FRIENDS OF EDGEWOOD NATURAL PRESERVE

# Explorer Edgewood

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# **DOCENT TRAINING FOR 2007** By Mary Wilson

Spring has sprung, Fall has fell, Winter is here and it's"....time to train new docents for Friends of Edgewood's wildflower walks.

FoE's walks focus on the spectacular blooming of serpentine grasslands at Edgewood Natural Preserve in Redwood City. Docents at Edgewood Natural Preserve find that hiking in a beautiful place and being with really appreciative members of our community is a thoroughly enjoyable experience.

Our training program runs every other week from the end of January into April and consists of 6 Wednesday evening meetings each followed by a Saturday morning hike that demonstrates the Wednesday topic. Our speakers are well known in their fields and include Toni Corelli, Ken Himes and Paul Heiple. Please join us! Please pass the word on to others who may be interested!

For more information, please contact me at docent-trainer@friendsofedgewood.org or 1-866 -GO EDGEWOOD (1-866-463-3439). ⊗



2004 training class in the field

# 2007 WILL BE AN AMAZING YEAR IN **EDGEWOOD**

# **By Peter Ingram**

The pre-Solstice change of weather is a wonderful harbinger for Mother Nature's agenda of what we humans call "The New Year." As I contemplate what this annual ritual might mean for 2007, I cannot help but lapse into a bit of awe and a whole lot of excitement at the idea that we Friends are going to significantly and – hopefully – positively intervene in the natural cycle of processes in Edgewood's grasslands in the very near future!

I am alluding to the *Edgewood Preserve* Butterfly Habitat Restoration and Community Outreach Project. The Friends, along with the San Mateo County Parks staff, the San Mateo County Parks & Recreation Foundation, Dr. Stuart Weiss, and the Santa Clara Valley Chapter of the California Native Plant Society, have been working hard for the past several years to make this special project happen. In the midst of this effort, along came REI in 2006 with a \$10,000 grant, supplementing the multi-year \$10,000/ year grants from PG&E.

Now fast-forward to the spring of 2007: There has been a major distribution of a wonderful

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(EDGEWOOD 2007, Continued from page 1) educational brochure (5,000 copies), several public presentations, multiple press releases, and a really fun kick-off event in the Preserve, attended by hundreds of people drawn by the magic of butterflies. What follows is truly amazing, and occurs in two very different ways.

First, over a 3-week period in the sloppy spring rains, Dr. Weiss and a small band of committed volunteers painstakingly collect and transport several hundred Bay Checkerspot Butterfly larvae from Santa Clara County open spaces to Edgewood. Their work is un-glamorous, wet, tiring, and even laborious.

But then on a bright spring day in April, the magic happens: Dr. Weiss triumphantly releases hundreds of adult Checkerspot butterflies into the Serpentine grasslands, and for the first time since the late 1990's, these majestic creatures are flitting around the Preserve, sipping the nectar of restored stands of Tidytips and Goldfields.

Those present for this historic human intervention are struck by the sheer beauty and gracefulness of it all, and go home humbled by the experience, grateful for the opportunity to contribute in some meaningful way, and ever hopeful that the new population will survive and thrive in Edgewood.

So, join us in the New Year for this exciting change in Edgewood. And know that your support as members and contributors has, and will make, a real difference in the history of Edgewood Natural Preserve.

Best wishes for the holiday season,

Peter Ingram ®

# ANNUAL MEETING BEST EVER

This year's annual meeting attracted over 50 members and guests, who were treated to friendly discussion, a tasty lunch, and an entertaining and informative program.

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# **EDGEWOOD'S TRAIL PATROL**

As part of the County's volunteer program coordinated by Ranger Nick Ramirez, Trail Patrollers supplement the ranger staff by walking Edgewood's trails and educating park visitors about the special care required to protect our natural preserve.

Six new members joined the patrol this year. They are Gary Cornelsen, Larry and Ann Gordon, Jerry and Claudette Gow, and Daphne Pereas.

Edgewood Trail Patrol coordinator Marshall Lim is recruiting new volunteers for 2007. No special background or knowledge is required, only a desire to help out. After Nick approves your paperwork, Marshall gives you a one-on-one orientation at the Park, at the end of which you graduate and receive your special cap and patch.



Marshall Lim

Most of the need is on weekends when the park is most heavily used, but some patrollers like to walk during the week.

Whatever time you can volunteer will help. To volunteer, contact either Nick or Marshall for more information.

As a bonus, Trail patrollers have the opportunity to take County-sponsored first aid and CPR courses if they desire.

# LESSER GOLDFINCH

# By Lee Franks

The Lesser Goldfinch (*Carduelis psaltria*) is a small (smaller than a sparrow), social, seedeating songbird. A permanent Edgewood resident, it is commonly seen during the summer months in weedy fields where it often feeds on thistle seeds. It delays nesting until June or July to ensure a dependable source of insects, thistles and dandelion seeds to feed its young.



The Lesser Goldfinch is a common backyard bird in our area, and it can easily be attracted to feeding stations that offer a supply of niger seed. Unfortunately, goldfinches are easily bullied at feeders by larger sparrows and finches. Only goldfinches and

© Shaw Creek Bird Supply Pine Siskins invert for food, however, so a special finch feeder with openings below the perches is ideal for ensuring a steady stream of these "wild canaries."

# Appearance

Plumage color differs according to sex. Adult males have a green back. Their forehead and crown are glossy black. Wings are black with white edging and a white patch (most visible in flight) at the base of their primary flight feathers. Male underparts are bright canary yellow.

The upperparts of the adult female are uniform olive green, They have white in wings and tail, visible in flight Their underparts are dull yellow. Females on average are smaller than males. Juveniles resemble the adult female, but are greener below.

Lesser Goldfinches are similar in appearance to the American Goldfinch. The adult male American has a yellow back compared to the green of the Lesser. The adult female is most easily confused with the female American, but yellow, not white, undertail feathers, together with white patches at the base of the primary wing feathers clearly distinguishes the Lesser.

# **Behavior**

Goldfinches are rarely seen on the ground, but generally hops when there. In vegetation, they mostly hop from branch to branch or along branches. They adapt to a wide variety of habitats.

The main food taken by these finches are seeds, flowers, buds and fruits. They usually feed in small flocks moving through patches of weeds, each bird clinging to and feeding from a different plant. They remove seed coats with their bill, shake their head to loosen the husk, and swallow the seed. They perch next to seed heads, often bending stems horizontal and sometimes hang upside down to reach over to seeds. When eating berries, they peck at the fruit on the stem and eat small bites of pulp.

Lesser Goldfinches need a reliable source of water. They drink frequently, probably owing to their seed diet. These birds flock gregariously in all seasons; pairs, groups, and individuals are attracted to other groups of the species, landing and foraging with them. Watering sites attract large numbers.



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# **ARTHROPODS OF EDGEWOOD By Paul Heiple**

This is the second in a series of articles on Edgewood's arthropods by Paul Heiple. The sketches were added by the editor for clarification and were not provided by the author. —ed.

I began this series in the last issue of the *Explorer* with two spiders that are common in the fall because it would be a year until they were seen again. Now that it is closing in on winter and few arthropods are active, I will explain the features that make an animal an arthropod and the major groups of arthropods that are found in Edgewood.

I should start with a bit of information on the classification system for animals. The top ranking in the system is the kingdom of animals, Animalia. This is the group of all organisms considered animals.

To be considered an animal, the organism must be multicellular, obtain its energy from carbon compounds produced by other organisms, and have two sets of chromosomes in the nucleus derived from the fusion of haploid gametes (egg and sperm cells) that differ in size. It is not an easy definition to grasp, but for most of us, we know an animal when we see it.



Arthropods are a phylum, the next category

below kingdom. The classification continues down to class, order, family, genus and the specific or species. Between the major classifications there can be further divisions made by adding prefixes such as super (superorder) or sub (subphylum). These further divisions are common in the phylum Arthropoda because it is so large. In fact, Arthropoda is by far the largest phylum in the animal kingdom. If ten animal species were picked at random from a list of all animals, the most common result would be to have eight of them be arthropods.

The world is dominated by arthropods in all aspects: number of species, number of individuals, and biomass. The only area in which

arthropods do not dominate is in the size of individuals; they do not reach the size of most of the chordates, our phylum. The



Typical spider (note variant spelling)

largest living arthropod is the Japanese spider crab with legs up to six feet long, but the body is only a foot or so across.

The one feature that defines an arthropod is the presence of an exoskeleton made of chitin. Chitin is the animal equivalent of cellulose, the material used by plants to make their cells stiff. Instead of glucose bound together as in cellulose, the building blocks are units of acetylglucosamine (think about the joint medicine). The chitin forms plates that are joined together by flexible joints.

Arthropods are also segmented, a body plan in which parts are repeated between the head and the tail (which are different from the segments between them) with the basic plan of a pair of appendages, similar nerves, muscles and vascular systems. Each segment can then be modified and fused with other segments to make more useful parts. The fusion of parts can be so complete that the only evidence of the

(Continued on page 5)

(ARTHROPODS, Continued from page 4) segmentation is found in the internal parts of the animal. The form that is closest to the simple form of a head, tail and basic segments is a centipede.

Below the level of phylum are the subphyla, groupings of distinct body plans. One of these everyone has heard of is the crustaceans. The other three are less known, the trilobites which are extinct and known only to those who study fossils, the chelicerates which includes the spiders, and the uniranians which includes the insects.

The question of which came first, the chitin exoskeleton or the body plans is an interesting one. All of the subphyla appeared in the Cambrian explosion, the sudden appearance of multicellular fossil organisms about 530 million years ago. This question was open thirty five years ago when I took Invertebrate Zoology and is still not answered. If the body plans came first, then the phylum Arthropoda is a superphylum and the subphyla become phyla.

Edgewood contains at least six classes of arthropods, perhaps more. It would take a great deal of study to find out how many more classes were present. I have no idea how many orders, families other taxa below class are present at Edgewood. This task would take many years of work and probably always remain an incomplete inventory. That is the way arthropods are, so numerous as to be beyond counting. Arthropods are also small, sometimes cryptic and often active at only limited times of year.

In Edgewood, an arthropod you might see during the winter season is the Wingless Scorpionfly, *Apterobittacus apterus*. This odd insect can be found in the grassland hanging on the grass by its long front legs. It captures its pray with the long hind legs. It can be identified by the long face, typical of the order. The other feature that gives the order its common name is the bulbous male genitalia at the end of the tail that resemble the stinger of a scorpion. The species in California do not have this feature.



Apterobittacus apterus © Alex Wild, 2003

Scorpionflies are the most primitive insect order to undergo complete metamorphosis. The larvae are caterpillar-like and feed on dead insects and other organic debris. Scorpionflies are rare in California, only four species are found in the state. The only species found in our area is the Wingless Scorpionfly. It is however common in the Bay Area.

In the last Explorer, I called Argiope trifasciata the Silver Argiope. Since there is another species in the southeastern US that is known by that name, it might be better to have called it the Transverse Argiope for the lines that are transverse on its back. Such are common names; no standard is kept for species besides birds.

(ANNUAL MEETING, Continued from page 2) President Peter Ingram emceed the event, offering a review of activities and accomplishments during 2006.



Photo by Gus Haas

We were thrilled to welcome Ranger Ricardo Trejo back to Edgewood. Ricardo has been ill for quite a while, but he looked terrific and we're anxious to see him return to duty in 2007.

A special highlight was an update from Stuart Weiss on the butterfly restoration project (see article page 1), including a sneak preview of the beautiful brochure under development.

For the 12<sup>th</sup> year in a row, the Friends of Edgewood presented the coveted Best Friend award. This year it went to Craig Cummings for his valuable contributions to the Photos website. Craig carefully and painstakingly documented over 7,000 locations of plants at Edgewood, and entered their locations into the Photos website at http://photos.friendsofedgewood.org.

The "business" part of the meeting was the election of three Directors to serve 2-year terms starting January 2007. Susan Crocker, Peter Ingram, and Bill Korbholz were elected, and they will join current Directors Herb Fischgrund, Yvette Pirie, and Michael Tu, who are completing the final year of their terms.

# **ADOPT-A-HIGHWAY UPDATE**

# By Ken Seydel and Bill Korbholz

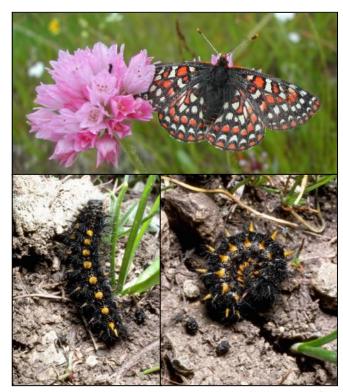
Again this quarter, our adopted section of I-280 alongside Edgewood is clean and attractive, thanks to the efforts of 11 dedicated freeway warriors.

This period we welcomed newcomers Dave Hershey and Lisa Tough to our volunteer team. They were joined by Carolyn Dorsch, Billy James, Bill and Kathy Korbholz, Jane Kos, Susan Russell, Ken Seydel, Jan Smith, and Michael Yantos.

During this 3-month period, we removed 37 bags of trash from the east side of I-280 north and south of the Edgewood Road offramp.

If you have an interest in joining our great group, contact Ken Seydel. We typically go out the first weekend of the month and spend about  $2\frac{1}{2}$  hours. We will see that you are safety trained and equipped with your very own Picker, hard hat, goggles, gloves, and bright orange vest.

# COMING SOON TO EDGEWOOD ...



Photos by Stuart Weiss

(LESSER GOLDFINCH, Continued from page 3)

#### Sounds

Males sing from isolated perches in defended areas as winter flocks disintegrate. Song continues throughout pair-bond formation, nestsite selection, nest-building, and into incubation periods. Males often sing while facing female, while performing circular flights over nest territory, and during intense male-male territorial encounters.

Song is a long combination of variable notes and phrases repeated randomly in rambling, intricate melody, interspersed with clear warbles and squeals. These goldfinches incorporate vocalizations of other species such as Purple Finch, Bewick's Wren and Black Phoebe. Minimum estimates of repertoire size ranges from 70-100 phrases.

### **Breeding**

Nests built mostly by female, usually accompanied by male, who stays nearby but

### MEMBERSHIP DUES

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rarely contributes to nest building. Females collect plant materials (oak leaves, grasses, strips of bark) in their bills, and sometimes hold branches with their feet as they strip off fibers. Nests are often protected from direct sunlight by clumps of leaves or lichens occurring naturally on branches.

Clutch size is usually 4-5 eggs which the female incubates alone for 12-13 days, during which she is fed on the nest by the male. After eggs hatch, the female continues to sit on the nest brooding young nestlings. Male continues to feed the female on the nest. She transfers food to nestlings for the first few days after hatching. Females then join males in foraging, and they both feed nestlings, regurgitating food into young bird's open mouth.

# References

The Birds of North America, No 392, 1999; Doris J. Watt and Ernest J. Willoughby. ®

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MEMBERSHIP DUES	\$10 Student/Retired (includes quarterly newsletter) \$25 Friend (newsletter)
New or renewing members may clip and complete this section to pay <b>tax-deductible</b>	\$50 Advocate (newsletter, set of 6 Edgewood photo greeting cards)
annual membership dues. Please send your check payable to <b>Friends of Edgewood Natural Preserve</b> to the return address on the back of this panel. Renewing members can determine their	<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</li> </ul>
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Name Address	Please send copies of Common Native Wildflowers of Edgewood (\$2.50), 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 (\$25.00). Includes tax, S&H. All items subject to availability.
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Fmail	☐ Public relations ☐ Adopt-A-Highway

☐ Adopt-A-Highway



# **UPCOMING EVENTS**

- Wednesday, Jan. 24, DOCENT TRAINING BEGINS. Being an Edgewood docent is both stimulating and satisfying. Join the training program now! See the article on page 1 for details.
- ☐ *Monthly*, **BIRD WALKS**. Meet Audubon Society docent Lee Franks at 8 am at the Day Camp kiosk on 12/17, 1/28. or 2/25.
- ☐ *Monthly*, **ADOPT-A-HIGHWAY**. The next sessions are scheduled for 1/7, 2/3, and 3/4. Contact Ken Seydel to volunteer or for more information.
- ☐ April, RELEASE OF THE BUTTERFLIES! ⊛

# HOLIDAY WISHES AND THANKS

The Friends of Edgewood would like to extend holiday wishes to all its members and supporters.

All of our accomplishments in preserving, protecting, and restoring Edgewood's natural resources over the past thirteen years have been possible through the generous contributions from our many Friends.



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 info@friendsofedgewood.org.

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