lt;br&gt;California Aster (<em>Symphyotrichum chilense</em>)&lt;br&gt;Canada Golden Rod, rhizome (<em>Soledago lepida</em>)</td>
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<tr>
<td>2017 Spring - Rock Area</td>
<td>California Fuschia (<em>Epilobium canum</em>)&lt;br&gt;Deer Grass (<em>Muhlenbergia rigens</em>)</td>
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<td>2017 Spring - Behind Deck</td>
<td>Chaparral currant (<em>Ribes malvaceum</em>)&lt;br&gt;Emerald Carpet Manzanita (<em>Arctostaphylos ‘Emerald Carpet’</em>)&lt;br&gt;California Pipevine (<em>Aristolochia californica</em>)&lt;br&gt;Douglas Iris (<em>Iris douglasiana</em>)</td>
<td>Wall Germander (<em>Teucrium chamaedrys</em>) (non-native)&lt;br&gt;Anchor Bay Ceanothus, ground cover (<em>Ceanothus gloriosus</em>)&lt;br&gt;California Pipevine (<em>Aristolochia californica</em>)&lt;br&gt;Douglas Iris (<em>Iris douglasiana</em>)</td>
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<tr>
<td>2017 Fall - Front Mound</td>
<td>Pacific Dogwood ‘Eddie's White Wonder’ (<em>Cornus nuttallii</em>)&lt;br&gt;Oregon Grape 'Soft Caress' (<em>Mahonia eurybracteata</em>) (non-native)&lt;br&gt;Silver Bush Lupine (<em>Lupinus albifrons</em>)&lt;br&gt;Autumn Sage (<em>Salvia greggii</em>) (non-native)</td>
<td>Blue Elderberry (<em>Sambucus nigra ssp. caerulea</em>)&lt;br&gt;Santa Rosa Island Sage (<em>Salvia brandegeei</em>)</td>
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<tr>
<td>2017 Fall - Back Mound</td>
<td>California Buckeye (<em>Aesculus californica</em>)&lt;br&gt;Western Redbud (<em>Cercis occidentalis</em>)&lt;br&gt;Toyon (<em>Heteromeles arbutifolia</em>)&lt;br&gt;Coffeeberry (<em>Frangula californica ssp. tomentella</em>)&lt;br&gt;California Bush Anemone (<em>Carpenteria californica</em>)&lt;br&gt;Pink Flowering Currant (<em>Ribes sanguineum</em>)&lt;br&gt;California Blackberry (<em>Rubus ursinus</em>)</td>
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<td>2018 Spring - Back Mound</td>
<td>Blue Elderberry (<em>Sambucus nigra ssp. caerulea</em>)&lt;br&gt;Santa Rosa Island Sage (<em>Salvia brandegeei</em>)</td>
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How Ames Gilbert Produces His Painterly Images
By Ames Gilbert

Have you seen the recent series of “Plantidotes” — painterly images of native plants on Redbud’s Facebook page and Instagram? We’ve included several with this article. Are you intrigued by how they look kind of like photographs but also like paintings? Have you wondered how Ames Gilbert accomplishes this? Have you wondered if you could learn enough tips to try this yourself? In this article, Ames generously shares the process he has developed over the years for creating such works of digital art.

Each one of these images is indeed a digital painting but with modifications for most of this ‘Plantidote’ series to make them realistic enough to be useful for identification. People have asked how I do it, so here follows a general answer. In reality, I may handle each work slightly differently.

I do not work in a physical medium; I do everything in Photoshop and Illustrator CS6, the last version one didn’t have to rent month by month, now something like ten years old. I’ve been doing digital paintings of one sort or another for 22 years now...

Step 1. Make Composite of Photo Components
For our purposes, let’s assume you know the basics of working with Photoshop (PS). The first thing is to set up the painting, using from one to six photos. (Nancy and I have about three quarters of a million between us).

Decide what will be the main focus, subsidiary, and background. I proceed as I would with a physical painting, really — lay down some pencil lines, decide where to position the main subject, how much space to the edges, and so on. But it’s a lot easier in PS!

Then I cut out all the items of interest from their backgrounds, which requires a great deal of patience and practice! The final part of this stage is to make a composite from all the pieces, adjusting sizes, lighting, color balance, and so forth, so everything hangs together. This enables me, to, among other things, (almost always) darken the final background, as this helps make the subjects of interest stand out.

Step 2. Now Paint!
Then I start ‘painting,’ using the adjustable transparency in PS layers so I can use the composite as a guide. This also means I can ‘dip’ my brush into any color ‘pot’ using the eyedropper tool.

Tens of thousands of ‘brushes’ are available; I have about a thousand, and you can make your own. Most people...
sell/collect them into sets, so you can use ‘oil brushes’ or ‘color pencils’ or ‘charcoal sticks.’ Of course, you can change the size, color, density and so on in an infinite number of ways for each. Plus, the more sophisticated brushes can apply two or more colors at a time, just as in real life. There are no rules in digital painting; I often use ‘watercolors’ on top of ‘oil’ or ‘color pencils,’ for example. Try that in real life!

**Step 3. Use Photoshop Layers for Paintings**

PS has layers, so you can combine them, change transparency, and so on. I usually end up with somewhere between ten and forty layers. If some specific items need a lot of work, such as an insect, I put these on their own layers.

**Step 4. Input Tools & Other Tools**

The creation of my digital paintings may involve several kinds of physical input, such as drawing lines, painting, or masking (hiding parts of the image). For such physical input, I use a Wacom Intuos 4 tablet with matching stylus. I got mine new just after the Intuos 5 generation came out, for $100. It is pressure- and angle-sensitive, very good in that regard. Because I’ve been doing digital paintings for over two decades, before affordable tablets came along, I started with a mouse and still use it when convenient; I’m pretty good with it after all that practice.

Also critical to my work are filters, digital tools for changing how an image looks. My collection of filters is way more valuable than the Adobe software. (I often switch back and forth between Illustrator and PS.) I even have a specialized program (Filter Forge) that does nothing but allow one to build filters from scratch. One option it offers is that I can build a unique library and also access the libraries of anyone else who cares to share filters they’ve created. These filters basically build on everything PS does but go much, much further.

Finally, I use ‘actions.’ In an ‘action,’ PS records all your steps; you can then apply that same sequence of steps to a project in the future. These are tremendous time savers. Again, you can also buy all sorts of actions that others have put together, in the same way as with ‘brushes.’

**Your Goals Guide Your Decisions**

Depending on my goal, I may combine elements of the original composition back into the painting at some degree of transparency. I do this a lot with the Plantidotes, because our audience expects pretty good botanical or entomological accuracy, IMHO. That is, they could use the painting as a reasonable guide to pick out enough accurate features to identify the plant or insect.

What I label as ‘studies’ are pure paintings, meant to convey an impression, more emotional than scientific. Yet all the other images are also the results of my personal decision to emphasize certain points of interest, or colors, textures and shapes, so they have an emotional/artistic element as well.

*Redbud News, July 2020*
Reflecting on Digital Paintings
When I’m all done, I combine the layers; PS does this automatically for me when I save as a jpeg, the final product. It’s ephemeral, and exquisitely dependent on technology, true, but anyone with a decent photo printer can print a good version.

Digital paintings are inherently different from physical ones in a very important way. Because they use transmitted light rather than reflected light, you develop a rather different style, because they are literally more luminous. I can safely say that I am well rid of things like (very expensive) tubes of oil paint, the smell of turpentine, cleaning brushes, tripping over easels, and all the rest!

An Example of Creation Steps

Make Composite: I’ve cut out parts of four separate photos taken at different times and combined them to form my desired layout. (The bee, the flowers in full bloom, and the flowers in bud are all from different original photos.)

Paint and Use Filters: I use filters in several separate layers. Note the softer, more painterly-like tone across the entire painting.
Questions from the “Peanut Gallery”

• *What inspired you to start doing this kind of work?*
Photos are great in themselves, but often I wanted to make changes to eliminate distractions, emphasize what I thought was of particular interest, or reinterpret what I actually captured to more closely reflect what I was feeling at the time. And, apart from professional botanical illustrators, and artists doing still lifes, little artistic attention is paid to native plants.

• *I’ve noticed that people often aren’t sure whether to call your work photographs or paintings. What do you call them?*
I personally think of them as paintings, but I am not a ‘trained artist,’ and plenty of real artists online have objected to manipulated images and prints thereof being called paintings (especially if there is $$ involved…), so, in public, I most often refer to them as ‘images.’

• *How did you learn this? To what extent did you develop the process you follow yourself, and to what extent do you follow a process you learned from others?*
I got the second version of PS but was not able to teach myself. When the third edition came out, I realized I should take a class. IMHO, there really is no substitute for taking a class from a knowledgeable person, such as those offered by Sierra College.

Some folks can teach themselves from a book, like the Adobe *Classroom in a Book* series (which I use as a reference), but I think the majority of people need a structured learning process, the discipline of homework and mandatory hands–on in a class, and being able to get help the moment it is needed from a good teacher who has plenty of experience and patience.

Now almost infinite resources are available on the Internet to teach the latest techniques. Some require payment; most do not. You can find some really good teachers out there!
Upcoming Redbud Events

Because of the ongoing COVID situation, we’ve transformed the August 8 Redbud Celebration and Membership Meeting into a series of virtual Welcome to Redbud events, which will take place this fall. We will share dates, times, and details in an upcoming newsletter, on our website, and on Facebook.

We will still feature a presentation by CNPS Executive Director Dan Gluesenkamp highlighting California’s ground-breaking commitment to biodiversity; CNPS mission, goals, and initiatives; and our Redbud chapter’s role in carrying out these initiatives. Details to come!

Our “Passionate about (Native) Plants” Public Lecture Series

The balance of our 2020 events for our Passionate About (Native) Plants” Lecture Series will be virtual. Mark your calendars now! For more information, see our Redbud Upcoming Events page. Information on Zoom sessions will be available on that page in advance. Each live session will include time for audience questions. We’ll also post information on how to view programs later.

Programs are 7 to 8:30 p.m. (non-members welcome)

- **July 28, Tue.** Chris Paulus. *Ecological Forestry, Fuels Modifications, Fire Safety, and Conservation.* The El Dorado Chapter of CNPS is pleased to co-host with Redbud a virtual presentation by Chris Paulus. Chris is a former CalFire Battalion Chief, and currently is Operations Section Chief for the North Fork of the American River Shaded Fuel Break Project. He will talk about fuels reduction and performance-based holistic fuels management. Chris will focus on what is commonly referred to as "defensible space" but will emphasize understanding the fire-adaptive strategies and traits of native plants within the fire-adaptive ecosystem where homes and businesses are located.

  This presentation is open to the public and free of charge. It will be available via a Zoom link sent to your email a few days before the talk (if you subscribe to Redbud newsletters). Contact web.eldoradocnps@gmail.com to request an invitation.

  You may also watch the live-stream presentation on YouTube (no password necessary). Stay tuned for the link.

- **August 26, Wed.** Matt and Rachel Berry. *The Wild Forager — Gathering the Abundance of Nature Through Stewardship.* A culture of land stewardship is the premise of a healthy, balanced landscape. We will look at ways to enhance plant biodiversity and how to gather and process abundant plants sustainably. We will cover how to identify some key edible plants and discuss the superior nutritional values typically found in wild food. We’ll also discuss regulations around collecting and strategies for expanding your foraging opportunities. Matt teaches ethnobotany, concurrently working for the U.S. Forest Service as a seasonal botanist. Rachel is a passionate herbalist and teaches wildcraft.

- **September 23, Wed.** Nancy and Ames Gilbert. *Rainwater Harvesting and Rainscaping Strategies for Healthy Watersheds.* Nancy, our chapter Horticulture Chair, and Ames, also a long-time active Redbud volunteer, have been implementing permaculture and regenerative forestry and gardening practices on their 13 woodland acres for over 20 years. Their presentation will include best practices for rainfall bio-
retention strategies such as how to store and harvest rainwater; and strategies to slow, spread and sink rainfall & storm water runoff. Learn about rain gardens, bio-swales, berms and basins, and appropriate native plants for these ecosystems.

- **Oct 28, Wed.** Hannah Kang. *“The Role of Herbaria in Preserving California’s Unique Botanical Heritage (or What’s a Native Plant and How Do We Know Them When We See Them?)”* Hannah has been a plant biologist at the UC Davis Herbarium. Over 2000 of her photos of native plants appear in CalPhoto, an online database of natural history photos maintained by the University of California, many taken in Nevada and Placer counties. She will help us understand the ways in which herbaria are more important than ever in this era of climate change, and how they benefit us as lovers of native plants, even if we never consult them directly.

### Upcoming Non-Redbud Events

Events sponsored by Mt. Lassen chapter. On Zoom and streamed live to [Mt. Lassen CNPS Facebook page](https://www.facebook.com/mtlassen.cnps):

- July 28, Tuesday, 7 p.m. *“Lawn to California Native Garden”*. Ann-Marie Benz & Maya Argaman, CNPS Horticultural Outreach Manager & Coordinator, respectively.
- August 12, Wed, 7 p.m. *“California Forests and the CalFire Vegetation Treatment Program”*. Andrea Williams, CNPS Director of Plant Science.
- August 26, Wed., 7 p.m. *“Beauty and the Beast: California Wildflowers and Climate Change”*. Rob Badger and Nita Winter, Authors and Photographers.

### Field Trip News

To comply with California’s stay-at-home order and the guidance of CNPS, and to help protect the health of all through physical distancing, Redbud has cancelled all field trips until further notice.

### New Redbud Virtual Field Trips

Not just one, not just two, but three new Virtual Field Trips since our last newsletter!

- **Up into the Sierra, around Tahoe, for our newest field trip:** [Virtual Field Trip – Roadsides – Lake Tahoe.](https://www.redbudnews.com/virtual-field-trip-roadside-lake-tahoe) Discover the plants of random backroads near Lake Tahoe. The trails around Tahoe have been unnervingly crowded, so explore this quiet opportunity to see nature and be physically distanced. Join host Shane Hanofee as he gives a brief overview of some groups of plants that like the wet, montane spots but are tolerant of the disturbance that comes with close vehicle traffic.

- **Watch this Virtual Field Trip to Big Tree Grove in Placer County** to experience an awe-inspiring natural world, so near and yet so far. The Big Tree Grove in southern Placer County features the northernmost natural stand of Giant Sequoias and an understory filled with amazing shrubs and wildflowers. Join host Shane Hanofee as he explores the plant communities of this local treasure!
• Finally, stay cool and enjoy the native plants along our Virtual Field Trip to Rock Creek Nature Trail. This shady isolated canyon features specially adapted native plants. Many of the smaller plants lack the green coloration necessary for photosynthesis, and they adopt varying degrees of symbiosis and parasitism with the fungal kingdom to survive in their unique niche where sunlight barely penetrates.

Other Redbud Virtual Field Trips
Explore other Redbud Virtual Field Trips, such as the Olmstead Loop Trail in Cool and the Yewei’im Bom Trail in Nevada City, on our Redbud YouTube channel any time you like.

More Virtual Field Trips keep coming! Stay up to date on our Facebook page and by subscribing to our YouTube channel.

Some Virtual Field Trips Farther Afield
• CNPS Chapter Local Garden Tours. What a treasure-trove of inspiration about gardening with natives, and views of native plants! CNPS has gathered together and made accessible in one spot the virtual garden tours done by 6 CNPS chapters plus a leading California native plant botanical garden. The formats include video tours, photo tours, and mediated conversations. You’re sure to find plenty you’ll enjoy!
• Skyline Ridge Preserve in San Mateo County. A slide show rather than a video that includes many plants also native to our counties.

News to Know: On Native Berries, Birds & Butterflies
By Chrissy Freeman

This month, we’re starting a new feature in the Redbud News, “News to Know,” curated links to emerging information and developments in the world of California native plants. Send news you think we should share to nativeplanthelp@redbud-cnps.org.

Migratory Birds Like Native Berries Best! Be sure to read this Audubon story about recent research in which scientists found that migratory birds much preferred the berries of native plants compared with those of non-native plants. These research results bolster arguments for planting native plants instead of non-natives in home gardens and in public and commercial landscaping. So bookmark it and keep it handy!

Milkweed, only food source for monarch caterpillars, ubiquitously contaminated. In this article, learn about new evidence connecting pesticide residues in milkweed, some at levels toxic to monarch butterflies. Studies were conducted in Central Valley areas known as key breeding grounds for western monarchs.

Nevada and Placer Counties are removed from the large-scale commercial agriculture of the Central Valley. We hope to make a difference by propagating local milkweed species in potting soil (presumably less contaminated than agricultural soil) and selling them to you to plant in your gardens where you use no pesticides or herbicides.
Enjoy the Healing Power of Native Plants Online

As the need for physical distancing continues now and for the foreseeable future, we’re repeating from our last issue the list of ways to stay connecting with native plants and one another. Although we cannot gather in person, we can still celebrate the beauty and resilience of California native plants, in our gardens, on solitary walks with our dogs, or through the Internet. CNPS members, family, and friends are staying in touch and continuing to share the healing power of native plants in many ways. Try some of these:

- Join social media discussions in our Redbud Facebook group to exchange photos, questions, stories, encouragement, conversations, and discoveries
- Take a virtual Redbud Chapter field trip (on our Redbud Chapter YouTube channel)
- View online videos of speakers, presentations, garden tours, and more on:
  - Redbud Chapter’s YouTube channel
  - California Native Plant Society’s YouTube channel
  - Santa Clara Valley CNPS’s YouTube channel
  - Jepson Herbarium YouTube channel (See article in April 2020 Redbud News.)
- Get gardening tips & insights from Redbud Chapter’s “Natives for Landscaping” online resources, CNPS Garden Ambassadors, or by emailing questions to nativeplanthelp@redbud-cnps.org
- Use Calscape, the CNPS database of California native plants, to find natives local to where you live
- Find stunning movies of California native wildflowers. (E.g., search YouTube for “California super bloom”.)
- Use iNaturalist to observe and identify plants and critters on your property or in your neighborhood.
- Search for and identify both native and non-native naturalized plants in the Calflora.org database
- Read Executive Director Dan Gluesenkamp’s inspiring message about the mission and the strength of CNPS during and beyond this challenging time.