FRIENDS OF EDGEWOOD NATURAL PRESERVE

Edgewood Explorer

September 2003 Volume 10 Number 3

GENERAL MEETING SET FOR OCTOBER 19

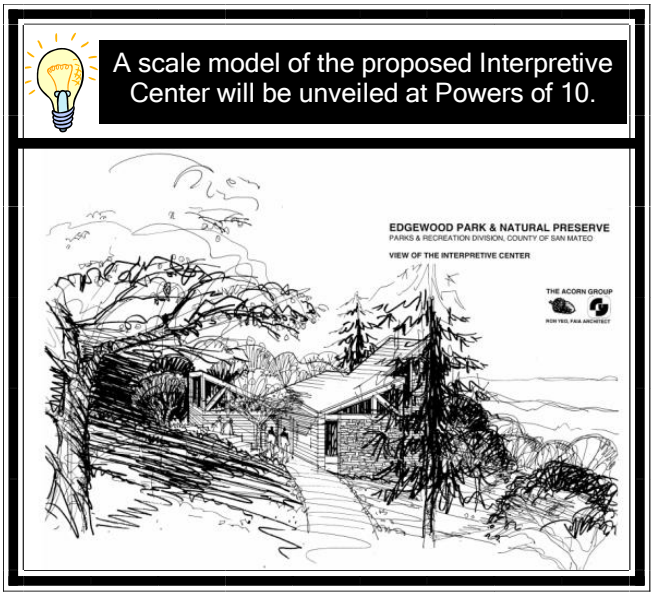
This year, because of the Powers of 10 celebration (see lead article on this page), the format of our annual meeting will be different from that of past years.

The general meeting will be held at 4:00 pm, immediately following the celebration in the Day Camp. All members are invited and encouraged to attend, as we will be electing 3 new Directors for our Board.

Directors serve two-year terms, and these directors-elect will join our other three elected Directors, Toni Corelli, Peter Ingram, and Bill Korbholz, who still have another year to serve.

A nominating committee is developing a slate of three candidates for the general meeting. Watch for an official meeting notice in the mail in which you will find candidate statements. As always, we will be accepting nominations from the floor as well.

Please plan to join us and participate in this important annual meeting. `



FRIENDS GEARING UP FOR POWERS OF 10 CELEBRATION OCTOBER 19

By Peter Ingram

Save the date: Sunday, October 19, 2003, 1:00 to 4:00 pm, at the Day Camp.

Last quarter we announced our Powers of 10 Celebration. At that time it was more of a vision, but now we have a plan and I think everyone who comes will find it fun and exciting.

On October 19th from 1 to 4 pm, we will be celebrating the tenth anniversary of the founding of the Friends of Edgewood, which coincides with the tenth anniversary of the designation of Edgewood as a Natural Preserve.

The general public is invited to join us for an ice cream social. The celebration at Edgewood will be free and open to the public. There will be many fun things for children to see and do. Adults will be equally delighted by the many interactive opportunities to appreciate a decade's worth of accomplishments and help create a vision for the next ten years.

Our theme, Powers of 10, will be evident

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INSIDE THE EXPLORER

ORCHIDACEAE - ORCHID FAMILY

By Toni Corelli

This is the third of a series of articles about flowering plant families. —ed.

- Herbaceous perennials, from underground rhizomes or corms
- Leaves usually alternate, sheathing at the base
- Inflorescence solitary or in a raceme, spike, or panicle
- Flowers bisexual, irregular (bilateral); sepals 3, usually similar in shape and color; petals 3, lower petal different from the other 2 in size and shape and called the lip, this petal often has a spur which contains nectar; the stamens (generally 1) and stigma and style are fused into a complex structure called the column, this is usually opposite the lip
- Fruit a capsule; seeds many, minute
- Many cultivated as ornamentals, some used as food flavoring, e.g., vanilla
- Largest family worldwide
- Some are parasitic and have no green parts

Most of the orchids in our area flower in late spring to early summer. This year was an especially good year for the orchids in our area and large populations were observed.

The pollination mechanism is complex and involves the release of pollen lumps called pollinia, which are composed of many pollen grains. The pollinia stick to the visiting insect, usually bees or flies. The stigma has a sticky substance that receives the pollinia that is deposited by the next insect visitor.

The vanilla that is used for flavorings comes mostly from *Vanilla planifolia* (vanilla orchid). The fruit will not develop unless it is pollinated; if it is not pollinated the flower lasts only one day. When referring to the vanilla bean people are actually talking about the fruit.

Since the Flora was published, 2 new orchid species have been found at Edgewood. This is the new key to Orchidaceae Family since the first edition.

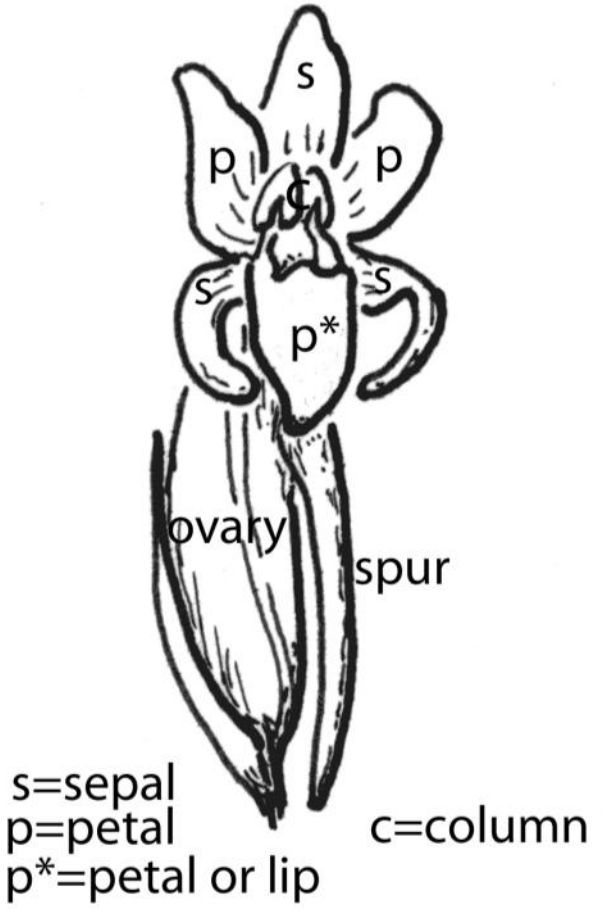
1 Plant non-green; leaves scale-or bract-like
  2 Perianth with reddish to purplish stripes
    Corallorhiza striata (striped coralroot)
  2’ Perianth with reddish to purplish spots
    Corallorhiza maculata (striped coralroot)
1’ Plant green
  3 Leaves mostly basal
    4 Sepals white with green midvein, petals white to pale green
      5 Spur oriented horizontally along the stem
        Piperia transversa (transverse-spurred piperia)
      5’ Spur curved along stem but not horizontal
        Piperia elegans (elegant piperia / elegant rein orchid)
    4’ Sepals and petals unmarked, green or yellow-green
      Piperia elongata (long-spurred)
  3’ Leaves along stem, alternate; perianth purple-tinged to pink
    Epipactis helleborine (helleborine)

References

Coleman, Ronald A. 1995. The Wild Orchids of California. Cornell University

Web pages:

- http://florawww.eeb.uconn.edu/acc_num/198500001.html
- http://biodiversity.uno.edu/delta/ `



Artwork by Linda Bea Miller

FLYCATCHERS

By Lee Franks

Birds pay a price for the advantages of flight. They must commit their forelimbs almost entirely to that enterprise. As a result the bill (or "beak") often must assume responsibility for diverse functions for which many mammals use their forelimbs—grasping, carrying, scratching, fighting, and digging.

The bill consists of the upper and lower jaws (mandibles), ensheathed in a layer of toughened skin. As tools, bills are not used just for eating food, but also for catching it. Have you ever watched a perched bird launch itself, and after a few quick flaps of its wings, seize an insect in mid-air, and then, holding its catch firmly in its bill, loop back to the same or another close-by perch? This is the "art of flycatching."

Flycatchers have ligaments connecting the upper and lower jaws that act as springs to snap the gaped jaw shut when an insect is snared.

The **Ash-throated Flycatcher** (a summer migrant), and the **Black Phoebe** (resident) are frequently observed in the Park. The Phoebe is most often found in and around the Cordilleras Creek area, and the Ash-throated hangs out in the open grasslands on the west end of the Park.

Appearance

Ash-throated—medium to large flycatcher (8") with moderately long tail and relatively large head with a short, bushy crest. Bill is black and moderately long. Upperparts of adult birds are grayish-brown. Throat and breast are pale gray, and the belly has a pale yellow wash.

Ash-throated flycatcher
http://www.rshantz.com/index.htm

Black Phoebe—medium sized flycatcher (6.5") that is the only black flycatcher in North America. The upper back, breast, and head are a sooty black, while the lower back, wings, and tail are brownish slate. The belly is entirely white, along with the undertail feathers.

Black phoebe

Food Habits

Ash-throated—prefers to forage in open habitats by moving from perch to perch, pausing to scan for prey (wasps, bees, leafhoppers, moths, etc.) and then moving on rather than returning to a preferred perch. Insects are captured in flight, on the ground, and in foliage while hovering, and swallowed whole. Sometimes take small fruits.

Black Phoebe—visually locates prey (flies, bees, beetles, butterflies, grasshoppers, etc.) from a low perch or by hovering, and pursues it until capture. Typically, only one prey item is captured on each flight, which take place in open areas. Small prey is eaten in flight and larger prey is taken to a perch where it is beaten then swallowed whole.

Nesting

Ash-throated—opportunistic, using almost any natural or artificial cavity, size permitting and at least 4 feet above ground**.** As a late arriving (mid -May to mid-June) migrant, they are at a disadvantage in competing for nest sites with other cavity nesting species, and at times must occupy less desirable cavities. Occasionally will evict other species from a cavity**.** They readily adapt to a wide variety of artificial nest sites, including hollow horizontal, diagonal, or vertical metal pipes and wooden or tin-can nest boxes.

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TRANSMISSION LINES CAN BE ELIMINATED FROM EDGEWOOD

By Kathy Switky and Lennie Roberts, Committee for Green Foothills

Those who admire the celebrated spring floral displays at Edgewood can't help being distracted by the ugly, environmentally damaging and potentially unsafe PG&E transmission towers that cross the preserve.

PG&E now proposes to make the situation worse by building a new 230 kV transmission line across the preserve as part of the new 27-mile-long Jefferson-Martin transmission project. The proposal would entail a wider right of way, installation of much taller towers, new concrete foundations, and long-term disturbance for access and maintenance.

Some of the most important habitat for serpentine species is below existing towers. Perhaps even worse, PG&E has proposed new towers across 280 from the park, in "The Triangle" area bordered by 280, Cañada Road, and Edgewood Road – the very same serpentine grassland that the Friends of Edgewood and the California Native Plant Society have fiercely protected for years, and home to several sensitive species.

Fortunately, one of the alternatives being studied would underground the new lines beneath Cañada Road and Skyline Boulevard as they go north through Edgewood and the San Francisco Watershed lands.

Environmental groups, including Committee for Green Foothills, Sierra Club, Friends of Edgewood, and CNPS, have called for undergrounding the existing 60 kV lines (along with the new 230 kV lines) and removing the existing towers.

Besides the obvious environmental benefits of avoiding impacts to sensitive plant and wildlife habitats, this proposal would increase safety from terrorism and vandalism, reduce impacts to neighboring communities from electromagnetic fields (EMFs), and improve operational reliability.

The Public Utilities Commission and PG&E are now reviewing comments on the 1,000-page draft Environmental Impact Report. Time will tell whether they will listen to reason—and the community—and make the decision that best balances safety, views, environmental protection, and public benefit with the need for these new transmission lines.

To find out more about this project, or to get involved in the fight to underground the new lines and remove these towers, visit www.GreenFoothills.org or contact Committee for Green Foothills Legislative Advocate Lennie Roberts. `

RANGER ROUNDUP

By John Trewin, Park Ranger III

As you may have heard, the San Mateo County Parks Division has reorganized its 13 parks, 2 historic sites, and 9 outlying trails into three areas. Under this new area concept, Edgewood Park is now part of Area III along with the Woodside Store, Flood Park, Wunderlich Park, Huddart Park and several South County Trails south of Highway 92.

The Area III supervisor is Ranger IV Priscilla Alvarez, who was already supervising the Woodside Store, South County Trails, Huddart and Wunderlich Parks. Rangers Ricardo Trejo, Shawn Witaschek and Katie Beltrano will continue to work at Edgewood, although they will be working in the other Area III units as well.

Other rangers you may see from time to time in Edgewood Park are Pam Noyer (Flood), John Trewin (Hud./Wund.), DeWayne Austin (Flood), Steve Cross (Hud./Wund.), Pedro Diaz (Hud./ Wund.), Diane Bradley (Flood), Dinora Dunsmore (Flood), and Emily Jetke (Hud./ Wund.).

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BIOCONTROL REPORT IV—ANOTHER GOOD YEAR FOR YST

By Paul Heiple

It was another good year for Yellow star-thistle, as heavy rains began the wet season in November and were followed by good rains in December. This rainfall pattern gave the plants an excellent start and insured deep root development. Unusual heavy April rains gave the plants an extra shot of growth before bolting.

A negative factor from the April rains may have been the germination of some of the seed bank which had only two months to grow before they were forced to flower. This resulted in a large number of rather small plants during the summer flowering period. The cool, rainy April weather also seemed to set back the biocontrol agents which showed up in numbers a month later than in previous years and in numbers which seemed lower than I expected to find. So this year YST grew well and was infested later, both positive for the weed.

The good news for Edgewood is that even though it was a good year for YST, the weed does not seam to have increased its area of coverage or its density. Like the Red Queen in "Through the Looking Glass," YST must run faster to stay in the same place.

The weeders of Edgewood are not stationary however. With the biocontrols slowing the

False peacock fly, *Chaetorellia succinea*
http://www.countyofsb.org/agcomm/3226_28.htm

Hairy star-thistle weevil, *Eustenopus villosus*
Forestry Images, http://www.forestryimages.org/

production of seeds, any YST pulled before the first of August is not going to have produced seed. This was also true this year; once the biocontrol agents showed up, they were hungry and damaged all the early flowers. Four agents were common this year, the false peacock fly and the hairy star-thistle weevil remained common with an increase in the bud weevils and a big increase in the gall fly. These

Bud weevil, *Bangasternus orientalis*

Gall fly, *Urophora sirunaseva*
Forestry Images, http://www.forestryimages.org/

abundant insects kept the seed production very

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(BIOCONTROL, Continued from page 5)

low through the end of August.

An incident occurred in July which shows how abundant the insects have become. One of our weeders working in the Clarkia trail area put some bags of pulled YST in her car for later disposal. Some days later, it was noticed that the area below the rear window was covered with what looked at first like mouse dropping. They turned out to be biocontrol agents that emerged from the bags and tried to escape the car by going out the back window.

It will soon be five years since the biocontrol insects became abundant in Edgewood. So far the greatest effects remain:

1. YST is disappearing from marginal soils,
2. Plants are fewer in good soils but the individual plants are larger so that ground cover remains great, and
3. Seed production is delayed by at least a month.

The last one is the most important to us, since it give the weeders and mowers more time to clear the plants out before they can produce seeds. Because of this, we are increasing the area cleared and pushing the YST back. If the trend continues, YST could become uncommon in Edgewood in three or four years. `

YELLOW STAR-THISTLE UPDATE

By Ken Himes

With the arrival of Labor Day, volunteers from the Friends of Edgewood and the California Native Plant Society have nearly completed the planned removal of yellow star-thistle for 2003.

Removal has taken place in nine sites situated along the Service Road. The combined size of these sites is about 15 acres. Except for partial mowing of one site and weed whacking on two additional sites by Parks staff, all work has been accomplished by manual (hand) removal. This is a significant development for 2003.

It would have been impossible to consider manual removal on such a wide scale when our project began. Most of you are aware that our

Centaurea solstitialis, Yellow star-thistle
http://cecalaveras.ucdavis.edu/starthistle.htm

partnership with San Mateo County Parks and Recreation is only in its fourth year, but it's been a productive four years.

Extensive mowing by Parks staff took place the three previous years. Volunteers removed resprouts in mowed areas and very little seed has dropped. Each year has seen a further reduction in yellow star-thistle densities. It is the result of well-timed mowing with volunteer follow-up that has allowed manual removal to be possible over such a wide area. As we continue to reduce yellow star-thistle densities, it will be possible to expand into new areas.

I mentioned one partner, San Mateo County. We also need to give credit to our insect partners. There are four insects present at Edgewood County Park and Preserve that have been released as biocontrol for yellow star-thistle (see Paul Heiple's article on page 5). The larvae either damage the stems or bore into the flower head. This results in very little seed production. A large percentage of YST plants have damaged flower heads. This lack of seed drop has allowed our removal season to be extended by at least one month.

I have recently found some heads with visible achenes. (The achene is the fruit that contains the

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(FLYCATCHERS, Continued from page 3)

Black Phoebe—rarely uses natural structures for nesting. Prefers buildings, bridges and culverts, where they build a nest cemented with mud to a vertical wall of the site. Top of nest is most often close to protective ceiling. Common to all nest sites are 1) ceiling that protects nest from weather and provides concealment, 2) placement near or directly over water, 3) placement close to a source of mud for construction material, 4) area surrounding site suitable for foraging.

Black phoebe
© 2001 California Academy of Sciences

Behaviors

Ash-throated—flight is generally rapid and direct with continuous flapping and without undulations. Engages in acrobatic aerial maneuvering and hovering in pursuit of prey, during courtship chases, and in territorial disputes. Typically aggressively defends breeding territories used for mating, nesting, and foraging. After egg-laying, pairs are less aggressive, with males wandering considerable distances beyond the territory, and females often quietly forage alone. A solitary species that does not flock, and is generally intolerant of other species nesting in close proximity.

Black Phoebe—accomplishes most locomotion via flight which is direct with steady wing-beats. Rarely moves on the ground, but occasionally lands on the ground near potential prey and hops several centimeters to capture prey item. Both sexes preen frequently throughout the day, often during or between foraging bouts, or after leaving nests during incubation.

Territories are aggressively defended using vocalizations and chase. During incubation, males will perch near nests throughout the day. As a species, they are nonsocial except in association with mate during breeding season. Pair bonds are not maintained after breeding season.

References

The Birds of North America No 268,1997; Wolf, Blair O.

The Birds of North America No 664, 2002; Cardiff, Steven W.; Dittmann, Donna L. `

VOLUNTEER RECOGNITION AND FAMILY BARBECUE EVENT PLANNED

By Nick Ramirez

The San Mateo County Parks and Recreation Division is hosting this event on October 4th from 11 am to 3 pm at San Pedro Valley County Park in Pacifica.

From 11 to noon you'll be able to tour the park and the Visitor Center. Then at noon there will be a half hour of presentations and special speakers recognizing parks volunteers.

From 12:30 to 3 pm you'll be able to enjoy the barbecue, giveaways, and children's activities.

Call Nick Ramirez, to RSVP or to volunteer to help recognize the volunteers at this event. `□

(YST UPDATE, Continued from page 6)
seed). We will now begin to work on bristly ox-tongue, another aggressive non-native member of the sunflower family. It is widespread in the complex of meadows that are situated near the west kiosk. Come out and give us a hand. We will continue to work Wednesday evenings until daylight savings ends. Contact Drew Shell at shell@corp.webtv.net for more information. We also work Friday mornings throughout the year. Contact John Allen,

Lessingia hololeuca
© 2002 James B. Gratiot

Flower head, Woolly-headed Lessingia
© 2003 James B. Gratiot

FREEWAY WARRIORS TO DOUBLE THEIR PLEASURE, DOUBLE THEIR FUN

By Bill Korbholz and Ken Seydel

CalTrans is so pleased with the work of our Adopt-A-Highway volunteers that they've asked us to come out monthly rather than bi-monthly.

So starting this month (September), we will be cleaning our segment of I-280 adjacent to Edgewood on the first Saturday of the even-numbered months and the first Sunday of the odd -numbered months.

Although crews will be going out twice as often, we should find about half as much trash on each outing. Rather than asking everyone to come out every month, we have formed two teams, each of which will volunteer every other month as before.

Results from June and August
In June, Sarah Divine, Carolyn Dorsch, Katherine Greene, Susan Russell, and Kathy and Bill Korbholz collected 18 bags of trash. They were rewarded with $21 and a hubcap.

Those same 6, less Katherine, were joined by Barbara Barnes, Billy James, Margaret Marshall, and Ken Seydel in August. The summertime is typically the worst time of the year for trash, and the group picked up 27 bags worth that day, not to mention another hubcap, a bike wheel and tire, and $6.50.

You're Invited
With our new monthly schedule, we need more than ever to add a few more freeway warriors to our crew. Although we don't do it for the money, statistically speaking you are likely to make about $1 per hour, and you might be the next person to find that $100 bill.

Our next outing after Sunday September 7th will be Saturday October 4. If you would like to join us on that outing please contact Ken. We will see that you are safety trained and equipped with your very own Picker, hard hat, goggles, gloves, and bright orange vest. `

(POWERS OF 10, Continued from page 1)
throughout the day. The lawn area of the Day Camp will be transformed into a Main Street of 10 displays and exhibits that you can stroll through. Each of the displays will highlight a different area of activity in which volunteers from the Friends have been involved.

As many of you know, over the past decade the Friends have made significant contributions to the preserve, including shielding the land from development, working with the California Native Plant Society to protect rare native plants and remove invasive exotic plants, adopting Highway 280 alongside the preserve, patrolling the trails, and training docents to lead wildflower walks, teach children, and support public outreach.

This event is a great opportunity for us to encourage public stewardship of the preserve and show what our organization has done over the last 10 years, what we hope to do in the next 10 years, and how people can get involved.

So save the date and bring your friends and family: Sunday, October 19, 2003, 1:00 to 4:00 pm, at the Old Stage Day Camp entrance one mile east of Highway 280 on Edgewood Rd. `

(RANGER ROUNDUP, Continued from page 4)
Most of these rangers have had an opportunity to work at Edgewood Park this summer doing weed whipping and trail brushing. Some of you may have already met us out on the trails.

We have witnessed the commitment of Edgewood's staff, dedication of its volunteers, and splendor of its wildflowers. We are excited by Ranger Trejo's well organized projects, programs and habitat restoration efforts.

Thank you to Ricardo, Katie, Shawn and Friends for welcoming and familiarizing us with Edgewood Park and Natural Preserve. `

MEMBERSHIP DUES

New or renewing members may clip and complete this section to pay **tax-deductible** annual membership dues. Please send your check payable 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 06/2001, membership runs through June 2001.

Questions, call Bob Young.

Name

Address

City State Zip

Home Telephone Work Telephone

- o $15 Basic Membership (includes newsletter)
- o $25 Family Membership (newsletter)
- o $7 Student/Retired Membership (newsletter)
- o $50 Supporting Membership (newsletter, *Edgewood Checklist of Plants*, and Edgewood photo greeting cards (boxed set))
- o $100 Benefactor Membership (above premiums plus Toni Corelli's 360-page fully-illustrated Flowering Plants of Edgewood Natural Preserve (*while available*)
- o $250 Patron Membership (above premiums

- o I am enclosing a gift of _____.
- o Please send ___ copies of the *Edgewood Checklist of Plants* ($2), ___ copies of Flowering Plants of Edgewood Natural Preserve ($25). Includes tax, S&H.
- o Please do not send any premiums.

I would like to participate in the following:

- o Docent program o Weed management
- o GIS/GPS mapping o Schools outreach
- o Newsletter/web o Habitat restoration

UPCOMING EVENTS

o *Sunday, September 7th, Saturday, October 4th, Sunday, November 2nd, Saturday, December 6th*, **ADOPT-A-HIGHWAY CLEANUP DAY**. Contact Ken Seydel.

o *Saturday, October 4th*, 11 am to 3 pm, **SAN MATEO COUNTY PARKS & RECREATION VOLUNTEER RECOGNITION EVENT**. See article on page 7.

o *Sunday, October 19th*, 1 pm to 4 pm, **POWERS OF 10**. Mark this date on your calendar and plan to come out for the festivities at the Day Camp.

o *Sunday, October 19th*, 4 pm, **FRIENDS OF EDGEWOOD GENERAL MEETING**. Stick around after Powers of 10 to elect 3 Directors for 2004-2005.

o *Saturday, October 25th*, 9 am to noon, **EDGEWOOD WEEDING SPECIAL**. Join Ken Himes and Paul Heiple in a push to remove bristly ox-tongue from Edgewood's meadows, and see one of Edgewood's rarely seen plants, *Lessingia hololeuca*. Meet at the intersection of Cañada Rd. and Edgewood Rd., or at the West Kiosk if you are late. Contact Ken or Paul with questions.

o *Last Sunday of Every Month*, **SUNDAY BIRD WALK**. Meet Audubon Society docent Lee Franks at the Day Camp kiosk at 8:00 am.

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, or email info@friendsofedgewood.org.

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SAVE THE DATE
POWERS OF 10
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