



## Predators Lurk on the Parkway!

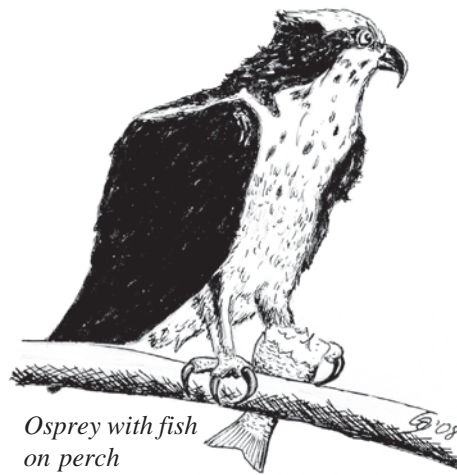
articles and drawings by William E. Avery

Predators have been reported on the American River Parkway – the furry, feathery, scaly kind that is. They lurk in bushes, behind trees, under ground, under water and in the air! They may be scary – especially if you are a creature smaller than them. But generally, to us humans, predators are fabulous, and we love to see them!

What does it mean to be a predator? Well, a predator can be defined as an animal that eats other animals. So predators must be adapted for catching and eating their prey. Of course, prey are adapted for getting and staying away! So it isn't easy to be a predator. In fact, even the laws of thermodynamics make it a challenge.

Because energy is lost in all transformations, only about 1% of the sunlight that hits the parkway is converted into edible plant material—the primary producers. Only about 10% of the plant material can be converted into the bodies of herbivores or plant eaters – the primary consumers. Only about 10% of the herbivores can be converted into the first-order predators, those that eat herbivores, or the secondary consumers. And only about 10% of the secondary consumers can be converted into the tertiary consumers, and so on. And so the higher-level predators are generally rare because their food is rare and hard to catch!

So what this means to us humans is that when we see a predator we are seeing the top of an energy (or food) pyramid with a broad and supportive base of producers. Predators tell us that an ecosystem is in relatively good shape – otherwise they wouldn't be present at all.



*Osprey with fish  
on perch*

We sometimes call predators indicator species because they indicate the state of health of the community in which they live. We also sometimes call certain predators keystone species because, like the keystone of an arch, their activities (such as preying on certain species that might otherwise become too abundant) help hold the community together and maintain a high species richness. Predators also tend to catch weaker, less wary, less well-adapted, or sick prey and so may improve the prey gene pool and act as selective forces in evolution.

Many of the predators that we especially love are large and relatively easy to see: the otter or coyote or birds of prey such as the osprey. We marvel at these predators' adaptations for catching their prey. The osprey, with its strong curved talons, powerful slicing bill, and its incredible ability to fly at great heights, can spot fishes, pluck one from the water, and fly with it to a perch to eat. An osprey is so well-adapted, in fact, that it can have its perch and eat it too! The otter, with its grace and speed under water, is adapted for catching fishes and invertebrates such as crayfish. We get excited by the fast and wily coyote (see the Spring 2008 issue of *The Acorn*) and its ability to catch something as speedy and tricky as a jackrabbit.

Each of these predators represents the very peak of an energy pyramid. For the osprey, it starts with an enormous base of microscopic phytoplankton and algae. These are consumed by vast numbers of tiny zooplankton, insect larvae, and other invertebrates. These creatures are, in turn, consumed by planktivorous (plankton-eating) fishes which are themselves consumed by piscivorous (fish-eating) fishes which are, in turn, eaten by the osprey. The coyote indicates a productive terrestrial community beginning with grasses, herbaceous plants, shrubs and trees that produce

*see Predators page 3*

## ARNHA Board of Directors

Larry Washington  
President

Lee Wilner  
Vice President, Membership

Peggy Kennedy  
Vice President, Publications

Claudia Hulbe  
Recording Secretary

Paula Baldi  
Corresponding Secretary

Roberta Wilner  
Treasurer

### Members at Large

Cindy Dunning  
Mojgan Fischer  
Marilee Flannery  
Bruce Kennedy  
Linda Thomas  
Greg Voelm  
Jamie Washington

### Associate Members

Katie Baygell  
Bill Dillinger  
Carol Doersch  
Bud Getty  
Peter J. Hayes  
Lou Heinrich  
Mia Hershiser  
Timothy Howe  
Georgia Jones  
Molly Keller  
Ed Littrell  
Diana Parker  
Kip Skidmore  
Jo Smith  
Betsy Weiland  
Lynn White

Representatives to other groups:  
Commission on History and Science  
Greg Voelm

Parkway Advisory Committee  
Betsy Weiland

Parkway Master Plan Revision Committee  
Lou Heinrich

Save the American River Ass'n.  
Bud Getty

American River Parkway Coalition.  
Katie Baygell & Peggy Kennedy

### ARNHA

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

The ACORN is published quarterly on partly-recycled paper by ARNHA, a 501(c)3 nonprofit organization. Letters to the editor should be sent to the address above.

# President's Message

*The root of most conflicts and misunderstandings lies in the absence of communications.*

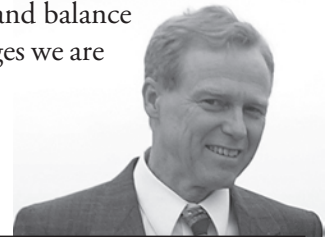
James Barksdale

Effie Yeaw Nature Center is a great liaison between people and nature. This small nature center located in Ancil Hoffman Park, just steps away from the American River, has a wonderful staff of highly trained naturalists who can open up a world of communication between people and nature. They will take visitors on hikes through the nature trails and down by the river and begin the dialogue between the visitors and nature, often times pointing out things never seen before by the participants and just as importantly pointing out misconceptions or misunderstandings that people may have with what they perceive in nature. Reflecting on James Barksdale's quote, we understand that the more communication we have with nature and the more sensitive we are to nature, then the more enjoyment we will have living in this natural world.

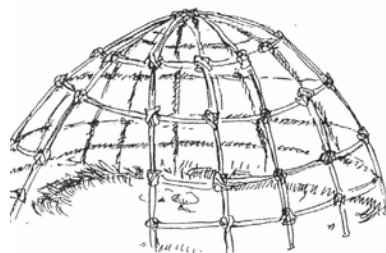
It is hard to believe that many people on this planet have little or no communication or connection with the natural environment. We, as ARNHA members, have the duty as well as the privilege to bring people to nature and nature to people.

It is exciting to begin the dialogue and help make a connection between a person and nature, to spark interest, and to raise sensitivity to the plant and animal life that is indigenous to the Central Valley. When that *spark* of interest is let loose into an inquisitive and open mind and given over to the naturalists at Effie Yeaw to feed and nurture . . . stand back and watch it grow! We are talking about a life-altering change, the beginning of open communication and sensitivity and support as opposed to misunderstandings and conflicts. Yes, we also protect people by equipping them with knowledge, and at the same time we are protecting nature by sensitizing people to the frailty and balance of its ecosystems, preparing them to meet the challenges we are facing in today's world.

Sincerely,  
Larry Washington, President, ARNHA ■



**Docents Are Needed** for this upcoming year's *Gibson Ranch Frontier Life Living History Program*. Docents for this program will dress in period costumes of the 1890's California Ranch men and women and oversee craft and chore stations for 3<sup>rd</sup> through 5<sup>th</sup> grade children. They will "be in character" for the day, teaching the children about early California history. For more information, call Jamie Washington at 489-4918, x224.



**Maidu Indian Day** is on October 4th, the first Saturday of October. Save the date to volunteer at the Nature Center or visit the festivities.

## Predators, from page 1

leaves, seeds and fruits that can be consumed by insects and other invertebrates, small mammals, small birds and deer. The coyote, being somewhat omnivorous, may eat these or even some of the predators that prey on these animals. So, large familiar predators represent an entire food web and energy pyramid.

The health of the American River Parkway can be seen in the presence of many other predators as well. Some of these predators are familiar to us, but we may not think of them as predators. Their predatory activities are hidden from view. Other predators are very small or cryptic and so less apt to be noticed. As is true of more familiar predators, each of these predators is also wonderfully adapted for detecting, chasing, capturing, and consuming their prey.

Some of the familiar predators, with less-observed predatory behavior, include double-crested cormorants and common mergansers which swim underwater in order to catch fish; common and Barrow's goldeneyes which dive for aquatic invertebrates such as mollusks, insect larvae, and small crayfish; herons and egrets that stalk or ambush fish, amphibians, reptiles, and small mammals; warblers and other songbirds – voracious gleaners or hawkers of insect larvae and small flying insects; swifts and swallows by day and bats by night which prey upon massive quantities of flying insects; raccoons and skunks – predators of invertebrates, amphibians, reptiles small mammals, and birds eggs; bullfrogs and Pacific chorus frogs which

use their tongues to catch unsuspecting insects. Reptiles, such as gopher snakes, rattlesnakes, western fence lizards, and alligator lizards are all very active predators of small mammals, small reptiles or a variety of invertebrates. Each of these familiar predators can also be envisioned as occupying their own pinnacle of a smaller energy pyramid with a base of primary producers 100 to 1000 times the biomass of the predator in question! In many cases, they also perform the wonderful essential service of keeping various insect or small herbivore populations (e.g., rats, mice, voles, ground squirrels) in check.

Rachel Carson stated that “some of nature’s most exquisite handiwork is on a miniature scale...a bit of pond weed or seaweed put in a glass container and studied under a lens is found to be populated by hordes of strange beings whose activities can entertain you for hours.” Look closely for the small predators as you walk along the river. Spiders are widely renowned for their predatory nature, but less familiar are some of the predatory insects. These include the dragonflies, both as flying adults and aquatic larvae – dangerously adapted for capturing flying or aquatic prey. Adult dragonflies capture flying insects on the wing, hold them with their legs, and then chew them up with rapid side to side motion of powerful mandibles. Dragonfly larvae use gigantic protrusible jaws to suddenly catch, crush,



underwater. These victims may include other insect larvae or even small amphibians and fishes.

Along sandy, calm edges of the river, it is possible to find the relatively common toad bugs. These are cute little hemipteran (members of the insect order Hemiptera or “true bugs”), insects about the size of

Abe Lincoln’s head on a penny. Their cryptic, sand-grain coloration helps their little rounded bodies blend in with the moist sand on which they live. They have bulging eyes and hop on long, springy, hind legs – sort of like their namesakes. Like toads, they also prey on insects and other invertebrates. But unlike toads, toad bugs catch their prey with spiny, raptorial front legs, pierce their invertebrate victims with a sharp, straw-like beak and suck out the victim’s blood and other body fluids! Yikes! And yet they are fabulous and awe-inspiring at their scale of existence, and they represent a small-scale, healthy, and productive community in which they too are at, or near, the pinnacle of a little energy pyramid.

Predators may be awe-inspiring, majestic and fascinating to watch. We love to see them on the Parkway whether they be toad bugs, dragonflies, otters, coyotes, warblers, or ospreys. They thrill us with the sense of power, majesty, or even danger that they evoke; but we also smile, remembering that they represent an abundance of productivity, the important regulation of primary consumers, and general ecosystem health. Predators lurk on the Parkway, and we need to keep an eye on them - because if they ever disappear then our Parkway ecosystem will be in serious trouble.”

*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, ■*

**Successful Bird & Breakfast**

ARNHA's annual Bird and Breakfast fundraiser netted \$2,400 March 15 as 72 participants enjoyed bird-watching at Effie Yeaw Nature Center, followed by a breakfast of tasty casseroles and fruit salads prepared and served by ARNHA Board and Effie Yeaw Nature Center staff members.



Fifty-six bird species were observed, including an Anna's hummingbird feeding young in a nest, said **Jack Hiehle**, coordinator of the leaders from Sacramento Audubon Society. Numerous wild turkeys were observed, many of them flying back and forth across the American River, possibly to nest on the quieter south side.

**Betty Cooper** of the EYNC staff chaired the B&B committee, which included **Linda Thomas, Mojgan Fischer, Katie Baygell, Paula Baldi, and Jamie Washington**. ARNHA Board members and friends donated the food, and **La Bou** contributed the coffee.

**Carol Doersch Honored As Outstanding Volunteer**

**Carol Doersch**, one of the founders of the American River Natural History Association and a steadfast supporter of the Effie Yeaw Nature Center, was honored April 22 by the Sacramento County Board of Supervisors as an Outstanding Volunteer.

The Nature Center had nominated Carol as the Department of Regional Parks' Outstanding Volunteer this year. She had received the same recognition by the supervisors in 1986.

**Jamie Washington**, EYNC volunteer coordinator, said Carol has given generously of her time and energy since the founding of ARNHA in 1981. "She has continued to support ARNHA, to work on varied educational publications, to find funding for the nature center and its programs, and to create and establish our Maidu Cultural Program."

Carol served as ARNHA president in 1985-86 and Board Secretary in 1981-82, 1988-2001. She has been a key member of the ARNHA Publications Committee, serving as editor of *Biking and Hiking on the American River Parkway* in 1997 and *The Valley Nisenan* in 1988. She used her computer skills to format *Birds of the American River Parkway*, *Effie Yeaw, a Sketch of her Life*, and other ARNHA publications.

Carol also is proud of having helped start a local kite festival, along with **Jo Smith** and **Martha MacBride**. It became so popular that it was taken over by the parks department.



**Nature Area Raptor Show**

Effie Yeaw Nature Center staff and visitors enjoyed several "Wild Adventure"-

style raptor scenes in March. Animal caretaker **Lara Maddox** had taken **Tanner**, the center's red-tailed hawk, outside for fresh air and had him settled on his perch, attached by the jess, or leg-strap. Suddenly a red-shouldered hawk swooped down and struck **Tanner** on the back of the head, knocking him off the perch and leaving him dangling and flapping his wings, but not noticeably injured.

At another time, longtime EYNC volunteer **Jack Hiehle** was leading a Sacramento Audubon bird walk in the nature area when the group saw a bald eagle, an infrequent visitor to the area, being harassed by a red-tailed hawk. The eagle flinched as the hawk dived on it.

And on another day, Effie Yeaw volunteers director **Jamie Washington** reported seeing a bald eagle perched in a tree about 100 feet off a nature area trail.

"We had a great view of it before it flew away towards the river," she said. "It was amazing."

## Blooming Good Time for Wildflowers

With a powerpoint program of dazzling color photographs, plant scientist **Tim Nosal** advised an ARNHA Forum audience on where to find the best wildflower shows in the Sacramento Valley from Bear Valley west of Williams south to Jepson Prairie near Dixon.

But you can find plenty of floral displays closer to home on the upper American River Parkway, the state Department of Fish & Game scientist said March 27 in the program at the Effie Yeaw Nature Center. At various times between March and June near Sunrise Boulevard, Hazel Avenue, and Lake Natomas, you can see blooming California poppies, miner's lettuce, interior live oak, maidenhair fern, and the Dutchman's pipevine that hosts the beautiful pipevine swallowtail butterfly.

Nosal waxed rhapsodic over vernal pools on lands of former Mather Air Force Base in Rancho Cordova and at Jepson Prairie. There in late March and April, as rain water-filled depressions in the land dry out, downingia, butter and eggs, and brodiaea bloom successively.

"I thought I saw a lake, and it was a field of lupine," Nosal said of Bear Valley, located west of Williams on Interstate 5. Goldfields and poppies are other highlights of this destination which is best enjoyed from the vehicle because the flower-filled valley is closed to the public.

Table Mountain, a state Department of Fish and Game preserve in Butte County, is home to a vast panoply of flowers in late March, including shooting stars, lewisia, woodland star, and what Nosal called DYCs or "darn yellow composites." (a large botanical family that includes daisies, dandelions and asters).

The Pine Hill Ecological Preserve in Westerns Eldorado County has unusual growing conditions and is noted for milkweed, lemon ceanothus and Pine Hill flannelbush.

(For detailed driving directions to wildflower sites, visit [www.arnha.org](http://www.arnha.org). For more wildflower information, see *California Native Plant Society*: [www.cnps.org](http://www.cnps.org); *Sacramento Valley Chapter, CNPS*: [www.sacvalleycnps.org](http://www.sacvalleycnps.org).)

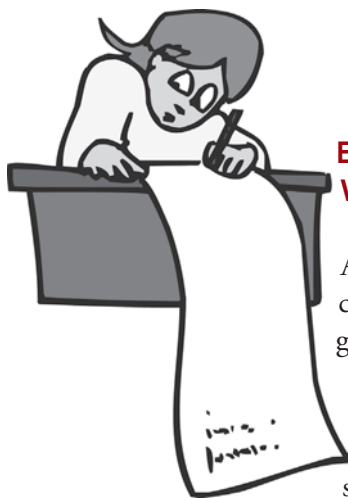
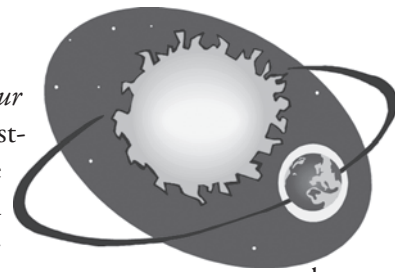
## The Sun as 'Star' Performer

The sun is a typical star, but it is *our* star and is vitally important to the existence of life on earth. It is the ultimate source of our biosphere, climate, and economy. Sacramento City College astronomy professor **Liam McDaid** wants us to stand more about our home star, how it makes its energy, how we know this, and how it affects us.

McDaid, SCC Astronomy coordinator, professor, and author, will be featured at a free ARNHA public forum Friday, June 27, starting at 7 p.m. in the Assembly Building of the Effie Yeaw Nature Center in Ancil Hoffman County Park. He plans to have volunteers from the Sacramento Valley Astronomical Society bring telescopes, so those who attend can view Saturn and Mars at the conclusion of his program, at about 8:30 p.m.

McDaid has M.S. degrees in astronomy and physics from New Mexico State. As a graduate student, he shared an office with **Clyde Tombaugh**, discoverer of Pluto, who he says instilled in him a love of educating the general public about astronomy.

Light refreshments will be served.



## Effie Yeaw Nature Center Announces Wish List

The Effie Yeaw Nature Center needs a new Automated External Defibrillator (AED). Their current AED is an older model whose battery is getting low. Soon, replacement batteries will no longer be available. In addition, this older model cannot be used for infants or children. See [www.medical.philips.com/main/products/resuscitation/products/onsite/](http://www.medical.philips.com/main/products/resuscitation/products/onsite/) for more information. One model costs about \$1,500 and the other about \$1,900.

In addition the following are needed:

- Home Depot, Lowes, OSH or Ace Hardware gift cards for exhibit or animal enclosure construction and maintenance.
- PetSmart or Raley's gift cards for animal care supplies.
- Hancock or Joann's fabric gift cards for exhibits and animal care.
- Gift cards for Raley's, Safeway, or Smart & Final for supplies for volunteer training and volunteer appreciation events.

Donors should state how they would like the gift put to use. Phone **Marilee Flannery** at the Effie Yeaw Nature Center, (916) 489-5080, for more information.

# Saving Parkway Natural Values

A resource planning team is on course to produce a management plan designed to head off future developments that would erode the incomparable natural values of the American River Parkway.

The American River Parkway Natural Resources Management Plan was proposed last year by the Save the American River Association, and the concept won acceptance from county parks. Funding was secured from the State Water Forum.

The plan would establish a scientific baseline from which to evaluate questions and concerns about future changes affecting the narrow, verdant ribbon through the burgeoning Sacramento metropolis. Examples:

1. What are the ecosystems that comprise the Parkway?
2. What parts of the natural features—plants, animals and terrain—are changing for better or for worse?
3. What are the effects of human uses on the ecosystems?
4. Have we reached the maximum or exceeded the desirable amount of urbanization of the parkway? What factors should be considered in limiting human uses?

**Elmer Aldrich**, retired State Parks planner and pioneer visionary in creating the Parkway, said the plan would automatically be consulted prior to making any changes for developments or alteration of the Parkway's natural values.

"In effect," he said, "it would place this protection as high as, if not higher than, man-made developments as was envisioned in the 1950s when the media and organizations spurred public support to establish the parkway and protect the natural values of the Lower American River."

"Recreationists need not worry that this plan will be too restrictive. What it really does is assure long-range protection of natural features as part of the great Parkway scenery that enhances the quality of every permitted recreation."

Principal staffing is by **Trevor Burwell, Ph.D.**, of Hauge Brueck Associates, Sacramento environmental planners. Burwell started work on the plan as Senior Resource Specialist with the Parks Department and is now under contract to continue the work. **Mary Maret**, parks department Senior Resource Specialist, is the other principal staff person.

SARA is staying in close touch with the progress and has offered to help, including with financing. To follow the progress, SARA President **Warren Truitt** appointed a committee chaired by **Elmer Aldrich** and including **Leo Winternitz, Felix Smith, Jack Hiehle, Shelley Mathews, and Tim Nosal.** ■

## FROM THE ALMANAC

### Throwback

The pond turtle is an olive-brown lump on a rock, stolidly taking the sun, a reptilian exponent of Satchel Paige's dictum that to live a long life it is necessary to avoid the social ramble and other unnecessary exercise.

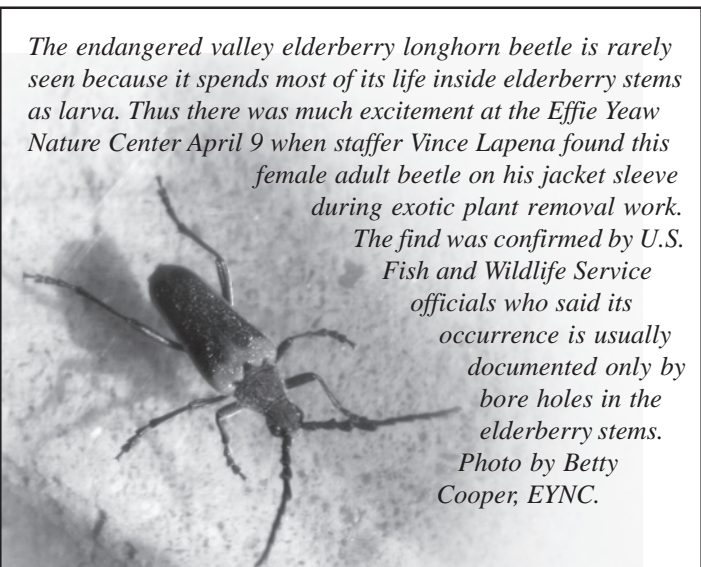
This must work, because the turtle lives a long time – as long as 25 years. It's an armor-plated throwback to the Mesozoic era 200 million years ago when dinosaurs stomped the earth.

But now the valley's only native turtle bestirs itself. The salad plate-sized animal drops into the water in quest of a meal of insects, small fish or water plants.

If it happens to be a female, this is the time for her to crawl some distance away and use her claws to dig a small hole in a stream bank or hillside. There she will lay 5 to 11 hard-shelled eggs and cover them with silt. Two months later, the young will hatch and make for the water. Beginning in November, all the turtles will hibernate beneath the mud under the water until February.

All of which provides an excuse for recalling Ogden Nash's ode to the bony-shelled reptile: *The turtle lives twixt plated decks, which practically conceals its sex. I think it's clever of the turtle in such a fix to be so fertile.*

Reprinted from ARNHA's "An American River Almanac: Reflections on nature throughout the year," with essays by Peter J. Hayes and color photographs by Tom Myers and George Turner. This book of photographs and essays can be purchased at the Effie Yeaw Nature Center and selected book stores. ■



*The endangered valley elderberry longhorn beetle is rarely seen because it spends most of its life inside elderberry stems as larva. Thus there was much excitement at the Effie Yeaw Nature Center April 9 when staffer Vince Lapena found this female adult beetle on his jacket sleeve during exotic plant removal work. The find was confirmed by U.S. Fish and Wildlife Service officials who said its occurrence is usually documented only by bore holes in the elderberry stems. Photo by Betty Cooper, EYNC.*

## Has Project BudBurst Bloomed in Your Neighborhood?

Project BudBurst is ideal for teachers and students, families interested in participating in a science project, scouts and 4-H groups, gardening clubs, nature centers . . . anyone or any group with an interest in contributing to a socially and scientifically relevant research study.

Project BudBurst shows participants across the nation how to collect important climate change data on the timing of leafing and flowering of trees and flowers. This national citizen science field campaign targets native tree and flower species across the country and is open to everyone. By receiving data about the timing of leafing and flowering of native species scientists learn about the prevailing climatic characteristics in a region over time. This program, which began in 2007, is sponsored by the U.S. Bureau of Land Management, National Fish and Wildlife Foundation, National Science Foundation, and others.

Last year's inaugural event involved thousands of people of all ages making careful observations of phenological events such as the first bud burst, first leafing, first flower, and seed or fruit dispersal of a diversity of tree and flower species, including weeds and ornamentals.

Phenological observations have been used for centuries by farmers to maximize crop production, by nature-lovers to anticipate optimal wildflower viewing conditions, and by almost all of us to prepare for seasonal allergies. Today, this well-established science is used also to track the effect of global warming and climate change on organisms and to make predictions about the future health of the environment.

To participate or learn more, go to [www.budburst.org](http://www.budburst.org). *The information for the preparation of this article was taken from the Project BudBurst website.* ■

## A Positive Outcome to SARA Markis Appeal ?

There may be, after all, a positive outcome to SARA's appeal of the Markis Use Permit. After receiving SARA's letter expressing displeasure with the way SARA's Markis appeal was handled and viewing photographs of other houses along the Parkway that have not complied with permit requirements, primarily relating to inappropriate armoring, house color and adequate screening, the Board of Supervisors instructed County Parks to pull the permits for the properties highlighted in SARA's presentation, review their permit deficiencies, and then contact the property owners about the need to comply with permit requirements. **Celine Livengood** of County Parks is in charge of this project and is keeping SARA informed of progress made.

SARA appeared before the Sacramento County Board of Supervisors on February 13 to appeal the County Project Planning Commission's 4-1 decision to approve the Markis Use Permit, with a 35-foot setback. The Park-

way Corridor Combining Zone (PCCZ) calls for a 75-foot setback in that area – within the Riverwood gated community – in Carmichael. Willing to compromise, SARA supported the 50-foot setback recommended by County Planning, trusting this could provide just enough space to adequately screen the two proposed large houses from visual intrusion into the Parkway.

For the *privilege* of appealing, SARA had to pay a \$5,000 fee. The Supervisor's subsequently voted 4-1 to support the Planning Commission's decision. **Don Nottoli's** was the only vote supporting SARA's position.

SARA intended their Markis Use Permit appeal to address not only Markis but all preceding permits seeking to ignore PCCZ requirements. Should the County successfully gain compliance from the offending property owners, the Parkway will benefit enormously as these offending properties will be less visually intrusive. Stay tuned! ■

*by Warren V. Truitt, President, SARA*

---

## Park Ranger Leaders Named

**Steve Flannery**, recently named chief ranger of the Sacramento County Regional Parks Department, has appointed patrol ranger **Kathleen Utley** as a park ranger supervisor.

A ranger since 1989, Utley is field training officer for newly-hired rangers in the 35-person unit of the parks department. "She's done all the jobs in the unit," Flannery said. "She's a drug recognition expert, leading rangers in drug arrests and is fearless in the field."

Utley is a 1986 graduate in Environmental Studies from Sacramento State University. She completed the training course at the Northern California Criminal Justice Training Center. She was a rescue diver with the Drowning Accident Rescue Team for three years and a reserve officer with the Colfax Police Department. She joins **John Havicon** as one of two park ranger supervisors.

Flannery, a 30-year veteran of the parks department, was named acting chief ranger last September and appointed to the permanent post in March. A 1979 graduate in biological conservation from Sacramento State University, he is the husband of **Marilee Flannery**, director of the Effie Yeaw Nature Center. ■

## American River Natural History Association

P.O. Box 241

Carmichael, CA 95609-0241

(916) 489-4918

www.arnha.org

Address Service Requested



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

# ARNHA Calendar of Events

- **Summer Fun Days**  
June 9 to August 15, 9 a.m. to noon  
Effie Yeaw Nature Center (916) 489-4918
- **Rex Cycle Bike Ride**  
Saturday, June 14  
www.arpf.org/rex, (916) 486-2773
- **“The Sun – A Star Performer”**  
**ARNHA Public Forum** Friday, June 27, 7 pm  
Effie Yeaw Nature Center (see story page 5)
- **Down River Day**  
Saturday, August 2  
www.arpf.org, (916) 486-2773
- **ARNHA Annual Meeting**  
Wednesday, September 10 - 6:30 pm  
Effie Yeaw Nature Center (916) 489-4918

## Welcome, New Members!

- Brittany Adamson
- Kaia Anderson
- Daneen Benigson
- Andrew Berg
- Vicky Bigelow
- Dale & Theresa Blue
- Susan Bristow
- Karla Campbell & Kurt Koldinger
- Jessamyn Carino
- Kent & Diane Carlson
- Susan T. Casper
- Lisa M. Cowlshaw
- Joan E. Denton
- Deborah Doss
- Pamela Douglas
- Beth & Joel Dubois
- Leonor S. Ehling
- April Evans
- David & Dona Evpak
- Nathan Fairman
- Yuuko Felletto
- Blanca & Scott Fishman
- Deborah Forester
- John & Lisa Forsythe
- April Frazier
- Lisa Glaser
- Adrienne Graham & Erick Cooke
- Celia F. Hall
- Pam Hall
- Nicole & Bradley Hamlin
- Nikki Harris
- Tracy Haven
- Schelene E. Heglund
- The Heron Family
- Rosemary Hoskinson
- Jennifer Johnson
- Kristi Jones
- John Keeney
- Patty Kepner
- Bennett Kohler
- Arelene & B. Krause
- Therese Larrea
- Laura K. Lehrer
- Dawn-Marie Lillie
- Karnie Loehr
- Tony Loftin
- Rachel Lucchini
- Kara Malone
- Rhoda Mantell
- Jennifer Mason
- Judy, Monica & Michael May
- Cassandra McFarlin
- Marianne McMorris
- Robert & Anne Meagher
- Modern Impressions
- Charmaine Morrison
- Tina Nassar
- Amy Palmer
- Lindsey Paskulin
- Brian & Deanna Pennock
- Tim Peppel
- Kira Perdue
- Elinor Petuskey
- Andra Rieden
- Karen Roberts
- Marisa Schiffman
- Paula Schroeder
- Nancy Scott
- Tom Shay
- Chrisan Sievers
- Cathryn Snow
- Leslie Soule
- Bruce & Deb Steubing
- Diann Shadwell Stevens
- Jennifer Stidger
- Holly Wunder Stiles
- Mary Sullivan
- Julie Tait
- Adam Tebbe
- Sharon Teig
- Mil Tielman
- The Tilton Family
- Traci M. Trask
- Sigrid Trevino
- Dianne Tully
- Jennifer Varley
- John & Jean Voelke
- Susan Webb
- Tammy Wilcox
- Liz Williamson
- Marilyn D. Wolf
- Joe Zales

Tell Your Friends About ARNHA – Recruit a New Member Today