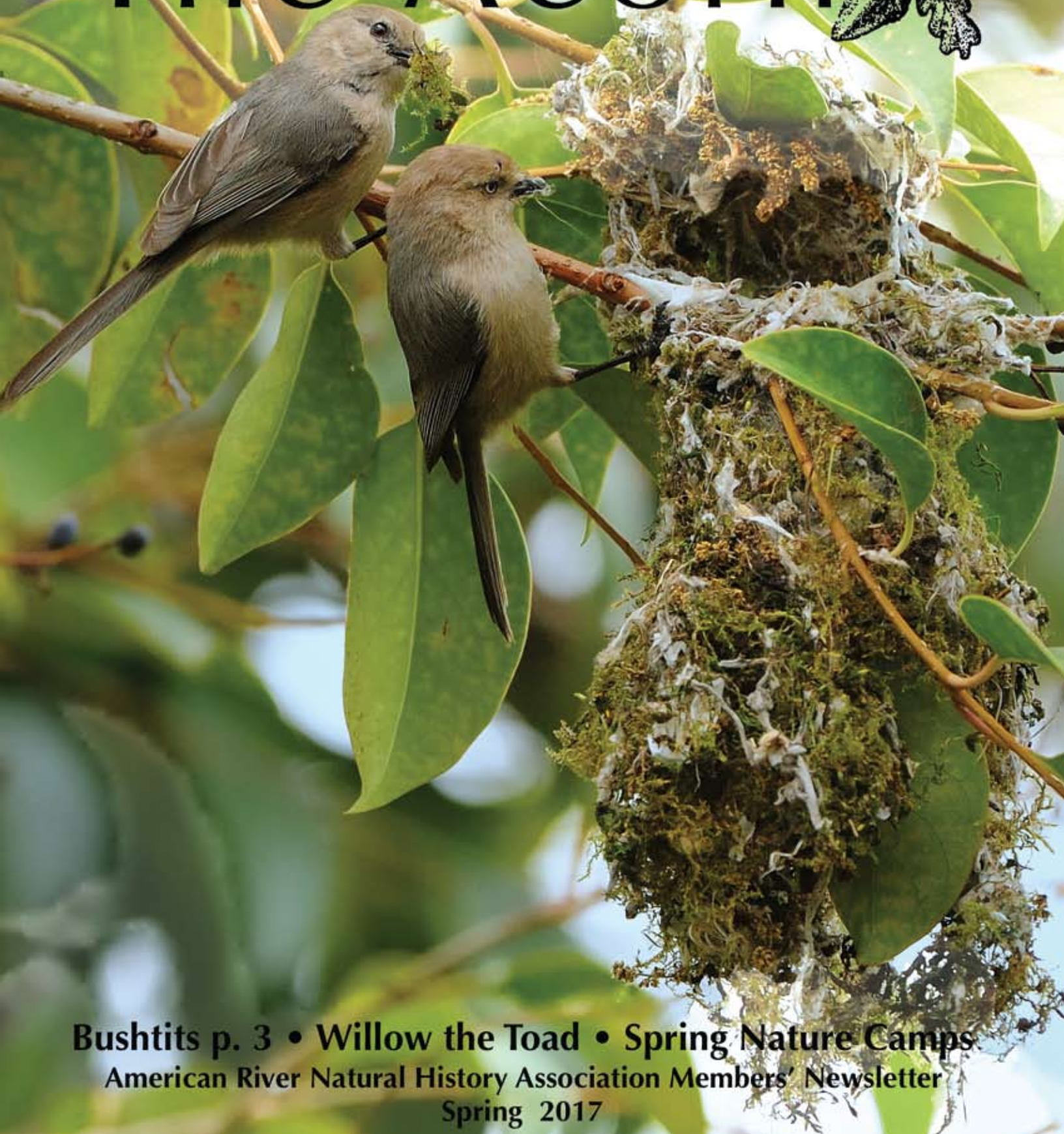


The Acorn



Bushtits p. 3 • Willow the Toad • Spring Nature Camps
American River Natural History Association Members' Newsletter
Spring 2017

from the president

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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.

Wishing everyone a happy, healthy, and nature-filled New Year.

The year 2017 holds great promise, especially for ARNHA and the Effie Yeaw Nature Center. I am fortunate to be president at this time, with so many exciting things currently happening and coming in the future.

We completed our work with consultant David Catlin, and his report has provided us with ideas on how to make the Effie Yeaw Nature Center better. We will spend much quality time this coming year deciding where we want to go, what we want to do, and how to make these things happen. In addition to charting our own path, we will continue to develop new relationships and foster existing ones, with our colleagues who protect the American River Parkway and create future stewards of the environment through outdoor education for people of all ages.

In addition to developing plans for enhancing the visitor experience at the Nature Center, we will begin the process of finding a new Executive Director. Paul Tebbel has made the decision to transition toward retirement, and a search committee will be formed to seek someone who will bring vision and expertise to the position. Paul and Betty Cooper will serve as co-directors during the transition period. We are confident that we can find someone who can build on Paul's legacy and help us fulfill our mission and vision for the future.

A couple of dates for your calendar include Rich Howards's Beginning Birding: Spring Edition with the first of four evening lectures on Friday, March 3. See <http://www.sacnaturecenter.net/ssbeginbirding.html> to sign up. A fun fundraising event for ARNHA is the annual used book sale on March 4, from 8:30 a.m. to 3 p.m. This year's sale features the book donations from the Peter J. Hayes book collection. All ARNHA members are invited to donate nature books to the sale and to come to the sale for incredible book bargains

The year 2017 is going to be an exciting one for ARNHA and the Effie Yeaw Nature Center, and I look forward to sharing this journey with all of you. May you find peace and joy as you experience our little piece of wilderness. In the words of John Muir, "One touch of nature makes the whole world kin."

See you on the trail,

Joey Johnson

Joey Johnson



Photo by Kari Bauer

ARNHA President Joey Johnson

Cover photo by Lon Yarborough

Tech Spec: Nikon D300, Nikon 500mm f4 lens shot at f5, 1/640 second, Matrix metering with +1.3 EV. ISO 1000. Chief editing strategy was to employ noise reduction on unfocused background and darken distant background creating three planes only one of which is in focus and well lit.

Bushtits: Most Spectacular LBJs

story and drawing by William E. Avery, Ph.D.

Wouldn't it be amazing if dinosaurs survived the last major extinction and we could see them today just like in the movie *Jurassic Park*? But wait, they have! Moving swiftly, they hunt in packs speaking to each other with soft contact calls as they search for their prey in the Parkway foliage. They are small feathered *Coelurosaur theropod* dinosaurs, and they are fearsome predators, closely related to the famous but extinct raptorial Velociraptor. One particularly fearsome species, if you are very small and live in trees, on the undersides of leaves, is *Psaltiparus minimus*, the most abundant passerine, or perching bird, observed on the 2016 ARNHA wildlife count with 781 individuals counted - the Bushtit.

Some ornithologists have a fun abbreviation for this kind of bird: LBJ or little brown job. The Bushtit is thus diminutive and cryptically dull in color and might be dismissed as a LBJ if not for the fact that it just happens to be one of the most interesting birds on the Parkway.

The Bushtit, a very small gray-brown bird, has a disproportionately large head, small bill, and a relatively long tail. Wings are gray and head may be gray or brown. Its breast is somewhat lighter, varying from light brown to light gray. Males and females can be distinguished from each other by eye color. Females, surprisingly, have a bright gold iris surrounding their pupil, and males have a dark brown or black iris. Bushtits are small birds (under 4.5" from tip of bill to tip of tail) and weigh between a tenth to a fifth of an ounce (3 to 6 grams) or just a little more than a couple large paper clips.

Bushtits work together. Because of their small size, they tend to lose body heat easily at night, and so to compensate

they huddle tightly together in pairs or small groups. Like their Velociraptor cousins, Bushtits hunt in packs, or small flocks, of 10 to 40 individuals. They call to each other constantly - "tseep-tseep-tseep" as they sweep through aerial foliage in trees and shrubs on the prowl for small insects, including scale insects and spiders. In addition to their constant contact calls, they have a variety of different vocalizations to warn each other of specific types of predators. Though they lack a distinct song, they have been reported to sing softly to each other in small roosting groups! If you see a small flock of LBJs sweeping quickly through the branches and calling

to each other, then you have likely just spotted Bushtits on the hunt.

Bushtits typically mate for life and may live as long as nine years. The golden-eyed female and dark-eyed male work together for about a month to build a hanging nest woven out of spider silk, grass, moss, and leaves, lined with soft material such as cottonwood cotton or downy feathers and covered with camouflaging material such as mosses and lichens from the nearby branches. Examining an old nest with a hand lens, I found also a variety of other materials such as animal hair; cotton string; a variety of other threads; fibers including Dacron Holfil, maybe from humans' deck chair cushions; empty spider egg cases; and alder catkins.



The entrance to the nest is at the top, and inside the nest the mother Bushtit may lay 5 to 7 white eggs. Both parents incubate the eggs and may do so simultaneously. In fact, often 2 to 4 helper bushtits live in a family, and they may all sleep together in the same nest! These helpers are generally not direct offspring and tend to be males. Incubation lasts

continued next page



Notes on Cover Photo

by Lon Yarborough

Bushtit Construction was shot on day 3 of the nest building. On day 5, a windstorm tore the nest apart and no attempt was made to repair it. During the 3 days, I shot over 2,000 images. Each night, I would examine the images and the settings used and fine-tune my approach.

I prefer to shoot wildlife in Aperture Priority and use exposure compensation (EV) for quick adjustments. Since the nest was in my back yard in Carmichael, I was able to find the perfect angle and make myself comfortable. By the second day, I determined that this was a pair of Pacific Bushtit due to the brown crowns. I also discovered that the female (green iris) was the chief architect and construction supervisor. Many times she moved moss and twigs placed by the male. Both would forage in the yard, keeping in constant contact with their calls. Often, they would be on the ground or in the garden within feet of me with no apparent distress.

The strategy of the shot was to capture the female's identifying eye color while she was engaged in building and the male was in the frame with supplies. What I did not expect was the expression of adoration and desire to contribute revealed by the male's posture. It is the relationship of the pair that makes this image so sublime. ■

continued from previous page

ten days with fledging after 21 days. Both parents and helpers gather food for the nestlings. Once fledged, the young birds leave the nest permanently. The nest may be reused for a second clutch later in the season. The cryptic nests are fun to try to find hanging in dense foliage 4 to 25 feet above ground level. But please, if you do find one, try to keep your distance, so that you don't disturb the Bushtits and California Scrub Jays don't see that you have found something interesting. If the nest is discovered by a predator such as a California Scrub Jay or a squirrel the Bushtit family will abandon the old nest and immediately set about to build another one. And, of course, that will take another month. Old nests are never used again the following year, but their materials are often recycled.

Bushtits are year-round residents, and populations seem to be holding steady over the years as recorded by the ARNHA wildlife count and Christmas Bird Counts. They have been among the most abundant of birds counted and have been observed for all 32 years of the wildlife count. Abundant, intelligent, and resourceful, they have capitalized on the value of cooperation to enhance their chances for survival.

So if you happen to notice a little flock of LBJs moving through the nearby foliage, "tseep-tseeping" to one another, remember to give them the credit they are due. After all, these are surviving raptorial dinosaurs, their populations are holding steady while many other bird populations are in decline, they cooperate with and rely upon one another, they mate for life and can build one of the most beautiful and comfy hanging nests for a family of ten in just a month from nothing but spiders' silk, moss, and other materials at hand. These are the Bushtits: most spectacular!

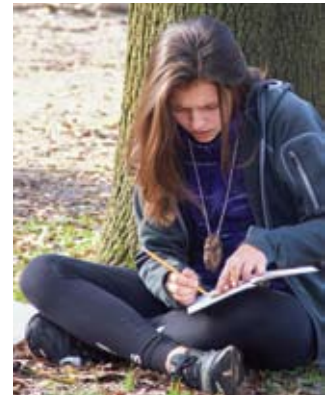
William Avery is a frequent contributor to The Acorn and is a Professor in the Department of Biological Sciences, CSUS. He recently completed artwork for Field Guide to California Rivers, UC Press, 2012, and Field Guide to Oregon Rivers, OSU Press, 2014. ■

The Wood Ducks were photographed from a kayak near Watt Ave after spotting them with my binoculars. The mother was about 10 feet away from them "patrolling" the area. It's difficult to get close to Wood Ducks to get a photograph and I spent about 20 minutes slowly approaching them, staying close to shore so I didn't get noticed. I was rewarded with a great photo opportunity.

Shot information: 1/800, f5, ISO 400, 248mm, -2/3 exposure • Paul Sayegh



New Winter Nature Camps Teach and Entertain



School may have closed for fall and winter vacation, but learning and fun continued under the oaks at the Effie Yeaw Nature Center. Over 120 school-aged children and teens participated in a variety of day camps. Elementary school children participated in classes such as “Chinook Shenanigans,” “Predators in the Preserve,” and “Deer Toes and Coyote Paws.”

“Wildlife Watchers” enabled children ages 6 to 11, grouped by age, to become citizen scientists, similar to the college students who conduct the ongoing wildlife study in the preserve. Through a variety of activities, campers learned about deer and turkeys, and how to conduct science surveys (how do you keep from counting the same deer twice?). They turned their observations into a data set: 90 deer and 25 turkeys spotted and counted!

Younger and older children participated as well. The popular “Camp 5” for 5-year-olds again drew an enthusiastic group. New this winter was “Nature’s Notebook” for ages 11 to 15. Participants studied flora and fauna in the preserve and created nature journals to record their observations. See SacNatureCenter.org for information about Spring Nature Camps offered from April 10 through April 14. ■



Photos by Kari Bauer



From bottom left clockwise:

Margaret Rogers and our youngest “Camp 5” campers search for Horsehair Worms.

Solis studies animal tracks during “Deer Toes and Coyote Paws.”

Evalynn learns about the Blue-bellied Lizard in “Deer Toes and Coyote Paws.”

Anika examines an oak leaf and records her observations in the “Nature’s Notebook” camp.

Will looks for tracks in a puddle after the recent rain.





Under the Oaks

by Pete the Parkway Coyote

Since the beginning of the year, much-needed **winter rains** have soaked the Preserve. The Riverview Trail became waterfront property for a few days as American River flows increased. A large oak tree on the Meadow Trail came down, and branches fell from the majestic English Walnut which stands at the trailhead. Near the river, King Salmon got caught in the trees. By now, the soil is beginning to dry, and visitors, both human and others, are enjoying a lush green landscape.

Photos by Ed Harper



American Bald Eagle

The February 15 **Volunteer Appreciation Luncheon** featured accolades for the volunteers who aid staff to keep ARNHA programs robust and informative. Cathy George now joins the Exhibit Hall door of honor, having donated more than 1,000 hours. Renee Covey, Abigail Mead, and Linda Melching donated more than 500 hours, and eleven other volunteers donated more than 250 hours of service.

The new **Young at Heart Programs** are perfect for senior center groups, assisted living and retirement communities, and other seniors wherever they meet. Join a naturalist for a customized nature walk here at the Center, or enjoy a naturalist program with a live owl or hawk at your meeting place.

<http://www.sacnaturecenter.net/schoolandgroupprograms.html>.

Daryl Hannah, a lovely **California Mountain Kingsnake**, now enjoys life on display at the Nature Center.

The **Red Shouldered Hawk pair** is carrying nesting material to their previous nesting location. Last year, visitors enjoyed watching them successfully raise their family on the very same nest.

Used Book Sale, March 4th - Most books will be sold for only \$1. What a deal! Donate your used nature book to the Effie Yeaw Nature Center prior to March 4.



Burrowing Owl

Birds shown on these pages were seen on the Birds of Winter class field trip to Waverly Road, east of Stockton.

Under the oaks, down by the river, yeah On a blanket with nature is where I'll be . . .

The **Discovery Shop Holiday Sale** was the biggest and best, reports Melanie DuBoce, Discovery Shop Manager. Thank you to the over 400 people who shopped and 35 volunteers who baked goodies and helped out to make the sale such a success.



Ferruginous Hawk

It was raptors on parade in January for members of Ed Harper's class, **Birds of Winter** in the Sacramento Region. Among the 29 species sighted were 5 American Bald Eagles, 3 Ferruginous Hawks, 2 Burrowing Owls, 8 American Kestrels, 1 Merlin, 2 Red-shouldered Hawks, 14 Red-tailed Hawks, and 3 Northern Harriers. Next January's class promises more of the same.

On a sunny December 3, sixty-seven volunteers counted 111 bird species (14,974 individuals) and 18 mammal species, including seven River Otters near Sailor Bar, along the American River Parkway in the **ARNHA Wildlife Count**. Newcomers are welcome to join the Count next year.



Photos by Ed Harper

Horned Lark

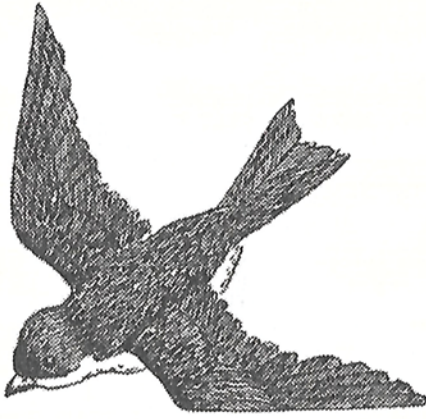
Bird and Breakfast, the popular fund-raiser featuring guided bird walks and breakfast, returns March 18 and 19th. Saturday's Traditional Event, for adults ages 12 and above, features birding in small groups lead by Sacramento Audubon expert birders, followed by sumptuous fare and a birding optics display and sale by Out of This World Optics. All ages are welcome at Sunday's Family Friendly event for more guided birding, a fun bagel breakfast, and special activities for the under-twelve crowd. Some scholarships are available for scouting and youth groups.



Mountain Bluebird

- **Pete the Parkway Coyote**

Pete's curious nature, sharp eyes, and keen sense of smell make him a great ambassador for the American River Natural History Association.



They're back

A slimmed down shadow of its former self, the river of gold slides past Sailor Bar and Ancil Hoffman Park on its way to join the Sacramento. Here and there, a bulge roils the placid surface as a steelhead breasts the current.

But the main action is a few feet above the water--scores of swallows, twisting and darting in wide-mouthed pursuit of almost invisible insects.

On streamlined, pointed wings, the swallows have come back to Sacramento from wintering grounds in Guatemala and Brazil. Oh, a few, such as the blue-backed Tree Swallow, are year-around residents. But most of the others, the Violet-green, Barn, Cliff, Northern Rough-winged swallows, are travel-happy types that may wind up as far north as Alaska.

Many swallows will nest near the same spot by the American River where they were born last year, drawn by an instinct similar to that which sparks the spawning salmon's return to its birthplace. Most swallows nest in cavities of trees or embankments, or in a gourd-shaped nest made of mud and built under bridges or freeway overpasses.

The American River Parkway offers vantage points from which to watch mixed flocks of swallows swooping and diving and narrowly missing each other as in a war-movie dogfight scene. Since they eat half their weight in insects in one day, swallows rarely stop flying in daylight. When they do, they teeter on tiny, undeveloped feet, but with such powerful wings, why should they walk when they can fly?

From "An American River Journal," published by the American River Natural History Association (ARNHA). It features illustrations by ARNHA co-founder Jo Glasson Smith and nature essays by Peter J. Hayes, retired newspaper editor and ARNHA Associate Board member. The book is available for \$9.75 at the Effie Yeaw Nature Center, ARNHA.org and selected bookstores. Visit ARNHA.org "Podcasts," to hear readings of the essays by the author.

Beginning Birding and Intermediate Bird Photography Workshops Offered This Spring

by Melanie DuBoce

As the weather is clearing up, the Nature of Things Speaker Series is springing into action!

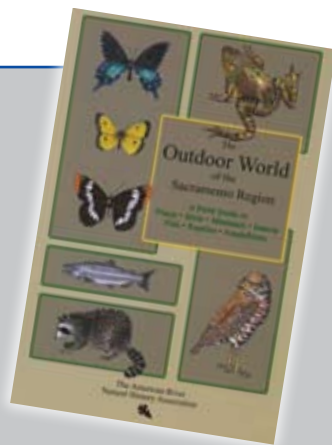
Up first and back by popular demand is Beginning Birding: Spring Edition with Rich Howard. Interested in birds but don't know where to start? This class will introduce the basics of birding, from binoculars to ethics. In four classroom sessions, the class will learn the distinguishing marks of the 100 most common birds of Effie Yeaw Nature Center and the American River Parkway. Photos, many of them taken locally, will be supplemented by the sounds birds make, which are often the best way to find and identify birds. The class includes two field trips to see and hear birds in a variety of local habitats. This series has lectures on Friday nights, March 3, 10, 24, 31: and birding trips on Saturdays, March 25 and April 1.

Next is award-winning wildlife photographer and author Paul Bannick's intermediate Bird Photography Workshop. Bannick will explore how to get the best bird photographs with the lowest cost and the fewest technical variables using a digital camera with a lens. The class does not cover digiscopes. Participants do not need to own a camera or lenses to take this class.

This program is on Friday, March 17 from 10:30 am to noon. Visit SacNatureCenter.com for information and pricing, and to sign up for programs.

Melanie DuBoce is a naturalist at the Effie Yeaw Nature Center. She enjoys helping ARNHA members and others learn more about nature. ■

**The first all-color edition of
The Outdoor World of the Sacramento Region
with 550 illustrated species
is available at the Discovery Shop
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- Yvonne Harty
- Cheryl Hayton
- Rod Herring
- Elaine & Michael Hill
- Stephanie Howard
- The Hu Family
- Mary Ann Hubbert
- Nick Huppert
- Julia Janssen
- Sulay Jaramillo
- Larry Jones
- Boris Kalanj
- Samantha Kanold
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- Simran Kaur
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- Timur Kopbayev
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- Edye Kuyper
- Michael Kwong
- Marlene Laughter
- John Leng
- Margaret Leonard
- Ralph Levy
- Eric Liskay
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- Cheryl Mahoney
- Marc Maskowitz
- Eric Mayhew
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- Nicole McLean
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- Phil Miller
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- The Montoya Family
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- Sarah Powell
- Lisa Prichert
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- Sky Jessica Reed
- Stephani Reynaga
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- David Sutton
- Tracy Ternes
- Dorothy Thompson
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- Jordan & Casey Traller
- W. Al Trivett
- Amy Vierra
- Jacqueline Wait
- Lingru Wang
- Cynthia Warren
- Kris & Gretchen Williams
- Colleen Wise
- Nathan Woods
- Michael Woskow
- Sarah & Matt Z' Berg

Willow the Toad

by JoLynn Jarrett

Willow the Toad was found as a tadpole in the spring of 2011 and given a home as a member of the Effie Yeaw Nature Center's Aquatic Education program. The staff watched as he morphed from a tadpole into a toad. Then, they transferred Willow to the Animal Care program where he has become a popular addition to our amphibians.

Willow loves to eat crickets and large mealworms. When he's picked up and held or sometimes when he just wants to say something, Willow likes to chirp with a series of squeaks. Willow also likes to burrow deep into his dirt and hide, but sometimes he bathes in his water bowl.

The California Toad or the *Anaxyrus Boreas Halophilus* is a subspecies of the Western Toad and is native to most of the Western United States. Active mostly during the day in higher elevations, California Toads can be active during the night in low-lying areas. Toads generally like moist habitats near dead leaf litter, in burrows, and under fallen logs.

Toads lay long strings of eggs in water that hatch into fish-like tadpoles. As tadpoles, they begin to eat algae and small plants. As they grow, legs start to grow as their gills and tails become absorbed into their bodies. As toadlets, they have front legs and back legs and their tail are almost gone.

Toadlets start eating small insects or anything else that they can fit into their mouth including each other. As adults, they will eat insects, worms, bees, ants, and even small mammals. When their legs and lungs are fully formed, they are usually found on land. Their legs mostly are used for walking, but toads can hop great lengths and heights.

What is the difference between a Toad and a Frog?

A Toad tends to walk or hop rather than jump like a frog. Toads have rough, bumpy skin while frogs have smooth skin. Frogs also like to stay near water while toads like the drier climate until they mate and lay eggs.

Fun Fact! Did you know that frogs have teeth but toads do not? Toads use their long sticky tongue to nab insects such as bees, ants and even spiders and swallow them whole!

JoLynn Jarrett is the EYNC Animal Care Supervisor. She grew up on a ranch and has loved animals for as long as she can remember. ■



Photo by Kari Bauer

Ask a Naturalist

Q. Are there rattlesnakes in the preserve?

A. Naturalist Heather Gabel replies:

Yes! In Northern California, there is only one venomous snake, the Northern Pacific Rattlesnake. They can be spotted throughout the Preserve and along the American River Parkway during warmer months. According to Mike Cardwell, the wildlife biologist studying rattlesnakes in the Preserve, 'Our rattlesnakes are most abundant in undisturbed dry valley and foothill habitats, but they are often present in fewer numbers in wetlands and higher elevations in the Sierra Nevada.'

"Rattlesnakes are most active around dawn and dusk but may be encountered anytime when temperatures are mild. A juvenile rattlesnake eats lizards while an adult eats mostly small mammals, including rats, mice, and young ground squirrels (Adult ground squirrels develop immunity to rattlesnake venom!). Rattlesnakes play an important role in controlling rodent populations.

"When visitors hear that there are rattlesnakes in the preserve, some express hesitation about walking the trails. But rattlesnakes are not aggressive toward people and will try to avoid contact with humans. However, if a rattlesnake feels threatened, it may strike to defend itself. Staying on trails and leaving rattlesnakes alone will greatly reduce negative encounters. Should a bite occur, keep the bite below the heart and seek immediate medical attention." ■

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(916) 489-4918 • www.arnha.org



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ARNHA Calendar of Events

- **Beginning Birding, Spring Edition, with Rich Howard**
Friday Evenings, March 3, 10, 24, 31
Saturdays, March 25 and April 1, at EYNC
- **Used Book Sale**
Saturday, March 4, 8:30 am to 3 pm, at EYNC
- **Bird Photography with Paul Bannick**
Friday, March 17, 10 am to noon, at EYNC
- **Bird and Breakfast**
Saturday March 18 & Sunday, March 19
8:00 am to 11 a.m. at EYNC
- **Spring Nature Camps**
April 10, 11, 12, 13 at EYNC
- **Art Where Wild Things Are**
Call to Artists, April 15
See Sacramento Fine Arts Center.org
- **Art Gala**
Saturday, June 10, 5 pm to 8 pm at EYNC

See SacNatureCenter.net for more information.

Save the Date!

Saturday, June 10, 2017

ARNHA and Sacramento Fine Arts Center present

Art Where Wild Things Are Gala and Art Auction

5-8 pm

Live and Silent Auctions, Food, Wine and Artistic
Interpretations of Life in our Local Natural World
Benefitting the Effie Yeaw Nature Center

Tickets on sale soon at SacNatureCenter.net.

Call to Artists!

To enter the juried art show, view the prospectus at
sacfinearts.org/pdf/AWWTA2017_entry.pdf

