



GOLD FIELD NOTES

EL DORADO CHAPTER ☼ CALIFORNIA NATIVE PLANT SOCIETY ☼ SEPTEMBER-OCTOBER 2023

SEPTEMBER 23 PROGRAM LESSONS IN NATIVE PLANT HUSBANDRY

Changed Day & Time
Saturday, September 23
10 am

We are mixing it up this time for our chapter program with an in-person meeting at the Nature Nook Demonstration Garden next to the Placerville library (345 Fair Lane, Placerville). This meeting will be held during the daytime on Saturday, September 23 at 10 am.

Taking place just before the Fall Plant Sale (see note below), this meeting will give you information on planting as well as some opportunities to do hands-on work, right before you bring home all your new, precious native plants.

There will be hands-on demonstrations on how to plant trees and shrubs and how often to water them afterward; how to plant seeds and re-pot seedlings as needed; simple ways to test your soil to find out what will grow best there; how to choose plants for your site; and more.

CALENDAR

September 23 (Saturday)

Chapter program.
Lessons in Native Plant Husbandry at the Nature Nook, Placerville Library. Details in article to right.

October 1 to 7 and 14

Twice yearly plant sale.
Online sale October 1-7 and pick-up on Saturday, October 14. See details to the right.

October 7 (Saturday)

Field Trip.
Blodgett Forest Research Station, east of Georgetown. This is a companion activity to the chapter program in November. See details inside.

November 28 (Tuesday)

Chapter program.
Pyrosilviculture at Blodgett Forest. See inside for details.

Available Anytime!

Botanical programs.
View past presentations from the Friends of the Chico Herbarium's "All Things Botanically Related" series. Check this website for program links: <http://friendsofthechicoherbarium.org/presentation-series>

Evening programs (with occasional exceptions) are held on the fourth Tuesday of January, March, May, July, September, and November. The program begins at 7 PM and may be in-person or hosted via Zoom. Check the chapter website for details on Zoom link and location (<https://www.eldoradocnps.org/>).

Native Plant Sale
Plants - Books - Garden Art
Sponsored by the El Dorado Chapter of the California Native Plant Society.

2023 Fall Plant Sale

Order Online: From 10:00 am **October 1** thru 5:00 pm **October 7**

Location: shop.eldoradocnps.org

Plant Pickup

Date: **October 14**

Time: **Pickup time assigned at checkout**

Location: **2850 Fairlane Court,
Placerville, CA**

(parking lot of county building C)



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www.eldoradoCNPS.org

[eldocnps](https://www.instagram.com/eldocnps)

[EldoradoCNPS](https://www.facebook.com/EldoradoCNPS)

Homegrown Habitat:
Native Plant Gardening
in El Dorado County

CNPS is a 501(c)3 non-profit organization.



EL DORADO CHAPTER'S ANTI-WEED PROJECTS, 2023

Our Chapter's weed warriors have been very busy this year! We began our work at the Farview Parcel of the Pine Hill Preserve, with removal of Italian thistle (*Carduus pycnocephalus*) - a tough and prickly member of the Sunflower family, as well as tocalote (*Centauria melitensis*) - a relative of yellow star thistle - and a few invasive grasses. Tal and Bill Blackburn were instrumental in the successful removal of all the Italian thistle individuals that we could find and that were, thankfully, confined to a small area of the Parcel.

A main target of our Pine Hill Preserve weed control efforts is stinkwort (*Dittrichia graveolens*). See the accompanying photo of stinkwort and tumbleweed side by side. This invasive Sunflower family member is a relatively new addition to our county weed list and is a problem because of its ability to grow in gabbro soils, as well as less challenging soils, its ability to grow in the understory of chaparral shrubs, and not being confined to only disturbed soils such as roadsides, where it also grows abundantly. **Stinkwort exudes a very aromatic (some say it's objectionable, others like the smell) glandular material that can cause a blistering rash. Because it's a newcomer and hasn't yet made huge inroads in elevations above, say that of Placerville, we have a chance of being able to control populations in discreet areas like those of the various units of the Preserve. Having managed to get this weed under control in several areas of the Preserve in the last few years, in 2023 we have been removing stinkwort in a Cameron Park parcel that provides habitat for several Pine Hill rare species, that is currently owned by El Dorado County, and may be added to the Preserve in the future. Thanks to a huge effort over four days, with multiple volunteers, dozens of bags-full of this problem weed were removed from this parcel, so that next year, we may be able to "clean up" the remaining individuals and have stinkwort under control there. Contributing to this project are Tal and Bill Blackburn, Lisa Couper, Wil Carlson, Janet Cicero, Mike Nehl, Al Ludtke, and Deb Ayres, as well as Dana Watkins from El Dorado County Planning, and Graciela Hinshaw - Pine Hill Preserve Manager - with Landon Eldredge, Jacob Picardat, Sophia Weinmann, and Faith Provost from the Bureau of Land Management, Mother Lode Field Office.**

Further "up the hill" Shellie and Steve Perry have been heading up weed monitoring and removal efforts in the El Dorado National Forest, within the footprint of the 2021 Caldor Fire. They have been monitoring and photo-documenting common or woolly mullein (*Verbascum thapsus*) to learn more about how it spreads on the Eldorado as well as pulling this widespread member of the Snapdragon family. They have also removed ox-eye daisy (*Leucanthemum vulgare*) in and around the Leek Springs Ecological Preserve. Shellie and Steve are searching for more efficient ways to control this spreading non-native member of the Sunflower Family. They have also been contributing to the education of the public by teaching recognition of invasive weed species to people

recreating on the Eldorado so that they can respond appropriately when they see them. Steve and Shellie have been joined this summer in these projects by Annie Walker, Janet Cicero, Lisa Couper, Mike Nehl, Roger Jensen, and Sherrie Carhart.

Though Shellie and Steve and crew haven't found any tumbleweed (*Salsola* spp.) in the Caldor fire area, it is readily found in the western part of the county, especially in disturbed places along our roads. Make sure to read Deb Ayres' article in this issue about the chapter's 2023 tumbleweed monitoring project for the county.

Through these 2023 efforts, we have been building a dedicated team that has made a difference in the health of our local ecosystems, helping populations of our native plant species, including rare plants that occur nowhere else on earth, to thrive in their natural habitats. A huge thank you to all that have participated in these efforts! If you have been inspired by their work and would like to join in our weed program, join the warrior team! Visit the El Dorado Chapter website to contact the Weed Committee chairs, **Ginna Meyer and Deb Ayres. We'd love to have you!**

Ginna Meyer
Invasive Exotics Co-chair



Mike Nehl, Wil Carlson, Lisa Couper and Janet Cicero removing stinkwort at the El Dorado County Cameron Park parcel in August. Note the red, iron-rich color of the gabbro soil. (Photo: Ginna Meyer).

TWO FEATURED WEEDS: STINKWORT AND TUMBLEWEED

Two of the weeds mentioned in the articles on pages 2-4 occur in the same locations and have a somewhat similar appearance. The image to the right illustrates some of their differences.

Stinkwort on the left, tumbleweed on the right. Background: large infestation of mostly stinkwort. Taken at the El Dorado Hills fire station on Bass Lake Rd. 9/6/23. (Photo: D. Ayres).



TUMBLEWEED (*SALSOLA TRAGUS*) IN EL DORADO COUNTY

Weed Co-chairs Deb Ayres and Ginna Meyer have been surveying and mapping tumbleweeds in the County. As members of the Weed Management Area that includes El Dorado and Amador Counties Deb and Ginna noticed incursions of tumbleweeds that had escaped weed control

and volunteered to map its distribution on the western slope of the county on Calflora (<https://www.calflora.org/search.html>). Prior to this effort, in 2014 only a single imprecise occurrence of tumbleweed near Latrobe had been noted on Calflora downslope of 3,300'.

For our search area we focused on Highway 50 and the main arteries leading from the highway, surveying 240 miles of road (Fig. 1). One of the first things we noticed was the extensive and mostly effective roadside and median weed control that the El Dorado County Agricultural Commissioner had conducted. The County uses the herbicide Milestone that has pre-emergent (kills the germinating seedlings) and post-emergent (kills younger plants) control of sunflowers, like stinkwort and yellow star thistle, and tumbleweed, which is NOT a sunflower. The boom on the sprayer is 8 feet wide – and this is an important feature. In previous years we noticed stinkwort had heavily colonized our search area in the highway medians and along the roadsides where the robust plants were expanding cracks in the road surface. This year we found long stretches, like between Greenstone and Missouri Flat roads that were almost devoid of any weeds.



Fig. 1. County-wide distribution of tumbleweed, September 2023. Note the single yellow square near Latrobe in the south-west county - the only lower elevation observation prior to this survey. (<https://www.calflora.org/entry/observ.html?track=m#srch=t&lpcli=t&taxon=Salsola+tragus&chk=t&cch=t&cnabh=t&inat=r&cc=ELD>)

Stinkwort (*Dittrichia graveolens*) and tumbleweed (*Salsola tragus*) have similar life history and ecology. They are annual plants with seeds that germinate in the spring and mature plants that flower in

(continued on p, 4)

TUMBLEWEEDS *(continued from p. 3)*

the fall. They grow where other plants have been removed through disturbance, like roadsides, or mowing as the plants arise AFTER the spring mowing of the annual grasses. Stinkwort, which invaded El Dorado County in 2009, disperses its seed on the wind.



Figure 2. Tumbleweed and stinkwort growing along a fence line > 8' from the road edge: South Shingle Rd. (Photo: D. Ayres)

Tumbleweed, as its name implies, spreads by the entire dead plant, full of ripe seed, tumbling across the landscape. It's one of the fastest spreading weeds due to its tumbling seed dispersal, and hitching rides on trains, moving 1,500 miles from South Dakota in the 1870s to California 15 years later in 1885. Although stinkwort has more abundant populations than tumbleweeds, thus far, we frequently found them growing together making discrimination of the tumbleweeds at times difficult, especially from a car going 65 mph!

It is intriguing just where we found tumbleweed that had escaped herbicide control; >8 feet from the road edge, exceeding the width of the spray boom (Fig.2); along fences where the adult plants, blown by the wind, had fetched up and shed seeds; next to guardrails and fences that prevented the spray boom from reaching the area (Fig. 3); under guardrails that protected the seeds and plants from the spray; and roadside off- and on-ramps and in the triangular areas formed by the ramps (known as "gores"). It is also possible that tumbleweed is not as susceptible to Milestone as are the sunflowers.

We also gained insight on the longevity of a few populations. The aforementioned 2014

Latrobe population was still colonizing along South Shingle Road (Fig. 2), and seemingly had spread by 2023 (Fig. 1). The Strawberry population had first been noted in 2002, again in 2007, and we found 10-20 plants along the Highway 50 roadside in 2023 suggesting that these annual plants produced enough seed every year to permit the long term persistence of the population but not enough seed production to promote a broader scale invasion. In general, tumbleweed was scarce at the higher elevations and had larger, more mature flowering plants and larger populations at the lower elevations, like El Dorado Hills and Shingle Springs (Fig. 3).

Without baseline data like these, informed decisions on control efforts and results cannot be made. The main invasion route is clearly Highway 50, spreading upwards from lower elevations, while lateral expansion from the highway is limited at this time. Given the explosive spread this plant is capable of, and its escape from chemical weed control in certain situations, targeting the county-wide and local establishment sites should be a priority for El Dorado County.

For a cool video on tumbleweeds see: <https://www.pbs.org/video/why-do-tumbleweeds-tumble-6r210m/>

*Deb Ayres
Invasive Exotics Co-chair*



Figure 3. Tumbleweed (left) and stinkwort (right) adjacent to a guardrail, El Dorado Hills. (Photo: D. Ayres)

FIELD TRIP: BLODGETT FOREST RESEARCH STATION

When: Saturday, October 7

Where: Blodgett Forest Research Station, east of Georgetown. Meet at 9:30 am at the Georgetown Library to arrive at Blodgett at 10:00 am.

About this trip: Part of Blodgett Forest was burned by last year's Mosquito Fire. Forest researchers will explain to us how the forest ecosystem fared during and after the fire and how different treatments resulted in differential fire effects in the forest. This field trip is a companion activity to the November evening program described in the article to the right.

This forest is managed by the University of California, Berkeley "to improve the understanding and management of mixed conifer forest via research, demonstration, and education. Over 400 publications have come from research in the fields of silviculture, vegetation ecology, wildlife ecology, atmospheric chemistry, fire ecology, entomology, pathology, eco-physiology, soil science, economics, forest harvest methods, hydrology, and more" (Blodgett Forest Research Station website: <https://forests.berkeley.edu/forests/blodgett>). "Blodgett Forest is primarily a productive mixed conifer forest, with smaller proportions of oak forest, and shrubland. Elevation on the main tract ranges from 1,200 m to 1,500 m (3,900' to 4,800'). Four fish-bearing streams flow through the forest, which contains over 400 species of plants and habitat for 150 species of animals."

What to bring: Water, lunch/snacks, insect repellent, sunscreen, camera or smartphone for photos, field guides.

Level of difficulty: Easy to moderate, depending on where we will be hiking, and on how far.

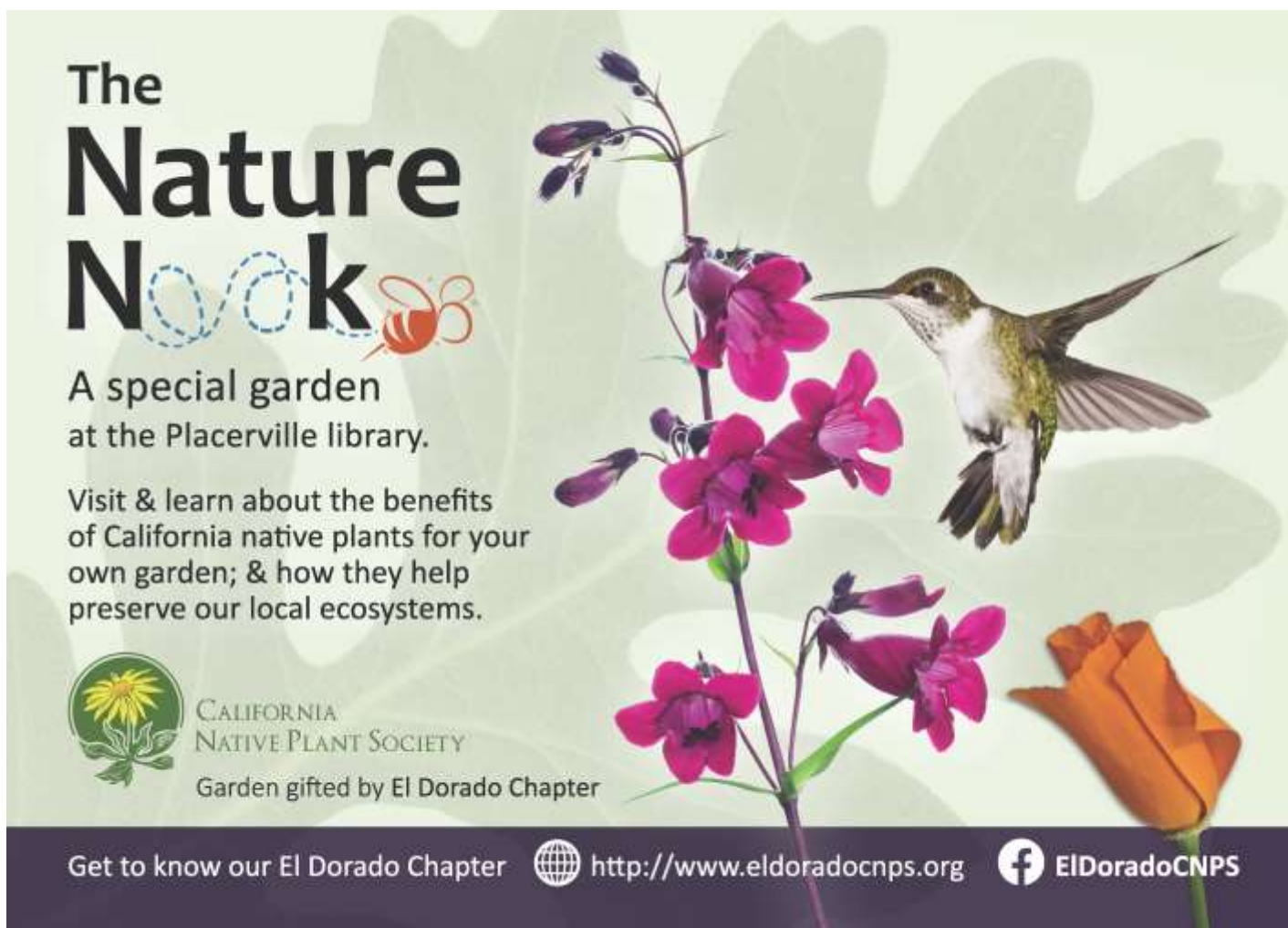
Contact: Ginna Meyer (<https://eldoradocnps.org/about-us/contact-us/>)

NOVEMBER 28 PROGRAM BLODGETT EXPERIMENTAL FOREST AND PYROSILVICULTURE

Join us for an evening program via Zoom on the *Blodgett Forest Research Station* (<https://forests.berkeley.edu/forests/blodgett>), its experimental forest management regimes, and the varied effects the Mosquito Fire (9/12/2022) had on forest impact and recovery due to *pyrosilviculture*.

This program is on Tuesday, November 28 at 7 pm. A Zoom link will be available on the website and in the next newsletter. This program is being held a week later than usual to avoid Thanksgiving week.


You can learn more about this topic at the following website: <https://forests.berkeley.edu/news/2022/09/blodgett-forest-research-station-the-mosquito-fire-912-update>.





The Nature Nook

A special garden at the Placerville library.

Visit & learn about the benefits of California native plants for your own garden; & how they help preserve our local ecosystems.

 CALIFORNIA NATIVE PLANT SOCIETY
Garden gifted by El Dorado Chapter

Get to know our El Dorado Chapter  <http://www.eldoradocnps.org>  EIDoradoCNPS



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September-October 2023

For Updates Visit Us on the Web
www.eldoradoCNPS.org and



CALIFORNIA
 NATIVE PLANT SOCIETY

DEDICATED TO THE
 PRESERVATION OF
 CALIFORNIA'S NATIVE FLORA

The California Native Plant Society is a statewide nonprofit organization of amateurs and professionals with a common interest in California's native plants. The mission of the Society is to conserve California native plants and their natural habitats, and increase understanding, appreciation, and horticultural use of native plants. Membership is open to all.

Membership includes the journal *Artemisia*, quarterly magazine, *Flora*, which gives statewide news and announcements of Society activities and conservation issues, and the chapter newsletter *Gold Field Notes*. To join, call our main office in Sacramento, (916) 447-2677, or visit www.cnps.org to join online.

CHAPTER OFFICERS AND COMMITTEE CHAIRS

Contact Chapter Leadership at web.eldoradocnps@gmail.com

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