



The Shooting Star

SIERRA FOOTHILLS CHAPTER

CALIFORNIA NATIVE PLANT SOCIETY

APRIL 2015

Page 1



Abernathy Lava Cap Field Trip, 2010

Photo: Alison Colwell



Shooting Star, Red Hills ACEC, Feb. 15, 2015

Photo: Douglas Krajnovich

SPRING NATIVE PLANT SALE IN SAN ANDREAS

APRIL 11, 10 am to 1 pm

This year's Spring Native Plant Sale will be held on Saturday, April 11, from 10 am to 1 pm. It will be held on the grounds of the Calaveras County Water District located off of Pool Station Road in the Reed Business Park, in San Andreas.

We will have the same selection of rare high quality plants for sale as well as a fine selection of books and material that every gardener and native plant lover should have in their personal library. The Central Sierra Chapter of the Audubon Society will also be setting up their bird houses and feeders and books.

We'll be recruiting volunteers to help work the sale, so if you have an interest contact Stephanie Garcia or Judy Dean. Please contact Judy or Stephanie with any questions.

IT'S FIELD TRIP TIME!!!

March 28-Hwy 49 Bagby Serpentine

March 29-Corsa Garden Tour

April 4-Moss Creek Trail

April 19-West Side Railroad Grade Trail

April 25-Abernathy Lava Caps

See Field Trip Schedule for more-details and additional field trips

CORSA GARDEN TOUR March 29, Noon to 2 pm

Coming up soon!! Once again Deana Corsa is graciously opening up her beautiful

Phoenix Lake garden for a guided tour. Her garden has been on the Master Gardener's Annual Tour twice over the past ten years. This is the same one we toured last September. Only this time, we should be just in time to see many of the natives blooming. This is a great opportunity to get ideas for planting natives in your own garden. During our tour, we will talk about the natives growing through out her expansive garden. Don't miss this opportunity to see, in person, natives growing amongst oaks, pines, and cedars in a garden setting. If you have any questions email Stephanie at sjgarcia@mlode.com

Directions: 15575 Buena Vista Avenida, Sonora

From Sonora: Hwy 108, take Hess Ave; LEFT on Hess; RIGHT onto Phoenix Lake Road; Turn LEFT on De Los Portales, at the main, Phoenix Lake entrance; RIGHT onto Paseo De Los Robles; RIGHT onto Buena Vista Avenida; Park in turn about beyond driveway

If you change your mailing or e-mail address, be sure to send a note to Jennie Haas. This will keep your newsletter on time!

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www.sierrafoothillscnps.org

Dedicated to the Preservation of California Native Flora.

FIELD TRIPS

As our field trip season gets started, we're looking forward to seeing and learning about all of the wildflowers and other plants that we'll see. The Field Trip committee has a great track record for hitting the timing right to catch peak blooms. We were thrilled last year to find that, even in a severe drought, we still found many wildflowers. We're hoping this year proves to be as good.

Plants are blooming and leafing out 1.5 to 2 months early this year due to the very warm, dry winter that we've had. We're timing many of our trips accordingly. The field trip schedule is included in this newsletter as a pull out section. Hang it on your refrigerator and give copies to your friends. We hope that you'll join us.

We'd like to offer a few trips in Calaveras and Amador Counties but have had no leaders come forward. An e-mail was recently sent out to Calaveras County members and our field trip e-mail list asking for leaders to come forward. If you know nice places to view wildflowers in these two counties and know the plants' names, you might very well be a great leader. Contact Jennie to volunteer and schedule a trip: (209) 962-4759, jhaas953@gmail.com.

-- Jennie Haas, Field Trip Coordinator



Field trip to Abernathy Lava Caps in 2010.

Photos: Alison Colwell

What's Blooming?

Thank you to Shooting Star Chapter Member for photos!



Fiddleneck at Kesterson Unit of San Luis NWR, Feb. 21, 2015 (Above)

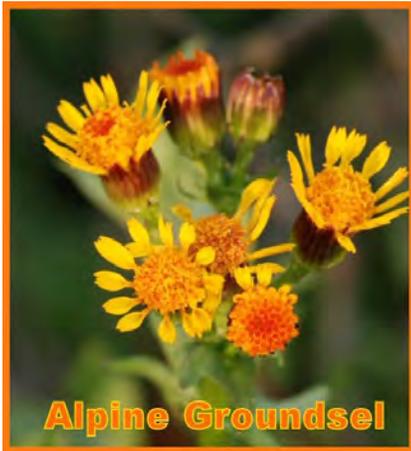
Shooting Star, Red Hills ACEC, Feb. 15, 2015 (Left)

Photos: Douglas Krajnovich

Fantastic Fibonacci

No, Leonard Fibonacci was not a member of a high-wire act. He was a brilliant Italian mathematician of the Middle Ages. In 1202 he published *Liber Abaci* (Book of Calculation), which helped spread the use of the modern Arabic numeral system (no more VII, XVII, etc.). In the book he also talked about a sequence of numbers that would later bear his name, the Fibonacci Sequence. The sequence is 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, and so on. Basically, the series takes two adjacent numbers, say 3 and 5, and adds them to come up with the next number in the series, in this case 8. So what does mathematics have to do with nature? A lot!

The number of flower parts is often a Fibonacci number. It's common to find flowers with 3, 5, and 8 petals. Sunflower family plant parts often come in Fibonacci numbers. Take Alpine Groundsel, *Packera pauciflora* (previously *Senecio pauciflorus*) for example. The bracts at the base of the flower head, called phyllaries, number 13 or 21 and the petal-like ray flowers number 0, 8, or 13. The disk flowers, the small flowers in the middle that develop into fruits of this and many other plants in the Sunflower family, are arranged in two sets of spirals, one set spiraling clockwise and the other counterclockwise. If you count the number of left curving spirals and the number of right curving spirals, you'll have adjacent Fibonacci numbers (this is much easier seen in large sunflowers). The same is true for the scales of pine cones and the segments on pineapples. These spirals allow for the most efficient arrangement of flowers and later fruits in a pattern that facilitates growth.



The leaves of many plants spiral up the stem in Fibonacci fashion. One pattern involves the numbers 2 and 5. If you follow the leaves up the stem in a spiral manner, it will take you 2 spirals and 5 leaves to get to a leaf that is above the first leaf. This is the most efficient arrangement of leaves for gathering light, ensuring the least amount of shading by upper leaves.

The Fibonacci Sequence brings some order to our understanding of our complicated natural world, but a deeper look can reveal that things aren't always so simple. Yet, that deeper look will also reveal more patterns. For example, there are the Golden Ratio, the Golden Angle (137.5°), and the Golden rectangle, which are Fibonacci related mathematical concepts used in artwork by Leonardo Da Vinci, in architecture like the Parthenon and the Egyptian pyramids, in bee colony ancestry, in the pattern of cactus spines, in the shape of your ear, in the spiral shape of a nautilus shell, and even in places that are outside of this world, such as the shape of our Milky Way galaxy.

-- Barry Breckling

Traditional Uses of California Native Plants

This month's plant is *Toxicodendron diversilobum*, or Poison Oak. It has one of the widest distributions of any CA native and grows in canyons, chaparral and oak woodland, as well as along mountains streams up to 5500 feet elevation. It can grow as a ground cover, shrubs up to 13 feet high, or climb the trunks of large trees.

The famous---infamous--- leaves of three " are compound and 3 to 6 inches long. The leaflets are shiny, 2.5-5 inches long, oval, with wavy or lobed edges. The color varies from bronzy red to bright green in Spring, and changes into a bright red in Autumn. In April or May, drooping clusters of tiny, fragrant, yellow green flowers emerge from the leaf axil. Many animals browse the leaves, stems, and berries of this plant. It is very adaptable and sprouts vigorously after fires or severe pruning.

The plant was used in many ways by Native Americans. The supple, slender stems were used for the warp in basketry. The juice from the stems, leaves, and roots turns black quickly and was used as dye for basket strands. The Karok Indians used the leaves to cover Soap Root bulbs while baking them in an earth oven. The Concow Indians mixed the leaves into acorn meal to bake bread. Twigs were used to spit salmon steaks for smoking. Poison Oak juice was also used as a cure for warts. The wart was cut up to open it, and fresh juice applied several times until the wart disappeared. It was also used for ringworm. After a rattlesnake bite, the fresh leaves were sometimes bound tightly to the wound immediately afterwards to counteract the poison.

Full-blooded Indians seemed to be immune, or only mildly affected, by the urushiol oil of the plant. Some say they ate a small piece of the young leaf in Spring to trigger their immunity. Mixed-blood Indians may have been more susceptible, and there were many plants used to relieve the rash, including *Grindelia* (Gumweed), *Artemesia* (Mugwort), and *Arctostaphylos* (Manzanita).

Columbia celebrates this notorious plant in a unique way with its annual Poison Oak festival, an event not to be missed.

Sources :

-- Stefani Reichle

Discover California Shrubs, Mary Ruth Casebeer
Early Uses of California Plants, Edward K. Balls



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