FRIENDS OF EDGEWOOD NATURAL PRESERVE

# Explorer Edgewood

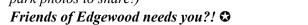
December 2011 Volume 18 Number 4

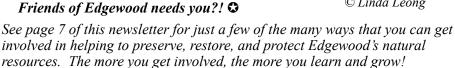
#### FROM THE EDITOR ...

by Linda Leong

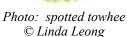


- Wildflower Walk Docents hike almost weekly to keep the What's Bloomin' board up-to-date?
- Ceiling tiles in the Education Center are made with aspen twigs, a renewable resource?
- Caterpillar waste is known as "frass"?
- A visitor to the Ed Center inquired about a pungent plant that she thought smelled like "pot"? (FoE's best guess was tarweed)
- You can capture wonderful photos in Edgewood on a midday hike in May? (send me your interesting park photos to share!)









# 2012 **Board of Directors** Laurie Alexander Paul Heiple Bill Korbholz Kathy Korbholz\* John Morse Christal Niederer Cynthia Schreurs Mary Wilson \*Director Emeritus

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Photo: Friends John and Frances Morse and their grandchildren show off their new shirts. © Frances Morse

## 2011 Annual General Meeting

by Mary Wilson, FoE Board President.

We had lovely weather for Friends of Edgewood's 2011 Annual General Meeting. Members turned out in record numbers. Twenty-two guests attended for the first time. I hope we can maintain this level of interest. This year, as for the past several years, Arguello Catering donated the picnic lunch. We really appreciate their delicious contribution.

Our program was low-key. Laurie Alexander invited members to post what they liked about the Bill and Jean Lane Education Center (Ed Center) on poster boards. The Ed Center has been open now for about half a year and feels so central to our efforts that I wonder how we ever managed without it.

Kathy Korbholz introduced new Edgewood T-shirts. They proclaim "I am a friend of Edgewood" and are decorated with a small butterfly & boot prints rather than color pictures. They were well received, and many were sold after the picnic. These T-shirts, as well as some sizes of our previous T-shirts, can be purchased at the Ed Center.

I was delighted to be able to present our Best Friend award to Laurie Alexander for her outstanding job in organizing the first training sessions for Ed Center hosts and for coordinating the Ed Center staffing and procedures. She took the lead in "inventing" how Friends of Edgewood would use the Ed Center. We are all very grateful for her energy and organizational skills.

During our business meeting, three Directors were elected to serve for two years: Bill Korbholz, Cynthia Schreurs and myself (Mary Wilson). The proposed bylaws change to allow up to 12 directors was approved by a majority of the attending membership. This change was recommended to allow more members the opportunity to take an active role in the governance and conduct of the business of the Friends of Edgewood and to gradually increase our pool of qualified candidates to fill officer positions each year. Thanks to all who came!

Note: With approval of the bylaws change, John Morse was appointed to the Board of Directors in November 2011 to serve a 2-year term, and Kathy Korbholz was appointed Director Emeritus for a 1-year term.

Look deep into nature, and then you will understand everything better.

~ Albert Einstein



Photo: Laurie Alexander, Edgewood's "2011 Best Friend". © Kathy Korbholz





Arguello Catering is the official caterer of the Friends of Edgewood.

Arguello has been generously catering lunches for our general meetings for over 10 years!

# www.arguellocatering.com



#### DIANNE'S DIGITAL DELIGHTS

by Dianne Hunt

This spring, the FoE wildflower docents started hiking together on Friday evenings and in the summer we added Tuesday evenings. Most of us hadn't hiked Edgewood at this time of year. We were seeing things we had never seen before.

I have great memories of these hikes. We saw soap plant blossoms, orb-weaver spiders on their webs and turret spiders sitting on top of their turrets, dusky-footed woodrats, bunnies and jack rabbits in their scurry zones, amazing birds, the yampah field in full bloom, rattlesnakes, full moons, heavy banks of fog, and incredible sunsets. The list is endless.

To me, another great thing about these hikes was the friendships that developed among all of us. We learned so much from each other. What a variety of expertise our docents have!



Photo: Sun sets over Edgewood. © Dianne Hunt

#### THE CRITICAL JUDGE OF PINE

by Mary Anne Leary

It is not out of the ordinary for people to enjoy the beauty and fragrance of a towering Pine Tree. Edgewood is graced by the presence of a Monterey Pine, *Pinus radiata*, which was planted at the Day Camp. Per Toni Corelli's book, *Flowering Plants of Edgewood Natural Preserve*, she writes of how the "tree is rare where it occurs naturally; it was planted here and is extensively planted throughout our area where it has become naturalized."

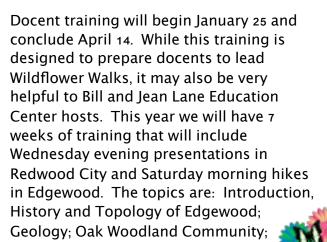
The Pine Family, Pinaceae, is known in the fossil record since the Cretaceous Period (144 to 65 Million Years Ago), a time when fossils of flowering plants were first found.

Per the USDA "The needles of pines, which contain vitamin C, were brewed into a tea that was drunk to treat headaches (Heinsen 1972). The Costanoan and others chewed pine resin to treat rheumatism. This resin or pitch was used as a salve that was applied to burns and sores. Pine resins were useful as glue or sealant. Pine resin was also chewed as gum. Pine nuts were burned into charcoal, crushed, and then applied to both sores and burns. Various Native American tribes used the split roots of many pine species as the foundation to make fish traps, seed beaters, burden and many other types of baskets (Murphey 1959). The inner portions of slender new pine twigs could be processed into sewing materials (Barrett & Gifford 1933)."

(continued on Page 7)

# It's Time to Clear Your Calendar for 2012 Docent Training!

by Mary Wilson, Docent Training Coordinator for Friends of Edgewood



Chaparral Community; How to Lead a Hike; Floral Anatomy; and Serpentine Grasslands. Our presenters will be John Allen, Toni Corelli, Paul Heiple, Ken Himes, Ty Freiberg,

and Mary Wilson.

If you know anyone who would be interested, please have them email docent-trainer@friendsofedgewood.org to register and to receive more information. Thank you very much.

No winter lasts forever; no spring skips its turn.

# Rattlesnakes: Myths and Misconceptions of this Much Maligned and Misunderstood Mouser of the Meadows

By Roger Myers, FoE docent emeritus.

All alliterations aside, the essential truth regarding rattlesnakes is that they represent vital threads in the fabric of a balanced ecosystem at Edgewood Park and Natural Preserve and deserve our respect and protection. Were it not for the service provided by rattlesnakes (and some of our raptors, coyotes, foxes, and non-venomous constrictors), Edgewood would be overrun with mice, voles, rats, gophers and other rodents, which in turn would wind up eating every seed in sight. These serpents are far better mousers than any cat!



Photo: Young rattler in Edgewood Preserve. © Jan Casazza

Let's start by dispelling a few myths and misconceptions about rattlesnakes:

- They are **not** typically aggressive and will almost always retreat when given the opportunity. Even a rattler that is raised up and rattling furiously is usually moving slowly backwards while keeping a wary eye on what it perceives as a potential threat.
- 2. When a rattler is encountered basking on a trail, many people imagine it is waiting there with hostile intent. Not true. These snakes are ectotherms, meaning they are dependent on external forms of heat to raise their body temperature. After a rattlesnake has consumed a large prey item, it needs to raise its body temperature for the digestive process to work properly. If they cannot do this, they run the risk of having the food rot in their gut and killing them. They are out there basking because they must.
- 3. It is not true that a rattlesnake bite is the kiss of death. You are far more likely to die from shock or secondary infection of the wound. Of over 10,000 people annually bitten by venomous snakes in the U.S., usually less than a dozen will die. It takes time and energy for a snake to produce enough venom to kill a prey item. It does not want to waste it on something it clearly cannot eat.
- 4. Quite a few baby rattlers have been spotted at Edgewood this year. It is a myth that their bite is more dangerous than that of an adult because they

- have not yet learned to control their venom and are likely to give you a larger dose than an adult. The characteristics of venom actually change as a snake grows. The venom of baby snakes has a higher component of neurotoxic venom to more quickly immobilize their smaller prey items while the young snakes are still perfecting their hunting skills. Adult venom is formulated to more quickly start the process of digestion, as larger prey items are harder to digest..
- 5. Some people still believe that snakes can sting with their forked tongues. Again, not true. Snakes actually use their tongues to smell. They are trying to figure out what is going on around them and where the next meal might be found. The snake uses its forked tongue to detect and follow the scent of its prey. Chemically analyzing collected scent particles in the Jacobson's organ on the roof of its mouth, it can tell which tine of the fork detects the strongest scent!
- 6. You cannot tell how old a rattlesnake is by counting the segments on its rattle. Rattlers add a new segment or "button" to their rattle string each time they shed their skin. A well-fed young snake may get 4 to 6 buttons in its first year. Newborn rattlers can grow about a foot a year, so you can use length as a rough age estimator of younger snakes.
- 7. The rattling sound of a rattlesnake is not meant as a threat. The snake is merely trying (quite effectively, I might add) to get your attention. A snake is very poorly equipped to defend itself.
- 8. Rattlesnakes will not chase you, nor can they leap off the ground to bite you! A coiled rattlesnake can only strike out about a third to one-half of its body length. The largest of Edgewood's rattlers rarely exceed 5 feet in length, meaning they could only strike 20 to 30 inches. Give them a few feet of clearance, and they can be gently stepped around without unduly riling the reptile.
- Stranger than myth, but true: Do not handle a severed head; it can still bite and inject venom by reflex for more than an hour after death!

So what are your chances of being bitten by a rattlesnake? Consider these facts:

- ~ 90% of victims are males between the ages of 18 and 50.
- 75% are bitten on the arm or hand while intentionally trying to capture, handle, or kill a snake.
- Alcohol is associated in about 2/3 of the bites.
- ~ 1/3 of victims owned the snake that bit them.
- 15% of victims have been bitten previously.

You do the math. Unless you are a heavy drinking, dim-witted, macho male who likes to keep venomous snakes as pets, the odds are most definitely in your favor. If you **do** fit this profile, don't claim you were never warned (...though you could well plead ignorance!). Of 10,000 to 12,000 annual venomous bites in the U.S., fully 9,000 to 11,000 victims fall into the above categories. Amazing.

(continued on Page 8)

#### Mistletoe Miscellany

By Carolyn J. Strange

Blessed as we are with a moderate climate where many broad-leaved trees remain clothed and green through winter, it may be hard to fathom why ancient Europeans so deeply revered



mistletoe, even though vestiges of their rituals linger in our winter holiday custom of hanging up beribboned mistletoe sprigs. But picture a bleak winter landscape in which some otherwise naked trees bear an exuberant clump of verdant mistletoe. Any evergreen might seem to defy winter, but this magical plant can spring from bare limbs. Truly unearthly, it never even touches the ground!

"Mistletoe" is apparently the combination of old words for "dung" and "twig," revealing the ancients as keen observers of Nature. Indeed, birds disperse the sticky seeds from tree to tree in droppings. Scientists, also keen observers, dubbed the genus of leafy American mistletoes *Phoradendron*, or "tree thief." Despite their green photosynthesizing leaves, the "holiday" mistletoes are hemi-parasites that steal water, minerals, and other nutrients from their hosts.

Rather than a tidy taxonomic term, *mistletoe* is more of a lifestyle descriptor. The roughly 1300 mistletoe species worldwide fall within the flowering plant order Santalales, named for the famously fragrant sandalwood, a root hemi-parasite. Mistletoes are shrubby parasitic and hemi-parasitic relatives that invade their hosts aboveground.

North America has two kinds, the leafy American mistletoes, which look similar to the European mistletoe, and dwarf mistletoes. With their short stems and tiny scale-like leaves, dwarf mistletoes might be inconspicuous except that their host trees, conifers, usually respond to their parasitic infections with dense profusions of distorted branches known as witches' brooms.

Among California's seven species of leafy mistletoes, most infect one to several native trees. But oak mistletoe, Edgewoood's representative, primarily infects oaks. California also has 12 dwarf mistletoe species; each infects one to only a few pine family species.

Female mistletoe plants produce small, sticky, whitishpinkish berries that generally mature winter through spring and attract many birds. Seeds generally survive their trip through birds and stick tightly where deposited. (Dwarf mistletoes don't rely on avian dispersal; ripe berries explosively eject their seeds at about 60 miles per hour!) To survive, seeds have to land near a suitable entry site (such as a bud, leaf base, or twig) where rootlike structures can penetrate the branch and seek the host's plumbing.

Damage to hosts can range from minor swellings to eventual death, depending on mistletoe species, severity of infection, host health, and environmental conditions. Past forestry practices, including fire suppression, have encouraged dwarf mistletoe. Now, heavy infestations of dwarf mistletoes cause more damage and economic loss in western forests than any other insect pest or disease, according to the California Department of Food and Agriculture.

Mistletoes have participated in their ecosystems for millennia, however, and contribute tremendous ecological value. They provide food, cover, roosts, and nesting sites for many insect, bird and mammal species. Forests having more dwarf mistletoe also have more kinds and numbers of birds. Cavity-nesting birds may increase as much as three-fold, thanks to more dead trees. Mistletoe berries provide critical winter food for birds such as robins, cedar waxwings, grosbeaks, western bluebirds, and many more. Hungry bees seek mistletoe nectar and pollen, often the first available in spring. Three hairstreak butterfly species depend entirely on mistletoes for survival. One hairstreak caterpillar requires leafy mistletoe, and the other two species' caterpillars require dwarf mistletoe. All three adult butterflies drink mistletoe nectar. Mammals such as elk, cattle and deer, as well as squirrels and porcupines, also munch mistletoe.

Despite all this nibbling amongst wildlife, indoor mistletoe can become a holiday hazard for children and pets. All parts of many mistletoe species contain toxic chemicals that can be poisonous if domestic denizens ingest them. Yet mistletoe has long been thought to cure a variety of ills, and people still experiment with extracts.

While some people harvest mistletoe with shotguns (!), others express more Druidic reverence and avoid collateral damage to the host tree. (No picking (or shooting!) of anything is allowed at Edgewood.) Instead, they climb the tree, using pruning tools, and lower the mistletoe bundles carefully onto tarps or sheets, harking back to the ancients, who believed that it's bad luck for ceremonial mistletoe to touch the ground.

#### References:

http://www.usgs.gov/newsroom/special/mistletoe/

http://www.sciencenews.org/view/feature/id/1186/title/Botany under the Mistletoe

http://www.cdfa.ca.gov/phpps/ipc/weedinfo/viscum.htm

http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7437.html

#### YOU, yes YOU are the new normal

by Catherine ("Cat") Frock

I had no idea what I was getting myself into. But on that cool October morning as I walked briskly down the Clarkia Trail, that wasn't what I was thinking about. I was late. Fortunately, I quickly located a group of people ahead of me, carrying items that your average citizen would probably not take with them on a leisurely hike at a local county park: a heavy sign, large trash bags, dirt-laden gloves, and lots of tools. I smiled because I knew I had found them: the tireless volunteers of the Edgewood Weed Warriors.

When I moved to the Bay Area as a newly unemployed biologist in the fall of 2010, I was looking for reasons to get out of my apartment. I didn't know that a weeding program existed at Edgewood. How lucky I was to discover it! And, it was less than three miles from home. I had no idea what a wonderful experience I was about receive as a volunteer weeder.



Right away, I realized this was no ordinary volunteer group. Former engineers and geologists shared with me a wealth of information about the park's plants and animals, putting my college background in biology to shame. Perhaps they were willing to teach me what they had learned because I was the "young one" of the group (by a couple decades on most days). But I think this level of involvement is just in the DNA of people who are deeply attached to conserving a special place. They make it their mission to know about invasive plants as well as the beautiful natives, about land use history and the future efforts

that need to be taken to conserve a unique beauty for others to enjoy, just as they have enjoyed it. For whatever reason these people give, I am grateful. And you should be, too.

Recently, I heard someone at work (yes, I have a job now!) say that volunteer-based conservation is "the new normal." I can strongly attest to that. At the San Francisco Bay National Wildlife Refuge Complex, our entire biology program relies heavily on volunteers. Volunteers not only help out with removing invasive plants and propagating natives for habitat restoration but also with conducting biological surveys of threatened and endangered species. Refuge biologists actually spend time recruiting volunteers and then training them for these tasks.

We biologists really need all the help we can get. In times of widespread state and federal funding cuts, biology is an industry that is always hit hard. The effort required to conserve places and species is intensive, and that work is never-ending. The importance of public involvement and support is both underestimated and crucial.

Although my hours spent at Edgewood have greatly decreased since I started working again, I often think about the Weed Warriors. They turned my days of unemployment into a time of learning and professional development. But even now, the weeders and other volunteers have a daily impact on my life.

As long as there are people who care enough about a place like Edgewood that they donate their time to its cause, people like me who do conservation work for a living will be able to make a difference. The goals of biologists are literally impossible to achieve without volunteers.

So, thank you for caring enough to keep me employed! More importantly, thank you for caring about something irreplaceable that is truly worth saving: the world we all live in.

Cat lives in San Carlos, works at National Wildlife Refuges all over the Bay area, and enjoys hiking anywhere. She was trained as a Wildflower Walk Docent in the spring of 2011.

Man has been endowed with reason, with the power to create, so that he can add to what he's been given. But up to now he hasn't been a creator, only a destroyer. Forests keep disappearing, rivers dry up, wild life's become extinct, the climate's ruined and the land grows poorer and uglier every day.

[Uncle Vanya, 1897] ~ Anton Chekhov



© Linda Leong

## Bill and Jean Lane Education Center Visitors

Apr 5 to Nov 19, 2011 Adults: 5151

Children: 1616

(Pine, continued from Page 3)



I know I am going to be dating myself here, but who remembers the commercial in the 70s with Naturalist Euell Gibbons asking, "Have you ever eaten a pine tree? Parts are edible." Every time my siblings and I would hear this commercial we would roll in laughter! We were expecting him to tear off a part of the picnic bench

and start to eat it! There definitely are parts of the Pine tree that are edible, such as pine nuts, which can be eaten raw or roasted. When the cones are heated, the bracts will open to release the seeds. "Pine nuts are cholesterol-free, contain from 53 to 68% fat (of which

93% is unsaturated fat), multiple micronutrients and vitamins. Nuts of different pine species differ in size, nutritional/medicinal value and taste."



Pine can offer good medicine for those who struggle with self-criticism, self-acceptance, and feelings of inadequacy." vs. "Pine can offer good medicine for those who struggle with self-criticism, feelings of inadequacy, and an inability of self-acceptance. Such a person tends to be quite hard

on him/herself and have perfectionistic expectations. The straight uprightness of the Pine tree shows through its plant signature the qualities of being rigid and strict concerning one's behavior. Those who suffer from guilt and self-blame would benefit from the Pine flower essence. Learning how to truly forgive ourself is the affirmative lesson of Pine, allowing for self-acceptance to help release feelings of regret and remorse and providing assistance in deepening our sense of self-esteem.

#### References:

http://plants.usda.gov/plantguide/pdf/cs\_pira2.pdf http://pinenut.com/growing-pine-nuts/ringing-cedarnuts-oil.shtml

■ \$10 Student/Retired (includes quarterly newsletter)

#### 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? Lv msg at (866) GO-EDGEWOOD (866.463.3439) or contact membership-coordinator@friendsofedgewood.org

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Eve. Phone: (	)	-		
Email:				

		\$25 Friend (newsletter)					
		\$50 Advocate (newsletter, set of 6 Edgewood greeting cards)					
		\$75 Supporter (newsletter plus choose one)					
		Set of 6 Edgewood greeting cards and 1-year subscription to <i>Bay Nature</i> magazine					
		☐ Toni Corelli's Flowering Plants of Edgewood Natural Preserve					
		\$100 Steward or □ \$250 Guardian (newsletter, set of 6 Edgewood					
6	1	greeting cards, plus choose one):					
6		1-year subscription to <i>Bay Nature</i> magazine					
		☐ Toni Corelli's Flowering Plants of Edgewood Natural Preserve					
		Please keep the premiums and maximize the value of my dues.					
_		I am enclosing a gift of					
	Plea	Please send (subject to availability):					
_		_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					
_	Nat	Nature magazine @ \$6.00;copies of Flowering Plants of Edgewood Natural					

Preserve @ \$12.00. All prices include tax, shipping & handling.

☐ Junior explorer program

☐ Habitat management

☐ Adopt-A-Highway

☐ Organizational support

I would like to participate in the following:

☐ Docent program

■ Newsletter/web

Public relations

☐ Education Center host

(continued from Page 4)

So, rather than be fearful of Edgewood's increasing rattlesnake population, appreciate them for the marvelously designed creatures that they are and the critical role they are playing in rodent control and the general balance of nature. When one greets us with a nervous rattle, let's be neighborly and give it the space it needs to feel safe.

Editor's Note: Roger Myers was the recipient of Edgewood's 2001 Best Friend Award. Although he moved from California more than 10 years ago, Roger continues to follow happenings at Edgewood and was kind enough to share his thoughts about our recent insurgence of rattlesnakes in the Preserve.



Check out the lovely "Edgewood Journal" now in the Education Center library - this journal is a heartwarming and inspiring compilation of poems and creations by the Peninsula Young Writers (PYW) who visited Edgewood Park for guided nature walks led by Friends of Edgewood Park docents.

#### **UPCOMING EVENTS**

#### Adopt-a-Highway

Next Sessions: 12/3, 1/8\*, 2/4, 3/4

\*Rescheduled due to holiday

To volunteer or get more
information, contact Ken Seydel at

adoptahighwaycoordinator@friendsofedgewood.org

### **2012 Docent Training**

Jan 25 through Apr 14

Wildflower Walks \*\*\*\* begin March 17, 2012



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 edited by Linda Leong and is supported by contributions from many Friends. For more information about the Friends of Edgewood, visit our web site at <a href="www.friendsofedgewood.org">www.friendsofedgewood.org</a>, mail us at PO Box 3422, Redwood City, CA 94064-3422, leave message or fax us toll-free at (866) GO-EDGEWOOD (866-463-3439), or email us at <a href="mailto:info@friendsofedgewood.org">info@friendsofedgewood.org</a>.

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