FRIENDS OF EDGEWOOD NATURAL PRESERVE

# Explorer Edgewood

September 2005 Volume 12 Number 3

# BANNER YEAR; DOCENTS DELIVER By Carolyn Strange

Visitation was as variable as the weather this wildflower season, but despite several threatening (and outright drenching) weekends, 616 visitors signed in for our docent walks. For the past several years visitation hasn't even reached 500, so this was a banner season.

Our top five days were all above 30 visitors (one was 52!), and we had lots of days with sign-ins in the twenties and high teens. (Last year only two days topped 30, and one was the special Bay Nature hike.) Rain made visitation highly variable, but even in an unrelenting downpour three visitors came out! And our intrepid docents led them on a walk.

Last year we had disappointing turnouts at the alternate trailheads, usually in the single digits. This year we tried just one alternate trailhead for five Saturdays—the Clarkia Entrance—and visitors found it! But, again, turnout was highly variable, with three single-digit days, and two in the twenties.

Docents fielded seven special requests for hikes, and even though one got rained out, requests contributed 80+ visitors to our tally.

People came from all around the greater Bay Area, but we also had a few from Southern California, and folks signed in from Bend OR, Seattle WA, Chicago IL, Green Bay WI, and Vestal NY, too.

The comment cards returned this season were again overwhelmingly positive. Visitors love Edgewood and appreciate our docents.

Thanks again to all our docents for sharing your enthusiasm! 🏵

### CONSTRUCTION FOR INTERPRETIVE **CENTER HAS BEGUN**

#### By Susan Russell

Susan is a long-time member of Friends of Edgewood and is currently serving on the Parks Foundation Board. She has been involved in the weeding and Adopt-A-Highway programs at Edgewood. —ed

One of the most significant events in Edgewood's history is unfolding right before our eyes. A dream is beginning to come true, as we celebrate the first onsite work that will lead to the establishment of the Edgewood Interpretive Center.

# **Ribbon-Cutting Ceremony November 6**

The first phase of construction consists of environmental enhancements to the main entrance area near the Day Camp. The outer parking lot will be graded to reduce erosion and paved with a porous material to prevent runoff into the creek. A new pedestrian bridge across Cordilleras Creek made of sustainably-grown timber will help guide Park visitors from the parking lot to the Center. The creek habitat will be restored with native plants, and additional plants and shrubs will be placed to form a buffer zone between the creek and the parking lot. A gala ribbon-cutting ceremony is planned for

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# REFLECTIONS ON PAINTING VIEWS OF EDGEWOOD

#### By Trevlyn Williams

In the last Explorer, we discussed Trevlyn's upcoming showing of Edgewood watercolors, and her intentions to donate 10% of the sales proceeds to the Friends. The showing is over now, and Trevlyn generously supplemented her 10% pledge, topping it off at \$1000. Thanks, Trevlyn. — ed

What is art? The myriad of answers could take us in lengthy discussion. I can answer for myself though in the context of my July show of Edgewood paintings.

What motivated me to paint views of Edgewood and its environs? Three things. One, I enjoy painting. Two, Edgewood inspires me to look at the landscape and interpret it into painting. Thirdly I have an interest in Edgewood that goes to the core of my interest in the world around. It is ecologically important, for us living in the neighborhood and also for us to have a better sense of the role of the natural environment no matter where we live.

When I look to make a painting I am in reflection of the subject. The result tells of my feelings. Since Edgewood is important I want the artwork to generate interest and a focus on the subject.

Was the venture successful? Yes I believe so. I am not talking about the monetary terms. It was gratifying that I sold half the show and can look to at least covering expenses for the year and very importantly keeping Gallery House in business (art venues need our support). We all know that money is the bottom line in our ventures. I also made money to donate to Friends of Edgewood and this too is important. Not enough to fund the new Interpretive Center but enough to buy a coat of paint perhaps for one wall.

One of the most important things that came of

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# FALL COLOR STARTS WITH POISON OAK

#### By Toni Corelli

Poison oak is one of our most common plants at Edgewood. It cannot and should not be overlooked along each trail. The scientific name says it all *Toxicodendron* "toxic tree" *diversilobum* "diversely-lobed" which translates to "toxic tree with diversely lobed leaves." The common name western poison oak means "poison" referring to the oils that can cause skin dermatitis, and "oak" to the leaves that look somewhat like oak leaves, but oak leaves are not compound as are poison oak leaves which have compound leaves with three leaflets. "Leaves of three let it be."



Kathy Korbholz

Western poison oak is deciduous, Latin for "to fall off," referring to the leaves. It is one of our most spectacular "fall color" plants. The red color is a result of pigments called anthocyanins. Anthocyanins occur naturally in leaves in the form of dissolved cell sap. As summer turns to autumn and the days are sunny and the nights are cooler, chlorophyll production, which gives the leaves their green color, decreases. Anthocyanin production in the leaves increases in response to surging sugar concentrations, changing the western poison oak leaves to a brilliant red color in the fall. The production of anthocyanin pigments can change the leaves of other species as well to tints of red, purple, and crimson. Anthocyanins are also responsible for the color you see in cranberries, red apples, concord grapes, blueberries, cherries, strawberries, and plums.

# BIOCONTROL REPORT VI: YST MAKES A COMEBACK

### By Paul Heiple

As I wrote last year, the biocontrol agents we have in Edgewood Park are not enough to make Yellow star-thistle (YST) an uncommon plant. This year shows that they are not even enough to hold the gains we have made if the weather favors the YST.

#### Weather Favors YST

This year had many favorable features to help YST gain ground. First there were the early rains, then the rains spaced themselves out so that there were no dry periods or dry soil at depth. The amount of rain was also above normal so that the deep soil moisture that YST depends on during the summer was well recharged. The result was a germination and survival rate for YST that was above the normal level and exuberant growth because of all the rain.

#### **Weather Discourages Biocontrol Agents**

As if that were not enough, the cool June weather kept the biocontrol agent inactive during the early flowering stage. Normally, cool weather delays the flower formation on YST, but that was not enough to delay the flowers until the insects came out this year. The hairy starthistle weevil (*Eustenopus villosus*) often damages a great many flower heads before they open, but this cool year kept that from happening.

In fact, looking back at my writing on this subject in previous years, this is the third year in a row with plenty of winter rain, an early start to the rainy season and a cool spring, all helping YST and holding back the biocontrol.

I did think that I was finding more hairy starthistle weevils with dark bodies this year; perhaps the beetles are beginning to adapt to the cooler climate by absorbing more heat from the sun. It would be nice to check this observation against local collections of the weevils made over the last five years.

#### **New Agent Not Released**

Last year I reported a new biocontrol that was about to be released, *Puccinia jaceae* var. *solstitialis*, a rust that damages the plants in the rosette stage of development before any seed production has begun. The release never took place in San Mateo County. *Puccinia jaceae* var. *solstitialis* does not attack only YST; it also attacks *Centurea cyanus* or corn flowers which are grown in the county for the florist market. Since that would have a negative impact on the grower, this county did not have any release sites. Release sites in other counties are reporting a very slow spread of this biocontrol so I am not expecting to see this in Edgewood any time soon.

#### Weeders Holding their Own

So now to the good news: the weeders got out and held the line. Although no new areas were cleared, the weeding crews cleared all the areas worked on in previous years. Since this year probably germinated much of the seed bank, we can hope that we have reduced the number of plants we will face next year in most areas. In areas that have had years of treatment, we swept the areas several times to get almost every plant before seed was produced. Such constant pressure on YST will yield areas that are free of plants in a few more years, moving us to the goal of a YST-free Edgewood.

#### **YST Adaptability**

I made an observation and tested a theory this year, that YST has seed heads that can open and close depending on conditions. The mechanism for this movement is moisture dependent. When the air or the seed head is moist, the seed head is closed; when the air is dry, the seed head opens. The result is a seed head that is only open and releasing seeds on sunny warm days. What drove this to evolve is unknown; one can speculate that the plant is protecting its seeds from some night time seed eater or that releasing seeds during wet weather is not to the plants' advantage. The answer to this problem is in Europe. For weeders, it is best to pull ripe seed heads in the morning before they open.

#### SCHOOLS OUTREACH PROGRAM

#### By Carol Hankermeyer

During the school year 2004-2005 Schools Outreach hosted field trips for 230 scouts, middle school, elementary school, and homeschool students at Edgewood. Unfortunately, an April storm rained out Castilleja High School's scheduled botany excursion.

Despite this loss, it was an impressive number of participants for our budding program, which has been bolstered by the recent addition of 5 new docents. The total number of 15 should now finally allow us to begin a campaign to promote interpretive walks for local schools. Toni Corelli has been generously donating her Flowering Plants of Edgewood to any school group visiting Edgewood in 2005.

Another boost to the program is the project of creating a training manual to aid new volunteers in leading children's tours. Toni Corelli, Herb Fischgrund, Frances Morse and I are working to produce this guide, which we hope to complete by next year. Toni has also produced laminated interpretive cards and flower pictures as tools for docents to use in their walks. They will be kept in the storage room at Edgewood for the benefit of any docent leading a children's hike.

Meanwhile, Frances Morse has procured a \$4000 grant for Friends of Edgewood from the Kirven Foundation, some of it hopefully to be designated for docent training and for busing less advantaged school children to the park.

Finally, a kids' docent enrichment hike to share interpretive ideas and strategies is planned for October. We always welcome new docents, and if you are interested in joining us, even if you are not currently a docent, please contact me at outreach01@friendsofedgewood.org.

I am also seeking a co-chair to help plan and coordinate the outreach program. Please let me know if you would like to join this worthy program.

(INTERPRETIVE CENTER, Continued from page 1) Sunday November 6<sup>th</sup> at 11 am at the Day Camp, and **all are invited and encouraged to attend**. Although much work remains, this is a critical step in the development of this important facility for Edgewood.

#### From Early Beginnings

The need for an Interpretive Center at Edgewood was first publicly recognized in the Master Plan that was adopted in May 1997, and when our County Parks Foundation was established in 1998, the Center was one of the initial projects under consideration. The Edgewood Explorer first referred to the possibility of building a visitors' center in the March 1999 issue. A great deal of progress has been made since then, including the development of a concept plan, architecture and design documents, and—probably most importantly—the raising of over \$700,000 by the Parks Foundation, much of which was donated by Edgewood supporters like you.

#### What Makes Edgewood Special?

With the reality of the center now within sight, it's useful to reflect on why the community has shown such great support for this project.

As the only natural preserve in the San Mateo County parks system, it's clear that Edgewood's remarkable and fragile natural resources require special care in order to preserve them and keep them healthy. The Friends of Edgewood and the Santa Clara Valley Chapter of the California

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(REFLECTIONS, Continued from page 2) this show of paintings is the interest it generated about Edgewood. People commented on enjoying knowing about it and where it is. The

work brought Edgewood to a new audience as well as new views to an old audience.

Long a bleeding heart with desires to save the world, now in my forties, I accept my limitations. What I do know is that I can generate interest in something important, perhaps make a little money for the cause, and serve both art and the environment in some small way at the same time.

(INTERPRETIVE CENTER, Continued from page 4) Native Plant Society are unquestionably responsible for making Edgewood one of the most pristine parks in the San Mateo County system. The high rate of volunteerism at Edgewood is truly impressive, and its effects are evident.

Edgewood has spectacular wildflower displays in the spring—lush displays and much variety (over 50 species can be seen on a single walk), with a progression of varieties from early spring into summer. Many of the flowers can be seen elsewhere in the Bay Area but not in such profuse displays.

Serpentine, the unusual soil that covers about a third of Edgewood, supports unusual plants and wildlife—things that just don't grow in more common kinds of soil. Most species brought in with European settlement can't live in serpentine soil, so serpentine areas form natural preserves of native plants and the animals that depend on them. Edgewood provides a window on what the area was like before Europeans arrived.

In as little as an hour's walk, a hiker can experience a diversity of habitats. The hiker's experiences include panoramic views—east and south to the Bay and west to the foothills and Crystal Springs reservoir; shady, narrow, winding paths lined with ferns; and dry, sage and coyote brush-dominated rocky hillsides. And this is all in addition to the wildflowers.

Edgewood has a huge variety of plant species for its size. It's less than one square mile in size and has about 480 plant species. That's roughly 500 times the species richness of the entire Santa Cruz Mountains bioregion.

Four of Edgewood's plants are on the federal list of endangered or threatened species. The state bird (quail), rock (serpentine), flower (poppy), tree (redwood) and grass (purple needle grass) all can be found at Edgewood. The Bay checkerspot butterfly, a federally threatened species, was formerly seen by the thousands at Edgewood. It is now extinct there, due largely to the invasion of non-native grasses that have

overwhelmed the butterfly's food plants. But a restoration program is in progress, and visitors may be able to see the Bay checkerspot once again in the coming years.

#### So Why an Interpretive Center?

People have a variety of reasons for supporting an interpretive center at Edgewood. Below are some of the many we've heard.

- It will expand awareness of why Edgewood is special far beyond what is possible through docent walks.
- It will greatly facilitate teaching children about Edgewood, both through formal school trips and informal visits by families.
- It will provide an excellent staging location for docent walks and enable the docents to give visitors a quick overview of the park before the walk begins.
- Designation as a natural preserve may have saved Edgewood from development, but it didn't save it from invasive weeds, vandalism, and damage from people who stray off trail or engage in other activities that are harmful to Park's sensitive habitats. For this we need volunteers—to serve as docents, weeders, trail patrollers, and outreach workers. By making more people aware of the Park's needs, the Center will help us recruit more volunteers.
- Edgewood is only one of many threatened natural habitats. By enhancing awareness of Edgewood's issues, we enhance awareness of environmental issues generally.

#### What is Required to Achieve the Goal?

With the first phase of construction nearing completion, the Parks Foundation is now undertaking the ambitious goal of raising the remaining \$1M to pay for the building and exhibits and to endow initial operations of the Center. The goal isn't just ambitious, it's urgent.

If we want the Center open by the March 2007 wildflower walks, the funds must be raised by March 2006. I cannot overstate the importance of receiving continuing generous support from all of you to help make this dream a reality.

#### ADOPT-A-HIGHWAY UPDATE

#### By Ken Seydel and Bill Korbholz

For our work in June, July, August, and September, twelve different volunteers helped us clean our section of I-280 adjacent to Edgewood.

Summertime is always the heaviest trash period, and this year was no exception. For those 4 months, we collected a total of 50 bags of trash in over 15 work-hours. In addition to the usual hubcaps and car parts, we found a sink, a 7-foot ladder, and a Stanford police walkie-talkie.

We'd like to thank the following freeway warriors who joined us during this period: Carolyn Dorsch, Katherine Greene, Billy James, Bill & Kathy Korbholz, Lucy Krensky, Margaret Marshall, Susan Russell, Ken Seydel, Jan Smith, and Michael Yantos, and our newest volunteer, Jane Kos.

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.

(POISON OAK, Continued from page 2)

What causes the leaves to actually fall? Each leaf has a specialized layer of cells called an abscission layer that is located between the leaf and/or petiole and the plant. This layer is composed of specialized cells that transport water to the leaf and carry carbohydrates back into the plant.

Again as climatic conditions change in the fall, cells in the abscission layer are triggered by plant hormones to secrete a waxy substance that begins to swell. Eventually all water and carbohydrates are cut off, the abscission layer begins to disintegrate and the leaf falls from its own weight or because of wind and weather.

However, not is all lost and the leaves that fall are not wasted. They decompose and restock the soil with nutrients and make up the mulch adding nutrients and keeping the soil moist. Fallen leaves also become food for numerous

soil organisms that are so important to the ecosystem as a whole.

Some who come to Edgewood might call our poison oak, "poison ivy." Poison ivy is related to poison oak, and is in the same family (Anacardiaceae, Sumac Family) and genus (*Toxicodendron*), but poison ivy does not occur naturally in California. The Sumac Family is a large family of over 600 species in 70 genera worldwide most of which occur in the subtropical and tropical regions. Many species produce an oily substance, which causes contact dermatitis (a blistery rash).

However, not all members of this family cause dermatitis, some that occur in the tropics are important timber producing trees. Some members of this family have edible fruit such as, mangos, cashews, and pistachios.

Handling a green unripened mango fruit can cause dermatitis and contact with unprocessed pistachio and cashews can cause dermatitis. Another familiar ornamental tree in this family is the Peruvian pepper tree (*Schinus molle*). The fruit has been used as a substitute for black pepper.

The Docent Training Manual has much more information about Western Poison Oak written by Kathy Korbholz.

#### References

Friends of Edgewood Natural Preserve Docent Training Manual. 1999-2000.

#### **Web Sites**

http://bodd.cf.ac.uk/BotDermFolder/BotDermA/ANAC.html

http://scifun.chem.wisc.edu/chemweek/fallcolr/fallcolr.html

http://www.parks.ca.gov/?page\_id=23487 (where to see fall color in California)

http://chemistry.about.com/library/weekly/aa082602a.htm

http://www.microscopyu.com/galleries/confocal/abscission.html

http://www.na.fs.fed.us/spfo/pubs/misc/leaves/leaves.htm

#### UPDATED DUES RECOMMENDED FOR 2006

#### By Peter Ingram

As reported in the last edition of the Edgewood Explorer, the Executive Committee has set an ambitious goal of supporting the operations of the new Edgewood Interpretive Center with annual donations of at least \$1,000.

This commitment will be added to our continued funding of all activities associated with the annual wildflower walks, schools outreach, quarterly newsletters, and the many other beneficial uses of your generous contributions.

In order to ensure the Friends' long-term fiscal health, we had concluded that after 13 years without any increases in our dues, it is time to make some adjustments that will increase annual income enough to balance with anticipated expenses.

Beginning in January 2006, look for this new menu of annual contribution opportunities:

- \$10 Student / Retired
- \$25 Friend
- \$50 Advocate
- \$75 Supporter
- \$100 Steward
- \$250 Guardian

Premiums at some dues levels will be adjusted to more accurately reflect our costs.

Please refer to the dues schedule in the renewal form below for a comparison.

As we plan ahead for this change, we want to hear from you! Your comments and questions will be helpful and appreciated.

You may email us at membershipcoordinator@friendsofedgewood.org or leave a message by calling 1 (866) 463-3439. ®

### **MEMBERSHIP DUES**

Name	
Address	
City	State Zip
Home Telephone	Work Telephone

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MEMBERSHIP DUES	□ \$15 Basic Membership (includes newsletter)
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	□ \$25 Family Membership (newsletter)
	□ \$7 Student/Retired Membership (newsletter)
	<ul> <li>\$50 Supporting Membership (newsletter, Edgewood Checklist of Plants, boxed set of Edgewood photo greeting cards, and 1-year subscription to BAY NATURE magazine)</li> <li>\$100 Benefactor Membership (above premiums plus Toni Corelli's Flowering Plants of Edgewood Natural Preserve)</li> </ul>
mailing label. For example, if the code is 06/2006, membership runs through June 2006.	\$250 Patron Membership (same premiums as \$100 Benefactor level)
uestions, call (866) GO-EDGEWOOD or contact embership-coordinator@friendsofedgewood.org.	☐ 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
me	of Flowering Plants of Edgewood Natural Preserve (\$25). Includes tax, S&H. All items subject to availability.
Address	Please do not send any premiums.
	I would like to participate in the following:

☐ Docent program ☐ GIS/GPS mapping

☐ Newsletter/web

☐ Public relations

☐ Weed management

☐ Schools outreach

☐ Habitat restoration

☐ Adopt-A-Highway



## **UPCOMING EVENTS**

- ☐ Sundays, Oct. 23, Nov. 20, Dec. 18, **BIRD** WALK. Meet Audubon Society docent Lee Franks at 8 am at the Day Camp kiosk.
- ☐ Sunday, Nov. 6, INTERPRETIVE CENTER BRIDGE RIBBON-CUTTING **CEREMONY**. 11 am, Day Camp.
- ☐ Sunday, Nov. 6, ANNUAL GENERAL MEETING AND MEMBERS **APPRECIATION PICNIC**. 12 noon to 3 pm at the Day Camp.
- ☐ *Monthly*, **ADOPT-A-HIGHWAY**. The next sessions are scheduled for 10/1, 116, 12/3, and 1/8/2006. Contact Ken Seydel to volunteer or for more information. ®

#### GENERAL MEETING—SAVE THE DATE

The annual general membership meeting of the Friends of Edgewood is set for Sunday, November 6<sup>th</sup>, from 12 noon to 3 pm at the Day Camp picnic area. Once again, the Friends will host an appreciation picnic for our members and special invited guests.

This year the general meeting will immediately follow the Interpretive Center Bridge Ribbon-Cutting Ceremony at 11 am (see article on Page 1). This will be a very significant occasion for Edgewood, and I hope to see all of you there.

These events are a great way for Friends to socialize with friends, review this year's activities, elect Board members, and of course, learn who has won the coveted Best Friend award. Please plan to join us! ®

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.

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