

Edgewood

EXPLORER

FRIENDS OF EDGEWOOD • SPRING 2022

We're Back! Wildflower Hikes Restart in New Ways

Story and photo by Kathy Korbholz

The silver lining of the pandemic-enforced two-year hiatus gave us the opportunity to reimagine how we deliver wildflower hikes to the public and to solve some long-standing issues with our procedures. The goals of this re-imagination effort are to:

- ❁ Increase: everyone's enjoyment; the ability for visitors to see and hear; everyone's safety
- ❁ Decrease: chaos at the start of a hike; congestion on the trail; group size



Although visitor procedures will be dramatically different from how they were in years past, we will resume offering free public wildflower hikes in early March. Perhaps the most important change is that visitors will have to register in advance, online, via EventBrite. As a part of the online process, visitors will sign both our standard liability waiver and affirm they are COVID-19 symptom free. Therefore, it is not possible to accommodate last minute drop-ins.

We are also moving our season a bit earlier to capture the early blooms and avoid some of the summer heat. Our season will run the three full months of March, April, and May. There will be no wildflower hikes offered in June.

Another important difference is that we will limit the number of visitor tickets per hike to eight. All visitors regardless of age must register for a ticket. We believe this smaller group size will improve the ability for visitors to see and hear, and will reduce the potential of COVID-19

exposure. Further, we have allowed our docents to specify a mask-required hike if they prefer. Visitors will know in advance if they are choosing a mask-required hike.


These wildflower events are being advertised as hikes for adults and older children. We hope this explicit designation will help our visitors come better prepared for a 3-hour hike over uneven terrain. (Believe it or not, we have had visitors show up in high heels, with no water or hat, and with a firm appointment less than halfway through the hike.) For families with small children, we will be offering kid-friendly, one-hour hikes starting at the Education Center on weekend days.

One hallmark of this season is variety. When our docents sign up to lead hikes, they can choose from five different starting points, three different weekend starting times, and even weekday opportunities. Two weeks before the actual hike date, all committed hikes will be offered to the public via EventBrite (www.friendsofedgewood.eventbrite.com).

Because of all these choices, visitors cannot simply show up at the Ed Center at 10:00 on a weekend morning and expect to join a docent-led hike.

After two years of COVID-19 dominating our lives, we all need a dose of nature to lighten our spirits. Please help us get the word out about the opportunity to sign up for a nature boost and join us on the trails.

The new, reimagined wildflower hike procedures are the culmination of several months of weekly meetings by a dedicated planning team: Sandy Bernhard, Nancy Enzlinger, Kathy Goforth, Bill Korbholz, Kathy Korbholz, and Barrie Moore. ❖



**The Bill and Jean Lane Education Center
will be open Saturdays and Sundays
from 10:00 a.m. until 2:00 p.m.
beginning Saturday, March 5**

Reducing Coyote Brush in the Grasslands



Story and photo by Perry McCarty

Walking through Edgewood's grasslands these days, you're likely to see heaps of sticks dotting the hillside between the Sunset and Ridgeview Trails. They are signs of San Mateo County (SMC) Parks brush removal and burn pile project.

Coyote brush is a successional plant that can become established in large stands in the absence of grazing or fire. It also aids establishment of other species in the Coastal Sage Community. The growing shrub cover acts to protect small mammals that scurry about the shrubs, eliminating herbaceous plants. Coyote brush also provides perches for birds that have seeds in their droppings. Both activities promote the development of shrubland (as described in last winter's Explorer by Bruce Homer-Smith) at the cost of grassland habitat.

The Natural Resource Management (NRM) group at SMC Parks is acting to intervene in this transition and maintain and restore grassland by working with Woodside Fire Department to conduct a scrub removal and burn pile project. SMC Parks clears the brush, gathers it in 4' x 4' x 6' piles to dry for 2–3 months, and then Woodside Fire will conduct the burns.

NRM coordinated with several stakeholders when planning the project. The area identified for potential removal was the scrub on both sides of the Sunset Trail from the butterfly gate to the West Kiosk. Some of the shrub acts as an effective barrier between the Sunset Trail and the sensitive butterfly habitat. There was desire to maintain some of that protection. Also, the area includes the PG&E pipelines, so this year's removal was restricted to the area between the Sunset and Ridgeview Trails that are further from the pipelines. Lessons learned from this

year's initial burn pile project should help when planning for shrub removal from those areas not included this year.

Last fall, county Natural Resource Specialists Scott Correa and Samantha Faul walked the area with Paul Heiple of Friends of Edgewood to identify areas for partial or complete clearing of scrub. They also noted locations of special status and locally-rare species to ensure their protection. The plan called for clearing scrub uphill of a large Coast live oak in an area the weeders call Redtail Swale and to reduce by 60% the dense scrub just below the Ridgeview Trail in an area called Tocalopolis. You can see ribbons attached to the plants that were protected there.

SMC Parks worked with contractors January 17–20 to remove the scrub and assemble it into burn piles. Woodside Fire reviewed the piles to ensure they complied with size and separation restrictions. Now the piles are drying and a couple of days will be scheduled, probably in March, for the piles to be burned. Woodside Fire will clear a three foot buffer of vegetation around each pile prior to burning. SMC Parks expects to perform some reseeding this fall in the burn locations.

Burning poison oak can cause irritation if inhaled, though Woodside Fire assures that this is only an issue if people are very close to the fires. SMC Parks will provide public notice when the burning is scheduled and what trails will be closed. The burns will occur during the wildflower-hikes season but hikes will be scheduled to avoid those days.

Some plants respond well after fire. There is a dense stand of chaparral mallow under the PG&E power lines on the ridge across from the Clarkia Trail where plant material had been burned years ago. What might emerge from these new burn piles? We're eager to find out! ❖



President's Message

by Peter Ingram

My message this year is an ask: The FoE Board is looking for motivated friends and members to help us

advance one of our three strategic priorities: "Strengthening Our Organizational Infrastructure."

Back in the fall of 2020, we decided to hold open one vacant seat on the board going into 2021, to allow for a more in-depth review of needs. We wanted to use the COVID-19 "down time" to engage in organizational capacity building. So we applied for (and received) a San Mateo County Parks Foundation grant to fund this new initiative, driven by three goals: add capacity; create more diversity; ensure long-term organizational sustainability. Our list of challenges includes:

- Gaps in skills, abilities, expertise, and passions.
- The challenges of recruiting board members and cultivating active and engaged volunteers (who could step up to board service in the future).
- A lack of job descriptions and succession plans for key roles on the board and at the programs level.

The board attended two half-day strategy sessions in late 2021, to set the stage for a work plan that is driven by some important questions. For example:

- How do we ensure that FoE will continue to be a viable and relevant player in the restoration, preservation, and protection of Edgewood's natural resources?
- How do we adapt to changes in our volunteer population and shifts in demographics of the Edgewood visitors that we serve?
- How can we better understand the impacts of climate change and integrate purpose and knowledge into the work we do?
- What does a successful FoE/parks department partnership look like? How do we get there?
- Do our core obligations to Edgewood need to change?
- How should climate justice and diversity, equity and inclusion inform our stewardship?

So here's the ask: We have established four FoE Board teams: Mission Review, Land Management, Human Resources, and Climate Change. If you feel you could add value in one of these areas, I would love to get an email (president@friendsofedgewood.org). And please feel free to refer others who can bring ideas, energy, and experience to this important work. Thank you! ❖



Meet Intern Bennett Pereira

by Sandy Bernhard

You may already have spotted Bennett in the preserve, wearing his trusty hiking sandals, bent down to examine flora or fungi. Bennett is a 4th-year student studying ecotourism and outdoor leadership at Mount Royal University, in Calgary, Alberta. As part of his

program, he's completing an internship with the Friends of Edgewood this spring. You may be thinking, how did he hear about Edgewood so far up north? Turns out, Bennett spent most of his childhood in San Carlos and often hiked in Edgewood.

Bennett had several choices for internships. He chose Friends of Edgewood partly because he knows and loves the preserve, partly because his commute is just a few minutes from his home, but mostly because we offered Bennett a great variety of projects to work on—some behind a computer screen, some on foot in the preserve.

Bennett has joined the Wednesday Wildflower Survey team and the Friday Weed Warriors, where his friendly personality and open-minded curiosity have made him a welcome presence. He jumped right on a project to photograph, map, and catalog all the various signs in the preserve and provide us with his thoughts on ways to improve interpretive communication with visitors. He'll also be doing some work wrangling the huge amount of data from our Camera Trapping program. When we discovered Bennett has an expertise in fungi, we asked if he could create a Fungi section to our online Field Guide. He is thrilled to have the opportunity and set right to work.

Bennett plans to work as a mountaineering and kayaking guide when he graduates, at least for a few years until the next choice becomes clear. He is candid about how in his late teens he was heading into trouble as a misfit with traditional schooling, but after attending a school in Utah that showed him the joys and challenges of being an outdoor adventurer and naturalist, he got back on a positive track.

If you see Bennett, give him a friendly wave or stop to say hello and inquire what he's up to—with his energy and enthusiasm, who knows what he'll be doing next! ❖



Rufus hummingbird and common paintbrush (*Castilleja affinis*) Photo by Jacquelynn Resmini www.studebakerstudio.com

How *Castillejas* Attract Pollinators and Thrive by Bruce Homer-Smith

Edgewood has six plants in the *Castilleja* genus—two paintbrushes, two owl’s clovers, cream sacs, and valley tassels. They are all colorful, attracting our eyes and those of pollinators.

Paintbrush

Let’s start with coast paintbrush, common at the seashore and in California’s coastal hills. It’s found along the Edgewood and Franciscan trails. Coast paintbrush is built in several layers—leaves wrap around bracts which wrap around a tubular flower. Young leaves and bracts are often green at their base but change to a brilliant orange or red at their divided tips.

The foliage gets more deeply colored as flowers mature, attracting pollinators to the plant. The flowers themselves are mostly hidden by the bracts but emerge as folded-over red, orange, or greenish-yellow petals that cover the stamens. The pistil generally sticks out beyond the petals.



Coast paintbrush (*Castilleja affinis* ssp. *affinis*)
Photo by Wilde Legard ([CC BY-NC-SA 3.0](https://creativecommons.org/licenses/by-nc-sa/3.0/))

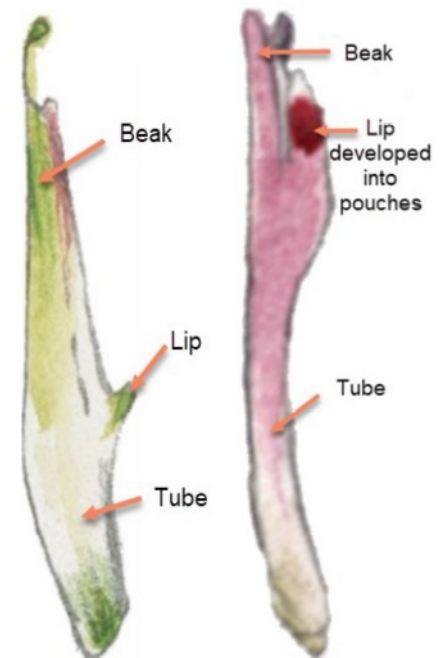
Floral Design

All *Castilleja* flowers have a similar design. They have a nectar-coated ovary at the bottom of a long floral tube. Hummingbirds, butterflies, and bees reach down the tube to get to the nectar, picking up and dropping off pollen in the process.

The floral tube is topped with a set of petals called the lip and a separate petal, sticking up and folded along its length, called the beak.

Paintbrushes have tiny lips and long beaks. Owl’s clovers, cream sacs, and valley tassels have well developed lips and short beaks.

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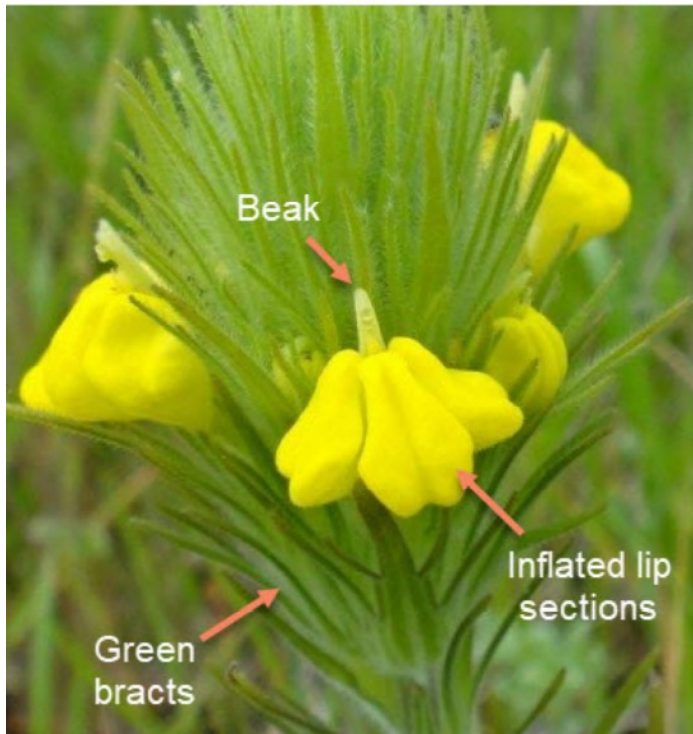
Left: Coast paintbrush (*Castilleja affinis*)

Right: Owl’s clover (*Castilleja exserta*)

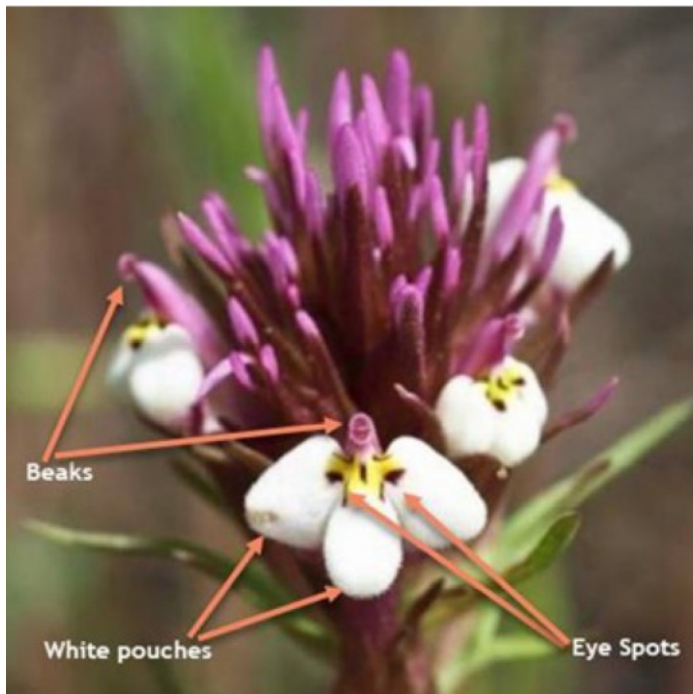
Drawings © John Muir Laws. All rights reserved.

Castillejas continued from page 4

Instead of attracting pollinators with bright red foliage, these *Castillejas*—cream sacs and graceful owl’s clover—advertise with colorful floral lips that contrast with the bracts that they are wrapped in.



Cream sacs (*Castilleja rubicundula*)
Photo © Neal Kramer. All rights reserved.



Graceful owl’s clover (*Castilleja densiflora* ssp. *gracilis*)
Photo by Keir Morse (CC BY-NC-SA 3.0)

Castillejas Are Hemi-Parasites

All *Castillejas* are hemi-parasites—they use both photosynthesis and tap into the roots of adjacent plants to gain carbohydrates. This ability to diversify food sources allows them to thrive in tough situations (lack of water, poor soil, or short growing season) in a wide variety of habits including deserts, coastal chaparral, serpentine grasslands, and alpine meadows. There are about 200 species of *Castillejas* worldwide, concentrating in North America.

Castillejas use haustoria—slender projections on their roots—to penetrate the cell walls of adjacent plant roots. The haustoria sit between the cell wall and the cell membrane of the host plant’s vascular bundles, absorbing water, carbohydrates, and nutrients. Since they depend on other plants, *Castillejas* generally don’t form tight clusters but spread out among other populations.



Cream sacs (*Castilleja rubicundula*) spread out among other plants. Photo by Toni Corelli (CC BY-NA 3.0)

Ecological Impact

The ability of *Castillejas* to parasitize adjacent plants impacts the many ecosystems where they are found:

- They can change the competitive balance. For instance, paintbrush can break up a monoculture by sapping the dominant species, making room for other plants and animals to be successful.
- They may provide subtle benefits to the host plant. For instance, the interplant connections may enhance communication in response to insect invasions of the community.

Want more? See <https://PlantID.net/?TaxonRpt=Castilleja+affinis+ssp.+affinis> and <https://oleaeuropea.wordpress.com/2011/07/27/indian-paintbrush-a-pretty-parasite/> ❖



Sign explains: "Sensitive Plant Habitat—Please stay on the trails!" Photo by Barrie Moore

Are You on the Right Path?

by Bill Korbholz

That sounds more like a psycho-therapy question, but I meant it as it applies to Edgewood. I'm following up on the article written by my wife, Kathy Korbholz, for the winter 2020–2021 issue of the Explorer, in which she introduced us to the growing problem of social trails and the measures we have taken to address them.

As a reminder, we use the term social trails to refer to informal, non-designated trails between two locations. You've surely seen them in your visits to Edgewood, and frequent visitors will agree that the number of them and their visibility have increased in the past couple of years. Our theory is that the pandemic has brought more inexperienced visitors who are unaware of (or oblivious to) the preserve's rules and the importance of protecting Edgewood's habitats.

As Kathy wrote, a handful of FoE volunteers became aware of this developing problem back in September 2020 and launched a program to analyze the reasons people follow social trails, survey them, and perform remediation where possible. The team consisted of Perry McCarty, Howie Smith, Ken and Dee Himes, and Kathy and me. We also got support from county parks staffers Stuart Smith and Rogelio Castaneda.

We're doing surveys approximately every six months, so three rounds so far. As of last December, we have documented over 100 social trails, a staggering number, given that there are only 11 authorized trails.

Our surveys (see example, page 7) include statistical information such as length, aspect,

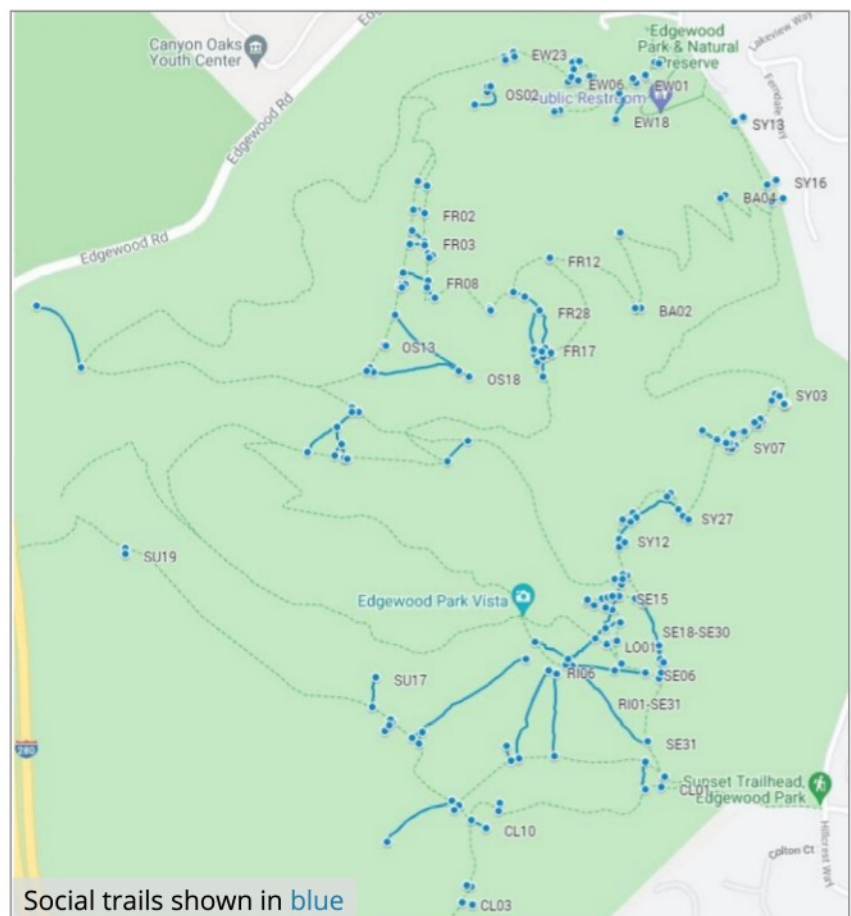
and GPS position of the trail endpoints. There is also a small map to help us locate the trail. But most useful are the photos taken at the time of the survey, before and after remediation was performed. As we develop a history of surveys across several years, we'll be able to track the effectiveness of our mitigation techniques.

What are our mitigation techniques? Typically, we cover the trails, or at least the trail mouths, with brush. In the grasslands, we rake thatch over the trails. We've also installed a helpful sign encouraging visitors to take the authorized trail. In one case, parks staff erected a fence on the Sylvan Trail. Fences are by far the most effective technique, but they are costly and labor-intensive to build, and, of course, quite intrusive.

It's too early to assess our progress, although the early winter rains last year stimulated much plant germination along these trails, and that helps to disguise them.

My appeal to you is to please avoid using social trails. They heighten trail maintenance issues, threaten Edgewood's habitats, detract from Edgewood's beauty, and legitimize improper visitor behavior.

For more information about our efforts, email social-trails@friendsofedgewood.org. ❖



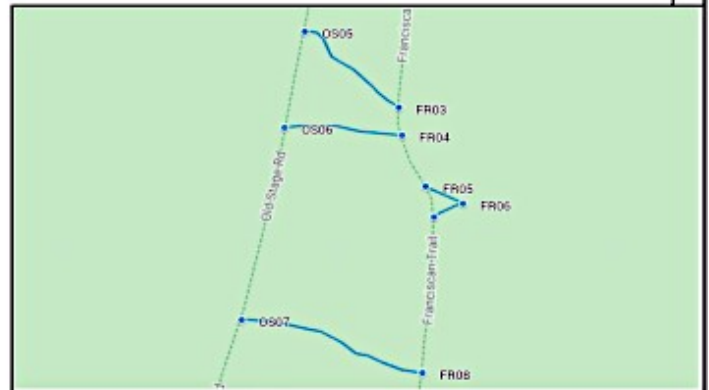
Description	Social Trail Data Sheet		Trail Designation	Date	Length (est. ft.)	Width (est. ft.)
	Reason for Trail	Shortcut to another trail/segment		OS05-FR03	9/29/2020	95
Assessment	Soil Type	Soil Compaction	Potential Erosion	Beg Lat	Beg Long	Urgency
	Fertile	High	Med	37.47044	-122.28339	High
	Average Steepness	Insolation	Wetness	End Lat	End Long	Slope Aspect
	Moderate	Sun	Low	37.47027	-122.28315	SE
				% Veg Cover	% Weed Cover	
			Low	Low		

Recommendations / Remediations

We initially considered decompacting and seeding the trail. We ended up decompacting a 5-ft segment next to the oak tree with a pick ax, and covering the whole trail with thatch. It may be desirable to cover parts of the trail with branches. We left a few branches at the trail mouths.

Comments

Significant gopher activity. FR03 after photo was taken 10/29/2020.



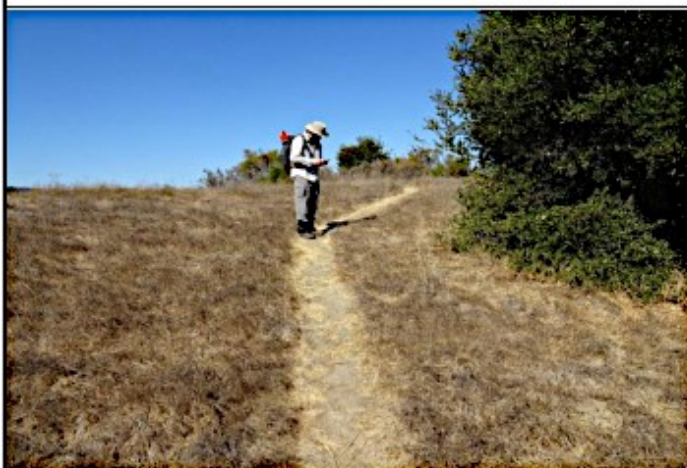
Map (OS-FR Complex)



OS05 Before (DSC01998)



OS05 After (DSC02053)



FR03 Before (DSC01996)



FR03 After (DSC02051)

Treasurer's Report for 2021

COVID-19 Restrictions Presented Challenges and Opportunities

by Angela Mallett

Friends of Edgewood board members, along with other volunteers, started the year planning with COVID-19 restrictions in mind. Many of our docents joined our Trail Ambassador Program during the wildflower season, allowing them to share their love of Edgewood with visitors without a large docent-led group.

While the Bill and Jean Lane Education Center was closed for the year, we took the opportunity to plan and start some needed repairs; we also planned precautions for opening in the future. Docent training and the Junior Explorers remained canceled for the year.

Outdoor programs not involving the general public, like Weed Warriors, nest box monitoring, and Adopt-a-Highway, continued with modifications.

Our Members General Meeting was held for a second year on Zoom in October. The Board set aside a couple of mornings to revisit the mission and programs supported by the Friends of Edgewood. We hope to excite our current members and attract new members in 2022–2023 with new and updated ideas.

Our biggest expenditure in 2021 was habitat restoration and preservation (Project 467), including the Green Grass initiative (HMP experimentation), Edgewood Farms for seed propagation, and San Mateo thornmint and white-rayed pentachaeta restoration.

2021 was another great year for revenue, allowing us to spend more on habitat restoration and preservation without running a deficit. Membership dues and other gifts

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**FRIENDS OF
EDGEWOOD
SPRING 2022
WILDFLOWER
HIKES
MAR-APR-MAY
NEW DAYS & TIMES**



FREE DOCENT HIKES

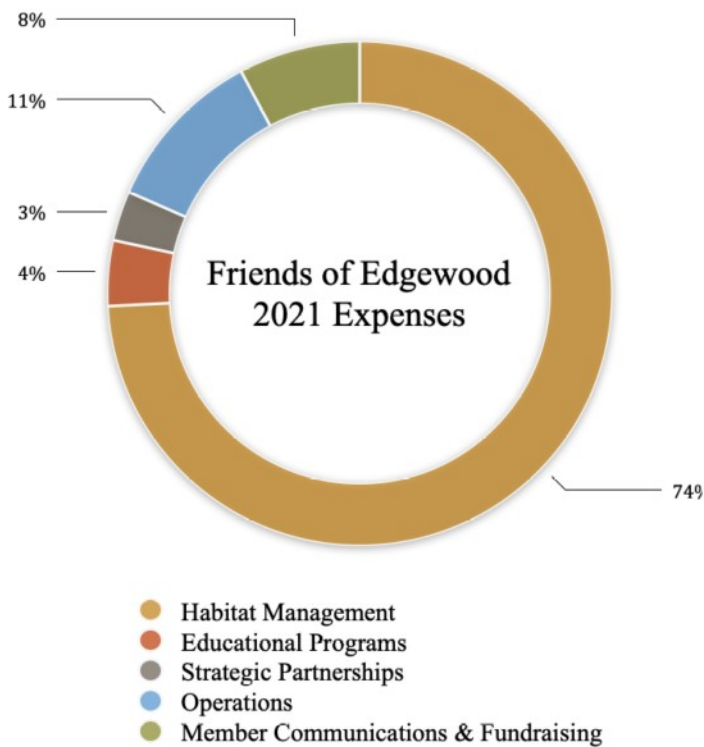
**AT EDGEWOOD PARK & NATURAL PRESERVE
MORE INFO AND SIGN UP AT
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Treasurer's Report *continued from page 8*

amounted to 96% of (non-investment) revenue. We also received some generous grants, primarily for habitat restoration, amounting to the remaining 4% of our incoming (non-investment) revenue.

In 2021, 74% of our expense budget was used for habitat restoration and preservation. Our educational programs and the Bill and Jean Lane Education Center, limited greatly by COVID-19 restrictions, accounted for 4%. Another 8% went to member communications and fundraising, which includes publishing the Explorer newsletter. We also granted 3% to our nonprofit partners who are key to our strategic goals. The remaining expenses were costs related to incoming donations, insurance, and other general operating expenses.



As a mature, all-volunteer run nonprofit organization, Friends of Edgewood Natural Preserve endeavors to use our financial resources wisely, to spend our yearly funding within our means, and invest for the longer term to support the continuation and growth of our programs. Our 2021 Annual Report can be found at <https://friendsofedgeswood.org/annual-report>.

Thank you again to our volunteers, members, and friends for your generous support. We appreciate your donations of both money and time to preserve and restore Edgewood County Park and Natural Preserve as a unique treasure in our neighborhood. ❖

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 _____

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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@friendsofedgeswood.org, and we will help you get set up.



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Friends of Edgewood

PRESERVE • EDUCATE • RESTORE

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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

Open Saturdays and Sundays, 10 a.m. – 2 p.m.
Please check the website for the latest information.

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



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Edgewood EXPLORER

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- Edgewood Park and Natural Preserve is open for hiking and equestrian use.
- Please review trail maps, obey signs, and stay on approved trails.
- Maintain six feet social distancing from people not in your group.
- The Bill and Jean Lane Education Center is open Saturdays and Sundays, 10 a.m. to 2 p.m.
- To join a docent-led wildflower hike, you must sign up in advance on EventBrite. (See p. 1.)
- Restrooms in the picnic area are open daily.
- Picnicking is allowed.
- 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, Sandy Bernhard, Nancy Enzinger, Kathy Goforth, Peter Ingram (president), 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.