FRIENDS OF EDGEWOOD NATURAL PRESERVE

# Edgewood Explorer

June 2011 Volume 18 Number 2

## NOTES FROM THE EDUCATION CENTER by Julia Bott, Laurie Alexander, and Bill Korbholz

## A Note from Julia: Community Giving a Warm Welcome to the Bill and Jean Lane Education Center. During the many years we worked towards the dream of an Education Center at Edgewood Preserve, I always said, "It's just a building. It's the docents and programs that will

give the building life and make it a vibrant center." Well, I wasn't entirely correct.

It is now clear to me, after spending a few shifts as an Education Center host, that the visitors are also a big part of what makes the Center an exciting place to be.

In our host training, we were taught ways to engage the visitor. But most visitors come in and readily engage the hosts. They have stories to tell and a profound love of Edgewood to share. Some stories go back many years and some are about what they saw that day. "Thank you for doing this" is a common theme.

Elly Hess noted, "As a host at the Center, it is rewarding to realize how much the public is enjoying the Center." She also gave a shout out to the volunteers, adding, "The dedication of all the volunteers is beyond belief"

You, too, can enjoy these experiences first hand—volunteer to be a host. Contact Laurie Alexander at Ed-CenterCoordinator@friendsofedgewood.org.

#### 3 Notes from Laurie: Statistics, Comments, Jobs.

Between opening day on March 19, 2011 through May 31, 2011 the Center had a total of 3,071 visitors, comprised of 2,393 adults and 678 children (which included over 100 children in different school and scout groups). Weekend days averaged over 100 visitors per day, with the maximum day being Sunday, April 24 (during spring break), when there were 178 visitors!

The Guest Journal in the Center lets visitors record their experience both in the Center and in the Park, and here are some entries:

Love it. Gorgeous Center to celebrate Earth. Thank you all for your foresight and fortitude to make it happen. Thanks for giving me a way to get back to nature.

Great resource for the community. Thank you.

Beautiful Experience.

Liked the lizards.

Awesome! Thank you so much for demolishing the yellow star thistle.

This is a beautifully constructed Nature Center with its wonderful education and recycled features of construction. The new Center is fabulous; been hiking here for 25 years!

Now that we have experience with visitors and their needs, we're moving forward with one-time projects and small on-going tasks to enhance the Education Center and its programs. We currently need support for editing videos, building web sites, organizing events, posting training materials on-line, developing marketing tools, and analyzing statistics. Let us know how you can help—we probably have a task for you.

#### A Note from Bill: Finishing the Furnishings and More.

We've been thrilled by the enthusiasm of visitors this inaugural year of the Bill and Jean Lane Education Center. Many visitors have been moved to offer unsolicited donations to help with its support.

Financial support from the public is still much needed, as there is no funding to cover the continuing operation of the Center, not to mention finishing the furnishings for the office and exhibit room. Contributions to help us maintain and enhance what is truly your Education Center can be made online at www.supportparks.org/donor.html or mailed to the San Mateo County Parks Foundation, 215 Bay Road, Menlo Park CA 94025. Questions? Contact Julia Bott at julia@supportparks.org or 650-321-5812.

## OUT OF THE MOUTHS OF BABES by Laurie Alexander

A goal of the Education Center is to inspire stewardship for the land in our visitors. Sometimes, the visitors, especially the younger ones, inspire me.

I was staffing the Education Center one Saturday, when I felt a tug on my sleeve.

A dark-eyed little girl waved the Bay Checkerspot brochure at me, and pointing to the butterfly photo on it, asked precisely, "What is a Checkerspot?" We turned around to the *Life in Serpentine* exhibit, and the girl's eyes widened a bit as she saw the giant butterfly. She and her older brother and I discussed the butterfly and the caterpillars for a moment, and then she impatiently waved the brochure toward me again. "But what is the *mystery* of the Checkerspot?" she said, as she pointed to the picture of the magnifying glass on the brochure. "It says this is the story of *The Return of the Checkerspot*. What does that mean?"

Startled that she had made the connection between the magnifying glass and an implied mystery, I replied, "What do you think it means?"

"I think it means that there used to be butterflies here but they went away, and now they are back again."

(Continued on page 7)

#### NATURE NEWS NUGGETS

#### by Carolyn J. Strange

#### **Biodiversity's Boost**

The saying "the more the merrier" seems to apply in ecosystems, too. Specifically, the more diverse plant communities are, the more productive they also seem to be. Maybe the saying should be, "The more there are, the more there is."

Ecologists first explored this relationship with experiments carried out in plots where they varied the quantities and combinations of species planted, while keeping all other factors as similar as possible. Such artificial ecosystems have generally demonstrated that as species diversity increases, so does productivity, as measured by the amount of aboveground plant matter, or biomass, produced over the growing season. It's thought that because species' characteristics vary, species mixtures can collectively make better use of resources.

The next logical step was to take the same questions out into nature and do the experiment the other way around: mark off plots amid an established vegetation community and then remove plants to achieve the desired assemblages of plants.

Researchers did just that in the Patagonian steppe, a semiarid grassland east of the Andes Mountains in Argentina, where three shrub species and three grass species account for 97% of the productivity. (These six target species also account for 94% of the aerial cover, but only 10% of the total number of steppe species.) By removing plants, the researchers created plots having one, two, four, and six species in all possible assemblages. They also removed parts of remaining individual plants to even out biomass, as needed. Then they waited. Over three years, the experiment again showed a positive correlation between species richness and productivity—much greater than in the artificial ecosystem experiments.

Productivity is enhanced in established ecosystems, the researchers say, because over a long history of coexistence, the species settle into ways of using resources harmoniously, such as extending their roots to different depths, using different forms of nitrogen, even staggering photosynthesis.

Of course there's a flip side to biodiversity's boost. When species disappear from such flourishing communities, the drop in productivity may be greater than previously thought.

 $http://www.brown.edu/Research/ECI/people/sala/pdfs/Flombaum\_Sala\_2008.pdf$ 

#### Weeds and Climate Change

Although increasingly rare at Edgewood, thanks to our Weed Warriors, the "wicked weed of the West," yellow star thistle or YST, already wreaks ecological havoc and causes millions of dollars of damage across the western states. Besides displacing native plants, YST degrades pastures and croplands, poisons horses, reduces wildlife

habitat and forage, and can significantly alter water cycles by depleting soil moisture reserves, among other not-soendearing qualities. But YST could become an even more formidable foe in coming decades.

When grown under the conditions expected to result from climate change, YST grew to six times its normal size in some cases, while other grassland species didn't change much. Climate change is expected to increase carbon diox-



Yellow Star Thistle (Centaurea solstitialis) © Kathy Korbholz

ide, precipitation, and nitrogen, as well as temperature. As expected, all the plants increased in size when exposed to more nitrogen, but other than that, most of the grassland species studied did not re-

spond much to changes in growing conditions. YST, however, also bulked up with more carbon dioxide—one of the largest responses to elevated carbon dioxide scientists have observed.

Although it has been widely accepted that climate change is likely to make invasive plant problems worse, the news isn't all bad. Plants and ecosystems are likely to respond to climate change in a number of ways, and as ranges and distributions shiff, weeds won't always win, necessarily. Some weeds may retreat, creating restoration opportunities, according to a modeling study that looked at the "kudzus of the West," five of the worst invasive weeds: YST, tamarisk, cheatgrass, spotted knapweed, and leafy spurge.

Alas, the study concluded that YST is likely to just expand rather than retreat. Tamarisk isn't likely to move much. Cheatgrass, however, could move northward into Idaho, Montana and Wyoming, while retreating in southern Nevada and Utah. Spotted knapweed will likely climb to higher elevations in the Rockies, again creating both invasion risk and restoration opportunity. Leafy spurge, which plagues northern states west of the Mississippi River, is also poised to both advance and retreat. However, the displaced local natives might no longer be able move back in as the weeds move out, so further modeling is necessary, the researchers say. They suggest that perhaps natives from elsewhere could be considered for restoration to prevent other exotic plants from invading the changing sites. Whether and how to intervene are just the preliminary questions when considering the management of transforming lands in the face of climate change.

http://esciencenews.com/articles/2011/05/31/climate.change.albws.invasive.weed.outcompete.bcal.species
http://esciencenews.com/articles/2009/01/28/climate.changes.impact.invasive.
plants.westem.us.may.create.restoration.opportunities

## THE BAY CHECKERS POT BUTTER FLY (EUPHYDRYAS EDITHA BAYENSIS)

#### By Christal Niederer



Bay Checkerspot Butterfly (Euphydry as editha bayensis) © Christal Niederer

The Checkerspots are back! The Edgewood population was estimated at 4,500 butterflies in 1997, but numbered less than 100 butterflies in 2000, and appeared to be extinct as of 2003. No butterflies or larvae were observed in 2003, 2004, 2005, and 2006. A reintroduction took place in 2007, which was an extremely dry year. Only 1,000 larvae and 12 adults were transported.

From February 10 to 12 this year, 4,003 larvae were transported from Coyote Ridge (San Jose) to Edgewood. We were hoping for a cooler spring this year (which we got!), and that the larger number of larvae would increase the critical density of adult butterflies. Butterflies judge habitat quality by the presence of others; they need a critical mass to settle down and develop a sedentary tendency. Introducing too few butterflies may increase the likelihood that they will fly away looking for other individuals.

The federal and state permits allow continued reintroductions over the next five years, further increasing chances of hitting a good weather year that is conducive to establishment. Mowing and dethatching continue to take place rotationally throughout the butterfly habitat, creating dense fields of dwarf plantain, gold fields, tidy tips, and other nectar sources.

Populations at Coyote Ridge are also much higher this year than in previous years, making impacts to the source population even less likely (the federal permit allows collection of up to 5%; we are closer to 1%).

Adults live for only 6-10 days. They mate, and the female lays eggs—sometimes laying more than 500 eggs in her lifetime. The eggs are deposited at the base of dwarf plantain, or if the plantain is not available, on purple owl's clover, which the hatched larvae then feed upon.

The tiny caterpillars that emerge are called pre-diapause larvae. If they reach sufficient size before their host plants

dry out, they will survive and enter diapause, a dormancy state in which they spend the long, hot summer. Unfortunately, most pre-diapause larvae will starve to death before reaching that state. This year's cool April meant host plants stayed fresh for a longer period, meaning a greater survival rate at this critical stage. Survivors leave diapause when dwarf plantain germinates with the onset of the rainy season (in some cases, if food is not readily available, they may not enter diapause until the next rainy season). Once they break diapause, they are post-diapause larvae. They munch plantain and bask in the sun until becoming large enough to form a chrysalis and pupate. After about ten days in this stage, they emerge as adults.

By far the most critical survival factor for the caterpillars is whether their host plants dry up before the caterpillars are large enough to go into diapause. However, another danger comes from certain wasp and fly species that can parasitize the caterpillars, with their larvae eating the living caterpillars from the inside. Rain and hail can cause substantial mortality of adult Bay checkerspot butterflies. Strong wind can also be problematic for them, often damaging their wings to the point that their ability to fly is compromised. Bay checkerspot butterfly adults are also eaten by a variety of predators: spiders catch butterflies both in their webs and while the butterflies are not flying. Other invertebrates undoubtedly prev on some butterflies while the butterflies are on the ground or in the vegetation. Mammals may take some butterflies, particularly during periods when the butterflies are inactive (at night and during periods of bad weather).

This season's monitoring included walking transects for adult butterflies, with volunteers taking a daily stroll on a fix ed course through the habitat. In 2007, we saw 13 adults during the entire flight season; this year we saw more than 130. Volunteers also monitored vegetation phenology plots, which found plenty of fresh host and nectar sources in the weeks before larvae entered diapause for the hot, dry summer. Success, however, will be best measured next winter when we count post-diapause larvae. Plenty of larvae next year will show that the larvae we released pupated, emerged as adult butterflies that mated and laid eggs and produced pre-diapause larvae that were able to get large enough to enter diapause before host plants dried out. Stay tuned for more results.

 $Ehrlich\ P.R.,\ R.R.\ White,\ M.C.\ Singer,\ S.W.\ McKechnie,\ and\ L.E.\ Gibert.\ 1975.$   $Checkerspot\ butterflies-\ an\ historical\ perspective.\ Science\ 188\ 221\ -228$ 

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Weiss, S.B. 2002. "Final Report on NFWF Grant for Habitat Restoration at Edgewood Natural Preserve, San Mateo County, CA." Available on line at: http://www.co.sanmateo.ca.us/vgn/images/portal/cit\_609/14232740Edgewood-NFWFFinalReport.pdf

### CHANGE IS INEVITABLE by Anne Koletzke

"Change is inevitable—except from a vending machine."

Robert C. Gallager

I used this quote in my first article for the *Explorer*, so I thought it only appropriate that I use it again here, in what will be my final article and the end of my tenure as editor.

As you may have noticed, my love for animals is huge. Multiply that by about a hundred times, and you have how much I love horses. Multiply *that* by a hundred times more, and you have how much I love the horses at GEVA, an equine retirement and rehabilitation foundation where I spend a great deal of my time. So when I learned there was such a thing as acupressure for horses, and that one of the foremost practitioners in the field lived nearby and was offering classes, I signed up.

Unfortunately, and much as it irks me to admit, I really and truly am not as young as I used to be. I am also astonishingly inept at multitasking. So when the acupressure homework started to pour in, it didn't take long for me to realize I couldn't manage it and the *Explorer*, too.

I can't thank Bill Korbholz enough for offering the editorship to me. I have learned so much, and I cherish the chance it has given me to collaborate with so many wonderful people. And with so many wonderful animals!

Speaking of whom, I was anxious about how m.m. would react to my resigning, but as usual, he surprised me. "Oh, thank goodness!" he said. "I'm 5 years old now, which is positively ancient for a meadow mouse, and all this running about gathering news and conducting interviews on top of the usual predator evasion and food finding has begun to take its toll. My good friend Owl offered to fly me everywhere, and I actually tried it once, but it only confirmed my suspicion that we meadow mice were never, ever meant to fly through the air!"

And then he suddenly grew very quiet and very still. Finally, speaking so softly I could barely hear him, he said, "Will you still come out to see me?"

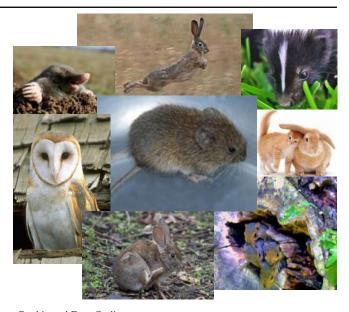
"Oh mouse, of course I will!!!" I said. "And we can go to visit everyone together, even grumpy old Mole. You can ride in my shirt pocket, the way you did when I first took you to meet Owl."

"Oh that's grand!" he said, bright-eyed once again." And I do enjoy Owl. Let's go now and tell him our news."

"I suspect he's aware of it already—he's wise, you know."

"Oh, he's not so wise. When I told him meadow mice were semi-fossorial, he had no idea what I was talking about. I've taught him lots of stuff. In fact just the other day . . ."

And so he chattered on, peering out over the top of my pocket, while I made my way up the hill to find a most extraordinary barn owl, best friend in all the world to an even more extraordinary meadow mouse.



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http://www.nwasianweekly.com/2011/02/year-of-the-cat-or-year-of-the-rabbit/

http://www.shawcreekbirdsupply.com/barn\_owl\_info.htm
http://philadelphia.crittercontrol.com/facts/animals/moles.html
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#### BIRD SONGAND OTHER STORIES

New works by Trevlyn Williams featuring Edgewood and other local scenes

Gallery House
320 S California Avenue
Palo Alto, CA
June 21 - July 16
http://www.galleryhouse2.com/next.html

#### Opening Reception with the Artist Friday June 24

6 p.m. - 8 p.m.

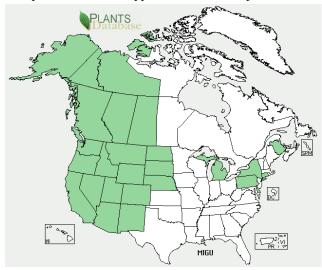
10% of sales donated to Friends of Edgewood



## THE HEALING PLANTS OF EDGEWOOD The Risk-Taking Mimulus by Mary Anne Leary

Edgewood is blessed to have three species of the *Mimulus* genus gracing its landscape: *Mimulus aurantiacus*, commonly known as Sticky Monkeyflower; *Mimulus douglasii*, our beloved Purple Mouse-Ears; and *Mimulus guttatus*, commonly known as Large-, Seep- (Seep-Spring), or Common Yellow Monkeyflower. The *Mimulus* genus, also known as Monkeyflowers, used to be a member of the Scrophulariaceae Family, but now, through DNA studies, has been reclassified into the Phrymaceae Family. According to Ken Himes, this change will not officially occur until the new edition of the *Jepson Manual* is released this summer. There are approximately more than 100 species of *Mimulus* worldwide, with over 60 species native to California.

In this article we will specifically explore *Mimulus* guttatus. As the name implies, the Seep-Spring Monkeyflower likes to grow in moist areas, ranging from coastal meadows and streams to steep mountain slopes with snowmelt seepages. As stated by Toni Corelli in her book, The Flowering Plants of Edgewood Natural Preserve, the Seep-Spring Monkey flower can have a long blooming season from January to October. Mimulus guttatus is native to the western United States. The map shown below, from the US Department of Agriculture's Plant Database, shows the distribution for the Seep-Spring Monkey flower. The flower likes to grow in clean water that is well oxygenated, so it is a flower that is rarely seen in more commercially populated areas. Monkey flowers are characterized by their mouth-like shape, having a throat that opens out into two upper and three lower petals.



It is recognized in flower essence therapy that Monkey-flowers in general deal with some aspect of fear. *Mimulus guttatus* is a remedy for those who struggle with known fears and anxieties of everyday life. These can be fears such as experiencing anxiety before a test or when having to do public speaking. Children suffering from a fear of the dark can be assisted by taking the Mimulus flower essence.



SeepSpring Monkeyflower (Mimulus guttatus) © Richard Katz

The remedy can also be helpful throughout different stages of life when we experience shyness or worry in our interactions with everyday life experiences.

In 1928, the Mimulus flower essence was first prepared by Dr. Edward Bach in Wales, England, as the Seep-Spring Monkey flower had become naturalized in Britain in the early nineteenth century. Un fortunately, *Mimulus* is

no longer as abundant along the streams and rivers of England due to farmland chemicals polluting the waterways, thus reducing the number of "crystal streams where the water is clear." Dr. Bach notes in his book, *The Twelve Healers*, that the indications for needing the Mimulus flower essence are "fear of worldly things, illness, pain, accidents, poverty, of the dark, of being alone, of misfortune; the fears of everyday life. These people quietly and secretly bear their dread; they do not speak freely of it to others."

As stated in the *Flower Essence Repertory* by Patricia Kaminski and Richard Katz, "Mimulus helps the soul to contact the strength and purpose of its Higher Self, and thus sets it free to experience life with greater curiosity, exuberance, and joy." So no longer will we look upon our beautiful Seep-Spring Monkey flower in the same way, for we now know its vibrational medicine can encourage inner strength, courage, and confidence to face life's everyday challenges.

http://plants.usda.gov/java/profile?symbol=MIGU, map of *Mimulus guttatus*, U.S. distribution http://www.flowersociety.org/Mimulus-Guttatus.htm

http://en.wikipedia.org/wiki/Mimulus

Bach, Edward M.D., *The Twelve Healers and Other Remedies*Barnard, Julian and Martine, *The Healing Herbs of Edward Bach*Kaminski, Patricia and Richard Katz, *Flower Essence Repertory* ®

#### "Just living is not enough," said the butterfly,

"one must have sunshine, freedom and a little flower." ~ Hans Christian Anderson



## WELCOME NEW DOCENTS! by Mary Wilson

The 2011 Wildflower Walk docent training class graduated 9 new docents. It was a wet year and a late wildflower season. We dealt with showers, muddy trails, and were nearly rained out one time.

All our new docents worked hard and well to learn the material. Our newest Wildflower Walk docents are Catherine Frock, Haumea Hanakahi, Christine Isborn, Maha Justi, Dianne Maurer, Pam Ridlehuber, Barb Roddin, Marc Roddin, and Cynthia Schreurs. Please welcome them next wildflower season as they begin to lead Wildflower Walks.

Our volunteers brought many levels of experience and interest to our training class from working in other parks, to managing volunteers in other organizations, to donating expertise with computer-aided communications. Several of this year's class have jumped right in and helped with the new Education Center and with organizing the Wildflower Walks docents even before graduation: Maha Justi helped set up the Education Center internet connection, Barb and Marc Roddin are hosts at the Center, and Dianne Maurer has taken on coordinating the Wildflower Walks docents. We are certainly richer for the contributions of all of our new docents.

I also want to thank our presenters Toni Corelli, John Allen, Ty Freiberg, Paul Heiple, and Ken Himes. Their expertise and dedication are what makes the docent training so special; their passion for Edgewood is contagious. John Allen taught the history of Edgewood, naming and pointing out the Park's various landmarks. Paul Heiple explained the geology of Edgewood, and walked the class all over the Park to point out the various rock types. Ken Himes again taught why Chaparral and Oak Woodland plant communities are established where they are at Edgewood. Ty Freiberg taught the trainees how to engage the hikers they will lead, and Toni Corelli taught them how to recognize huge numbers of April wildflowers. All of us who support, love, and hike Edgewood benefited from this sharing of knowledge.

## THANK YOU KATE, WELCOME DIANNE! by Mary Wilson

Friends of Edgewood thanks Kate Finnigan very much for having coordinated our Wildflower Walks for the past three plus years. Her energetic and positive attitude, and the very interesting Docent Kick-off nights she produced were especially appreciated. She got the 2011 season started, but needed to devote her time to a new and additional career—motherhood.

Fortunately for Friends of Edgewood, Dianne Maurer, who was taking the Wildflower Walks Docent Training class, had had a lot of experience managing volunteers for the Oregon zoo in Portland, Oregon. She had recently relocated to the Peninsula and had also already taken the Education Center host training. We are very fortunate that she was willing to pick up the Wildflower Walk Docent pro-

gram in midstream. She is doing a great job and is teaching us a lot about using Google Calendar. We look forward to her guiding hand for the foreseeable future. Thank you very much Dianne!

## JUNIOR EXPLORERS 2010—2011 by Carol Hankermeyer

Junior Explorers has experienced another record year of field trips for school children, with the new Bill and Jean Lane Education Center as a drawing card. The Center is ideal in providing a focus on Edgewood's unique natural features and as a gathering point from which to launch our field trips. In the 2010-2011 school year, Junior Explorers successfully hosted 18 field trips for 370 students, ranging from pre-school to high school and all grades in between. If we include no-shows and cancellations, we accommodated more than 450 students, matching the 2008 all-time high!

In addition to quantity, the quality of the field trips has been reflected in teacher and parent responses. Here are a couple of examples:

Dear Carol, Judy, and Kathy,

I cannot thank you all enough for the wonderful attention you gave our children today. I'm sure they sense that understanding and preserving nature must be incredibly important and amazing for us to go to the trouble to share it with them.—Julie Treichler, MOM's Club

Thank you for such a wonderful tour of Edgewood Park. All the boys really enjoyed it. The Den will definitely be returning for longer hikes.—Mike Lyzun, Cub Scout leader



Filoli docents at the Bill and Jean Lane Education Center after a tour with Junior Explorers Coordinators

This year we initiated a new collaborative effort between Filoli and Junior Explorers. Filoli docents visited Edgewood to learn about the special flora, the butterfly reintroduction, and the interpretive strategies we employ in our particular setting. In turn, Filoli hosted Edgewood docents at a spider talk given for their docents on June 7. We an-

(Continued on page 7)

(Junior Explorers—Continued from page 6) ticipate this kind of exchange will be beneficial to both environmental education programs.

Lastly, we now have an added perk for all kids attending Junior Explorer field trips: an Edgewood Explorer button



Cub Scouts view Bay checkerspot display in the Education Center.

Photo © Mike Lyzun

they can proudly wear to show they success fully completed a hike at Edgewood Preserve.

We would like to like to offer special thanks to Laurie Alexander for her great support in integrating the Education Center into the Junior Explorers program.

And, as always, we express our undying gratitude to our wonderful Junior Explorer docents who make the program possible. *You* can be one, too!

(Out of the Mouths of Babes—Continued from page 1) "Exactly!" I replied. Then I told her about how it came to be that over time there was less and less food for the caterpillars, so that finally the butterflies had disappeared, but that this year scientists had brought caterpillars from somewhere else to live and grow up and become butterflies and eventually lay eggs in the serpentine grassland of Edgewood.

She immediately spotted the hole in my story. "But when they brought them here, was there enough *food* for the caterpillars?"

#### 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 the mailing label. For example, if the code is 06/2011, membership runs through June 2011.

Questions? Call (866) GO-EDGEWOOD (866-463-3439) or contact membership-coordinator@friendsofedgewood.org

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"Oh, yes!" I said. "Scientists and rangers and lots of really concerned people worked very hard for many years to control the weeds that were crowding out the caterpillars' food plants. They waited 'til there were enough of the right plants for the 4,003 new caterpillars to eat before they brought the caterpillars to Edgewood." She considered this for a moment, nodded her head, and then darted off to see the mountain lion tracks in the *Streams and Springs* exhibit.

When the child and her father were signing the Guest Journal, I invited them to include any suggestions they might have. The little girl considered me thoughtfully, and then wandered off with her brother.

Later, as the family was about to leave, I felt another tug on my sleeve. The dark eyes peered up at me confidentially. "I have my suggestion ready now."

What, I wondered, would a small child suggest for the Education Center? Step stools to see better over the railings? Real water in the *Springs and Streams* exhibit? I underestimated the breadth of this little one's vision. She looked up at me and said,

"I think people should make sure there is always enough food for the caterpillars."

The butterfly counts not months but moments, and has time enough.

Rabindranath Tagore



	\$10 Student/Retired (includes quarterly newsletter)				
	\$25 Friend (newsletter) \$50 Advocate (newsletter, set of 6 Edgewood photo greeting cards)				
	<ul> <li>\$75 Supporter (newsletter plus choose one):</li> <li>□ Set of 6 Edgewood photo greeting cards and 1-year subscription to Bay Nature magazine</li> <li>□ Toni Corelli's Flowering Plants of Edgewood Natural Preserve</li> </ul>				
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	Please do not send any premiums.				
	I am enclosing a gift of				
Please send copies of Common Native Wildflowers of Edgewood @\$1.50, copies of the Edgewood Vascular Plant List @\$3.00, copies of the Apr-Jun 2004 Bay Nature magazine @\$6.00, copies of Flowering Plants of Edgewood Natural Preserve @\$12.00. Includes tax, S&H. All items subject to availability.					
I would like to participate in the following:					
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		GPS mapping		Schools outreach	
		sletter/web		Habitat restoration	
	Publ	ic relations		Adopt-A-Highway	

## **DIANNE'S DIGITAL DELIGHTS** by Dianne Hunt



Lots of showers bring lots of flowers—and a beautiful waterfall.

In the Waterfall Lover's Guide of Northern California, Edgewood's Sylvan Trail Falls is classified as "uninspiring." I beg to differ. This spring, as you can see, Sylvan Trail Falls was very inspiring.



#### UPCOMING EVENTS

- □ Adopt-A-Highway. The sessions for the rest of the year are 7/10, 8/6, 9/11, 10/1, 11/6, & 12/3. To volunteer or get more information, contact Ken Seydel.
- □ SUMMER SOLSTICE

Tuesday June 21, 10:16 a.m. PDT All are welcome Admission is Free!

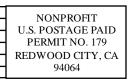
Butterflies are self propelled flowers.

~R.H. Heinlein



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#### ADDRESS SERVICE REQUESTED



If the Sun and Moon should ever doubt, they'd immediately go out.

~ William Blake