FRIENDS OF EDGEWOOD NATURAL PRESERVE

Explorer Edgewood

March 2005 Volume 12 Number 1

DOCENT WALKS START MARCH 12

By Carolyn Strange

Abundant rains have gotten the wildflowers off to a great start—early and in a different order than prior years—and our docents are ready to help visitors enjoy and understand the show. This year docent walks run every weekend from Saturday, March 12 to Sunday, June 12.

We're experimenting again with just one of the alternate trailheads we tried last year, and will lead walks from the Clarkia trailhead (at Cañada Rd.) on five Saturdays in April and May. The old Park & Ride access provided great access to our serpentine grassland wildflower displays, but that's gone for good. Clarkia seems like the next best route. Turnout was low at the alternate trailheads last year, so now all we have to do is get the word out to the public!

We have a wonderful new flyer this year to help with that task of attracting visitors to our docent walks. This flyer springs from a wonderful collaboration with the San Mateo County Parks and Recreation Foundation. They're spotlighting Edgewood's interpretive center in a fundraising mailing, and wanted to include our flyer—so they hired a graphic designer to help us spiff it up. A real win-win situation! As the enclosed flyer notes, the more specific docent schedule appears on the Friends web site (as does a PDF of the flyer).

Also new this year, and another win-win, is a collaboration with our intrepid Weed Warriors. They've planned special weeding Saturdays during the walks season (see page 8), and will choose their work spots to increase the likelihood that the docent tours will encounter the weeding crews, presenting a live, interactive interpretive display of the ongoing preservation

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INTERPRETIVE CENTER UPDATE

By Bill Korbholz



The proposed design of the exhibits in the exhibit room of the Interpretive Center. See the article for descriptions of the numbered exhibits.

We have lots of exciting news to report about the project to build an Interpretive Center at Edgewood.

Fundraising Continues

First, recall that the Friends of Edgewood pledged \$10,000 last year as a part of a \$50,000 challenge grant to the Parks Foundation. Melvin and Joan Lane pledged \$25,000 and the remaining \$10,000 came from an anonymous donor. We're happy to report that thanks to your

(Continued on page 5)

INSIDE THE EXPLORER

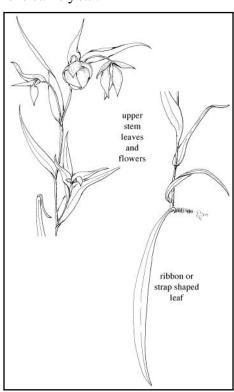
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GREEN RIBBONS AND BOWS

By Toni Corelli

The long, narrow green ribbon-like leaves lying on the ground are the first leaves of the white globe lily, also known as fairy lantern (*Calochortus albus*). The large green bow-like leaves are the resting leaves of the checker lily, also know as Mission bells (*Fritillaria affinis* var. *affinis*).

The underground bulbs of these plants produce these leaves. The purpose of these leaves is different for these two plants. Their function is to provide carbohy drates to the bulb to produce the stem leaves and flowers, but sometimes not in the same year.



Illustrations by Linda Bea Miller

For the white globe lily the bulb produces a ribbon-like leaf. It is often referred to as strap shaped and can be over a foot long.

It is a solitary basal leaf and lies along the ground before the bulb sends up the

flowering stem.

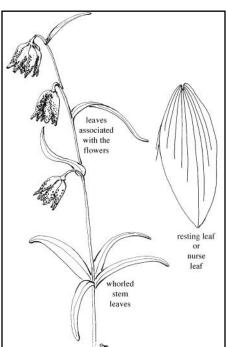
The upper stem leaves associated with the flowers are upright and the flowering stem can be much branched with white globe-like flowers. Usually the white globe lily stems, leaves, and flowers will be produced in the same season as the ribbon-like leaf.

The white globe lily ribbon-like leaves are

prolific this year and can be seen all along the trails in the woodland and chaparral; usually it flowers in

late March to April.

For the checker lily, the bow-like leaves serve to add nutrients to the bulb to provide the strength needed to produce the flowering stem and leaves for another year.



This broad

bow-like leaf has been referred to as a resting or a nurse-leaf since usually the bulb will not produce the flowering stem and leaves in the same season.

In the resting phase, this bow-like leaf is the only evidence that this plant is there this year. When not in the resting phase the bulb will send up a tall stalk with 1 or more whorls of leaves along the stem. Near the flowers are the other green solitary leaves.

So the checker lily can produce three different leaf types, the bow-like leaf that allows the plant to rest that year, the whorled leaves along the stem and the solitary leaves associated with the flowers.

The hanging bell-shaped flowers are of various shades of mottled yellow to green to brownish purple in a checkered pattern. There are already many checker lilies in leaf, bud, and flower along the trails in the woodlands.

What a gift nature gives when from these leaves come the white globe lily and checker lily.

CALIFORNIA THRASHER

By Lee Franks

The vocal repertoires of birds are among the richest in the animal kingdom. Vocalizations convey information about the identity, location, and motivation of the singer, including ownership of territorial space. More varied song repertoires help attract females and foster superiority in vocal duels between competing males.

Vocal mimicry (one species being copied by a second species) is one way some species increase the size of their vocal repertoire. Selection has favored a large and diverse repertoire in some species and one way of increasing repertoire size and diversity is to incorporate sounds from the surrounding acoustic environment, even sounds that do not belong to the birds' own species, as well as non-avian sounds such as the barking of dogs, screeching of machinery, or human whistling. The most renowned vocal mimic is the Northern Mockingbird, but the California Thrasher, a striking and exuberant songster, is certainly a close second.



Photos by Tom Grey, http://www.geocities.com/tgrey41/

The California Thrasher (*Toxostoma redivivum*) is a conspicuous bird, with its long and dramatically decurved bill, the dashing style in which it runs for cover with its long tail raised, and its habit of singing almost year-round, loudly delivering rich and colorful phrases from the tops of the coyote brushes found in the chaparral sections of Edgewood Park.

Appearance

A medium-sized to large (12") songbird that is nearly twice the weight of the Northern Mockingbird, and 10% heavier than the American Robin. The bird is similar to the California Towhee in overall coloration. Its upper-parts are chocolate-brown, while its underparts are a rich buff. The chin and upper throat are pale, and there is a faint pale eyebrow. Their bill and legs are black.

Behavior

Walks or hops between foraging stops on the ground. Runs swiftly, with long tail raised. Often seeks cover with a dashing run. Climbs through vegetation to gain an elevated song perch, or access a nest. Eats insects and other arthropods such as beetles, spiders, and crickets, which are taken on the ground. They locate prey by digging vigorously with their long bills in leaf litter and in soft ground beneath cover. When they eat plant food it is usually poison oak and toyon. Mated individuals often feed on the ground near each other, as do parents and dependent young.

The California Thrasher is strongly territorial. Both male and female defend territories. Territory borders are often disputed with neighbors. Strong agnostic interactions occur between this thrasher and Western Scrub-Jays, which are potential nest predators.

Sounds

The California Thrasher commonly mimics a wide range of avian species that share its habitat, as well as frogs, coyotes, and a postman's whistle. They loudly deliver their repertoires from elevated perches, allowing as many as 8 neighboring territorial thrashers to be heard at the same time in the dense chaparral cany on on the south side of the Clarkia Trail (upper section).

The female also sings "loudly and sweetly," and a mated pair may counter-sing for extended periods. Male and female songs appear the same in quality, content, and volume. This thrasher sings year-round, but with varied vigor and

(Continued on page 4)

(DOCENT WALKS, Continued from page 1)

work in the Preserve.

To help ensure that our docents are up-to date on the latest goings on, such as the weeding and Interpretive Center developments, we gathered for a Pre-Season Kickoff Meeting the last week of February. We enjoyed a good turnout, excellent discussions, and the camaraderie of kindred spirits who share a love of native flowers and plants.

Come out and join us for a walk in the Park!

FRIENDS RECEIVE GRANT

Every year the San Mateo County Parks & Recreation Foundation donates \$15,000 to Parks & Recreation to support volunteer programs. A portion of that money goes directly to volunteer organizations and park units as grants. This year a total of \$9,100 was granted, the remainder being retained by Parks & Recreation for volunteer coordination.

The Friends of Edgewood applied for and received grants of \$1,500 to support the docent program and to replace the map pockets on the kiosks at the park.

In addition, CNPS received a grant of \$650 to support the weeding program at Edgewood.

Among other grantees were the Friends of Fitzgerald (\$1,500 for docent program materials), Volunteer Horse Patrol (\$800 for uniform items), and San Pedro Valley Park Volunteers (\$500 for bookstore materials and trail maintenance tools).

The remainder of the \$9,100 was allocated to various park units for tree planting, painting, and various other projects.

We are very grateful to the San Mateo County Parks and Recreation Foundation for making these volunteer grants available, and to the Parks and Recreation Department for approving our grant requests.

(CALIFORNIA THRASHER, Continued from page 3) intensity through the seasons. Songs are heard more or less continuously throughout the November to June period, and with declining frequency after breeding through the summer. They are quietest in late summer (molting period), but singing frequency increases around mid-August, corresponding to completion of molt. Singing further increases in frequency in the fall, and becomes more extended and vigorous after the first rains of the season (mid—to late-November).

Breeding

The California Thrasher's breeding season is of extended duration (February through June). They typically lay a first clutch (generally 3 to 4 eggs) in February or March. Their second brood follows immediately after the first, with the female laying a second clutch while the male is still feeding the dependent young of the first brood.

Both parents build their nests, incubate the eggs, and brood the young. The voung depart the nest at 12 to 14 days old. with well developed legs enabling them to run, but with notably short wings, with flight



feathers about half grown. The last 30% of their adult weight is gained out of the nest. The young birds remain in parental territories for 3 to 4 months.

References

The Birds of North America, No 323, 1998 Martin L. Cody

Ornithology, 1990 Frank B. Gill ®

(INTERPRETIVE CENTER, Continued from page 1) generous support, a total of \$45,000 in matching funds was raised, for a total of \$95,000.

The Foundation has now raised about \$450,000 of the \$800,000 required to begin construction, and hopes to raise the remaining \$350,000 in order to break ground this August. If that schedule is met, the Interpretive Center will be available for the 2006 docent season.

In addition to raising funds for the building construction, another \$700,000 will be required to build the exhibits and to seed funding for continuing operations and maintenance.

Exhibits

The Acorn Group, who provided the Conceptual Plan for the Interpretive Center, designed the exhibits as shown on page 1. They are described below, and you can take an interactive virtual tour of the exhibits on the Friends website at http://www.friendsofedgewood.org/ICTour.htm.

- 1. **A Special Place**. Upon entering, the visitor is greeted by highly visual, large full-color photomurals of Edgewood landscapes with brief text outlining the conservation history of the park. The entire display is movable to permit group use of space.
- 2. **Green Design**. This panel highlights sustainable design elements of the Center's architecture.
- 3. Changing Colors, Changing Seasons. A large photoalbum format features silk-screened see-through acrylic pages that the visitor layers upon one another, showing the Edgewood landscape swathed in changing colors of wild flowers and other vegetation as the seasons change from spring to late autumn.
- 4. **Life in Serpentine**. A larger-than-life grasslands soil profile offers a tactile experience that, through comparison of serpentine and non-serpentine soil complexes, explores the foundations of Edgewood's unique biota. Set against images of the larger grasslands landscape, the exhibit tells the aboveground story in terms of the below-ground structure, revealing the geologic forces that created Edgewood's unique soils. An inset map shows the location of serpentine soils and where changes in soil type can be observed via Edgewood's indicator plants.
- 5. Streams and Springs. This realistic riparian exhibit features dripping water, tracks embedded in mudstained concrete, other animal signs, and sounds of aquatic life (e.g., tree frogs). Visitors are challenged to seek out and identify the denizens of Edgewood's waterways by the "clues" left behind in this exhibit.
- 6. Species that Specialize. This exhibit features a

- showcase of Edgewood's endangered and threatened plant and animal species. An interactive game illustrates how specialization can lead to extinction when habitat is lost.
- 7. **Test Your Exotic IQ**. The visitor is challenged to link an intriguing piece of trivia to the corect image of either an exotic or native species (for example, mustard, eucalyptus, and starling vs. goldfields, madrone, and Acorn woodpecker).
- 8. **Changeable**. This is a small, changeable exhibit area for seasonal or special exhibits such as photography, "wildflower of the week," etc.
- Land and Water. This three-dimensional watershed model features Edgewood and its trails in the context of surrounding mid-Peninsula lands, faultlines, Crystal Springs Reservoir, and the San Francisco Bay. Interactive elements invite prediction and play.
- 10. Computer Stations. Computer stations offer opportunities to watch video clips, explore topics in depth, learn via web links, use interactive software, sign up for "e-gram" notification about special events, etc. Flat-screen monitors save electricity as well as space.
- 11. **Stewards of the Land**. A panel highlights curent efforts to eradicate exotics and restore native landscapes, and an invitation to become involved.
- 12. **Voices of Edgewood, Past and Present.** Visitors use hand-held earpieces to hear oral interviews with descendants of the Ohlone, Finklers (actor), and the Friends of Edgewood. Stories reveal the significance of the land to each group or occupant.
- 13. **Donor Rock**. Donor acknowledgments are engraved in stone and mounted on a serpentine boulder at the entrance.

The Doors

Thanks to the efforts of the RecycleWorks green building program, we already have our front doors! These doors were the entrance to the County controller's office when it was located in the Courthouse



annex building, which will be torn down when Redwood City renovates the Courthouse square.

How You Can Help

Again, we want to thank every one who has donated to make this dream a reality. Remember that all funding for this project must come from private and public donations; the County has no money in its budget for this project. To contact the Parks Foundation, call Julia Bott, the Executive Director, at (650) 321-5812, or email her at Julia@SupportParks.org.

YST WEEDING YIELDS RESULTS

By Ken Himes

Monitoring can be defined as repeated observations or measurements in an area to evaluate change in conditions or progress toward achieving management goals. A major management goal at Edgewood has been to control the spread and reduce the densities of the highly invasive plant, yellow star-thistle (YST, *Centaurea solstitialis*) in Edgewood's grasslands. During the period 2001 to 2004, we have monitored by two methods: 1) photo documentation done yearly to observe change over time, and 2) vegetative sampling along transects in treatment areas to measure change.

At Edgewood, we want to determine if well-timed mowing can reduce densities of YST and avoid negative impacts to native species. The graph below shows several encouraging trends in treatment areas as a result of monitoring during this period.

Percent cover of a plant is determined by the area occupied by that plant in a sampling frame

at pre-determined intervals along a transect. Since 2001, the cover of YST has decreased by 6.5 percentage points in treatment areas compared to control areas. This trend is to be expected, since well-timed mowing is known to prevent seed production.

Native purple needle grass (Nasella pulchra) growing in treatment areas has increased in cover by 4 percentage points over control areas. This positive trend is unexpected, since mowing can damage plants. The trend may be attributed more to a decline in cover of purple needle grass in control areas than an increase in cover in treatment areas. YST plants, being annuals, build up large amounts of thatch over time and the thatch results in purple needle grass plants being affected by shading. Mowing breaks up thatch in treatment areas and prevents a build-up of thatch.

Lastly, the annual summer-to-fall-flowering hay field tarweed (*Hemizonia congesta* ssp. *luzulifolia*), also a native, shows a 5.9 percentage point increase in cover in treatment areas compared to control areas. This is also expected since the tarweed is in direct competition with

Change in Percent Cover in 4 YST Treatment Areas vs. Control Areas 2001 – 2004 8% 5.9% 4.0% 4% Change in % Cover -2% -4% -6% -6.5% -8% Yellow star-thistle Purple needlegrass Hayfield tarweed **Net Decrease Net Increase Net Increase**

YST for space, light, water. minerals, and other resources. This increase results from decreasing YST densities (or percent cover) in treatment areas. These encoura gin g trends show welltimed mowing is an effective management method to control YST. But the key is to continue monitoring and adapt our methods to control YST as needed. ®

ADOPT-A-HIGHWAY UPDATE

By Ken Seydel and Bill Korbholz

The December clean-up was well timed. We had a beautiful crisp (42°) morning and just beat the rain. The crew was small, but competent and efficient: Brian Cole, Billy James, Lucy Krensky, Margaret Marshall, and Ken Seydel. We were done by 11:00 am.

We collected 11 bags, but nothing of real interest. This is the first time we have been shut out—no money and no hubcaps. I guess in the wintertime people keep their windows closed and the treasures don't blow out!

Our January outing got rained out, and before we could re-schedule, CalTrans suspended all activity in reaction to a highway accident involving two Adopt-A-Highway employees. CalTrans reminded us that we all need safety training updates yearly.

So prior to our outing on February 5, ten of us met for a Safety Review session, which consisted of watching a training video and reviewing guidelines.

We then did our usual cleaning of the I-280 easement adjacent to Edgewood. Participating were Pat Bennett, Brian Cole, Sarah Divine, Carolyn Dorsch, Billy James, Bill & Kathy Korbholz, Lucy Krensky, Susan Russell, and Ken Seydel. We also welcomed Michael Yantos as a new participant! As in December, we collected 11 bags and finished by 11:00 am.

If you are one of our regular helpers and missed the re-training session please contact us to make individual arrangements.

If you have an interest in joining our great group please contact Ken Seydel. We will see that you are safety trained and equipped with your very own Picker, hard hat, goggles, gloves, and bright orange vest.

MEMBERS HIP DUES

New or renewing members may clip and complete this section to pay **tax-deductible** annual membership dues. Please send your check pay able to **Friends of Edgewood Natural Preserve** to the return address on the back of this panel. Renewing members can determine their membership expiration date by checking the six-digit code to the right of their name on their mailing label. For example, if the code is 06/2006, membership runs through June 2006. Questions, call (866) GO-EDGEWOOD or contact membership-coordinator@friendsofedgewood.org.

Name	
A 11	
Address	
City	State Zip
Home Telephone	Work Telephone

	\$15 Basic Membership (includes newsletter)
	\$25 Family Membership (newsletter)
	\$7 Student/Retired Membership (newsletter)
	\$50 Supporting Membership (newsletter, <i>Edgewood Checklist of Plants</i> , boxed set of Edgewood photo greeting cards, and 1-year subscription to BAY
	NATURE magazine) \$100 Benefactor Membership (above premiums plus Toni Corelli's <u>Flowering Plants of Edgewood Natural</u> <u>Preserve</u>)
	\$250 Patron Membership (above premiums plus 16x20 photo-poster)
	I am enclosing a gift of
	Please send copies of the Edgewood Vascular Plant List (\$2), copies of Common Native Wildflowers of Edgewood (\$2), copies of the Apr-Jun 2004 BAY NATURE magazine (\$5), copies of Flowering Plants of Edgewood Natural Preserve (\$25). Includes tax, S&H. All items subject to availability.
	Please do not send any premiums.
I wo	ould like to participate in the following: Docent program

☐ Schools outreach

Habitat restoration

Adopt-A-Highway

☐ GIS/GPS mapping

☐ Newsletter/web

☐ Public relations



UPCOMING EVENTS

- ☐ Saturdays and Sundays, Mar. 12 through June 12, DOCENT-LED WILDFLO WER WALKS. See the article on page 1. For more information see www.friendsofedgewood.org.
- ☐ Saturdays, Mar. 19, Apr. 16, May 21, June 18, July 16, SPECIAL WEEDING DAYS. See the article on this page.
- ☐ *Monthly*, **BIRD WALKS**. Meet Audubon Society docent Lee Franks at 8 am at the Day Camp kiosk on 3/20, 4/24, 5/29, and 6/26/05.
- ☐ *Monthly,* **ADOPT-A-HIGHWAY**. The next sessions are scheduled for 4/2, 5/1, and 6/4/05. Contact Ken Seydel to volunteer or for more information.

SPECIAL WEEDING DAYS

The Edgewood Weed Warriors are scheduling 5 special weeding Saturdays this year at Edgewood: Mar. 19, Apr. 16, May 21, June 18, and July 16.

All volunteers are welcome—no experience necessary! We will start at 9 am and quit around noon. Equipment will be provided, but if you have your own gardening gloves, you should bring them. A hat, sunscreen, and water are also recommended.

Specific meeting locations and other details will be determined later, and will be posted on edgewood.thinkersrus.net. Or you can contact Ken Himes or John Allen.

The Edgewood Explorer is published quarterly by the Friends of Edgewood Natural Preserve, a nonprofit organization dedicated to preserving Edgewood for the human, plant, and animal generations to come. The newsletter is produced by Bill Korbholz with assistance from Laverne Rabinowitz and contributions from many Friends. For more information about the Friends of Edgewood, visit our web site at www.friendsofedgewood.org, mail us at PO Box 3422, Redwood City, CA 94064-3422, call or fax toll-free at (866) GO-EDGEWOOD (866-463-3439), or email info01@friendsofedgewood.org.

Friends of Edgewood Natural Preserve PO Box 3422 Redwood City, CA 94064-3422

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