

Lompoc Valley Botanic and Horticultural Society Newsletter

March 2026 | Volume 41 | Issue 2

March Meeting

Join us at Stone Pine Hall on **March 15th** at 2 pm for our second meeting of 2026. Visit LVBHS.org for additional details.

Earth Day Event

LVBHS is joining the City of Lompoc to celebrate Earth Day! On **April 18th** we will be at 1300 W Laurel Ave. Free mulch/compost/plants from 10am-noon. Bring your own bucket!

Garden Care Day

Join us at the Burton Mesa Chaparral Garden (BMCG) located on the Allan Hancock Campus. **April 25th** from 10am-noon.



Ceanothus Impressus - VGB



Burton Mesa Chaparral - VGB

The Burton Mesa Chaparral: A Rare Plant Community In Our Backyard - Victor Garcia Balderas

The Maritime chaparral vegetation type is found on well-drained sandy soils, restricted to the Central and Northern California coastal fog belt, and is fire dependent (many of the plants are susceptible to fires and will not germinate without the chemical signals left from high temperatures, ash, and smoke). Although at the broader scale, this vegetation type is composed of many different shrubs, Lompoc is surrounded by a vegetation community known as the Burton Mesa Chaparral (BMC). It is dominated by several rare and endemic manzanita and ceanothus species, and it is a beautiful, unique, and rare vegetation community.

Although most of the BMC is found within Vandenberg Space Force Base, there is a considerable stand open to the public at the Burton Mesa Ecological Reserve. The reserve is located by Vandenberg Village, and it consists of 5,368 acres and about 3 miles of hiking trails.

The Burton Mesa Chaparral Cont.

Walking through the trails of the Burton Mesa Ecological Reserve, you will come across the iconic rare sand mesa a.k.a. shagbark (*Arctostaphylos rudis*) and La Purisima (*A. purissima*) manzanitas. The main differences between the two species are that the sand mesa manzanita has flaky, papery bark and hairless stems; the La Purisima manzanita has a smooth bark and visibly hairy stems. Both of these stunning shrubs flower in the winter, with the latter blooming into late spring. I personally enjoy smelling the flowers of *A. rudis* because they smell like honey (and I highly recommend you smell for yourself). As I approach the white bell-shaped flowers to enjoy their sweet, floral fragrance, I am reminded of the dozens of native pollinators that they entice and nurture with their nectar and pollen sources.

Even though these two iconic manzanitas dominate, there are over 500 different plant species in the BMC!



Arctostaphylos purissima - VGB

You can find a rainbow of colors in the spring: **red** - California fuschia (*Epilobium canum*), coast Indian paintbrush (*Castilleja affinis*); **orange** - California poppy (*Eschscholzia californica*), sticky monkeyflower (*Diplacus aurantiacus*); **yellow** - rockrose (*Crocanthemum scoparium*), bush poppy (*Dendromecon rigida*); **blue** - Santa Barbara ceanothus (*Ceanothus impressus*), Parry's larkspur (*Delphinium parryi*); and **purple** - black sage (*Salvia mellifera*), lupines (*Lupinus sp.*).



Ceanothus Impressus - VGB

It's wonderful to appreciate and cherish the BMC, but it's also important to note that this vegetation community is globally recognized as critically imperiled, and it is home to federally endangered species, such as the Vandenberg monkeyflower (*Diplacus vanderbergensis*) and the Lompoc yerba santa (*Eriodictyon capitatum*). There are a couple of threats that impact this special place: fragmentation, altered fire regimes, and invasive species. As Lompoc has grown through the years, houses have encroached upon the BMC's range. One can imagine it gets tricky managing a vegetation community with such proximity to homes since this plant community has adapted to depend on fires. In addition, invasive species threaten the BMC by outcompeting native plants and reducing the diversity of the flora and fauna. Some common invasives include perennial veldt grass (*Ehrharta calycina*), pampas grass (*Cortaderia jubata*), rock rose (*Cistus creticus*), and ice plants (*Conicosia pugioniformis*).

We can all help preserve a portion of the Burton Mesa Chaparral. By volunteering at the LVBHS's maintenance and invasive species removal volunteer days at the Burton Mesa Chaparral Garden (Allan Hancock College), you have the opportunity to learn about the native plants, as well as how to remove some of those pesky invasives.

A DIVA tucked away in the Burton Mesa Chaparral needs our help - Denise Knapp, Ph.D.

The cutest annual wildflower you'd ever hope to see is found in scattered pockets of the Burton Mesa, and you might not even know it. The sunny yellow Vandenberg monkeyflower (*Diplacus vandenbergensis*, or DIVA as I like to call it) brightens up bare, sandy openings in the chaparral, woodland, and dunes along the northern edge of the Lompoc Valley from April through June, and it is found nowhere else in the world. There is a lot less of it than there used to be since it is threatened by invasive species, climate change, and loss of habitat from development. It was listed as an endangered species in 2014, which is when I first started studying it as head scientist at the Santa Barbara Botanic Garden.

Greetings from the Monarch Fellowship Hub 9846

I'm giving away 'Butterfly Gardens' to promote pollinator gardens and help create habitat corridors throughout California. I am giving away bundles of native nectar plants, usually four of the following:

- ❖ California Buckwheat - *Eriogonum fasciculatum*
- ❖ Larkspur - *Delphinium*
- ❖ Lacy Phacelia - *Phacelia tanacetifolia*
- ❖ Miniature Lupine - *Lupinus bicolor*
- ❖ Coastal Scrub Sage - *Artemisia californica*

Please email me to arrange pickup in Vandenberg Village or to chat about the plants and the program.

monarchfellowship9846@yahoo.com

Happy gardening,
Martina Livingston

Not too much was known about our little DIVA at the time, so my research started with monitoring and describing some of the known populations to determine trends and threats. I surveyed for flower visitors, which are not frequent, but included common small native bees and beetles, and checkerspot butterflies. Over the last 12 years, I have found that the number of plants is highly variable from year to year, with flowering peaking earlier in the more inland populations than closer to the coast. The size of the population each year pretty well correlates with the amount of rainfall in March and April, so unfortunately, as we continue to experience more megadroughts, there will be fewer years to replenish the seed bank of this plant.

One of the biggest threats to the Vandenberg monkey flower is invasive veldt grass (*Ehrharta calycina*) from South Africa. This aggressive perennial is widespread and rapidly filling in the bare ground that DIVA relies on.



The sunny yellow flowers of the Vandenberg monkeyflower can light up a day.



The red inflorescences of veldt grass show how much of this sandy opening it has filled in.

DIVA Cont.

To understand how to best mitigate this problem, I started experimental restoration trials at the Burton Mesa Ecological Reserve and La Purisima Mission State Historic Park around 2020. I wanted to test the hypothesis that management must include not only killing the veldt grass but also removing its biomass in order to help the monkeyflower. While herbicide can cover much more ground with the same amount of labor, I found that complete physical removal not only re-opens the habitat to DIVA but also improves native plant diversity as a whole.

The world would be a drearier place without the Vandenberg monkeyflower. Our little DIVA steals the show and when we protect its habitat we are protecting so much more – from



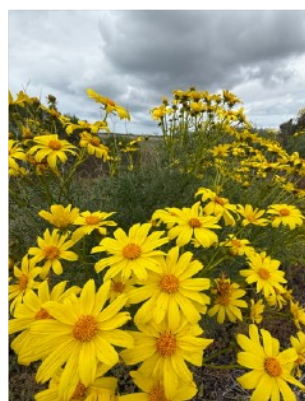
Coast horned lizards are *almost* as cute as *Diplacus vanderbergensis*.

suncups, pincushion, and popcorn flower to horned lizards, bees, and butterflies. Although I left the Santa Barbara Botanic Garden last fall, I continue to

help monitor this plant as a local volunteer to better understand trends and conservation strategies. Our Burton Mesa Garden Care Day in April will address invasive species and what we can do moving forward to help our DIVA. Perhaps my fellow members of LVBHS would like to help me tackle some veldt grass too?



Vandenberg monkeyflower likes bare sandy areas, which are rapidly being invaded by South African veldt grass.



- Photo by Jana Hunking

Coreopsis Craze

This summer deciduous plant is a sight to see! Multiple members want to make sure you don't miss it.

Great sky and coreopsis at the entrance to Ocean Park

Giant coreopsis (*Leptosyne gigantea*) perched on the hillsides off of Ocean Park Rd near Ocean Beach Park



- Photo by Mark Zuhlsdorf

Blooming Along Ocean Ave

I found giant coreopsis and milkvetch blooming out near Surf. Just east of the NASA hangars I found a very large colony of California aster (*Symphyotrichum chilense*) in bloom, halfway between the road and the railroad tracks. I thought it bloomed in September/October, but my bicycle cleats prevented closer investigation. - Tom Hofmann

What's Blooming: Hidden Lake, February 2026

- Tom Hofmann

I strolled out to Hidden Lake on Groundhog Day. Remember the rains last fall? Two tropical storms slid up from Mexico, and then a tropical-river rainstorm arrived from the North. They pushed us out of drought status and could promote our local wildflowers. The best way to learn is through personal inspection.

Hidden Lake sits in a bowl about a half mile north of Cabrillo HS. Over 400 yards long, it may harbor hundreds of migrating waterfowl during the winter. I've seen mallards, ruddy ducks, and coots. The dense canopy on the east, south, and west flanks and the year-long moisture encourage an understory unlike any of the other oak woodlands in our area. Tendrils of lace lichen (*Ramalina menziesii*) hanging from the oaks give the area an eerie feeling and indicate the high humidity of this niche.

Fifty yards past the end of Constellation Ave lies what I call the 'southern lateral trail' (it parallels the southern boundary of Burton Mesa Ecological Reserve [BMER], and the Vandenberg Village and Country Club Estates communities). One hundred yards to the west, a side trail branches off and winds through an overgrown section of Maritime Chaparral north of Cabrillo HS. This is not typical chaparral. Our local chaparral evolves through competition between three dominant plants. After a fire:

- ♣ Chamise—gets a head start by crown-sprouting
- ♣ Ceanothus—(Lompoc or Santa Barbara) germinates after their seed shells are cracked by the fire
- ♣ Manzanita—(Purissima or shagbark) slowly overtakes and outgrows the field

Ceanothus lives for 20-30 years and serves as an indicator species. The complete absence of ceanothus here confirms that this area hasn't burned for over half a century. Small specimens of chamise

Chaparral Nightshade (*Solanum xanti*)

struggle for light. Dead manzanita skeletons scattered among the living give this trail a cemetery feeling. Nature's solution, fire to consume the deadwood, will be unacceptable to the nearby homeowners. BMER holds this fundamental tension: protect sensitive plant communities (including rare plants) and protect the surrounding neighborhood.

Soon the trail enters oak woodland where most oaks overlap their neighbors. The oaks' shade limits the growth of the understory, but small plants find sunlight in small clearings and the borders of the trail. Small annuals will sprout in the rainy season, and they will bloom later in spring. A few perennials are blooming now:

- ♣ Wild Cucumber (*Marah fabaceae*)—star-shaped white flowers proliferate on this vine using the oaks for support
- ♣ Chaparral Nightshade (*Solanum xanti*)—small colonies in clearings with a purple flower having five fused petals
- ♣ Lompoc Monkeyflower (*Diplacus aurantiacus* var. *lompocensis*)—pale orange blossoms on several bushes

Three right turns bring us onto the middle lateral trail. This trail runs from the west boundary trail to the back side of Dragon Hill and down to the grassy meadows north of Vanguard. Shortly, a side trail splits to the left over a small hill that will proceed to Hidden Lake. Before reaching that junction, I find several California peony (*Paeonia californica*), small specimens that I don't remember from previous seasons. Their large flowers resemble a dark red bell hanging downwards.



Wild Cucumber
(*Marah fabaceae*)

What's Blooming Cont.

The trail to the lake goes over a small hill and splits---the views and flowers are to the right---so that's where I went. Continuing, the trail splits again and I follow the left fork. I've encountered several Indian warrior (*Pedicularis densiflora*) colonies here, but I was apprehensive because I could not find the largest colony last year. I believe several rainy years had promoted so much annual growth that the Indian warrior could not compete.



Figure 2. Indian warrior flowers erupt from leaf nodes.

Gladfully, I found the colony! I estimate the size at 10 by 10 yards, and it contains hundreds of plants (Figure 1). Compared to photos from 2022, grasses and herbs have filled in the bare leaf litter, but the warriors seem to be fighting back. Figure 2, showing withered and seed-producing flowers, indicates these plants have already had a long blooming season. Personally, I prefer this humble plant over the green foliage spreading during rainy times. I first met Indian warrior during the Christmas season 4 years ago. The foliage has a conical outline and the newest leaves have a red hue, so it looks like a small Christmas tree. It even has red blooms that poke out as ornaments. After the blooming season the red leaves will fade to green and it will resemble a small thistle.



Figure 1. An Indian warrior (*Pedicularis densiflora*) colony near Hidden Lake.

Milk maids (*Cardamine californica*) is a perennial in the mustard family (four petals). It forms a basal rosette of leaves and then a foot-long flower stem with multiple white flowers (Figure 3). It will be one of the first flowers of the season and then go dormant in the summer. I have also seen the names coast toothwort and bitter cress associated with this plant. In my wanderings, I have only found this plant on the north side of Hidden Lake. It must prefer the humid

environment that it shares with many other fleshy plants in the understory. Its neighborhood is so crowded that it can be difficult to discern which leaves belong to which stem without a little manipulation.

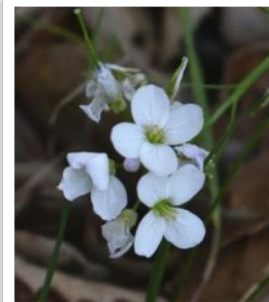


Figure 3. A cluster of Milk maids (*Cardamine californica*) flowers.



Figure 4. A dying hummingbird sage (*Salvia spathacea*) sprouts growth.

Hummingbird sage (*Salvia spathacea*) is one of my favorite California wildflowers. It is a soft perennial growing as a single stem that usually dies back after blooming, but not always. My photo (Figure 4) shows a gray dying flower stalk from the previous season. As I tugged the stem (no flowers were damaged during this episode), the juvenile stem moved in lock step. I saw several instances where the main stem let all its leaves wither and then formed a new stem at a lower lateral node.

What's Blooming Cont.

I consider hummingbird sage to be a summer flower, but I've seen some currently blooming on the golf course. Most of these plants were still in the growth phase, possibly motivated by the autumn rains — not as majestic as some plants after a full season, but not a shutout. Many writers suggest that this sage got its name from its attraction to the nectar eating birds. As I see the flowers (Figure 5), more than an inch long, I sometimes imagine the petals represent a bird's beak and the stamens resemble its extended tongue.



Figure 5. A single whorl of hummingbird sage flowers arrives early in the season.

California hedgenettle (*Stachys bullata*) doesn't sting or form hedges. It is perennial; evergreen given enough moisture, or withering after blooming, then reemerging next season. Also in the mint family, it closely resembles hummingbird sage and frequently shares the same habitat. Hedgenettle is always more diminutive, but I have seen specimens reach 18-inch in height. Both plants have these features:

- ❖ long, narrow, lance-shaped leaves with a rough pebbly surface. The hedgenettle has more rounded corners, like an elongated heart, while the sage has sharper 'barbs'
- ❖ multiple flowers stacked in whorls (radial arrangement). The hedgenettle has pink petals; the sage has deep magenta
- ❖ can form colonies spreading via rhizomes

My garden indicates how the autumn rains have helped. I marked a group of three plants with rocks, so my sister would not trample them, while we pruned a pyracantha bush. This was Thanksgiving, and by January they had produced four siblings! One of the trail junctions in the oak woodland section has a hedgenettle colony over 5 yards in diameter.

I found a few hedgenettle plants blooming around Hidden Lake. The majority are still growing and will bloom later in the season. The half-inch flower has been described as more galeate (hooded) than labiate (lipped, more common in the mint family). The upper hood has a solid pale magenta color (Figure 6). The larger lower lip droops and has an intricate lacy marbling. In cooler (bluer) light the color may shift towards lavender.

My stroll took me perhaps 3 miles round trip over about 1.5 hours. Those tropical river rainstorms have promoted our local wildflowers in a delightful way. Hidden Lake is blooming, enjoy!



Figure 6. California hedgenettle (*Stachys bullata*) flowers grow in multiple whorls.

Do you have plant related questions? Test the membership!

Email questions to:
lvbothortsoc@gmail.com

**SAT
APRIL
18**

**EARTHDAY
CELEBRATION**
COMPOST, MULCH
& PLANTS!

BRING A CONTAINER TO COLLECT MATERIALS

1300 W. LAUREL AVE.
10:00 AM - 12:00 PM



LVBHS

c/o Christine Zuhlsdorf - President
624 South C St,
Lompoc, CA 93436

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Caldwell, Julie Levy, Mark Zuhlsdorf



Photo by J. Leafy

Membership Information

Dues for 2026: \$20.00

Membership meetings 3rd Sunday
in Jan, Mar, May, Sep & Nov

Regular meeting location: Stone
Pine Hall, 210 South H St

E-mail: lvbothortsoc@gmail.com

The Nose-twisters - by J. Laffy Leafy

Not Larry, Moe and Curly – famous for tweaking each other's noses. But the name – seriously! – of the common garden nasturtium with its round leaves and bright orange, yellow, or red flowers literally means “nose twist,” from the Latin *nasus* (nose) + *toquere* (to twist). The plant is thought to have this name because of its pungent odor. Or it could possibly be because of the wry face one makes when experiencing its zingy peppery taste.

And on with the show: pollinators are attracted to the flower's yellow throat by the psychedelic bright red guidelines on the upper two petals. Pollen from the stamen's anthers clings to their legs, and the eyelashes (fringes) on the landing pads of the lower three petals serve to wipe pollen off the creature. Insects love the extremely sweet nectar in the fused fifth sepal that looks like a spur.

The nasturtium nose: nasturtium flowers, leaves, and seeds are edible. The leaves taste a lot like radishes and are great to mix in to salads. I've even added the petals to potatoes for an oomph of color. ~JL