

from the Arcata Marsh Interpretive Center Vol 25, Issue 1, Winter 2018

Our Mission: To stimulate understanding of the Arcata Marsh & Wildlife Sanctuary, its relationship with Arcata's integrated wastewater treatment system, the surrounding watersheds and bay, and their link with the Earth's water cycle

In This Issue: Upcoming Lectures... Take a Child Outside Day... Invasive Plant Work Days... Béla Fleck Donation... What's New at AMIC... Student Bird Art Contest... Dog Waste Management... Patricia Siering: In Memoriam... King Tide Tour... Natural Wastewater Treatment Lecture... Thanksgiving Tour... Bay Fishes Lecture... Godwit Days Volunteers Needed... Riparian Habitat Lecture... Artists... Calendar... Members & Donors



January lecturer David Narum.

Upcoming Lectures

On Friday, January 19, David Narum, project manager in the department of energy and technologies at Blue Lake Rancheria, will present on "Tradition and Technology at Blue Lake Rancheria." He will give examples of how the Rancheria is working to combine historic resilience practices with state-of-the-art technology in energy, water, food, and other areas. David works on resilience initiatives for the tribe and is also an adjunct professor of environmental resources engineering at HSU.

On Friday, February 16, Ellin Beltz will speak about frogs, sharing her passion for those small, secretive creatures. Ellin holds degrees in biology and geology and spent much of her professional life in the Chicago area. She authored a book on frogs in 2005, with over 40,000 copies in print.

On Friday, March 16, James Ray and Katherine Crane will present about "Arcata Marsh and Humboldt Bay Fishes." Both are staff members with the California Department of Fish and Wildlife, Aquaculture and Bay Management Project.

On Friday, April 28 [note change from third Friday pattern, to avoid conflict with Godwit Days], Sean Craig, HSU invertebrate zoology professor, will talk about the importance of marine reserves.

All lectures are free and begin at 7:30 pm at the Interpretive Center. For more information, or to guarantee a seat, call 707-826-2359.

Kids, Enjoy 5th TACO Day at the Marsh March 24

Take a Child Outside (TACO) Day is a free festival of fun outdoor play for kids and their caregivers. From 11 am to 3 pm on Saturday, March 24, environmental educators will offer nature-based activities, games, and crafts along the Arcata Marsh's 0.6-mile Log Pond Loop Trail.

Additionally, teachers and school staff are invited to attend and learn about field trips, in-class presentations, environment-themed curricula, and other opportunities for their students at each station.

Meet representatives from local organizations offering environmental education resources inside the Interpretive Center and sample activities along the Log Pond Loop Trail.

This free community event is sponsored by the North Coast CREEC Network, Friends of the Arcata Marsh, Redwood Science Project, and Humboldt State Natural History Museum. To learn more, contact Allison Poklemba at 707-826-4479 ext. 3 or Allison@creec.org.

Out with the "Bad" Plants

FOAM and the City of Arcata are cosponsoring two Saturday work days at the Marsh this winter, rain or shine. The dates are January 20 and February 3. The work days run from 9 am to 1 pm, but any amount of time you could donate is welcome. Tools, gloves, food, and beverages will be provided. For more information, contact George Ziminsky at 707-599-2655 or Dennis Houghton at dhoughton@cityofarcata.org or 707-825-2163.

2017-18 Board of Directors & Officers

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> FOAM website: www.arcatamarshfriends.org Facebook: www.facebook.com/Friends.of.the.Arcata.Marsh



Abigail Washburn and Béla Fleck. Photo by Jim McGuire.

Banjo Performers Pick FOAM for Big Donation

By Sue Leskiw

When I picked up FOAM's mail recently, I wondered who with a Nash-ville return address would be contacting us. When I opened the envelope and found a check from Béla Fleck Productions for nearly \$1,800, I entered a state of pleasant shock.

First, some background on Béla Fleck [excerpted from his website]. While watching "The Beverly Hillbillies" as a young boy, the bluegrass sounds of Flatt & Scruggs flowed out of the TV set and into his young brain. Earl Scruggs's banjo style hooked Béla's interest immediately. "It was like sparks going off in my head," he later said. In 1973, when he was 15, his grandfather gave him a banjo, starting him off on a lifelong experimental journey as he took that 5-stringed instrument into other areas of folk and blues music, as well as into jazz and even classical repertoire. Since 1998, he has been nominated for 30 Grammys, winning 15, including an award in 2016 for Best Folk Album for his debut album with his wife, clawhammer banjoist and singer Abigail Washburn. He has been nominated in more categories than any instrumentalist in Grammy history.

Rewind to mid-November. George Ziminsky was staffing at the Marsh Interpretive Center when Michael Moore, Jr, events coordinator for HSU's Center Arts, called. Michael relayed that his recommendation that FOAM receive the net proceeds from merchandise sales

at the November 29 Béla Fleck and Abigail Washburn concert at Van Duzer Theater had been approved. (The couple selects a children's non-profit or environmental organization in each community on their current tour via www.greeningpledge.com.) In addition, Center Arts agreed to the performers' request to waive the venue fee on merchandise sales, in order to donate more to FOAM.

I connected with Josie Hoggard, the merchandise and nonprofit coordinator for Abby and Béla. She asked me to provide talking points about FOAM that the performers could impart to their audience, plus brochures and volunteers to staff a table in the lobby. When I shared the exciting news with the FOAM Board, Bill Prescott informed me that he had tickets to the performance and could transport the materials. George and David Couch took Josie up on her offer of free passes and helped at the table.

George reports that the concert was fantastic, the audience cheered and clapped when Abby took to the mic to talk about FOAM, and CD and vinyl sales were brisk at the merchandise table. His last point turned out to be an understatement —who could predict that the offer to donate the *net* proceeds from merch sales would parlay into such a large donation to our nonprofit organization?

After I received the donation, I contacted Michael to ask for details about why he proposed FOAM to be the recipient of this bounty. He replied "My wife and I have both enjoyed walking in the Marsh (even before we knew each other). She volunteered for FOAM for a while. As our family grew to five, our children have enjoyed walking, school field trips, Marsh camps, and bicycling there. We especially appreciate the new bicycle path."

Let's all welcome FOAM's newest Life Members, Béla Fleck and Abigail Washburn!



What's New at AMIC

By Gretchen O'Brien

Happy New Year! The AMIC exhibit hall has a new science exploration table and chairs geared toward toddlers, with magnifying glasses, insect specimens in plastic containers, and other nature-related items to explore. The bookshelf is stocked with more books about animals, plants, weather, wetlands, and geology. This family-friendly and free exploration area is a perfect stop for a winter outing with kids.

- ▶ The exhibit hall will be used for a private City of Arcata staff training session between noon and 5 pm on January 16, 17, 23, 25, and 31 and February 6, 8, 13, 15, and 21. The restrooms and bookstore will remain open to the public.
- ► There is a new bike rack on the path up to AMIC and the outdoor amphitheater. Because it's shaped like a bike, it may not be clear at first what this "sculpture" is for, but it is indeed to secure your bike while visiting AMIC or the amphitheater.
- ► The bookstore has new t-shirt designs, Cornell Lab "Bird-A-Day" calendars, more upcycled earrings, and Arcata Marsh logo caps and knit hats.

March 23 Deadline for Student Bird Art Contest

For the 15th year, FOAM and Redwood Region Audubon Society are co-sponsoring a Student Bird Art Contest in conjunction with Godwit Days. At least \$550 in prizes will be awarded to Humboldt County students from kindergarten through high school who submit a drawing of one of 40 suggested species or another common local bird. Prize(s) also will be awarded for the best rendition of a bird in its natural habitat.

Awards will be presented at the 23rd Godwit Days Spring Migration Bird Festival on Saturday, April 21 at 10 am. All entries will be displayed at the Arcata Community Center during the Festival and copies of winning artwork will be shown at AMIC during May and June.

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A flyer with complete rules and a list of suggested birds is posted at http://www.arcatamarshfriends.org/wp-content/uploads/2018StudentArt.pdf (under Education tab) or can be picked up at the Interpretive Center. Flyers will be mailed to all Humboldt County schools.

Art may be dropped off at the Interpretive Center, 569 South G St, or mailed to Sue Leskiw, 155 Kara Ln, McKinleyville CA 95519. Entries must be received by Friday, March 23 to be considered. Questions? E-mail sueleskiw1@gmail.com.

Dog Waste Update

By Cindy Kuttner

When Jen Davis, manager of Humboldt Pet Supply (145 G Street, Arcata), and George Ziminsky, devoted Arcata Marsh volunteer, were checking out the proposed site for the Arcata Dog Park, Jen was surprised at how horrible the grounds looked. "It was incredible how much pet waste was there. So, George taught us about the science of pet waste and how it affects the environment." Jen went on to explain what she learned: Unprocessed food passes through our pets' systems. These foods come from so many sources: processed dog and cat foods (who really knows what's in those), human food (our leftovers), raw foods, and medications. Our pets' waste carries a host of multisyllabic bacteria. When this poop decomposes at the Marsh, it poisons the ponds, which harms the creatures living there.

The folks at Humboldt Pet Supply (HPS) decided to educate the community by publishing articles in their Paw Print newsletter. They declared September 2017 as "Poo Awareness Month," kicking off with a Clean-up Day at the Marsh. On September 9, volunteers combed two trail loops with gloves, rakes, and bags. They picked up 28 pounds of dog poo! When they returned 4 days later, the poo was back...well, new poo of course, but clearly the education of dog walkers at the Marsh was just beginning.

The team decided to make this a monthly commitment. They cleaned



up poo in October. In November, volunteers covered 60% of the Marsh trails, picking up 18 pounds of poo. In December, they cleaned up 16 pounds around Mt Trashmore, Allen Marsh, No Name Pond, and the Log Pond. Alex Villagrana of HPS notes that subsequent cleanups have been progressively smaller, so they are making a difference.

The Poo Clean-up Team will continue monthly work parties through 2018. Volunteers will help the Marsh and be entered in a drawing for a \$25-\$35 credit at Humboldt Pet Supply. The dates, all Saturdays, are: January 20, February 17, March 17, April 4, May 19, June 16, August 18, September 15, October 20, November 10, and December 8. The team usually meets at the Marsh's South G Street parking lot at 9:30 am for coffee and snacks. Then, members pick up along the trails between 10 and 11:30 am. Tools are provided. Dogs are welcome, as is the whole family.

Jen has received a few requests to free other public places of poo. She says that if enough volunteers join the campaign, they might branch out. So far, the Poo Clean-up Teams have had 3-4 volunteers.

HPS has produced a great video that is informative and fun to watch. View it from their home page (www.humboldtpetsupply.com) or Facebook page by clicking on "Videos."

Pet Waste Fact from *Mother Earth News:* It can take over one year for dog waste to decompose. The poop may not be visible, but the eggs from these parasites can linger for years in the soil. When composted properly, dog waste can be a safe soil additive for landscaping, but the limiting factor for composting is the temperature of the pile. Next Up: How can we compost dog poop, turning it into usable soil? Some people and cities are doing it!



FOAM vice-president Patty Siering (right) presents a honorary Life Membership to former Board member Anne Weiss at 2002 Annual Meeting. Photo by Sue Leskiw.

Dr Patricia Siering: In Memoriam

By Sue Leskiw

I first met Patty when she joined the FOAM Board in October of 2000. She became vice-president the following year, then took over the task of coordinating our monthly "First Monday" lecture series in 2002, when she was one of four HSU biology professors on the Board. She was the driving force behind FOAM starting a research grant program for HSU students that continues to this day. Patty had boundless energy, a ready smile, and contributed a lot during her six years on the FOAM Board.

Patty passed away from pancreatic cancer on December 3, 2017. Part of her obituary in the Mad River Union reads: "Patty Siering was a biology professor at Humboldt State University, an extraordinary cook who threw great parties, a founding member of the Team Stomatopod kinetic sculpture tribe, a lover of nature and dogs, a scholar who applied her knowledge of molecules and microbes to understanding ecosystems, a birder, a quilter, a hiker, a beloved wife, Aunt Patty to a dozen great kids, and a fierce advocate for education."

Not long after her diagnosis, Patty and her husband Mark Wilson set up a research endowment, a program designed to fund undergraduate research in environmental microbiology at HSU. In honor of Patty, FOAM has donated \$500 to this endowment. To contribute, visit https://alumni.humboldt.edu/giving/siering-wilson-award-endowment.



January 1 King Tide, with AMIC at back left. Photo by Paul Johnson.

King Tide Tour Draws Big Crowd

By Elliott Dabill

It's New Year's Day, and people recovering from pies and pints want to get outside for a bit. Throw in the excitement of a natural event like a King Tide, and at least 50 people came to Arcata Marsh to view the water wonder. Although Dave Couch couldn't co-lead with me, we were able to end with a rare and informative tour of the treatment plant, after walking the trail around the oxidation ponds. Paul Johnson offered his decades of teaching experience to help get good photographs from the outing.

We know that the moon is closer to Earth than is the sun and has a greater influence on tides, despite being of much smaller size. When the sun, Earth, and moon are lined up in either a new moon or a full moon configuration, high tides are bigger than normal. New questions arise while pondering the arrangement, so why on Earth are there two high tides per day, when the direction of the moon only explains one? Second, if the alignment of the three bodies causes a high tide, how does one account for a King Tide? Mystifying, ain't it? Spoiler alert: Answers are below, in case you wanted to think about it first.

While I was planning this special tour, it happened that the City of Arcata wanted help on the New Year holiday from volunteers that would pinpoint the highest point of the King Tide at 16 different locations around the Marsh. Troops were recruited, flags were tied to large nails that were driven into the mud at the peak tide (11:08 am), and pictures were taken to help City staff refind the markers the next day. On January 2, the staff zapped the GPS locations with their high-tech survey gear and followed up with new positions for the slightly higher tide on Tuesday (8.85 feet vs 8.80 feet on January 1). We now have a public data set for planning for the problems caused by sea level rise and the many unknowns that come with it. We've already recorded eight inches of increase locally since the 1980s, and the rate is increasing quickly. Deniers aside, parts of Arcata will be inundated within a few decades.

Two tides a day happen because the Earth and moon swing around each other; the Earth is bigger, so the pivot point is actually inside the Earth. There is a high tide facing the moon caused by gravity, and a high tide on the opposite side of the Earth because the swinging throws water away from the moon. It's similar to swinging around a bucket of water and explaining to a child why the water stays in the bucket.

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Finally, the King Tide. This is not a scientific term, but a popular way to explain tides that are higher than normal and completely predictable. The moon doesn't orbit the Earth in a perfect circle, but instead in an ellipse. Earth and moon are closest when at the narrow part of the ellipse and pull harder on Earth's water during the combination of that elliptical narrowness and the full or new moon. They are farthest apart when you see a quarter moon at the same time the longest part of the ellipse is present. That is part of the story, but the same thing is happening with the Earth and sun. When the Earth is closest to the sun (in January and July) and both orbits (Earth around sun, moon around Earth) are at their closest, you get male royalty attached to the event. Visualizing all of this can give you some vertigo while indoors, so think about it while you are walking the trails at the Arcata Marsh. It is a kingly endeavor to think while you walk.

Natural Wastewater Treatment Processes: the Arcata Pond/Wetland System

By Jane Wilson

Bob Gearheart, one of the creators of the Arcata Marsh and current director of the Arcata Marsh Research Institute (AMRI), works continually to keep simplicity, elegance, and biological complexity primary in our water treatment procedure. And that is a full-time job. The research institute is located within the fence around the primary water treatment facility, where George Allen's aquaculture labs were from 1980 to 1984.

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Here, Bob and HSU students study our marsh and its water treatment. You can find AMRI on Facebook, where many graphs indicate their work.

Reclaimed wastewater is the most available, reliable source of new water. The more times wastewater goes through different systems or HIGS ("holes in the ground"), the more acceptable it is to people.

Oxidation ponds are the most used method of reclaiming wastewater. Within all the ponds live aquatic plants, bacteria, fungi, actinomycetes (anaerobic bacteria), protozoa, sponges, microcrustaceans, insect larvae, insects, mammals, fish, and amphibians. There's a tremendous amount of plant material under the water. Even where is looks like open water, there is probably sago pond weed, a very important food for all the other organisms. All the plants grow, die, and decompose into peat. The peat builds up. That has happened through the last 30-60 years of our marsh. The peat has to be removed so the ponds do not fill in. In some places, plants that were planted on the bottom have floated up, so that there is a level of soil and growth on top of a level of water on top of a solid layer. The top layer is so stable that it can be walked on.

Our marsh captures 12,000 pounds of carbon a year, in addition to treating our sewage. Our marsh is very efficient and cost effective. The city didn't have to buy any of the pond areas except Gearheart. The community and the Friends of the Arcata Marsh have enthusiastically supported the water treatment area. All the members and volunteers of FOAM heard with smiles and tears of pleasure the praise Dr. Gearheart heaped on the work we have done for 30 years. Volunteers are a main component of what makes the Arcata Marsh so cost effective.

Within the marsh, water goes in and out of ponds. A torturous route is what it's all about. Complexity within simplicity is where you get the water treatment.



Legstretcher leaders Jenny Hanson (left) and Alex Stillman (right) examine a Coyote Brush twig with a participant. Photo by Sue Leskiw.

Thanksgiving Trek

By Sue Leskiw

Nearly 20 people gathered at the Interpretive Center on Thanksgiving morning, to be led on a legstretcher by docents Jenny Hanson and Alex Stillman.

Given Jenny's expertise, much of the interpretation focused on the plants we encountered along the way. We saw an amazing number of Great and Snowy Egrets hunting frogs, plus a couple frogs close up in the "concrete pond." Thank you, Jenny and Alex, for continuing this 18-year tradition at the Marsh.

Fishes of Humboldt Bay

By Elliott Dabill

Ron Fritzsche (pronounced like "fish") doesn't want to be your conventional lecturer. To begin with, he had the HSU library search the attic for a carousel slide projector that was just about to be condemned to the trash. Then, he used the slides to query the audience of 28 about the names of the fishes projected. It made the mid-November evening fun, although one unnamed FOAM Board member was disappointed that no prize was given for knowing the greenling. What followed was an entertaining march through the fishes of Humboldt Bay.

If you haven't seen a lamprey smile, the reason may well be that they have no lips. Worse, they have no lower jaw and instead attach their facial disc to another fish and rasp them open to eat out the innards. Very primitive are the lampreys, representing a time without lower jaws, with simple down-themiddle fins and open holes on the side for gill openings. An unnamed FOAM Board member should have been rewarded for remembering squeezing a lamprey in a pan and watching a dozen leeches emerge from those gill openings. A jawless parasite fish preyed upon by jawless invertebrates. There ought to be a movie, but you can always Google a lamprey to be amazed.

Cartilaginous fishes—those whose skeletons are made out of strong elastic tissue rather than bone—were represented by leopard sharks, beautifully patterned, sinuous, and up to seven feet long. Like a lot of sharks, the leopard has an upturned tail that forces the head down while it swims, putting directional control into the pectoral fins. Bat rays have a venomous spine at the base of the tail, so they are not your friendly species, and they caused trouble for the oyster industry in the Bay until young oysters were hung in bags to grow, so that the bat rays couldn't get at them. Toothless sturgeon have distinctive scutes (bony plates, from the Latin for "shield") along their bodies, and those mostly cartilaginous bodies can get up to 20 feet long for the white sturgeon (largest freshwater fish in the US). Even our green sturgeon can weigh more than 300 pounds.

Little fish that feed the bigger species are numerous and varied locally. Smelt grow up to six inches and are related to candlefish (so named because you can dry them and they burn). Stargazers are so named because their eyes look vertically; they also have two rows of lights on their bellies and make a stridulatory noise (producing sound by rubbing together certain body parts, from the Latin for "creaking") loud enough to annoy their neighbors. Gambusia are little live-bearing fish imported here from Illinois. They are also called mosqui-

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to fish, which is why we put them into the oxidation ponds, in which they thrive to this day.

Eelgrass beds have some distinctive fishes, from sticklebacks and tubesnout to pipefish and seahorses. You can hear the latter neighing as global warming causes them to move up the coast and be found here more often than in the past.

Keep your Google finger limbered, because you will want to see some of the more popular local fishes, the ones we catch for dinner. There are many species of rockfish (around 100) that hang out around rocks and the kelp forests. Many live to be 100 years old and will tell stories of stranded ships and the age of sailing to distract you from eating them. Ling cod are neither ling (long-bodied edible marine fishes) nor cod, according to Ron, and they are big enough to eat the rockfish you have on the line. Greenling have five lateral lines and are tasty.

Life in the sand or muddy bottom seems to be a frequent life-choice, since we have very active halibut moving around. Did you know they weigh up to 500 pounds? Flounder, speckled sand dabs, sculpin (also called cabezon, from the Spanish for "big headed"), and starry flounders that want to live on the bottom so passionately that they will cause one eye or the other to migrate so both are on the same side of the head for looking up.

A delightful end to the evening was to learn that the sunfish or mola can be local, if not in the Bay. They eat jellyfish, so they don't have to be very athletic, but they can jump out of the water; seemingly impossible for a fish that looks like a silver dollar with tiny wings. Wings are the only tiny thing about them, however: they can reach 10 feet across and weigh up to 5000 pounds !!).

The natural world constantly enriches us with its variety and stunning beauty. You only needed to see this string of fish pictures and be entertained with Ron Fritzsche's humor to be reminded of the bigger world, the life before humans, and the source for the steaming morsels on your plate. Thanks for a great evening, Ron.



A handprint bird from Godwit Days 2017. Photo by Sue Leskiw.

Help Needed with FOAM's Godwit Days Activities

The 23rd Annual Godwit Days Spring Migration Bird Festival is just around the corner and FOAM will again be hosting free family nature craft activities. The drop-in session will be held in the Arcata Community Center on Saturday, April 21, from 11 am to 1 pm. Planned activities include bird ornaments, bird hats, bird handprint art, owl rocks, wooden bird calls, and refrigerator magnets. All children must be accompanied by a responsible adult. If you can spend a couple of hours helping kids discover the many wonders of our Marsh, contact Sue at sueleskiw1@gmail.com.

FOAM also needs volunteers to staff its table at the Bird Fair. Hours of operation are Friday 3-7 pm, Saturday 10 am-5 pm (optional 5-7:30 pm shift), and Sunday 10 am-3 pm, divided into 2- or 3-hour shifts. If you can help hand out literature and sell items, email sueleskiw1@gmail.com.

Another volunteer opportunity is helping to hang the hundreds of entries received in the 15th Annual Student Bird Art Contest, co-sponsored by FOAM and Redwood Region Audubon Society. This will occur on Friday, April 20 starting at 1 pm. Bring a light-weight hammer and be prepared to push-pin artwork along the hallways and lobby of the Community Center. Contact Sue at sueleskiw1@gmail.com.

For more information on the Festival, visit <u>www.godwitdays.org</u>.

Streamside Habitats Lecture

By Elliott Dabill

Gordon Leppig spoke in December and began his talk with questions. What is a riparian habitat? Why should we care about these areas? What are their values to our society? And, tellingly, what do our current laws say about our views of working with nature, as opposed to merely dominating it? His position as senior environmental scientist supervisor with the California Department of Fish and Wildlife places him on a seat of knowledge high enough to look down at the landscape and formulate some answers.

California has surrendered 90% of riparian zones, along with 70% of coho salmon since 1960, as well as 25 of 32 other species endemic to the border between land and water. Look for alders and willows to define riparian space and recognize that their flowers are the nectaries for huge numbers of insects, themselves food for other animals. But that is not big enough, says Leppig: a meaningful definition of riparian would include all of the remaining redwood forests. Remember 150 feet for a more practical definition we'll get to later.

We care about the riparian world already, if unconsciously. The salmon fisheries, the beauty we associate with streamside scenery, recreation, corridors for wildlife and community cohesion, since we like to hang out at rivers and streams. Our economy is tied to the habitat: from wine along the Russian River to dairy and beer producers dependent upon the waters in Humboldt. We love riparian habitat as a people, from First Nations to nature firsters, but we don't live here alone.

The list of endangered animals and plants occupying riparian zones is long. Declining species include the tricolored blackbird, the red-legged frogs you can see in our Marsh's "frog pond," red-bellied newts, and half the fish species, such as the coastal cutthroat trout. Twenty-five species of bats eat insects there, roost in the trees, and take a drink. The decrease in animal abundance is matched with sedimentation and

bank erosion, and our attempts to correct damage done to human property by armoring the banks all conspire to make the problem worse. So what to do?

The "problem statement" from Dr Leppig was that local agencies have primary control over riparian habitat. That statement implies differences between localities, and sure enough, we have a local patchwork of widely varied ordinances that detail not only the definition of riparian zones, but also how close one can build to them: from no distance at all (seven northern California counties) to 20-25 feet (four counties) to one county with a 50-foot minimum. All these setbacks are inadequate if one considers the ecological needs of the zone. Gordon recommends 150 feet from the edge of a waterway to the nearest constructed landscaping or building. After all, he says, we encourage 100 feet of cleared land to protect ourselves from fires, so why not consider also the needs of the local environment? The better off that environment is, the more benefit accrues to us in overall happiness; the land wins, the riparian life wins, and we can take a longer view of the making of a good life.

23rd Annual Godwit Days April 18 through 24 Arcata Community Center www.godwitdays.org

JANUARY/FEBRUARY ARTIST CARLOS SALAS

I have been interested in painting since high school. In 1989, I started on an art degree at San Diego State University, finishing in 1992, and then attended Humboldt State. I have worked as a draftsman and have a teaching credential that allowed me to teach at Eureka High School during summer. Being bilingual, I also have taught Spanish at St Bernard High School. I have shown at 1st Gallery, Redwood Art Association, Morris Graves, Ink People, and during Arts! Alive in various business locations. This is my first show at the Arcata Marsh Interpretive Center.



Gray Jay by Gary Bloomfield.

MARCH/APRIL ARTIST GARY BLOOMFIELD

I am a wildlife artist and illustrator, working primarily in ink and/or transparent watercolor and specializing in birds. I enjoy putting extensive research into my work; from personal observation in the field (birding, sketching and photographing) to comprehensive library, museum and internet delving. I have a degree in scientific illustration from HSU.

My work appears in educational coloring books; brochures, pamphlets, posters, maps, interpretive signs, and displays; and educational and nonfiction books. My art also can be seen on numerous T-shirts. I started actively birding when I was nine, and since then have been an avid birder and occasional field ornithologist. I have called Arcata home since 1980.

I can be reached at <u>bloomfield-studio@me.com</u> or 707-362-1226. My online store is at <u>www.cafepress.com/bloomfieldart</u>.

Calendar of Events

[Docent tours leave the Interpretive Center every Saturday at 2 pm]

January/February—paintings by Carlos Salas

January 19—lecture by David Narum, 7:30 pm (see p. 1)

January 20—Invasive plant work day, 9 am-1 pm; HPS Poo Clean-up, 10-11:30 am (see p. 1&3)

February 8—FOAM Board Meeting, 6:30-8

February 16—lecture by Ellin Beltz, 7:30 pm (see p. 1)

February 3—Invasive plant work day, 9 am-1 pm (see p. 1)

February 17—HPS Poo Cleanup, 10-11:30 am (see p. 3)

March 8—FOAM Board Meeting, 6:30-8 pm

March 16—lecture by James Ray and Katherine Crane, 7:30 pm (see p. 1)

March 17—HPS Poo Clean-up, 10-11:30 am (see p. 3)

March 23—Student Bird Art Contest deadline (see p. 2)

March 24—Take a Child Outside Day, 11 am-3 pm (see p. 1)

April 4—HPS Poo Clean-up, 10-11:30 am (see p. 3)

April 12—FOAM Board Meeting, 6:30-8 pm

April 21—FOAM family nature crafts at Godwit Days, Arcata Community Center (see p. 6)

April 27—lecture by Sean Craig, 7:30 pm (see p. 1)

May—display of winners of 15th Annual Student Bird Art Contest, sponsored by FOAM and RRAS

Thanks to Our Supporters, October-December 2017

- ► New Life Members: Sam & Sharon Pennisi*
- ▶ Best Friends (\$100+): Debra Hartridge; Sharon Levy; Linda Rogers (Pullman, WA); Cynthia Rudick (Canton, OH); Robin Rusk; Diane Ryerson
 - ► Sponsors (\$50-99): Susan Butler*; Gail Coonen; George Waller
- ► Friends (\$18-49): Karen Angel; Susanna Gallisdorfer*; Paul Johnson; Mary Ann Madej & Alan Wolski; Sheila Marks; Mike Metro & Lorraine Dillon; Charles Swanson; Carl Tuck; Ellen Weiss & Nathan Copple; Berti Welty & Jo Weisgerber; Judith Wendling*; Katie White
- ▶ Donations: \$1,792.50 from Béla Fleck Productions (see p. 2); Susan Hansen, \$250; Richard Sanborn & Calista Sullivan, \$250 ("We love the Marsh. It's the first place we take our out of town visitors"); Paula Dawson (Mill Valley), \$150; Aldaron Laird, \$100; Stuart Moskowitz, \$100; Joan Sikkens, \$100 ("with thanks for an opportunity and successful photo show"); Miranda Hartridge & Andrew Gundershaug (Yuba City), \$75 in the name of Ira Blatt; Walt Paniak, \$50; AMIC donation box, \$77.60. [* = New member]

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Invasive Plant Work Days, 1/20 & 2/3
Poo Clean-ups, 1/20; 2/17; 3/17; 4/4
Frogs Lecture, 2/16
Fish Lecture, 3/16
Student Bird Art Contest Deadline, 3/23
Take a Child Outside Day, 3/24
Godwit Days, 4/18-24
Marine Reserves Lecture, 4/27

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