

# Parkway Scavengers: On Duty 24/7

text and illustrations by William E. Avery

The Great American River Cleanup, GARCU 2008, is over, and what a haul of garbage it was. All the volunteers are to be congratulated on a job well done. But after the hardy volunteers have picked up their T-shirts and gone home, another group of unsung heroes continues its never-ending job of river cleanup and recycling. These ecosystem heroes are the scavengers, detritivores, and decomposers; and they close the loop in nature's system of cleanup and recycling. These vitally important organisms remove and recycle all the dead bodies, fallen plant material, and animal waste products-the products of life and death in a normal, balanced, ecosystem.

There are many layers of scavengers and recyclers in this system. They range from the large, highly visible animals such as turkey vultures, part-time scavengers such as crows, gulls, coyotes, skunks, Sacramento suckers, other fishes, and crayfish to legions of less-visible recyclers such as ants, termites, flies, beetles, and annelid worms. In far greater numbers and mass than all of these large scavengers are microscopic invertebrates such as nematode worms, protozoans, and an almost incomprehensible number of bacteria and filamentous strands of fungi.

In a normal ecosystem, primary producers (plants and algae) convert sunlight, water, minerals, and carbon dioxide into plant biomass. Much of this biomass is consumed by herbivores, which are, in turn, consumed by carnivores. The herbivores and carnivores regularly deposit their waste products all across the landscape. Eventually, the carnivores must die along with unconsumed herbivores and plant materials. None of these dead plants and animals or droppings or even urine can be converted directly to new plant material without first being consumed and broken down into usable molecules such as carbon dioxide, phosphates, ammonia, nitrates, nitrites, and other minerals. This is the welcome task of the scavengers (consumers of dead animals), detritivores (consumers of dead plants) and decomposers (fungi, bacteria and other microbes) who,

together, re- 🚿



cycle hundreds of thousands of tons of natural waste material annually in the American River Parkway.

So what exactly happens to a dead fish, a dead deer, an animal dropping, or a fallen tree?

A salmon returns to the river to spawn. She is five years old and brings with her thousands of eggs and five years of body growth which occurred in the open ocean where she ate a lot of invertebrates and fishes. She swims upstream following familiar water-born "smells" to a recognized gravel bed. She has become aware of a certain male salmon. With the last of their strength, the salmon pair clear the algae and sediment out of a depression in the gravel and create a redd (nest) in the gravel. They spawn. The female deposits her precious eggs in the gravel, the male his sperm. Her final energy depleted, the female expires and begins drifting downstream.

Gulls and crows are the first to find the salmon's body. They peck and dismember it, dragging the remainder of the corpse onto a gravel bar. Turkey vultures have detected the pungent decay fragrances born on the wind and come from many miles around. In the avian feeding frenzy, rancid meat fragments and the skeleton splash back into the water and drift to the river bottom. A Sacramento sucker foraging for dead

see Scavenger, page 3

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# **President's Message**

"There's more to life than merely increasing its speed." –Gandhi

Seasons Greetings! I was thinking of using an excerpt from Robert Frost's "Stopping by the Woods on a Snowy Evening" and found this great quote by Gandhi with some of the same message. We all need to collect ourselves and our priorities a bit better—step off the merry-go-round and direct our energies toward what we really want and need to do.

Are we fulfilling the primal need for inner peace? Is it as simple as being surrounded by natural beauty?

Now, I will tell you how you can surround yourself with tranquil natural beauty and at the same time fulfill some of the practical side of Holiday shopping. You can go to the Discovery Shop at the Effie Yeaw Nature Center for their great annual holiday sale on December 6th.

Solve the age old dilemma—what to buy your friends and relatives for the holidays? How about a gift that keeps on giving? Like a park pass that will get you into all the county parks for a whole year. Or how about giving a membership to ARNHA that will support all the great programs and publications at Effie Yeaw Nature Center?

The gift shop at Effie Yeaw is run by ARNHA and is one of our best fundraisers. Here you will find our most popular publications on sale such as *The Outdoor World of the Sacramento Region, The American River Almanac* and *Biking and Hiking the American River Parkway.* They also have handsome jewelry, pottery, stuffed animals (no, not taxidermy), children's toys, and more! Please join us at this very

popular and fun event. And while you are there, give yourself a holiday gift by taking a stroll through the park, forgetting for a moment all the holiday bustle, and catching a well deserved breath of fresh air.

> Happy Holidays! Larry Washington





**Buy A County Parks Pass at EYNC – A Perfect Gift** 

## Rattlesnakes Warn Us– Keep Your Distance

One of the redeeming features of rattlesnakes is their rattles. Every time one of them sheds its skin — and a snake may shed four times a year — it adds a rattle. A snake may end up with 16 rattles and is likely to give fair warning if you invade its turf.

"If you hear a warning rattle, get away," Gary B. Hanson, retired university biology professor and Effie Yeaw Nature Center docent, told a September 18 ARNHA public forum. "If you step on it, it's a different story."

Hanson offered these do's and don'ts to avoid stepping on a rattler:

• Don't hike alone; carry a cell phone.

• Walk or hike in areas where the ground is clear.

• Use a walking stick to rustle shrubs along the side of the trail to alert snakes of your presence.

• Wear protective clothing such as long heavy pants, high boots, and gloves.

• Be aware of ledges, cracks, or holes; these are common resting places for rattlesnakes.

So, what about a worst-case scenario? Hanson offered these suggestions in case of a rattlesnake bite:

• Wash the bite area with soap and water.

• Immobilize the bitten area, and if possible keep it lower than the heart.

• Remove rings, watches, or tight clothing near the bite area to prevent constriction due to swelling.

• Get medical help immediately.

• DO NOT put ice or cold compresses on the bite.

DO NOT use tourniquets or snake bite kits.
Try to stay calm.

#### Scavengers, from page 1

water-plants and algae is delighted to consume some protein-rich salmon.

In an old beer can lives a crayfish (returned to the water by a compassionate GARCU volunteer). It emerges to find itself in a clawed tug of war with another crayfish over some meat attached to several of the old salmon's vertebrae. Later the Sacramento sucker's and the crayfish's fecal pellets are decomposed by aquatic worms, protozoa, and bacteria. Nutrients and minerals enrich the water and are now available to aquatic primary producers such as algae and water weeds. The gulls, crows, and vultures will use the stored fat and protein from the salmon to usher in a new generation of fledglings, and they will also deposit their droppings widely throughout the parkway. Nutrients from decomposed bird feces will be incorporated into a new generation of vegetation.

A twelve-year-old buck has browsed a lot of this vegetation, successfully sired many fawns, avoided predators and serious injury, and enjoyed the freedom of the American River Parkway. Finally, old age catches up with him, and he breathes his last breath under an old box elder tree. Almost immediately, flies arrive at the scene and begin depositing eggs by the millions.

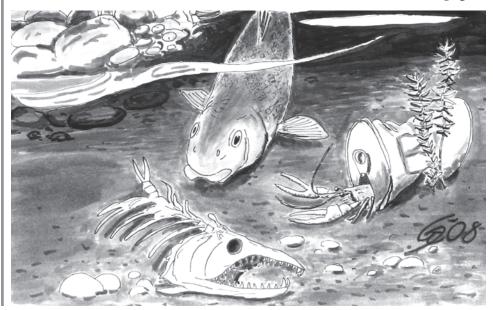
Yellow jackets and carrion beetles are

not far behind. Within a day or two coyotes, skunks, and even raccoons become aware of the interesting fragrances and may find their way there for a bite or more. The turkey vultures, by now feeding nestlings, are drawn from many miles away by the new airborne fragrances. The larger animals consume much of the meat and bones directly but also break the corpse up into many smaller pieces, moving them various distances away. The turkey vultures may fly many miles to regurgitate partially digested carrion to feed their young. Each of these larger scavengers, and their young, deposit more droppings across the landscape.

Meanwhile, beetles, fly larvae (maggots), mold, and bacteria consume anything that remains attached to the bones. Within a month or two, scattered bones and hair are nearly all that remain of the old buck. Even the hair will eventually be consumed by dermestid beetles and bacteria. The old box elder, and other plants in the immediate vicinity, will enjoy a burst of nutrients and will exhibit a rich green growth, but much of the nutrient wealth from the old buck will have been distributed widely throughout the ecosystem.

A coyote defecates on the Parkway. The excrement contains bacteria, undi-

continued on page 6



Winter 2008/09

Tell Your Friends About ARNHA - Recruit a New Member Today

#### **Chill Out with EYNC's Winter Fun Days**

Once again the Effie Yeaw Nature Center is coming to the rescue of children who need and want a minivacation during winter break! Sessions are offered December 22–26 and December 29–Dec 31.

This year we are offering exciting classes to kindergarteners (Rovers), first and second graders (Detectives), and third through fifth graders (Jr. Rangers). These kids will have a chance to learn more about animals from insects to black-tailed deer. They will have the opportunity to learn nature songs, experiment with nature photography, or create their own drawings and crafts in these engaging classes.

These classes are led by the wonderful and enthusiastic Effie Yeaw Nature Center Naturalists, who plan and fill these three hour sessions with more activities than you can imagine. Volunteers assist to make sure every child is having a good time while he or she learns about nature and the world around us.

Classes fill quickly, and children must sign up in advance. Each class is only \$20/day per child, and registration may be completed over the phone with a VISA or MasterCard. Go to www.effieyeaw.org to review the Winter Fun Days schedule and activities, or call the Effie Yeaw Nature Center, 489-4918 for more information!

#### **Conservation Conference Set**

The California Native Plant Society will hold its 2009 Conservation Conference: Strategies and Solutions, January 17-19 at the Sacramento Convention Center. Conference programs will include developments in plant conservation science, environmental policy, and land use planning.

Keynote speakers will be environmental justice and clean energy advocate Jerome Ringo; Prof. Steven Hopper, director of the Royal Botanic Garden; and naturalist, educator, artist; and author John (Jack) Muir Laws. For more information, visit www.cnps.org/cnps/conservation/conference/2009/.



Even though rain showers were forecast for Maidu Indian Day on October 4, fair weather prevailed, and the event drew 597 paid admissions, earning \$2,000 for the Effie Yeaw Nature Center's Maidu Cultural Heritage program.

In addition to paid admissions, many children aged 3 and under, 50 volunteers, and 30 people who gave demonstrations such as basket weaving, acorn preparation, flint knapping, fire starting, ethnobotany walks, and storytelling were admitted free.

Drawing the biggest crowd were fifteen Maidu dancers and singers, including Vince LaPena, longtime nature center staffer who retired recently; his father Frank; and sister Sage. Activities at other exhibits halted, as an enthusiastic crowd gathered to watch the performers and signal their approval at the conclusion by shouting a hearty "Ho!"

#### Effie's Circle of Educators: A new program for Educators

The Effie Yeaw Nature Center is now honoring ARNHA's educators by offering a new program, *Effie's Circle*. Recognizing that educators have long been the bedrock of support at the Effie Yeaw Nature Center, the new program is designed to help teachers meet standards for science and the environment

Effie Yeaw, herself, was a Carmichael elementary school teacher who specialized in sharing her love of nature with her students through fieldtrips and hands-on discovery. In today's world, our teachers and other educators work harder than ever to meet the challenges of educating our children

This program is open to ARNHA members who are educators in the community and will assist them in teaching about nature to people of all ages. When teachers join Effie's Circle, they will receive a coupon for 20% off of a single purchase at the Discovery Shop at the Nature Center and that is *just* the beginning. Throughout the year, they will receive more coupons, invitations to special events, announcements from the Effie Yeaw Nature Center about programs, and notice of special educational opportunities for educators.

To participate, educators must be ARNHA members and show some documentation of their status as an educator. Educators include school teachers, preschool teachers, college instructors, scout leaders, nature camp leaders, and others. For more information or to sign-up, come to the Effie Yeaw Nature Center, or email Jamie at washingtonj@saccounty.net.

*Share the good news*, and tell the teachers and any other educators in your life about this wonderful new opportunity offered by the American River Natural History Association!



Meet Sophia, EYNC's Newest Resident

Sophia was living life in the wild until the fall of 2007, when she was hit by a truck in Willits, California. Somehow, she survived the impact of the collision and clung to the truck grill for sixty miles before the driver found the little owl.

Sophia, a northern saw-whet owl, now perches in lobby of the Effie Yeaw Nature Center–she has come a long way since her dramatic rescue although the accident left the small owl unable to survive in the wild.

Her reddish-brown feathers, streaked with white, lie smooth and shiny over her 8-inch frame. Her big, bright golden eyes are piercing.

Visitors will get a close look at an owl rarely seen in the wild. Saw-whets come out only at night, and since they are so small, their markings help camouflage them well.

Sophia came to the nature center this July from the California Foundation for Birds of Prey in Lincoln, a nonprofit group dedicated to nursing injured birds of prey back to health, so they can be released again in the wild.

Veterinarians treating Sophia after the accident determined it was unlikely she would ever fly again. They agreed to let her become an educational ambassador at the nature center.

By Georgia Jones, Photo by Betty Cooper

#### **Record Turnouts for Clean Up**

There was some good news at the 15th annual Great American River Clean Up on September 20. Record numbers of volunteers turned out at both Ancil Hoffman County Park (68) and overall on the American River Parkway (1,346) to collect trash and recyclables. The record response suggested increased awareness of the need to protect the Sacramento area's natural treasure.

As many as five members of one family, school groups, and club members such as the Sacramento Walking Sticks, non-competitive walking enthusiasts, picked up 250 pounds of trash and 320 pounds of recyclables at Ancil Hoffman, home of the Effie Yeaw Nature Center. Altogether, volunteers picked up 10 tons of trash and recyclables at the 20 parkway sites in the program sponsored by the American River Parkway Foundation.

## Hey! Something's Fishy at the River Let's Keep It Clean –By Bruce Forman

#### Got River Protection Awareness? Got Puppets? Got Rhythm?

*Got Recycling?* If not, get a view of an entertaining new river conservation puppetry video co-produced by ARNHA and the California Department of Fish and Game in association with Mighty Acorn Productions. It features puppets by Richard Bay, renowned puppet master from CSU Sacramento.

The story follows an encounter that a brother and sister have with a salmon. Salmon becomes a teacher who introduces them to the threats to rivers, creeks and the ocean. The siblings learn how to practice conservation and prevent pollution in their community through a series of surprising encounters with various river animals. Viewers can sing along with the animals while learning how to keep animal homes healthy.

Piloted at ten local schools, the 20 minute video increased student learning significantly at all schools as measured with a field assessment. The concepts in the video were aligned with the Science Standards of the California Department of Education. Take in a viewing at the Nimbus Fish Hatchery (Call 916-358-2884 to learn current open hours for the visitors' center.) or watch for a scheduled viewing at the Effie Yeaw Nature Center.

The project was funded by generous support from the following organizations and individuals:

- California Department of Conservation
- California Department of Parks and Recreation
- County of Sacramento
  - Department of Waste Management and Recycling
  - Department of Regional Parks
- Arata Brothers Fund
- California American Water
- City of Roseville: Stormwater Management Program
- American River Salmon Festival
- California State Parks Foundation
- Carol Doersch (ARNHA Associate Board member)
- ICF Jones and Stokes
- Regional Water Authority
- Sacramento Region Water Forum
- Sacramento Urban Creeks Council

#### continued from page 3

gested plant material, partially digested grass, undigested meat, bones, and hair from the old buck. Within seconds, flies arrive, and dung beetles detect the fragrances. Flies lap up much of the liquids, lay their eggs, and accidentally deposit more bacteria and fungal spores that had been clinging to their legs.

Dung beetles burrow into the feces, eating them directly. Within several days, depending upon local temperature and humidity, the now-fuzzy droppings have been consumed by maggots, beetles, bacteria, and mold. The maggots mature and molt into flies. The beetles burrow into the soil, and the flies fly to other places, depositing their own smaller fecal pellets and bodies into the ecosystem. Much of the bacterial and fungal biomass is washed away by rains or desiccated and weathered into dust. Within a few weeks, the coyote feces are largely converted into minerals, dust, and soil and may now be converted back into plant biomass.

The old box elder tree eventually succumbs to old age and the invasion of its interior wood by fungi and termites. It may remain upright for a few years as a dead "snag" and serve as a perching site for hawks or owls and provide nest cavities for songbirds. A gust of winter wind finally uproots it and knocks it over.

Termites and fungi have already completed much of their work. The heartwood is riddled with termite passageways and droppings. The termite colony continues to eat its way through the wood. Termites cannot directly digest the cellulose that makes up the wood but depend upon a symbiotic relationship with protozoans and bacteria. The wood fragments that the termites chew into smaller particles move into the insects' intestines where they are engulfed by flagellated protozoans (single-celled "animals" that live inside the termite!) which, in turn, have symbiotic bacteria that live within their cytoplasm and secrete enzymes capable of digesting the cellulose. Wood is thus broken into simple sugars.

Meanwhile, throughout the fallen tree, microscopic filaments of many species of fungi continue to soften and digest their way throughout all the rest of the wood, under the old bark, and into and out of the surrounding soil. Ants, beetles, soil-dwelling annelids, and nematodes move in and out of the decaying wood. After several years, all that is left will be a rich mound of soil, overgrown with new vegetation, shaded by a new generation of box elder trees, browsed upon by a new generation of deer, watched carefully by a new generation of young coyotes.

And so the Parkway scavengers, detritivores, and decomposers continually clean up the Parkway and recycle their byproducts back to the primary producers - lush new vegetation, leaves, fruits, seeds, to be consumed in turn by herbivores and then by carnivores. They bring the natural cycle back to the beginning and ensure continuity of the Parkway's abundant wildlife. So here's three cheers to the Parkway Clean-up crew, on duty 24/7. Hip, Hip Hooray!

William E. Avery, Ph.D., is an associate professor in the Department of Biological Sciences, California State University, Sacramento, and a frequent contributor to the Acorn.

#### **'Thin Green Line' Forum Set**

Ever wondered what it's like to be a park ranger? Or a game warden? Or to be in charge of a wildlife refuge? Maybe it's a career option you'd like to explore. You'll have a great opportunity to get answers Thursday, January 29 at 7 p.m. when ARNHA presents another in its series of public forums at the Effie Yeaw Nature Center Assembly Building in Ancil Hoffman County Park.

Thanks to coordination by EYNC Supervisor Marilee Flannery, representatives of all three professions will be on hand to tell about the challenges and rewards of their jobs. There will be one or two Park Rangers from Sacramento County Department of Regional Parks, one or two Game Wardens from the State of California Department of Fish & Game, and one Refuge Manager from the U.S. Fish and Wildlife Service.

"The Park Ranger, Game Warden, and Refuge Manager are all badged officers who are currently patrolling and protecting resources important to our community," Marilee said. "Even though the officers are from different government agencies –one local, one state and one from a federal agency–all have one thing in common: they are all part of the 'thin green line' that protects our wildlife, fish, parks, plants, trees, and water from people and policies that may be harmful."

Each of these well-trained officers has stories to tell of their struggles to prevent the thin green line from unraveling. Some of these stories are funny and some are tragic. Please be prepared to listen to what it's really like to have a career that daily faces the joys and perils of being in the field of wildlife and resource protection. Following the stories told by each of the officers there will be a panel format, so all of the officers can speak briefly about current challenges facing our region's resources. The panel will then take questions from the audience.

The U.S. Fish & Wildlife Refuge Manager is Beatrix Treiterer, who works at the Stone Lakes National Wildlife Refuge. As a Refuge Manager, she has a dual function: to be both a manager of the refuge and a law enforcement officer. Names of other speakers were not known at press time, although their attendance was confirmed by their departments.

Light refreshments will be served at the forum.

# ARNHA's \$60,000 Gift to Effie Yeaw Nature Center

On a pleasantly mild evening, with a big buck deer and wild turkeys roaming nearby, ARNHA members heard an upbeat message at the 27th annual meeting held September 10 at the Effie Yeaw Nature Center's replica Nisenan village.

ARNHA President Larry Washington reported that EYNC's principal volunteer support group has raised \$1 million over the years for nature center programs, such as spring, summer, and winter Fun Days and rental of buses to bring school children to the center.

His report was followed by presentation to the County of a facsimile of a check for \$60,000 representing ARNHA's latest annual contribution to pay for EYNC programs.

Lynne Pinkerton, EYNC Cultural Programs Director, delivered a report indicating that ARNHA contributions have helped make a difference for EYNC. Last year the nature center presented programs serving 150,000 adults and children, an increase of 10,000 over the previous year.

Two hundred volunteers put in 8,635 hours helping lead nature tours, restore habitat, and staff the gift shop.

Janet Baker, new Sacramento County Regional Parks director, addressed the meeting, expressing thanks to ARNHA members for their volunteer efforts. She pointed out that "our No. 1 issue is money. We face tough budget times." Jamie Washington, EYNC Volunteer Coordinator, congratulated the many volunteers who help keep nature center programs running smoothly. They included the following:

Teneisha Negron, Animal Care Assistant; Tracie Ballensky, Animal Care Assistant; Kate Michael Wigginton, Summer Fun Days; Shilo Rochelle, Summer Fun Days; Jeff Kemp, Habitat Restoration; Sigrid Trevino, Butterfly Garden; Gail Philippart, Docent, Special Events; Kelly Cohen, Docent, Special Events; and Mojgan Fischer, All Around (Docent, Receptionist, Special Events, ARNHA Board).

All present received certificates and gift cards from Borders, Capital Nursery, Ettore's, Mikuni's, and others.

The meeting also featured "guest appearances" by Luna, the nature center's barn owl; Twilight, a western screech owl; and Sophia, a northern saw-whet owl, all displayed by naturalist Shawna Protze. EYNC's Joe Gallegos showed Marcie, an opossum.

After the meeting, members joined in a guided "Twilight Walk" in search of creatures of the dark. It was followed by a "star show" presented by Sacramento Valley Astronomical Society members who brought telescopes and gave members a close view of Jupiter, largest of the planets.

### FROM THE ALMANAC

### Low diver

A certain grebe is a strange sort of bird. It looks and acts like it was put together by a committee–a swanlike neck that is snow white in front, black on top, stubby wings and tail, red eyes, and legs set so far back on its body it can't walk on land.

This is the western grebe, with its look-alike cousin, the Clark's grebe, in a breath-holding family of diving birds. A friend tells of an encounter with one on Lake Natoma below Folsom Dam:

We were paddling our canoes near the shore when we spotted it floating out near the middle, Phil said. "I'll give a dollar to anyone who can make it fly." We started paddling toward it, and were about 50 yards away when it suddenly leaped forward and disappeared. After a minute it surfaced nearby and we paddled furiously toward it. Again it dived, this routine was repeated twice more before we gave up. The grebe may not be much for walking or flying, but it's some underwater swimmer.

Nature equips it well for its water habitat. A grebe's foot isn't webbed like a duck's, but instead has flat lobes on its toes that help propel it through the water. It has waterproof feathers and has the knack of "squeezing" air from its plumage so it can sink below the surface like a submarine.

Chances are that the Lake Natoma grebe spent the breeding season at a tule-lined lake in the Sierra Nevada. Anyone who has ever seen the courtship dance of a pair of western grebes won't forget it. They rise up as if on their toes and race side by side across the water, necks arched and heads down.

A western grebe's young are able to swim as soon as they hatch. But when they tire, they can cling to the back of their mother. They do this even when the mother has dived beneath the surface, trying to spear a small fish with her slender yellow-green bill. Naure is the great accommodator.

Reprinted from ARNHA's "An American River Almanac: Reflections on nature throughout the year." by Peter J. Hayes and color photographs by Tom Myers and George Turner. It can be purchased at the Effie Yeaw Nature Center and selected book stores for \$19.95

American River Natural History Association P.O. Box 241 Carmichael, CA 95609-0241 (916) 489-4918 • www.arnha.org Address Service Requested



- ٠ Discovery Shop Annual Holiday Sale December 6. 9:30 a.m.- 1:30 p.m. at EYNC
- American River Parkway Wildlife Count December 6 at EYNC
- Save the American River Ass'n Annual Meet. December 6. 10 a.m. at EYNC
- Salmon/Steelhead Viewing & Spawning Month of December at the Lower American River and Fish & Game Dept. Hatchery
- **Volunteer Holiday Party** December 12. 1-3 p.m. at EYNC
- Winter Fun Days December 22 - 26 and December 29 - Dec 31 (see page 4)
- NHA Calendar of Even 2009 Conservation Conference January 17-19. Sacramento Convention Center (see page 4)
  - The Thin Green Line Thursday, January 29, 7 p.m. EYNC (see page 2)
  - Spring Fun Days April 6 - 10

## Welcome, New Members!

- Deborah Bain
- Janet Baker
- Michael Barlow
- Melodie Bauer
- Eileen Beresford Robert & Jean Bonar
- Aubrianne Bradley
- Rene Carr
- Elena Casey &
- David Robinson Alex DeNuzzo
- Janie Ferguson
- Carole Girard
- Tim Grisaffi
- Christine Hansen
- **Donations**
- In Memory of Thomas P. Williamson
- Carol Eberling
- Vickie Jorgenson
- North Natomas Transportation Management Association
- In Memory of Paul W. Hurlock
- John and Janet Smith and Family
- In Memory of Barbara Mossmeyer
- Bruce and Peggy Kennedy

- Molly Hanson
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Raquel Molina

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Maya Lojo

Dan Meier

Lauren Kissinger

• Barbara Lippetti

Laurie O'Donnell

- Mika Heller
- Lynne Holmberg-Gray

Vince LaPena & Family

• Hillary & Neil Munson

- Griffin Eriksen Hurd • Tim Keenan &
  - Janet Sandlin
    - Teresa Schilling

Marli Porth

- · Lorie Shelly
- Shalla Shores
- Amy Silva
- Margaret Stelmok

Annmarie Piper-Makin

Rene & Michael Ruiz

• The Sandlin Family

Sunshine & Brian Rupe

- David & Sarah Wade Elaine Weihman

#### In Memory of John Connor Bruce and Peggy Kennedy

- In Memory of Cynthia Brakstad
- Bruce and Peggy Kennedy
- In Celebration of the Kennedy's 25<sup>™</sup> Wedding Anniversary
- Mary Wilkinson
- In Celebration of the Birthday of Jim Nishio Janet Rose & Stephen Woodward
- In Memory of Ruth Woodward
- Pam Elmore

#### Fans of the Nature Center Speak Up

In September, Elk Grove School District bus driver Randy Wells enjoyed the responsibility of delivering students to the Nature Center for a field trip. "The kids were really looking forward to the trip," he said. When the bus pulled up in the parking lot, there was a young deer standing nearby. About half of the students saw the deer before it headed off for quieter surroundings. "They got really excited when they got to see the deer. For some of them it was the first time seeing a deer." Randy praised the work that the Nature Center does, especially since many of the kids who ride his bus don't get a chance to see wild animals or come out to a natural setting like the Nature Area.

Betsy Tanner wanted to do something different for her birthday. Rather than receive gifts from friends and family, she decided to ask them for a donation to Animal Care at the Effie Yeaw Nature Center. Betsy collected \$247, which she donated to EYNC on September 22nd. Betsy received a special behind-the-scenes tour of the animal's homes and pictures of all the animal residents.

Nonprofit Organization U.S. Postage PAID Permit No. 226 Carmichael, CA

American River Field Guide for teachers, educators: Free download at www@arnha.org