



AWESOME DIVERSITY & DEFENSES of ARTHROPODS: LIVE SCIENCE FOR KIDS!

Mon. June 25; 3-5pm

In a presentation designed for school aged children **Stephanie Dole**, aka the **beetle lady**, will feature the fantastic diversity of these appendage-blessed wonders & highlight some of their remarkable defenses. She will bring live arthropods like the **bumblebee millipede**, the **Arizona blonde tarantula** & and the **vinegaroon**, (photo below) then lead our children outside to see some of our local **insects**.

Stephanie will provide insect sweep nets for the children to temporarily capture the critters, enabling them to see the variety of arthropods largely hidden from view, munching on or hidden in the vegetation of SPVP. Youngsters will also "play" with warning coloration.

Ms. Dole received her Bachelor's degree in Entomology at UC Davis & a PhD in Entomology at Mich. State U. She went on to teach general and aquatic entomology at Texas A&M University, and later Biology of Insects at the University of San Francisco. She has extensive experience doing field entomology in Thailand, the Amazon, the Sonoran Desert, the Sierra Nevada, etc. She has taught young children at the CuriOdyssey Museum.



BIRD SONG ID WALK with JIM STEELE on APRIL 14 at 8am



Pictured at left is one of the most thrilling and trilling of all of SPVP's serenaders, the **Pacific Wren**. You are almost guaranteed to hear him as expert song identifier, **Jim Steele**, will start you on your hike at 8am alongside the creek, AND likely with one of

the easiest & prettiest bird songs to remember. However, because song ID is not always such a snap, Jim will help you to separate out types of songs, so that you have a chance of homing in on the subject at hand. Bring binoculars if you want to see our feathered friends. (Glenn Bartley wren photo)



Nancy Rose

BBQ FOR FRIENDS ON MAY 19

We supply the BBQ meat; you bring a side dish unless you are working on Habitat Restoration in the morning (9-12). Meet at the VC; enjoy the barbecue in the

lovely Vis. Cntr. Patio, with the sound of our babbling brook & guitar music by **Scott Hill**. Expect a call from **Mila, Judy, Carolyn** or **Bing** & get ready to have some fun on Sat!

MIKE VASEY'S MICROHABITATS & MICROCLIMATES OF SPVP AND ENVIRONS on SATURDAY, MAY 5

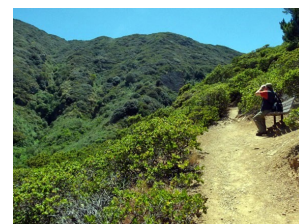
by Jim Steele

Dr. Mike Vasey will give a brief talk in the Visitor's Center at **10am** about the micro-climates & micro-habitats of San Pedro Valley Park followed by a hike up the Brooks Creek & Montara Mountain trails to the fire road & then down to some outstanding rocky outcrops above the saddle between Montara Mt. & San Pedro Mountain.



These rocky outcrops present an outstanding garden of native species like **fairy lanterns**, **purple onion** & **sedum** – a host plant for the rare **San Bruno Elfin butterfly** (not here) The hike is challenging but beautiful. Return the way we came or stage a car at the end of Springwood Way (which connects to Old San Pedro Rd directly below the rocky out-crop) & descend from there.

The hike is quite demanding. Total round trip is 7.5 mi. with a big elevation gain, taking over 4 hrs. Pack a lunch & drinks. (Sharron Walker photo of Brooks Creek Trail.)



Here is a small sampling of Dr. Vasey's contributions to the understanding of the Bay Area's ecology & protection of its environ: Teaching conserve. Boil. & environ. studies at SFSU since the early 1990s: Serving as dir. of SF Bay Nat'l Estuarine Res. Rsrv; Being the first author in several papers on the health of Bay wetlands & on the ecology of *Manzanitas*, an expert in that field. Vasey earned his PhD in Environ. Studies at UCSC, researching the conserve. of maritime chaparral & the influence of fog on this sensitive natural community.

ON THE TRAIL

A delicious sip of **hound's tongue** nectar by a seldom seen **veined white butterfly**, *Pieris venosa*—photographed March 18, at noon along the Trout Farm trail by **Ron Wilson**. This is Ron's fifth species of butterfly since the beginning of the year. Ron said the pale beauty was feasting on "odds and ends". Unfortunately she also liked the alien **periwinkle**.



And **Bing Huey** found this **bumblebee** "drunk with pollen", lost in one of the **Douglas irises** on the western beginning of the Hazelnut Trail on April 8 of this year. See p. 5 for another bug's interest in the Doug. Iris.

(continued on page 4)

ALL ABOUT FERNS; OUR PARK'S ANCIENT PLANTS

Text and Photos by Sharron Walker

As expected Dan Yansura's talk on ferns on Sat., March 31, was well attended. His informative and colorful power point presentation covered the biology of ferns and lycophytes and plant evolution. Ferns are ancient, some dating back to the Devonian Period which occurred from 416 to 358 million years ago.



During Dan's talk we were introduced to the parts of the fern: frond, fiddle neck, pinna (division of the frond), the stipe (stem), and sori (spores). We were also provided with the basics of identification;

the following is taken from Dan's Power Point: (1) Use sori pattern to ID a genus. (2) Check for indusium. (shield covering the sori on a fern frond) (3) Note leaf shape, simple, pinnate, etc. (4) Check for scales or hairs. (5) Pictures can help.

Armed with a handout provided by Dan & hand lenses, we first headed to the so. bridge on the Plaskon Trail to see the Equisetum (horsetail), wood fern, woodwardia, and our one



maidenhair fern, the 5 fingered fern. We then continued on the Old Trout Farm, finding *Polystichum imbricans* and *munitum* (2 sword ferns), *Polypodium californicum*, *Dryopteris arguta* (wood fern) & *Pter-*

idium aquilinum (bracken fern). By the way the horsetail is abundant along the Old Trout Farm Trail, with new and mature growth. The trails we hiked were the areas providing the best habitat for fern growth due to the shady and moist environment.



An afternoon well spent; we came away with a new appreciation for the ferns of SPVP, but wondering about the 660 species in California & the

MORE FERN FACTS

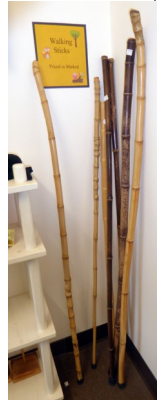
1. Because ferns unlike the mosses, were engineered with thin water and nutrient carrying tubes, they were able to dominate the land and grow in height, at least one tree fern to 20m tall and were a main coarse for herbivorous dinosaurs. 2. The odd coffee fern, (*Pellaea andromedifolia*) grows on upside of our V V Trail. (Stan Shebs photo)



STORY BEHIND OUR BARGAIN PRICED BAMBOO POLES

by Sharron Walker

Check out the supply of Bamboo Hiking Poles for sale at the Trailside Store! Ed and Donna Smith, friends of Sharron Walker, have 7 types of bamboo growing on their property in Livermore, & when Sharron commented during a recent visit, on a beautiful bamboo pole Ed had carved, he gifted several to the Friends. End result: a donation of 10 strong Poles, selling for \$8 each at our Trailside Store.



Recently Sharron met up with Ed and Donna and their grandchildren, Edwin and Savannah, when they visited the tide pools at Fitzgerald. Ranger Rob Cala was there sharing some of the local highlights. Ed gifted Rob with one of his hand-crafted poles. San Pedro Valley Park will be the next area to explore in June when the Smiths return to the coast!

JIM STEELE GIVES POWERFUL TALK on ACIDIC OCEANS

Mr. Steele covered a gamut of scientific processes in this informative talk, with abundant references to scientific papers, on a timely, critical topic: how an increase in ocean acidity might be handled naturally by the organisms of the sea. My take was that he thought that most organisms would survive a hostile lower pH not only due to natural programmed cooperative processes, many of which we are just beginning to understand, but also to combined physical processes.

I did enjoy Jim's segments on the fascinating endosymbiosis where in a very ancient ocean, chloroplasts and mitochondria were captured as bacteria by other cells, and how knowledge of such flexibility in the plankton, opens our minds to present phenomena. For instance, we are just now exploring the "antics" of the mixotroph microorganisms in plankton that may operate photosynthetically with stolen chloroplasts, or instead, eat other unicellular critters, showing a flexibility that might help organisms to maintain a dynamic balance in a less overwhelming crisis.

Finally, in discussing the terrible extermination of corals in the Great Barrier Reef (at right), he said that endosymbiosis may have helped a huge coral die-out from 18,000 yrs. ago, helping corals to rebound, thus telling of the resilience of the corals.



Jim knows that I do not agree with his stance on these 2 major issues, but I have not done the extensive research that he has, so I look forward to his reporting back to you in our next newsletter, or perhaps in a letter to our members who have received the printed copy, so we can get a fair reporting of his talk & ideas.

(Nat'l Geog photo) Carolyn Pankow

CREEPLY CRITTERS

By Judy Bacon

On Tues., April 10, we again hosted the program, "Creepy Critters". We had about 100 heads, big, little and tiny! The 2 young women, **Renee** and **Bailey**, from "Wildlife Associates" did a wonderful job explaining the difference between warm-blooded and cold-blooded animals, as well as giving information for each animal and showing a slide for each.

The first critter presented was Tank, the **Tortoise**. The kids were enthralled. Then came a **Mexican red-Legged tarantula, *Brachypelma emilia***, a mild tempered fellow who is becoming threatened by the pet trade. The kids were interested, the adults, not as much.



But when the **American alligator** was brought to the table, I was enthralled. This animal has the strongest bite of any living creature!



Our next critter was Katani, a **bearded monitor lizard**. We learned this lizard can take down a **deer**!



The last animal was the popular, Lola, a **red-tailed boa constrictor**, an arboreal critter from Central or South America. Boas can live 20-30 years in captivity. At times, people buy these animals as pets and then turn them out when they become too big or have been around too long!

Wildlife Associates' goal is to empower and awaken compassion for all living things. This organization only accepts animals that can no longer live in the wild, often ones abandoned or mistreated as pets or just plain illegal contraband.

(Photos of the 2 terrific presenters/handlers & the boa constrictor taken by **Judy Bacon**; alligator & monitor lizard photos were taken by a young attendee.)



SPVP GETS A NICHE FOR PACIFICA'S EARTH DAY

by Sharron Walker

On Sat April 21, Pacifica once again came out in force to clean beaches, creeks, restore, plant and demonstrate the importance of conservation and being stewards of the environment! Organized by the Pacifica Beach Coalition, activities took place in the morning, followed by the Eco Fest at Linda Mar Beach. For the 4th year Friends of San Pedro Valley Park shared a booth with the San Mateo County Parks Foundation.

This year since the theme of Earth Day was **sea stars**, Fitzgerald Marine Reserve had a separate Booth; above is a **Rob Cala** photo of a sun star, a group especially devastated by the densovirus that causes the wasting disease in most sea stars. **Ranger Rob** was also a keynote speaker. The County Parks Director, **Jonathan Gervais**, was at the event as well. Thanks to our Friends volunteers: **Carol Martinez, Amy Sullivan, Jack Coots, Carolyn Pankow & Sharron Walker** for giving their time to do community outreach!! (**Sharron Walker** photo of **Amy** signing up a new volunteer.)



BYPASS STOPS SLIPPING, SLIDING on TROUT FARM TRAIL

By Joseph Piro

For our April 14th Trail Day, we worked on the new trail segment being built to bypass the steep stretch by the old foundation on the Old Trout Farm Trail -- when complete, it will connect from the end of the bridge there to approximately near the bench on the Brooks Falls Trail above. **Ranger Matthew Tholmasoff, Istvan Puski, Keith**, first-timer **Max Kennel** (an ambitious young fellow) and I worked on bench-cutting & preparing a good surface of the leading edge of this trail segment as it pushes through the brush. Certainly good work! [Toddlers & Seniors esp thank you guys]



ON THE TRAIL (continued)



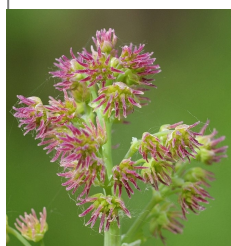
From **Laurie Nikitas'** cell: "I was back on the trail today after a really terrible bout of flu, and right at the bridge next to the parking lot, were these two, who emerged onto the pavement simultaneously. The **lizard** seemed pretty blasé, but then again, was a bit much for this young **garter snake** to tackle."

Crawdads in the Creek?*

Yes, according to a man we'll just call "**Ray**", who upon entering the water company land at the end of the Trout Farm Trail, saw one out of the water-mid April, 2018, in the early afternoon.



On 4/22 **Katie Antista** found our small and shy little California native **roses** blooming in 2 shades of pink, just past the fallen **oak** curve on the upper side of the Hazelnut Trail. (Wikiped. photos of **rose & crayfish**)



Bing Huey got great shots of the dioecious (separate plants for male(rt) & female (lft) flowers) **meadow rue**, *Thalictrum fendleri*,



that Bing found on the Brooks Creek Trail.

FACIOM

The **American robin** seems to love sitting on an anthill, while the **ants** crawl around in its feathers. Why? Experts think the **ants'** formic acid secretions help control **feather mites** and other parasites. In this photo by **John Dennehy** you can see a robin at a rehab center, who is growing back lost feathers whilst exposing all to ants! (Birdnote)

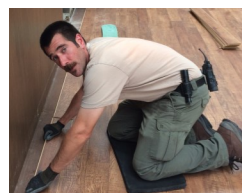


CALENDAR FOR MAY/JUNE 2018

VASEY'S WALK & TALK: MICRO HABITATS & CLIMATES OF SPVP
Saturday, May 5.....10am
MAY TRAIL DAY
Saturday, May 12.....9am
JIM STEELE'S MAY BIRD SONG WALK
Sunday, May 13.....8-10am
FRIENDS OF SPVP MAY BOARD MEETING
Tuesday, May 15.....7pm
MAY HABITAT RESTORATION DAY followed by BBQ at noon
Saturday, May 19.....9am
JUNE TRAIL DAY
Saturday, June 9.....9am
JUNE HABITAT RESTORATION DAY
Saturday, June 16.....9am
FRIENDS OF SPVP JUNE BOARD MEETING
Tuesday, June 19.....7pm
StEPHANIE DOLE'S ARTHROPODS: TALK & WALK FOR KIDS
Monday, June 25.....3-5pm
For all events except board mtgs, meet at the Visitor Center

RANGER CHANGERS FOR SPVP

Our friendly, industrious ranger of many years, **Greg Escoto**, has received a promotion to Ranger III, but with that designation, he has been given as his main responsibility the building for our new SM County parcel, Tunitas Creek Beach, just south of Half Moon Bay under our chief ranger, **Matt DelCarlo**, the director of our many coastal county parklands. Congratulations to **Ranger Greg!**



Ranger 3, **Derrick Emil**, will now be in charge of scheduling, training for our park, as well as ordering and buying of equipment. He said that 4 new rangers will be hired for our district. (park photo)



Steve Frost has been promoted to field supervisor for Huddart, Edgewood & Flood Parks., while **Miranda Holeton** may go to Hastings Law School— a big career change.

*DON'T MESS WITH MOTHER NATURE!

In this case, it's the people who brought the invasive crayfish that should be castigated! Crayfish are among the most impactful of aquatic invasive species, affecting the diversity of creeks by eating **nests**, and perhaps the **salamanders** using San Pedro Creek. The endangered **Shasta crayfish** is our only native Californian crawdad, & is now being protected by property owners. (Turning the tables: a salamander eating a crayfish)

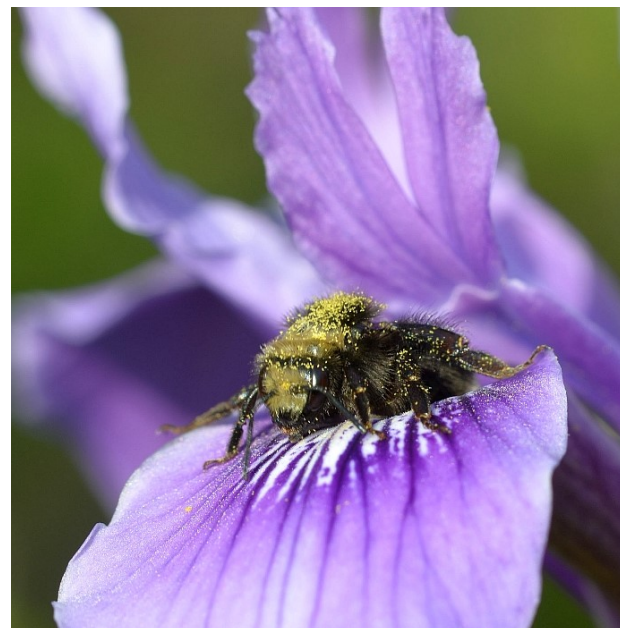


Michael Durham

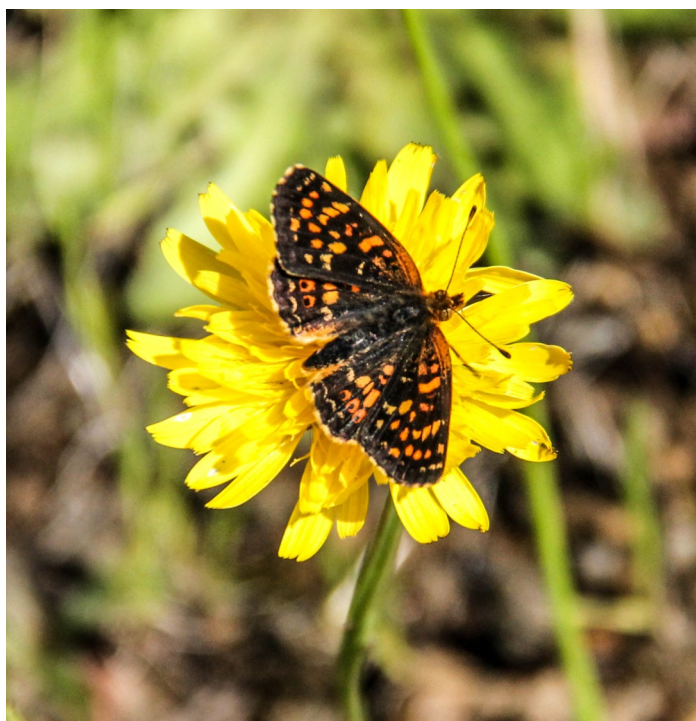
The Leaders of "the Friends of SPVP": President: **Jim Steele**; Vice President & Editor of this newsletter: **Carolyn Pankow**; Secretary: **Judy Bacon**; Treasurer: **Bing Huey**; Visitor Center Desk and Staffing: **Mila Stroganoff**; Habitat Restoration leader: **Istvan Puski**; Trail Leader: **Joseph Piro**; Membership: **Jim Steele**; Programs: **Jim Steele**; Trailside Store Manager: **Sharron Walker**; Membership miscellany, mobile display board: **Katie Antista**. **WEB SITE:** friendsofsanpedrovalleypark.org **Letters to the Editor:** Carolyn at pankowninca@gmail.com



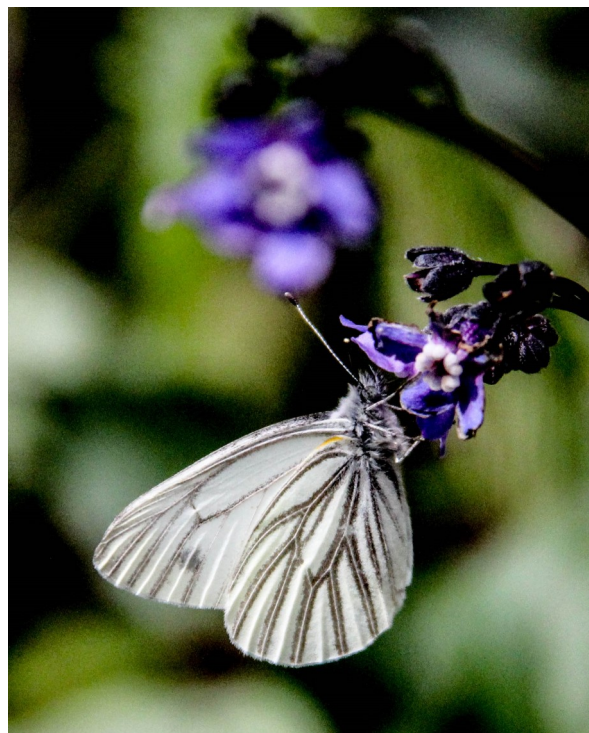
Sharron Walker's mule deer trimming our "lawn" in March '18



To the right are 2 subjects from Bing Huey's camera: a bumble bee (top) "drunk with pollen" from the Douglas Iris & an unknown true bug or Hemipteran exploring a flower of the same species.



Ron Wilson's *Phyciodes campestris*, the field crescent butterfly on 4/14/18 on the Valley View Trail



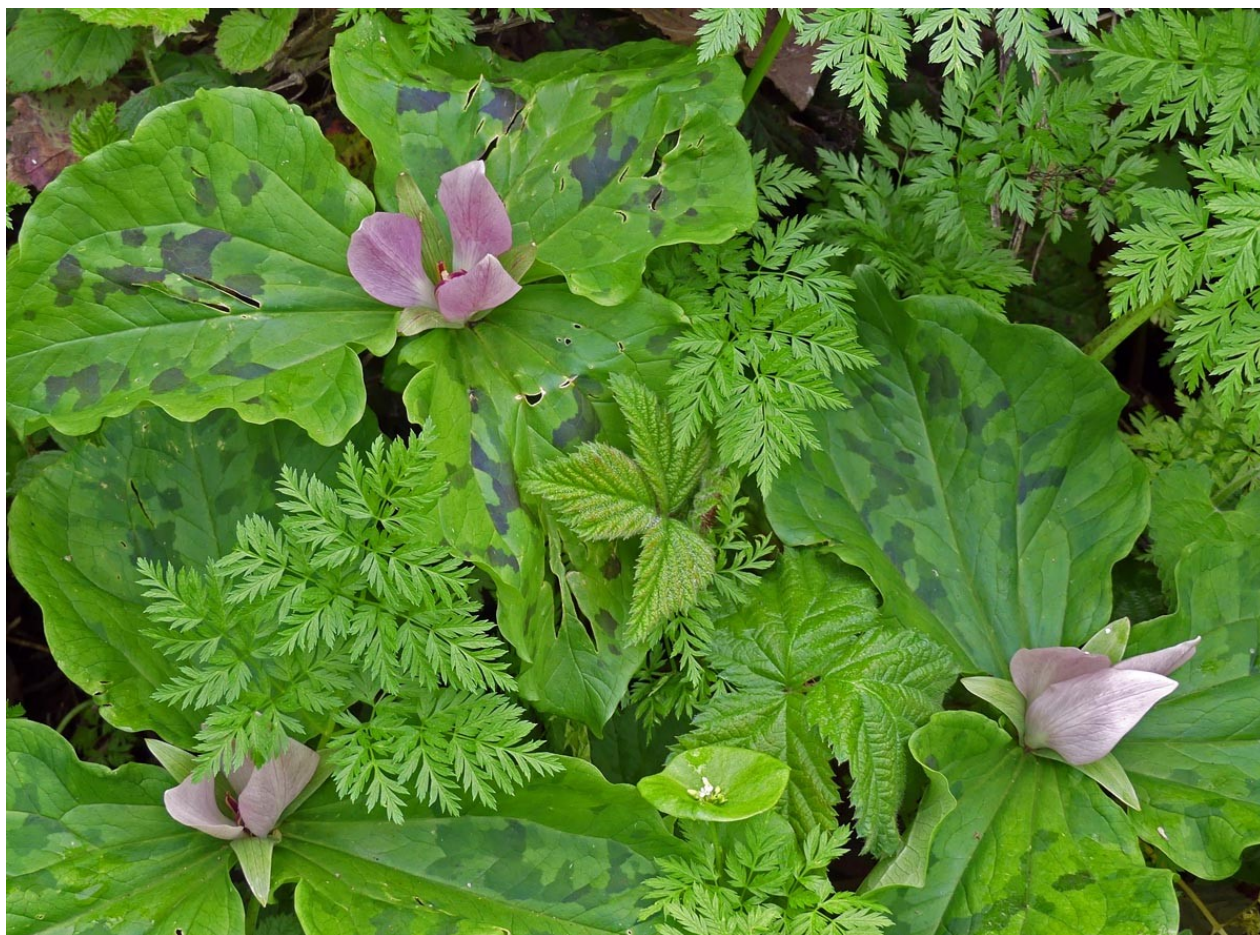
Ron Wilson's veined white butterfly, *Pieris venosa*, seen on the Trout Farm Mar. 18 at noon.



Sharron Walker captures a **yellow jacket** mistaking itself for a **bee**, as it approaches the flower of a **bee plant**, while a thimbleberry leaf “looks on”. (Sunday, April 22, 2018)



Sharron and Bevan Jones find an radiant golden bloom of **California poppies** on the Weiler Ranch on that same Sunday. Photo is **Sharron's**.



Sharron Walker photograph showing 3 **giant trilliums**, *Trillium chloropetalum*—seen on April 22, 2018. These flowers are in their pink phase, ready for seed making. They seem compatible with the “**hemlock**”, **blackberry**, and the **miner’s lettuce** in this photo.



Meadow rue, *Thalictrum fendleri* “Pretty-in-pink” stigma lassies await the pollen of the anthers from their favorite “lad”.—March 30

B
I
N
G

H
U
E
Y



He’s here! **Meadow rue** anthers bursting with pollen. Mar. 18. Male & female plants are on the Brooks Creek Tr.



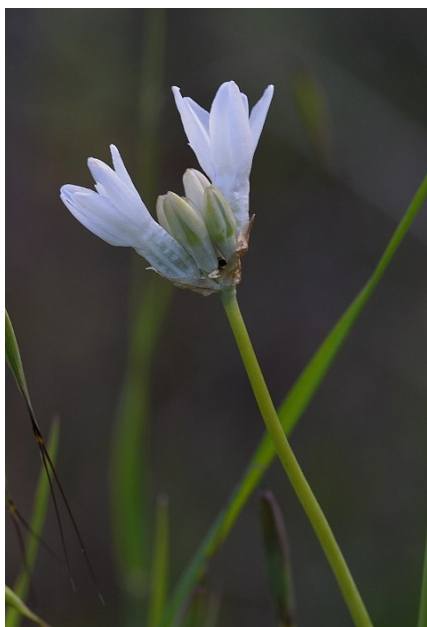
Bing's purple needle grass, *Stipa pulchra*; April 22, on the Valley View Trail (the Calif. State grass)



Bing's osoberry, *Oemleria cerasiformis*; March 23, on the Hazelnut Trail.



Bing's blue dicks, *Dichelostemma capitatum* ; April 22, on the Valley View Trail.



Bing's blue dicks—white phase; April 22, on the Valley View Trail.



Bing's anemone, *Anemone ore-gana*; March 23, crest of Hazelnut Trail.

Bing Huey's Floral Subjects of SPVP



A



B



C

By Bing Huey

A is bee plant
B is fat false Solomon's seal
C is star lily