Edgewood EXPLORER EXPLORER

Edgewood Is Site of Improvements and Inspiration

by Kathy Korbholz and Barrie Moore

You may have noticed some changes taking place at Edgewood over the past few months. Here are descriptions of what has been going on.

New Bridge

The start of the Sylvan trail has been re-routed and the trail now includes a delightful new bridge.



San Mateo County
Parks Department was
concerned about the
blind spot caused by the
new privacy fence along
the private drive at the
east side of the large
grassy area. Kids

Photo by Barrie Moore

running to and from this grassy area and the parking lot may not be seen by the residents driving along the private road. Also, with today's electric vehicles, cars approaching along the drive might not be heard by pedestrians in the parking lot. Therefore, the rangers re-routed the access to the Sylvan trail across the grassy area. They added a small bridge to cross the little creek gully. They also blocked both ends of the old trail which skirted the east edge of the grassy field.

New Plants

Have you been wondering about the four foot tall green "candles" along the Sunset Trail, near the PG&E substation? PG&E is restoring an area they had cleared earlier. A restoration crew planted native shrubs—coffeeberry, buckbrush, and



bee plant—inside the green tubes. Each tube, which protects a young plant, is set into a compostable bucket. The restoration crew will add water several more times to give the new plants a good start.

New Bench

Have you noticed the new bench on the Serpentine trail at the overlook corner? The bench was placed by the Parks Foundation and paid for by a donor. It is dedicated to the memory of the donor's wife, Lindsey Snyder. Some people have commented that the bench is facing the "wrong" way, but the donor requested that it face that direction because

Lindsey liked to look up at Inspiration Heights.

See also the Boy Scout project at Inspiration Heights, on page 6.



Adopt-A-Highway Cleans Up

by Dave Hershey

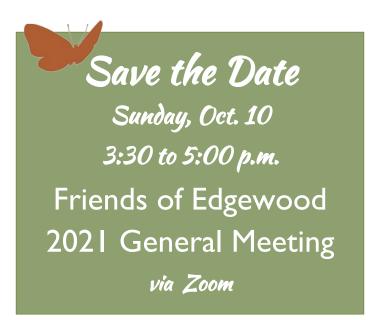
On July 7, Dave Hershey, Bonnie MacKinnon, and Karen Johnson traveled north beyond our usual I-280/Edgewood Park work area to the Crystal Springs Safety Roadside Rest Area on northbound I-280 near Hillsborough. The trio represented the Friends of Edgewood Adopt-A-Highway (AAH) team at a special Caltrans-sponsored litter removal event created in response to the governor's Clean California Initiative.

This cleanup session, organized and led by Michael Jevicky, Caltrans AAH District 4 Coordinator, offered the participants the opportunity to meet members of five local AAH groups. A total of 20 people comprised of Caltrans employees (9), volunteers (6) and private contractors (5) collected and removed 32 bags of trash equaling 4.6 cubic yards from the rest area and the adjacent Junipero Serra statue grounds in about 40 minutes.

If you like the idea of ridding I-280 of trash in the vicinity of Edgewood Park, you may want to join the Friends of Edgewood Adopt-A-Highway group for our monthly litter removal sessions. Read about our program on the Friends of Edgewood website (foew.org/adopt-a-highway-2). To volunteer, contact Dave Hershey, adopt-a-highway-2). coordinator@friendsofedgewood.org.



L to R: Michael Jevicky (Caltrans), Karen Johnson, Dave Hershey, Bonnie MacKinnon



General Meeting Set for October

by Barrie Moore

Mark your calendars for Sunday, Oct. 10, from 3:30 to 5 p.m., and join us for the 2021 Friends of Edgewood General Meeting via Zoom. More details, including instructions for how to join the Zoom meeting, will be mailed out to members and special guests in September. If you aren't yet a member, or your membership has lapsed, now is a great time to renew your support at foew.org/donate so you don't miss out on your invitation!

One important order of business for our General Meeting is the election of directors to our board for the January 2022—December 2024 term. This is a good time to share some of the work the Friends of Edgewood board is doing to ensure that we continue to find the talent and resources needed to drive the many programs that support Edgewood Natural Preserve.

We have always embodied an ethic of conservation, resource protection, and community outreach. We are proud of the strong foundation we have built and the dedication of our members and volunteers. As we look to the future, we know our success depends on cultivating the next generation of leaders and broadening our base of support to better reflect the richly diverse community of people who use Edgewood.

This fall our board will be working with a consultant from the American Leadership Forum to look at ways we can strengthen our organization. If you know people who would be interested in working in a leadership role or who you think could bring an important perspective to our work, please let us know by emailing Peter Ingram at president@friendsofedgewood.org.



Turkey Vultures Are Life of Party

by Diane Campbell

Turkey vultures (*Cathartes aura*) are scavengers that feed mostly on the decaying flesh of dead animals. Commonly called carrion, this fresh kill emits an odor that smells foul to humans. But, for a turkey vulture, it is the appealing aroma of an upcoming feast.

While most birds have a poor sense of smell, the turkey vulture is an exception. Researchers proved this in an experiment in 1938. Union Oil Company discovered that, by injecting a strong-smelling organic chemical called mercaptan into their gas lines, they could easily find any leaks by observing the vulture activity directly above the lines. And, while the turkey vulture has been known to watch the ground and observe the actions of other scavengers from the sky, it relies most heavily on its outstanding sense of smell. In fact, the turkey vulture has the biggest olfactory system in the bird world.

Since turkey vultures have feet akin to chickens, they are ill-equipped to grab prey while hunting, and therefore leave that task to the predators such as mountain lions. The diet of a mountain lion is 95% deer. Once a kill is made, a mountain lion often drags its meal to a secret "cache area" where there is heavy cover. Here, the mountain lion may cover the carcass with leaves and debris, thus ensuring that its meal is secure for a couple of days. After all, leftovers are delicious! Although turkey vultures possess excellent eyes, it is their incredible sense of smell that will lead them to the dead deer, where they may temporarily crash the mountain lion's party and provide the clean-up detail.

The turkey vulture may not be a hunter, but it is a feaster. Its beak is designed to tear and rip at carcass meat as

efficiently as any predator might. Its red head is featherless, ensuring that the turkey vulture can enjoy its meal without the worry of needing a napkin. The turkey vulture is literally the life of the party!

Read more about turkey vultures in the Edgewood Field Guide (<u>foew.org/turkey-vulture</u>).

Field Guide Reveals Fascinating Facts

Want to learn more interesting information about the animals and plants of Edgewood? Take a look at the Edgewood Field Guide at <u>foew.org/field-guide</u>. This online resource is available 24/7. While it always has been useful, it is especially so during the pandemic when visitors cannot go to the Bill and Jean Lane Education Center for information or answers to questions.

The Field Guide features many of the plants, mammals, birds, reptiles and amphibians, and invertebrates that are found in Edgewood Park and Natural Preserve. Field guide entries provide scientific information, photos, and descriptions useful for identification and understanding plant and animal roles in Edgewood ecosystems, as well as some fascinating facts! Here's a sample:

- Chestnut-backed chickadees work together to fight predators. The number of "dees" at the end of their "chicka-dee-dee . . ." warning call sends a message to the flock about how dangerous a nearby predator is.
- The plant name common muilla (*Muilla maritima*) comes from the word "allium" spelled backwards, a humorous anagram referring to the plant's superficial resemblance to onions, in the genus Allium.
- Female turret spiders can live to 16 years of age or more.
- When a Southern alligator lizard grows a new tail, the new tail is almost always shorter and has a different pattern of tiny scales than the original tail.
- Young western bluebirds receive care from their parents, but also from other helpers who may defend territory and bring food to nestlings.



Western bluebird. Photo by Frances Morse

Narrow Leaf Milkweed: Unique and Essential Pollination

by Bruce Homer-Smith

Milkweeds are one of my favorites! They have a crazy-but-effective pollination system, and they are essential to monarch butterflies.

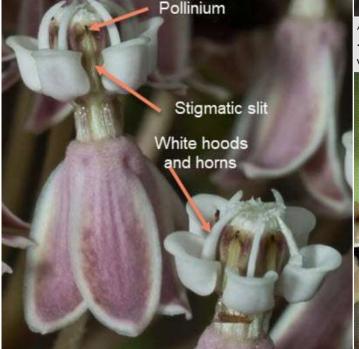
Edgewood has one species, the narrow leaf milkweed (*Asclepias fascicularis*), which blooms May to October and produces bunches of pink flowers.

A closer look at the flowers shows that each has five reflexed pink petals that surround a paler special structure—a gynostemium. The gynostemium manages cross pollination in a unique way.

In the picture below, you see a closeup of the gynostemium, emerging from the reflexed pink petals. Look closely at the labeled parts. The hoods hold lots of nectar. Between each hood is a slot that includes a pollinium and stigmatic slit (more about them below).



- < Gynostemium close-up. Photos © Wilde Legard CC BY-NC-SA 3.0
- v Honeybee drinking from hood. Photo by May Chen



Here's how it works: A honeybee (or other pollinator with strong legs) steps between the hoods as it drinks nectar from them. Its legs get tangled up in pollinia—a pair of yellow pollen sacs connected by a sticky string. The bee carries the whole pollinia structure to the next narrow leaf milkweed.

There, the pollinia on its feet get stuck in the stigmatic slits between the hoods. When the



pollinator flies away, the pollinia are ripped off its feet. The broken sacs of dozens of pollen grains are left sitting right on the stigmatic slit, which connects to many ovules at the base of the flower. Each pollen grain drills a tube down the stigma to reach and fertilize one of those ovules.

continued on page 5

Narrow Leaf Milkweed, from page 4

Only orchids and milkweeds use the pollinia method of bundling pollen grains to reach another plant en masse. This is an advanced and efficient way to pollinate many ovules with one transfer from a pollinator.



Monarch butterfly on milkweed. Photo © Bob Sikora

Monarch butterflies have a special relationship with many milkweeds, including the narrow leaf milkweed. They lay their eggs exclusively on milkweed leaves. The eggs produce larvae that eat the leaves, which contain cardiac glycosides. The monarch has evolved to be able to digest these compounds, but they're poisonous to most animals. The poison provides protection from potential predators for the full grown butterfly.

I hope you'll add narrow leaf milkweed to your list of favorite flowers at Edgewood. Here's how to find them. Start walking up the Clarkia Trail from Cañada Road. At the first sharp right-hand turn after the sign, you'll find narrow leaf milkweed on your left. In the fall, you'll recognize it with its long, narrow leaves and long pods of fluffy seeds. Once you learn this plant, you'll see it



Milkweed in seed (taken in August) at the bend in the Clarkia Trail. *Photo by Bruce Homer-Smith*

elsewhere in Edgewood—in open areas where there is a bit of extra drainage water in the spring.

There's a lot more to learn about milkweeds. For more photos and stories, see:

- Narrow Leaf Milkweed Photo Essay at https://PlantID.net/?TaxonRpt=Asclepias+fascicularis
- Milkweed Pollination at http://classic.plantid.net/LinkArticles/Milkweed Morphology.htm

"Art" Imitates Life

The wildflower survey team discovered a caterpillar disguised as bird droppings on a coffeeberry plant on June 16. The caterpillar was identified as a pale swallowtail larva (*Papilio eurymedon*) and over several weeks the group observed it grow.

In this photo taken July 7, you can see one of the caterpillar's eyespots, which are not eyes at all, but part of its defense system to fool potential predators. You can also see two little orange horn-like structures at the leading edge of its head. That's its osmeterium, a defensive organ that all swallowtail larvae have. The osmeterium is inverted in this photo, but when the caterpillar is threatened, the osmeterium everts into a forked-tongue-like shape and emits a foul odor, which repels spiders and insects.

Some of you may be familiar with the Pokemon Caterpie. Not only does Caterpie resemble a caterpillar, it also has eye spots and an osmeterium that it uses for defense.

Photo by Leah Moffett. Description by Sandy Bernhard.



Boy Scouts Restore the Trail to Inspiration Heights

Over the course of three days in late July, more than 20 volunteers from Boy Scout Troops 109 and 149 in San Mateo County worked hard to restore the trail to Inspiration Heights. The scouts dug trenches to add replacement logs along the trail border, installed the logs and nailed them into the ground, dug water bars into the trail, and shoveled dirt to fill the gaps in the trail caused by water erosion.

The trail restoration work was the Eagle Scout project of Andrew Yagen of Troop 109 in Menlo Park. San Mateo County Parks Volunteer Coordinator Stuart Smith provided support and supervision. Many thanks from the Friends of Edgewood to all who helped accomplish this ambitious project.

Plaques on the logs promote the seven principles of Leave No Trace, an international education program of outdoor ethics and skills that has been adopted by the Boy Scouts of America.





Then and Now

"It is a scientific fact that the occasional contemplation of natural scenes of an impressive character, particularly if this contemplation occurs in connection with relief from ordinary cares, change of air and change of habits, is favorable to the health and vigor of men [sic] and especially to the health and vigor of their intellect beyond any other conditions which can be offered them, that it not only gives pleasure for the time being but increases the subsequent capacity for happiness and the means of securing happiness."

It's been a long time since Frederick Law Olmsted wrote those words in a treatise about national parks in 1865. Olmsted, best known as a landscape architect, was on the board of commissioners for Yosemite. President Lincoln signed the Yosemite Land Grant in 1864—the first time the federal government set aside park land for preservation and public use. Friends of Edgewood can attest to the many benefits of park land set aside for preservation and public use. Olmsted's words still ring true in 2021.



Become a Friend of Edgewood!

JOIN or RENEW your membership ONLINE or by MAIL: **ONLINE:** foew.org/donate BY MAIL: Send this completed form with your donation amount circled to Friends of Edgewood, 3 Old Stage Coach Rd., Redwood City, CA 94062-3801. \$25 \$50 \$100* \$150* 250* \$500* \$ Please make me a Sustaining Member and charge my credit card \$_____ each month. (\$5 minimum) EXPLORER newsletter preference: □ email □ mail *Check if you wish to receive eligible thank you gifts: ☐ 6 Edgewood greeting cards for donations of \$100+ ☐ Plus 1 year of *Bay Nature* magazine for donations of \$150+ Name_____ City/State/Zip_____ Email_____ Phone_____ home □ cell Type of credit card: MasterCard Visa Discover Name on card_____ Card number_____ CVC_____Expires____ Thank you for supporting the Friends of Edgewood. Friends of Edgewood is a 501(c)3 nonprofit. Donations are tax-deductible as allowed by law.

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Friends! A sustaining membership lets you make a monthly donation via your credit card and have a huge impact on programs like Project 467, Junior Explorers, and more. Can you spare just \$5 or more per month to support Friends of Edgewood and the park we love? Go to foew.org/donate, and follow directions to

become a sustaining member, or email us at mem@friendsofedgewood.org, and we will help you get set up.



Friends of Edgewood Natural Preserve 3 Old Stage Coach Road Redwood City, CA 94062-3801

ADDRESS SERVICE REQUESTED

Bill and Jean Lane Education Center at Edgewood Park and Natural Preserve

Closed until further notice.

Please check the website for the latest information.

To learn more about Friends of Edgewood, visit our website at <u>foew.org</u>, call or fax us toll-free at (1-866) GO-EDGEWOOD, or email us <u>info@friendsofedgewood.org</u>.



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Edgewood **EXPLORER**

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IN THIS ISSUE

Improvements and Inspiration	1
Adopt-a-Highway Cleans Up	2
Save the Date: General Meeting Oct. 10	2
Turkey Vultures Are Life of Party	3
Field Guide Reveals Fascinating Facts	3
Milkweed: Unique & Essential Pollination	4
"Art" Imitates Life	5
Boy Scouts Restore Trail	6
Then and Now	7

- → Edgewood Park and Natural Preserve is open for hiking and equestrian use.
- → Please review trail maps, obey signs, and stay on approved trails.
- → Wear or carry a face covering. Put it on when you cannot maintain 6 feet social distance from others.
- → Restrooms in the picnic area are open.
- → Picnic areas are open only for single households.No gatherings are permitted.
- → The Bill and Jean Lane Education Center remains closed.
- → Restrictions may change at any time. Check our website at foew.org for current information.

The Edgewood EXPLORER is published quarterly by Friends of Edgewood Natural Preserve, a nonprofit organization dedicated to preserving and restoring Edgewood and educating the public about its treasures. Friends of Edgewood Board of Directors: Laurie Alexander, Sandra Bernhard, Kathy Goforth, Peter Ingram (president), Bill Korbholz, Kathy Korbholz, Linda Leong, Angela Mallett, Perry McCarty, Barrie Moore. The newsletter is edited by Michele W. Conway and supported by contributions from many Friends.