

Newsletter of the San Luis Obispo Chapter of the California Native Plant Society

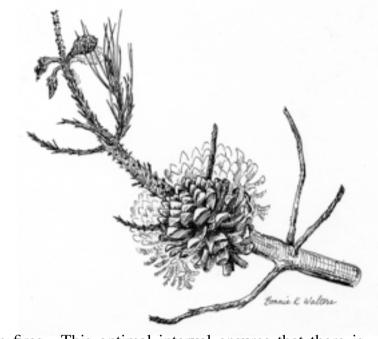


November 2022

Knobcone Pine (*Pinus attenuata*)

Bonnie's drawing accompanying this article was drawn back in 1985. It shows a burned branch and open cone of Knobcone pine (*Pinus attenuata*) and was inspired by the Los Pilitas fire that burned through the East Cuesta Ridge area that year. It was used as an Obispoensis cover in January 1986. Knobcone pine is a closed cone pine. That is, its cones do not open immediately, but stay closed on the tree until the tree or the branch to which it's attached dies. Since knobcones live on ridges usually surrounded by chaparral, death is usually due to fire. When fire does enter a grove, it burns very rapidly through the grove. The tree needles burn so fast that the fire doesn't stay long enough at one spot to heat the cones hot enough to kill the seeds inside. All the fire does is dry out the cone which causes them to open with a bang. My students who worked summers as fire fighters told me that the bang was so loud it could be heard tens of feet away.

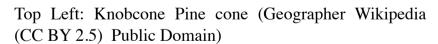
I can remember walking through the burned-out grove and marveling at the huge number of pine seeds covering the ground. So, the closed cones are an adaptation for fire. I might add that having the seeds shed after the fire helps in another way. The climate where knobcone pines grow is only a two-season climate. It is usually hot and dry in summer and cool and wet in winter. Decay organisms such as fungi work best under warm-moist conditions, conditions that happen for very short periods in the spring. This means that there is relatively little decay, especially of woody stems and branches in a knobcone pine forest. The result is that most of the biomass and, thus, potential plant nutrients are tied up in un-decomposed litter. The fire turns all this litter into readily available fertilizer. So the closed cone habit not only replants the grove, it does it when conditions are especially favorable for seed germination and seedling growth.



Closed cone pine forests, like chaparral, have an optimal interval between fires. This optimal interval ensures that there is enough seed produced to effectively restart the forest. This interval is said to be on the order of 25-50 years. However, the trees don't wait that long to start producing cones. After the fires on East Cuesta Ridge, I would lead field trips into the area. It soon became apparent that the trees did not rely on what is said about normal cone development. I recorded in my notes of cones appearing on saplings no more than five years old. Most trees are just thinking about having a growth spurt about then, and certainly not about having sex and producing the next grove.

DIRK WALTERS





Top Right: Bishop Pine cone (Chipping). Both Knobcone Pine and Bishop Pine cones are asymmetric, both release seeds after a fire. However Bishop Pine has two needles per fascicle, and Knobcone Pine has three needles per fascicle.

Bottom Right: Young Knobcone Pine trees in the burned remains of their parents, East Cuesta Ridge (Chipping)

COVER: Pinus attenuata (BLM Public Domain)





NOVEMBER 3rd CHAPTER MEETING VIA ZOOM

WILDFIRE IN CALIFORNIA LANDSCAPES

Jim Bishop

Register in advance for this meeting:

https://cnps-org.zoom.us/meeting/register/tZ0gdO6vgD4jH93OtlC9PuxH36JXyP1vtDF

Please join us on November 3rd for the next installment of our speaker series. Retired Cal Fire Battalion Chief Jim Bishop will be presenting on wildfire in California landscapes, with a thoughtful discussion on the behavior of wildfires, fire effects and controls, the beneficial use of fire, and the nature of threats to property such as homes. Learn about how the fire environment affects fire behavior, the key roles of humidity, fuel type, seasonal drying, slope and wind, and the ways in which they change. Popular media assertions about the wildfire "problem" and its "solution" oversimplify a complex situation. The background presented here will provide a more complete and realistic sense of the wildland fire problem given different fuels, conditions, ignitions, and values-at-risk.

Jim Bishop is retired from a career in Cal Fire, much of which was spent in wildland fire control and training, beginning as a Firefighter and ending as a Battalion Chief. His formal education is in physics and atmospheric science. He is trained as a Fire Behavior Analyst (FBAN) and has filled that position on major fires and prescribed burns, has taught in several national firebehavior courses, served on the FBAN national steering committee, and has developed materials used in those courses. He developed and taught a simplified method for applying the standard fire-behavior model for use by firefighters on the fire line.



Bear Fire 8 Sept. 2020 beginning its big run. (Photo by Russ Fowler)



Jim Bishop Training Battalion Chief (Photo by Greg McFadden)



The first day of the Highway 41 Fire (Photo by David Chipping)



Results of hot crown burn, Storrie Fire. (Photo by Jim Bishop)



Starting Thursday, October 20
On Our CNPS Website: https://cnpsslo.org/bookstore
A Beautiful Selection of Native Plants will be Offered For Sale







During the Pick-Up Event, Saturday November 5 A Selection of Native Plants will be Available to Purchase Books, Tee Shirts, Posters, and More will be at the Sales Table.







Plant Pick-Up will be Saturday, November 5 from 10:00 – 3:00 (Location is 11950 Los Osos Valley Road, SLO) (Email and Facebook reminders will be sent as the sale begins.) COVID Protocols will be observed



Manzanitas of the Central Coast

Join our chapter's field trip coordinator, Bill Waycott, for a series of outings to many of the more remote *Arctostaphylos* populations, between Big Sur and Point Concepción. Each hike is roughly three hours, with one or more of the manzanita species as the destination. The outing will feature a conversation on the unique plant community in which these species are located and include the expectation of a healthy trek in nature. COVID19 social distancing and masks, if directed by the County

Health Dept., will be required.

December 11th, 9:00 am, Ontario Ridge, near Avila Beach, CA. Meet at the start of the Bob Jones Trail, off of Ontario Road, located between Avila Beach Dr. and San Luis Bay Dr. (35.186581N 120.702040W). The hike is a total of 4 miles out and back, with a 600 ft. elevation gain (with a few steep sections). Our destination is the top of Ontario Ridge where we will see the rare endemic manzanita *Arctostaphylos pilosula*, as well as spectacular views of the Pacific Ocean. In this area, *A. pilosula* occurs on the Pismo Sandstone formation in the coastal hills from Avila Beach to Arroyo Grande, as well as two other locations in the county. Contact: Bill, 805-459-2103.



Arctostaphylos pilosula looking north from Ontario Ridge.

Training for new CNPS-SLO Field Trip Leaders – November/December 2022

The current sign-up period for training for new field trip leaders is coming to a close. If you have not done so already, please contact Bill Waycott (bill.waycott@gmail.com) to let him know your interest in leading or co-leading field trips with CNPS – SLO.

Our chapter has set up a two-step training program that gives new leaders a foundation from which to operate. This training includes:

- a one-hour face to face conversation with current field trip leaders, where we will go over the different scenarios of preparing for the outing, talk about safety out in the field, talk about the use of the CNPS waiver, talk about being comfortable in a public setting, and address the levels of botanical knowledge expected during the outings.
- a provisional field trip, co-led with one of the current field trip leaders, where the topic and destination is chosen by the trainee. After the field trip, the two co-leaders will review the outing and discuss what could have been done to make the experience better.

With this two-step approach, it is our hope to form a diverse team of field trip leaders and co-leaders who have a range of knowledge and experience and want to share their knowledge and enthusiasm with the public.

It is important to remember field trips can take the form of short walks from the car, hikes of less than a mile to several miles, or mountain bike rides. Our chapter supports all of these possibilities and asks potential leaders to consider multiple forms of engagement.

Conservation Update

- The SLO Chapter sent an independent comment letter regarding the scoping of the Los Padres National Forest's National Forest Ecological Restoration Project. This was described in the last newsletter and complements the scoping letter from the state office.
- We have sent a comment letter regarding the Draft EIR for SLO County's poorly conceived **Paso Basin Land Use Management Area** (**PBLUMA**) **Planting Ordinance**, which increases the potential for additional groundwater pumping from a basin that is already being over-pumped. Our concerns are based on the potential dewatering of surface waters and impacts on riparian vegetation.
- We are still awaiting the completion of the environmental review process for the oak-destroying Dana Reserve in Nipomo.

David Chipping

Invasive Species Report

Crimson fountaingrass Cenchrus (Pennisetum) setaceum

Cenchrus (Pennisetum) setaceum is in the Poaceae (grass) family. Poa is derived from Ancient Greek: $\pi \acute{o}\alpha$ for fodder. The genus Pennisetum is from Latin: penni (penna) for feather and seta for bristle. Crimson fountaingrass is a coarse tufted perennial to four feet tall that may live 20 years or more. The leaves are narrow, to 13 inches long, folded or flat, smooth tosparsely hairy with a midvein on the underside. The flower clusters are showy, purplish with spike-like bristly panicles, up to 12 inches long and about 1.5 inches wide. It reproduces by seed and disperses in late spring with wind or clinging to animals. Seeds may last six years. Cenchrus setaceum is native to northeastern Africa and western Asia, and was introduced

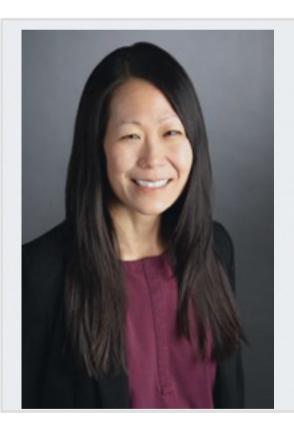
as an ornamental landscape plant. It is present mainly on the coast from the S.F. Bay Area to Mexico. It is a major invasive plant in Hawaii. I've seen broad stands at Cal Poly and Price Canyon Road. It grows on disturbed sites and roadsides, impacts coastal sage scrub and forces type conversion in desert areas from shrubland to grassland. It is well-adapted to fire.

Crimson fountaingrass may be removed by heavy tools such as a shovel and pick. It is hard work and has to be done repeatedly. Mowing does not work. Cattle will eat it if there is nothing else to graze. Effective chemical treatments include grass-specific herbicides such as Fluazifop, which is most effective on young plants, or nonselective agents such as glyphosate and imazapyr for large plants.

Mark Skinner



Crimson fountaingrass has been used by CalTrans for erosion control Photo: Chipping



CNPS has a New Executive Director

Dr. Jun Bando has been hired as the new Executive Director for the California Native Plant Society! Dr. Bando is an ecologist with a 20-year career spanning higher education, international diplomacy, and advocacy. Most recently, Dr. Bando served as the Senior Advisor for Strategy and Transformation at the California Council for Science and Technology (CCST). Prior to her work with CCST, Dr. Bando served as a special advisor and diplomat for the U.S. government, a lecturer at San Jose State University and the University of San Francisco, and consultant to the CSU Office of the Chancellor. She earned her PhD in Ecology at the University of California, Davis in 2005. She replaces Vince Scheidt, a San Diego-based environmental consultant, former CNPS board member, and long-time conservation advocate who served as the CNPS interim executive director during the organization's transition to new leadership. She started on October 10, 2022.

Request for Photographs for the Chapter Photo Collection

In the October issue we requested photos for Agoseris hirsuta, Ambrosia artemisiifolia, Anisocarpus madioides, Anisocoma acaulis, Arnica discoidea, Artemisia pycnocephala, Baccharis plummerae ssp. plummerae, Baccharis plummerae ssp. gabrata, Bidens laevis, Brickellia californica, NOW WE HAVE BRICKELIA NEVINI (Thanks to George Butterworth) Keep looking...

Still working through Asteraceae, and here is the November 'ask': Calendula arvensis, Calendula officinalis, Calycadenia truncata, Carduus tenuiflorus, Carthamus tinctorius, Centaurea benedicta, Chaenactis glabriuscula var. heterocarpha, Chaenactis glabriuscula var. megacephela, Cirsium arvense, Cirsium occidentale var. coulteri, Cirsium quercetorum, Crepis capillaris, Crocidium multicaule

Dr. Keil's Interesting Onion Find on Cypress Mountain

Allium falcifolium (Sickle-leaf Onion) was found by Dr. Keil on the serpentine outcrops of Cypress Mountain, southwest of Adelaida. It appears to be the southernmost collection of the species, which is usually found on serpentine outcrops in Northern California's Coast Range. There are two collections from Fort Hunter-Liggett in Monterey County.

The species is also unique in being the only species of onion found within SLO County that has a flat stem, the other 15 species having round stems. It also has flat leaves, but this is not a unique feature. Both *Allium crispum* and *Allium peninsulare* are similarly colored.



Allium falcifolium from Cypress Mountain Photo: Dr. David Keil



Allium falcifolium Photo: Jennifer Wheeler Public Domain BLM Arcata Field Office

A Common Serpentine-loving Onion Found Around the City of San Luis Obispo





Allium haematochiton from the head of Froom Canyon, City of SLO Open Space Photo: David Chipping

While most of us won't get to see *Allium falcifolium*, as it is on private land in a remote location, we have plenty of chances of seeing *Allium haematochiton*, (Red-skin or Red-scale onion, in reference to the bulb) which blooms from March to May on the serpentine outcrops of West Cuesta Ridge, Froom Canyon, Laguna Lake Park, and Reservoir Canyon.

The species is also at the edge of its range, as all other collections are from southern California mountain ranges. There is one collection from Soda Springs in Nevada County. The isolation of this population is probably due to introduction by native peoples. A similar disjunct population of *Calochortus clavatus* is found in Calaveras and El Dorado counties. Bulbs can be transported easily, and would also be a recognized food source for native people.

At Least CalTrans Meant Well... Two Not-Quite Native Introductions

In CalTrans revegetation and mitigation projects, contractors are given a list of native species that can be used. However, the sources of those seeds are sometimes a bit questionable. You may have noticed a mustardy-yellow stout annual lupine roadside in the North County that was called *Lupinus densiflorus* var. aureus by Hoover but is now renamed *Lupinus microcarpus* var. aureus. While the local variety *Lupinus microcarpus* var. densiflorus has a densely flowered white spike, and is well represented in road cuts along Highway 46 West, the yellow variety is less common but currently can be found in commercial wildflower mixes. The CalPhoto site does not recognize var. aureus, and all yellow-flowered examples are shown under *Lupinus microcarpus* var. densiflorus. As there are a number of yellow-flowered examples in the CalPhoto/CalFlora collections, the yellow variety is probably native elsewhere in California.

The second CalTrans introduction is the Red Bush Monkeyflower, *Diplacus aurantiacus* var, *puniceus*. This is a southern California native that is in the horticultural trade, and has been used by CalTrans in revegetation of a parking area at the top of the hill just south of the Arroyo de la Cruz bridge.



Diplacus aurantiacus var, puniceus (Photo D. Chipping)





(Top) Lupinus microcarpus densiflorus var. aureus (Photo E.C. Cunningham)
(Bottom) Mass of Lupinus microcarpus densiflorus var. densiflorus, Rinconada Mine (photo D. Chipping)

... and we do have another yellow lupine... Lupinus arboreus





(Left) This yellow-flowered Tree Lupine is a shrub found on the Nipomo Mesa, but north of Arroyo Grande the flowers are violet to blue as far as Cambria. (Right) North of Cambria flowers have light blue wing petals and a white to yellow banner (photo from Fiscalini Ranch). The yellow-flowered form was introduced to coastal dunes around Arcata in Northern California, where it has become an invasive pest and is subject to a vigorous removal program. (photos D. Chipping)

What's in a name? That which we call a rose By any other name would smell as sweet (Shakespeare Romeo and Juliet)

David Krause, in response to the rose identification exercise in the last issue, has presented us with a visual key to the three species of rose found around the county. Flower size, the persistence of calyx lobes on the mature fruit, the surface of the hypanthium, and the form of the prickles are shown. All photos by David Krause except where shown.

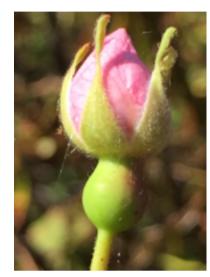
California Rose Rosa californica

Petal Size 12-25 mm

Calyx lobes persistent on mature fruit



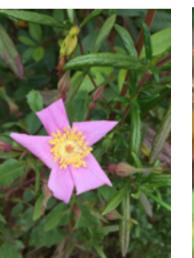
Hypanthium glabrous



Prickles stout curved



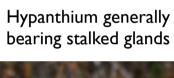
Petal Size 12-25 mm



Coast Ground Rose
Calyx lobes persistent
on mature fruit



Rosa spithamea





Prickles slender and straight



Wood Rose Rosa gymnocarpa





Calyx lobes early deciduous Hypanthium glabrous Pedicels glandular



Prickles slender and straight



Extreme drought advantages locally rare species

California Agriculture

Climatic volatility is altering ecosystems across the planet, but little research has attempted to quantify the effects of extreme climate events on the composition of ecological communities. A team of researchers led by Laura Prugh of the University of Washington, and including Justin Brashares of the Department of Environmental Science, Policy and Management at UC Berkeley, set out to redress this gap in research. Working in **San Luis Obispo County's Carrizo Plain National Monument** (a semi-arid grassland), they examined the responses of 423 species to California's 2012–2015 drought, California's driest period in the last 1,200 years.



The researchers categorized each species they studied as a "winner" or a "loser," depending on whether the species increased or decreased in abundance; a third category was established for species whose abundance was unaffected by the drought. Eighty-five species emerged as losers; 12 came out as winners; and 239 showed no significant response to the drought (87 species present for one year only were excluded). Winners included seven species of insect, one plant, one reptile, two birds and one rodent. Plants showed the most significant response to a single year of drought, whereas extended drought had its greatest impact on carnivorous animals.

The researchers report that locally rare species were more likely to "win" and abundant species more likely to "lose." This tendency, they say, was remarkably consistent across taxa and drought durations, suggesting that drought "indirectly promote[s] the long-term persistence of rare species by stressing dominant species throughout the food web." The researchers note that while extreme drought "can lead to substantial short-term declines in the abundance and diversity of species across taxonomic groups," such disturbances — by inducing occasional die-offs among dominant species and thus providing rare, fast-growing species with opportunities to thrive — "may play a vital role in the long-term maintenance of biodiversity." Original source: Prugh LR, Deguines N, Grinath JB, et al. Ecological winners and losers of extreme climate change in California. Nat Clim Change. 2018. 8(9):819-24. https://doi.org/10.1038/s41558-018-0255-1

Published as Research highlights, CALIFORNIA AGRICULTURE > VOLUME 72 > NUMBER 4. Author: Lucien Crowder, UC Agriculture and Natural Resources. Author: Lucien Crowder, UC Agriculture and Natural Resources. California Agriculture 72(4):196-199. https://doi.org/10.3733/ca.2018a0034. Published online December 17, 2018

Lichen of the Month: Cladonia asahinae or Pixie-Cup lichen

Cladonia asahinae, the Pixie Cup Lichen, is a species of cup lichen in the Cladoniaceae family. It is typically found on acidic soil on rotting wood, moss or humus that covers tree bases. Its definitive feature is that it terminates in a flaring cup that, when touched, will release powdery soredia. C. asahinae occurs in Europe, North America, and the southernmost part of South America. It also grows in the Antarctic. It is generally included in the so-called C. chlorophaea complex and is characterized by presence of aliphatic acids. (Photo D.Chipping)



Horticulture Now

Welcome to Horticulture Now, a new column featuring articles about California native plants in the garden setting. Some of these articles are newly written and others will have been previously published. Some months the column may feature a guest author. This month's article features *Morella californica* (the Pacific Wax Myrtle). Hope you enjoy it.

Gardening with California Natives

This month's 'plant of the month' is *Morella californica*, formerly known as and still known in the nursery trade as *Myrica californica* (commonly known as: California Bayberry, California Wax Myrtle or Pacific Wax Myrtle). *Morella* is found mostly on the shady northeast wind-swept slopes of coastal California. There it can be found with other like plants such as

Ribes speciosum (Fuchsia Flowered Gooseberry), Frangula californica (California Coffeeberry or California Buckthorn), Quercus agrifolia (Coast Live Oak), Toxicodendron diversilobum (Poison Oak) and Juncus acutus (Spiny Rush). It has a large distribution along the North American Pacific Coast from Gray's Harbor, Washington south to Long Beach, California with an isolated population on Vancouver Island.

In cultivation, *Morella* is available at most nurseries. It is valued as one of the most attractive California native plants and it is commonly used as a small tree or for a wind break, especially in coastal communities. It prefers to be multi-trunked (large shrub), but can be pruned into a single trunk tree.

Morella has long green leaves that have a spicy smell and are deer resistant. It has small white to cream colored flowers which start blooming in the Fall. The fruits are purplish in color and waxy in appearance. These fruits are attractive to many birds such as the Northern Flicker, House Finch, and American Robin, but only in small quantities.

Morella has very few insect problems, but can become infested with spider mites or thrips. A soap spray or Neem oil spray will take care of the problem. Remember to spray weekly, for one month to eradicate the infestation. It is known to be drought tolerant, but care should be taken to add moisture to get young plants well established for at least one to three years, depending on annual rainfall amounts.



(Photo Chipping)

In conclusion, when looking for that perfect shrub or small tree, remember *Morella californica* or Pacific Wax Myrtle. For now, Best Wishes and Happy Gardening, **John Nowak and Suzette Girouard**.

Editor's Note: Calscape states "This species makes an excellent small garden tree, especially in coastal gardens or inland if given slightly more moisture and afternoon shade." However, this might be misleading. The U.S. Fish and Wildlife Service has prepared a National List of Vascular Plant Species That Occur in Wetlands. The list cites Morella californica as being a Facultative Wetland (FACW) species. FACW is defined as "Usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands." So Calscape's statement of 'slightly more moisture' might be a little optimistic during a time of drought and water conservation.





Left: Wax myrtle in a high water-table dune swale on the Morro Bay sandspit. Right: Wax myrtle along Coon Creek, Montana de Oro State Park (Photos Chipping)

An Example of Good 'Diagnostic' Photography



George Butterworth's photos of *Brickelia nevinii*, taken in the Caliente Range, show all the properties critical to keying the plant: Shrub-subshrub/tomentose stem/ leaves tomentose, alternate, ovate, dentate, and sessile-subsessile/inflorescence leafy-bracted, raceme or panicle/ 1-4 flowers at branch tips, involucres cylindrical, 10-12 mm, white-woolly... and more.













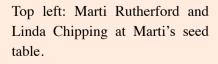


Start-Of-The-Season Kickoff Picnic Event

About 40 chapter members came to Rancho El Chorro Regional Park on October 2nd to enjoy the society of friends, to go on nature hikes by foot and bicycle, and to listen to cheerful remarks from Chapter President Melissa Mooney. Cindy Roessler, our Chapter Secretary, reminded everyone that our Chapter President and Vice President are stepping down from those positions, and we badly need volunteers to fill critical positions such as these. As noted elsewhere, the chapter is in need of a person(s) to fill the Sale Table Manager position.

Elliot and Meg Paulson, of Clearwater Color Wholesale Nursery, presented Marti Rutherford with a very fine *Lepechinia fragrans* (Fragrant Pitcher Sage) in gratitude for the native seed she has provided the nursery, which become the plants that Elliot provides for the November plant sale.





Top right: Marti Rutherford and Melissa Mooney with the Pitcher Sage.

Right: Elliot Paulson







Seeds Will Be Available at the Plant Sale



Thanks to contributions from many of our members, we will have seeds available at the plant sale on November 5th. In my own world, plants were not always very cooperative or perhaps I was lazy or just inattentive, so in many cases, I only have one or two packets of seeds. Arrive early for the best selection.

Seed packets will be offered for only \$1.00 again. Just a reminder, these are usually garden-collected seeds. If they have the opportunity to hybridize, they might. Seeds are identified by the person who collected them. There will be an assortment of wildflowers, shrubs, grasses and trees, and even a few succulents. There will be at least one mixture of wildflowers. We will not have rare seeds on offer.

There are no guarantees on these seeds. There is no germination testing. Some of these seeds may have insect damage though I have tried to weed those out as best I can. The seeds are not expensive for this reason. There is usually a generous amount of seed in each packet. Seed size is quite variable: sometimes super small like the size of a comma on this page, sometimes as big as a golf ball (we probably won't have these huge buckeye seeds because they ripen after the sale and they don't keep). It might feel like there are no seeds in the packet but there may be hundreds. In a few cases, there are few seeds. Some are more precious than others. It depends upon how hard the seeds were to obtain and how many we had. If you are curious about the quantity, please ask me at the sale. Most of these seeds were collected in 2022. The exceptions are seeds that ripen after the date of the sale such as *Ericameria*. I suspect those will still be viable but as for all, no guarantees.

Thank you to all who have contributed to our seed exchange which provides many of the seeds for the seed sales. I am thrilled to say that our local nursery, Clearwater Color, has used seeds sold at our sales event. Growing from seed preserves genetic diversity and can provide you with more plants at less expense. It does take time and attention but it is great fun. Maybe you, too, will find you enjoy it.

Marti Rutherford

LOOKING BACK: WHAT THE OLD NOVEMBER NEWSLETTERS TELL US

Looking Back 10 years to November 2012, we were engaged on a large housing cluster proposed by Laetitia Vineyards south of Arroyo Grande. A report on an October field trip to Shark Inlet recorded large numbers of monarch butterflies in the coastal strip. The planned field trip for the month was to Bishop Peak

Looking back 15 years to November 2007, we took part in a Valley Oak restoration project at Camp Roberts. We were following plans for the mitigation of damage caused by operations of Los Osos Community Services District and development plans at Santa Margarita Ranch. Charlie Blair described the highlights of the 2007 Cal-IPPC Symposium.

Looking back 20 years to 2002, we were engaged in a discussion of Critical Habitat designations for vernal pools and how they might protect pools at Camp Roberts and on the Carrizo Plain. The protection of Burton Mesa chaparral was an issue in northern Santa Barbara County.

Looking back 25 years to 1997, the big issues continued to be the EIR for the Nacimiento Pipeline, the decision to allow Sycamore Hot Springs to build in the San Luis Creek floodplain, and also the Divincenzo General Plan Amendment for the same area. CNPS was also participating in the Dunes Forum and impacts on dune ecology by the Unocal Oil cleanup in the Nipomo Dunes.

Looking back 30 years to 1992, the issue continued to report on the first Pest Plant Symposium to Morro Bay, the very first conference of what was to become the Cal-IPPC California Invasive Plant Council. The survey of Morro manzanita likely to be impacted by development in Los Osos continued. We reported on oak tree planting along a newly realigned Highway 46. The construction of the Goodwin Education Center in the Carrizo Plain National Monument was underway.

Looking back 35 years to 1987, we have no November newsletter in our files. Do you have one?

Looking back 40 years to 1982, we have no November newsletter in our files. Do you have one?

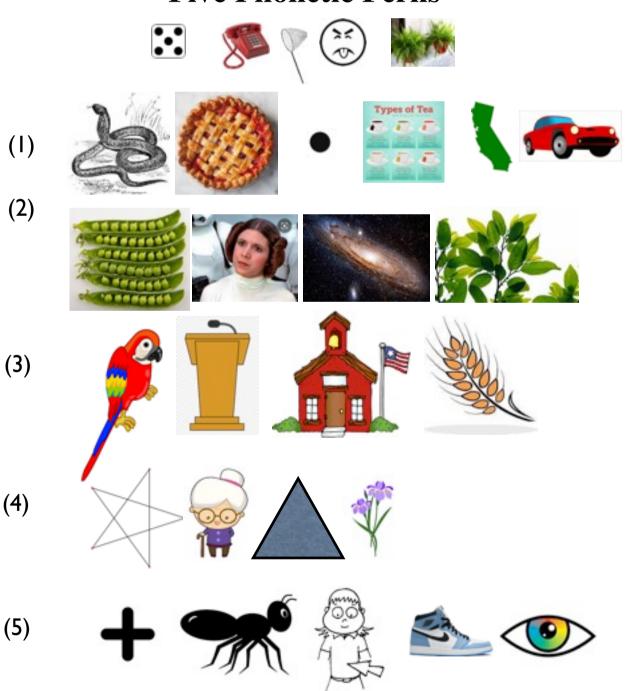
Leadership for CNPS SLO

In this time of hopeful recovery, our Chapter needs a new leader. Are you a good communicator? A reasonable risk-taker? A good listener? All these are qualities of a good leader, but you don't have to be seasoned to guide us. A shared passion for our Mission to educate others regarding native plants is critical. This is a good time to step up for CNPS SLO: our Chapter has a new webmaster; we are in good financial condition thanks to our long-serving Treasurer; we have a great newsletter; we have a conservation team ready and primed to fight the good fight; we have a set of hikes laid out for the coming year; and CNPS has a new Executive Director. Would you be willing to watch over us and help us "paint the larger picture?" If this sounds like something you might be interested in, please contact Melissa or Kristen at sanluisobispo@cnps.org. Please consider submitting your name for Nomination for President or Vice-President. The President generally presides over Board meetings, held 5 times per year, and the Vice President is in charge of Speakers and Programs for our monthly member meetings, held 8 times per year. Without these critical roles filled, the Chapter will face big changes next year. -Melissa Mooney

Our Book and T-shirt Sales Table Needs a Manager. Please contact Linda Chipping (805)/528-0914, lindachipping@yahoo.com) with any questions or interest.

... and Now for Something Completely Different

Five Phonetic Ferns



(1) Aspidotis californica (Asp-Pie-Dot-Teas Californi-Car) (2) Pellaea andromedifolia (Pea-Leia Andromeda-foliar) (3) Polypodium scouleri (Poly-Podium School-Rye) (4) Pentagramma triangularis (Pentgram-Gramma Triangular-Iris) (5) Adiantum jordanii (Add-Ant-Tum Jordan-Eye)

THE GOOD PEOPLE WHO MAKE THE CHAPTER 'HAPPEN' AND HOW TO FIND THEM

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WE ALWAYS NEED PEOPLE TO HELP OUT. OUR MISSION IS VITAL AND OUR FLORA IS AT RISK.

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The California Native Plant Society is a statewide non-profit organization of amateurs and professionals with a common interest in California's plants. The mission of the Society is to increase understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education and conservation. Membership is open to all. Membership includes the journal, Artemisia; the quarterly Flora, which gives statewide news and announcements of the activities and conservation issues, and the chapter newsletter, *Obispoensis*.



San Luis Obispo Chapter of the California Native Plant Society P.O. Box 784 San Luis Obispo, CA 93406



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