

Edgewood Explorer



PRESERVE • EDUCATE • RESTORE

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Changes to Friends of Edgewood Donation Levels and Premiums



by Bill Korbholz, FoE President

The Friends of Edgewood is instituting several improvements to its system of donation levels and corresponding premiums that we make available to our members.

Our previous system had been in place without change for almost 15 years. Several people had commented that it was difficult to understand and inconvenient to use. The changes that we are making as of September 1, 2014 should address those concerns.

Opposite the back page of this issue of the Explorer, you will find our new membership panel which depicts revised donation levels and associated premiums. The first thing you may notice is that you can now join or renew your membership online. To renew online, just click on the Donate / Join / Renew button on our home page at www.FriendsOfEdgewood.org.

You will also notice that our new membership panel, which mirrors the layout of our new membership brochure, has a cleaner and more attractive look. Choose from among three recommended membership levels, or donate whatever amount you desire.

We still offer our photo greeting cards and a Bay Nature subscription as premiums at roughly the same levels as before. However, we no longer offer Toni Corelli's Flora of Edgewood book, since most of our members who are interested in this book already own one. Of course, we continue to sell the Flora book at the Ed Center or online via our website.

We hope that these changes will make it simpler and rewarding for you to support the Friends. As always, your generosity, both financial and in terms of voluntary time and effort, is what enables us to continue our fine programs of nature education, interpretation, and habitat management.

Upcoming Third Saturday Docent-Led Nature Hikes - Free! by Todd Reimche

Friends of Edgewood Park and Natural Preserve have exciting nature hikes planned for Fall and Winter 2014/2015. Every third Saturday, a different docent will lead a themed nature hike. All hikes begin at the Bill and Jean Lane Education Center at 10 AM. Everyone is welcome!

September 20, 2014: A Natural Celebration of the Equinox. Docent: Bill Korbholz

The fall equinox traditionally marks a time of celebration after a bountiful harvest, if you're a human. Join docent Bill Korbholz on an easy 3-mile walk to discuss the meaning of the equinox and to observe how plants and animals react to this seasonal transition at Edgewood.

October 18, 2104: Who Haunts Edgewood? Docent: Kathleen Goforth

Join docent Kathleen Goforth on a hike through Edgewood's past and present. Learn about the Preserve's human and natural history (and what lies ahead) as we explore the woodlands, grasslands, and chaparral.

November 15, 2014: Water Wakes Up Edgewood. Docents: John and Nancy Baum

December 20, 2014: The Dusky Footed Wood Rat. Docent: Kathryn Strachota

January 17, 2015: Native Peoples at Edgewood. Docent: Kathy Korbholz

February 21, 2015: Buds and Birds. Docent: Trevlyn Williams

Come out and join the nature hikes, learn something new about and take a walk in the park – Edgewood Park and Natural Preserve, that is! ☺

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2014 Nest Box Report

by Frances K. Morse



Frances Morse inspects cavity nest boxes at Edgewood.
© 2014 Laurie Alexander

My second season as Edgewood’s Nest Box Coordinator has ended. I was ably assisted this year by avid birders Whitney Mortimer and Chris O’Connell (Sequoia Audubon Society) as well as some great ‘substitute’ monitors (John Morse, Laurie Alexander, and Thanh Mougeot). Armed with our notebooks, inspection mirrors, flashlights, binoculars, and paint scrapers (for cleaning out old nests and poop), we monitored 24 boxes once a week from March 3 to July 20. We experienced lots of joy (e.g., making eye contact with a calm mama bluebird on her eggs as we opened a box) as well as sadness (e.g., finding a tree swallow mom who had died in her nest, leaving 4 unhatched eggs). We also had many surprises (e.g., encountering non-avian critters in our boxes - gopher snakes, wasps, and mice)!



Whitney Mortimer joined the monitoring team this year.
© 2014 Frances Morse



Western Bluebird mama tends her eggs inside a cavity nest.
© 2014 Thanh Mougeot

From our 24 boxes, we counted 19 nests (2 were second broods) – built by 15 Western Bluebird pairs (WEBL), three Tree Swallow pairs (TRSW), and one Ash-throated Flycatcher pair (ATFL).



Tree Swallow sits on her eggs in her feathery nest.
© 2014 Ken Hickman

As you can see in the table below, overall, 61 (66%) of our 93 eggs turned into fledglings. Among the bluebirds, 70% fledged. The tree swallows (only 3 nests) did not fare as well, with only 40% of their eggs resulting in fledglings.

Bird	Total Nests	Total Eggs	Total # (%) Hatched	Total # (%) Fledged
WEBL	15	74	65 (88%)	52 (70%)
TRSW	3	15	10 (67%)	6 (40%)
ATFL	1	4	4 (100%)	3 (75%)
Total	19	93	79 (85%)	61 (66%)

(continued on Page 3)

(2014 Nest Box...continued from Page 2) The drought and hot temperatures seemed to impact our results this year – good and bad. The bluebirds started nest building earlier (March 3 versus mid-April), and only two boxes had second nests (versus five in 2013). In 2013, we had more nests (24 versus 19) and more eggs (108 versus 93), but surprisingly, the ‘success’ rates this year were slightly higher. That is, this year the bluebird hatching rate was 88% (versus 81% in 2013), and the fledging rate was 70% (versus 63% in 2013).



Six beautiful Western Bluebird eggs.

© 2014 Thanh Mougeot

As usual, we will be reporting our data to the Sequoia Audubon Society and to the California Bluebird Recovery Program (CBRP) (<http://www.cbrp.org>). Early reporting at both groups seems to suggest fewer fledglings and many unexplained deaths of eggs and hatchlings in 2014.

Looking forward, I will be participating in the newly formed Edgewood Natural Resources

Management Group, headed by Ramona Arechiga, to give the cavity-nesting birds a voice (chirp!) in the mowing and weeding programs at our park. These programs have been shown to improve the feeding grounds for the bluebirds. I will also be following the newest efforts by CBRP - *Wonderful Life of a Dying Tree* – a youth program that is advocating for the preservation of snag habitats (dead trees!) as a more sustainable and ecologically beneficial solution to the cavity nester problem. If you're interested in participating in the nest box program at Edgewood, please contact me at Info@FriendsofEdgewood.org.

The drought conditions will make it tough for the 61 fledglings of the Edgewood Flight School Class of 2014, but hopefully many will survive and enhance our pleasure as we walk in Edgewood.



Six very crowded Western Bluebirds about to fledge.

© 2014 Whitney Mortimer

Viva la Bluebird! ♡

Flooring at the Bill and Jean Lane Education Center Gets Some TLC

After a few years of welcoming visitors through the repurposed doors, the flooring of the Bill and Jean Lane Education Center (BJLEC) is being re-oiled to restore its beautiful color and shine. The floors are being treated with a plant-based wood-sealing oil wax (i.e., safecoat). Now that we have new concrete pathways leading into the BJLEC, we hope the floors will stay cleaner and shinier longer.

You may recall that the floorboards in the Education Center were milled from reclaimed dunnage from cargo ships. Where the ship was loaded on the other side of the world, the wood for dunnage was considered to be cheap enough to use it to load and secure cargo. Here in the US, however, we consider the wood to be "exotic hardwood". Instead of being thrown into a landfill when the ship arrived at a port near here, the folks at [Terramai](http://Terramai.com) milled it into beautiful flooring.

Did you know?

- ☞ The person who originally installed and oiled the floor developed a fondness for certain floorboards. He especially liked a couple of boards in front of the Life in Serpentine exhibit.
- ☞ Thomas, who recently oiled the floor, likes the unusual tangerine orange color in a piece of flooring just at the edge of the storage room door.
- ☞ Do you have a favorite board in the floor at the Education Center? ❖

Peninsula Young Writers (PYW) Return to Edgewood



Martha Vercoutere with PYW. © 2014 Beth Harrison
(<http://pywsummerblog.weebly.com/photos.html>)

PYW Executive Director Beth Harrison writes:

"Thank you so much, Jack, Mickey, Martha, and Laurie, for leading such successful visits to Edgewood Park for our Peninsula Young Writers on July 8 and 22. Check out our blog again for [photos](http://pywsummerblog.weebly.com/photos.html) (<http://pywsummerblog.weebly.com/photos.html>) from the field trip as well as some wonderful [poems](http://pywsummerblog.weebly.com/poetry) (<http://pywsummerblog.weebly.com/poetry>) the campers wrote afterwards. The children were really inspired by the careful observations you led them to make of their surroundings and the flora and fauna in the park. Best regards, Beth"

Laurie Alexander reported that the poetry dated 7/18 and 7/25 is from after the kids took a walk at Edgewood with the Junior Explorer program. Jack Stovel and Mickey Salgo led the walks on 7/8. Martha Vercoutere and Laurie Alexander led the walks on 7/22.

Edgewood After Dark

by Kathy Korbholz

Saturday July 26th dawned hot; the exclusive Edgewood event that evening promised a chance to cool down and experience the Preserve after dark. This particular evening, with its new moon, was chosen for stargazing because more stars can be seen when the moon is not visible in the night sky. Fifteen lucky participants joined local College of San Mateo (CSM) astronomy professor Darryl Stanford and docents Bill and Kathy Korbholz to walk up to Inspiration Heights from the Clarkia Trailhead on Cañada Road.



© 2014 Kathy Korbholz

The group made it to the top of Inspiration Heights in time to see the sun set behind the Santa Cruz Mountains and turn the sky incredible shades of pink and orange.



© 2014 Kathy Korbholz

As daylight receded, Darryl taught everyone how to use a Planisphere to locate objects in the night sky. The six Planispheres, together with red light flashlights, were generously donated by one of our FoE board members. Red light preserves one's night vision, making it easier to look back and forth from the Planisphere to the dark sky.

(continued on Page 5)

(*Edgewood After Dark...continued from Page 4*)



Night hikers learn how to use Planispheres.
© 2014 Kathy Korbholz

Despite the thin, fast-moving clouds, visitors spotted the planet Mars, the stars Spica, Arcturus, Polaris (the North Star), and Vega, and the constellations Scorpio and Ophiuchus. Darryl explained that star clusters arranged like their namesake (e.g., the Big Dipper and the summer triangle) are called asterisms, and the brightest objects are known as first magnitude. Darryl was so knowledgeable that not a single astronomy question stumped him. He made the information so fun and easy to absorb that several participants said they intend to take his class at CSM.

A second night event was held on August 10th to coincide with a supermoon*. After the short hike up to Inspiration Heights from Cañada Road, 30 adventurous participants were pleasantly surprised by a fruit, cheese, and wine spread. Guests helped themselves and then watched the sun set and shortly thereafter saw the moon rise behind the majestic valley oak atop the hill. One hardy soul brought along his telescope to share with the group and add to the viewing enjoyment.

New San Mateo County Parks Director Marlene Finley and recently hired Natural Resource Manager Ramona Arechiga offered their perspectives about Edgewood Natural Preserve,

a true gem among the county parks. Marlene mentioned that she completely understood the passion and sense of ownership the Friends have for “their park”. She had similar feelings for a local open space as she was growing up. Both women commented on the valuable partnerships that exist between the Parks Department and Edgewood’s volunteers and supporters.



© 2014 Kathy Korbholz

*A supermoon is the coincidence of a full moon or a new moon with the closest approach (perigee) the moon makes to the Earth on its elliptical orbit. The result is the largest apparent size of the lunar disk as seen from Earth. According to NASA, a full moon at perigee is up to 14% larger and 30% brighter than one at its farthest point, or apogee. Source: http://en.wikipedia.org/wiki/Supermoon#cite_note-PhillipsNASA2011-8

The Friends of Edgewood want to thank the San Mateo County Parks Department for providing seasonal aide Len Arends to accompany both special event groups. He added to the experience and made everyone feel safe. Len also graciously helped move supplies to the top of the hill for the wine and cheese party.

The Friends plan on offering night events like these again in 2015, and attendance will be limited to minimize impact on the park and ensure that participants can hear any special guest speaker(s). Watch for announcements and sign up early to secure your spot!



New Flap in Bird Migration

by Carolyn J. Strange



For many animals, autumn means migration, and chevrons of birds flying south are a sign of the season. Many species of large birds fly in V-formation, as do squadrons of planes. The right V-shape saves energy for those following the leader. Fixed-wing planes have it relatively easy once they achieve optimal spacing and orientation. Birds, of course, must flap their wings. So perhaps it should be no surprise (even though it's still awesome) that they also optimize wing beat timing to maximize lift.

Whether fixed or flapping, a pair of wing tips moving through the air creates a pair of trailing vortices, which push the air beneath the body downward (downwash). Air to the sides gets pushed up (upwash). To benefit from an upwash zone, situate yourself behind and to the side of whoever is flying ahead. And always avoid the downwash directly behind. It works for planes, but does it work for birds?

In a 2001 study, specially trained pelicans were fitted with heart rate monitors, as a proxy for energy expenditure. Indeed, flying in V-formation seemed to save trailing birds significant energy.

More recently, another research group delved deeper. They developed tiny, sensitive monitors able to record information such as speed, direction, position and wing flaps. The study also required finding a small flock of birds to wear the little backpacks. And because the monitors lacked transmitters, *collecting* the data meant getting the monitors back from the birds.

So the researchers teamed up with an Austrian conservation group working to reintroduce the critically endangered northern bald ibis back into its old European range. The conservationists had reared several young birds and were teaching them their migration route using a microlight aircraft, with the human “moms” perched on the back, calling for the young birds to follow. This unique mixed flock stopped at fixed points along the way, allowing the ground crew to gather data from the birds.

The results showed that birds flew about a meter behind and a meter beside the bird ahead, just as theory predicted. Some birds seemed to have a preference, for example, for flying on a certain side of the V or near the center instead of along the edges, but generally the birds shifted around, with no apparent leaders.

But it turns out that the birds also adjust their flapping just right. It's not about flapping perfectly in or out of synchrony—although they might do either one, depending on circumstances. Rather, the wing-tip of the following bird traces the same path as the wing-tip of the bird ahead—thus catching the vortex's upwash. So, rather than catching a boost about 20% of the time, as predicted, the birds ride the upwash throughout the flap cycle. The research team compared it to walking through snow by stepping in someone else's footprints—it's active, not passive, yet much easier. The birds also react quickly, changing their behavior in response to the wake they encounter.

No one knows exactly how they do it. Do they watch other birds? Do they feel air currents with their feathers? Or do they just follow positive feedback, and surf the air in the way that's easiest? In any case, the skill seems to be self-taught, not inborn. These young ibis didn't even have the advantage of learning V-form flying from older birds. Indeed, when they began their migration, they flew all over the place, taking some time before learning the V-formation.

(continued on Page 7)

(New Flap...continued from Page 6)

While the results may well apply to other large birds, fast-flapping small birds create smaller, harder-to-catch air wakes, and they would need incredibly fast reflexes to take advantage of them. Also, not everything can be figured out "on the fly." According to another study, with whooping cranes heading from Florida to Wisconsin, having older birds in the flock increases migration efficiency in a different way —because they know where they're going! The older the birds get, the straighter and shorter is the flight path of their flock. ✍

References:

<http://www.scientificamerican.com/video/v-pattern-helps-birds-flap-more-efficiently/>

<http://www.nature.com/nature/journal/v413/n6857/abs/413697ao.html>

I go to nature to be soothed and healed, and to have my senses put in order.
~John Burroughs

Volunteer Spotlight

submitted by Laurie Alexander

Did you know...18-year old Matthew James volunteered his time and expertise during his summer vacations in 2013 and 2014 to research and create web pages about Edgewood animals, including Coyotes, Pacific Treefrogs, and Western Fence and Southern Alligator Lizards? Matt is especially interested in amphibians and reptiles, and he quickly learned to use Word Press to publish new pages on our website. Check them out!

FriendsofEdgewood.org/coyote

FriendsofEdgewood.org/pacific-chorus-frog

FriendsofEdgewood.org/western-fence-lizard

FriendsofEdgewood.org/southern-alligator-lizard

Got a favorite animal? You, too, can research and write pages for the Friends of Edgewood website. Want to learn the basics of building a web page? Gain transferable skills and help publish content on FoE's website. Contact Info@FriendsofEdgewood.org.

Yes, I'd like to become a Friend of Edgewood!

Here's my membership donation to support preservation, education, and restoration:

Join or renew online at FriendsofEdgewood.org

- \$25 Friend
- \$50 Advocate *
- \$100 Steward *
- Other: \$ _____

* Donors of \$50 or more receive a set of six Edgewood greeting cards; donors of \$100 or more also receive a one-year subscription to *Bay Nature Magazine*.

Name _____

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I'd like to get the newsletter by email mail.

- Please keep my thank-you gifts.
- Please keep my donation anonymous.

Make checks payable to **Friends of Edgewood**, and mail to:

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For volunteer opportunities, visit FriendsofEdgewood.org/get-involved



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**Calling
 all Friends to the**
 ANNUAL MEETING
 Sunday, Oct. 19, 2014; 11:30 AM
Details will be mailed soon!
 Food - Fun - Festivities
 FREE!!!

Mission Statement of The Friends of Edgewood — To protect and celebrate Edgewood as a unique treasure by promoting exemplary stewardship, and by reaching out with informative public programs. www.friendsofedgeswood.org

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**Bill and Jean Lane
 Education Center -
 Autumn Hours and By
 Appointment***

Wed	9:30 am to 12:30 pm
Sat	9:30 am to 4 pm
Sun	9:30 am to 4 pm

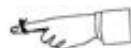
*Subject to volunteer staffing.

**2014
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 Directors**

Laurie Alexander
 Bill Korbholz
 Kathy Korbholz
 Linda Leong
 John Morse
 Thanh Mougeot
 Mickey Salgo
 Howie Smith
 Jack Stovel
 Mary Wilson



UPCOMING EVENTS

Annual Meeting (10/19) 

Special Event (RSVP Required)

Nature Walk with

Dianne West-Bourke: 10/4

<http://edgewoodnaturewalk.eventbrite.com/>

Adopt-a-Highway

Next Sessions: 9/7, 10/4, 11/2, 12/6

To volunteer or get more information, contact

Ken Seydel at adoptahighway-coordinator@friendsofedgeswood.org

Second Sunday Bird Walks

9/14, 10/12, 11/9, 12/14 (8 AM start)

Third Saturday Nature Walks

9/20, 10/18, 11/15, 12/20 (10 AM start)

The Edgewood Explorer is published quarterly by the Friends of Edgewood Natural Preserve, a nonprofit organization dedicated to preserving and restoring Edgewood and to educating the public about its treasures. The newsletter is edited by Linda Leong and is supported by contributions from many Friends. For more information about the Friends of Edgewood, visit our website at www.friendsofedgeswood.org, mail us at PO Box 3422, Redwood City, CA 94064-3422, leave a message or fax us toll-free at (1-866) GO-EDGEWOOD (1-866-463-3439), or email us at info@friendsofedgeswood.org.