UPWIND

from the Arcata Marsh Interpretive Center
Vol 24, Issue 2, Spring 2017

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

Dane St George holds a Barn Owl.

Upcoming Friday Lectures

On May 19, Pete Haggard will speak on "Coastal Spring Flowers and Pollinators." He earned a BS in wildlife management and has worked as an agricultural inspector in California for more than 30 years. Pete has collected, photographed, and identified thousands of insects. Along with his wife Judy, he authored *Insects of the Pacific Northwest,* a Timber Press Field Guide. He created and maintains a native plant garden near Arcata HealthSport.

On June 16, Michael Furniss will enlighten us about sea level rise, globally and locally. Human-caused climate change has put us in the midst of a "slow-motion flood" – what does that mean for Arcata, the North Coast, and other coastal communities and environments across the globe? How sea level works, why it matters, how it has changed in the past, what is vulnerable, what we may expect in the coming decades, and what you can do will be discussed. Michael, who retired from the US Forest Service's Redwood Sciences Lab in 2012, is broadly educated and experienced in hydrology, watershed management, forest ecology, wildland civil engineering, fish passage, and monitoring systems.

On July 21, HSU wildlife master's students Dane St George and Xeronimo Casteñada will tell us all about Barn Owls. The talk will include their natural history and research the two are doing into barn owl foraging behavior in Napa Valley vineyards.

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

Construction at the Marsh

On May 3, the City of Arcata held a groundbreaking ceremony for the Humboldt Bay Trail North project that goes through the Marsh. This northern 3-mile segment of the planned 13-mile-long Humboldt Bay

VIPs with shovels poised to break ground for trail. Photo by Alex Stillman.

is expected to be done by fall 2017.

Construction of the long-awaited Arcata Marsh amphitheater will begin May 22 and is expected to be completed by June 16. FOAM's capital campaign brought in over $10,000 to help build this outdoor education site on the bank of Butcher Slough, west of the Interpretive Center.

May is Wetlands Month!
Celebrate by visiting
the Arcata Marsh.

Zoie Andre at the state science fair. Photo by Melody McGuire.

FOAM's Science Fair Awards

By Sue Leskiw

For the 12th year, FOAM sponsored an award at the Humboldt County Science Fair in mid-March for the best project related to wetlands. Due to the quality of the projects in 2017, a second-place prize was given.

First prize of $50 went to Zoie Andre, an 8th-grader at Sunny Brae Middle School, for "Living Shorelines to Mitigate Sea Level Rise."

The purpose of her experiment was to determine which living shoreline structure—willow bundles, oyster shell bundles, or erosion control coir log wattle—would collect the most organic material and sediment in north Humboldt Bay. The most effective structure then could be used to create conditions for salt marsh development and help prevent sea level rise damage to shorelines. Zoie hypothesized that coir log structures would be the most effective at trapping organic material and sediment because its material has the highest density and is less porous. Over three tests, she measured the average amount of material trapped (in cubic centimeters) and found it was highest for willow bundles (1828), followed by oyster shell bundles (288), then coir logs (91), making her hypothesis incorrect. In her "Real World Applications" section, Zoie noted that living shorelines are a natural method that helps prevent sea level rise damage, as well as provides fish and wildlife habitat, sequesters carbon, and reduces erosion at a lower cost than traditional sea walls.

Her project was one of 19 selected from Humboldt County to compete in the state science fair held in late April, where she received an honorable mention (5th place) plus an award of $250 from the California Sea Grant Program. Her project is expected to be displayed soon at the Interpretive Center. In her thank-you letter, she told FOAM that she plans to put the $50 prize into her college fund.

Second prize of $25 was awarded to Sophia Thoele, an 8th-grader at Jacoby Creek School, for her project, "Is Dune Movement Affected by Drought?"

Sophia noted that sand dunes typically move at highest rates during dry, windy summers, as opposed to wet winters when the sand is saturated. She therefore hypothesized that during long periods of drought, sand dune movement rates may increase and persist over a longer time period, affecting homes, hiking trails, cattle ranches, roads, and Humboldt Bay.

Using aerial photographs, Sophia measured the rate of dune movement for 11 time periods between 1948 and 2016 on three different dunes at Ma-le'l Dunes and Lamphere Dunes. She also calculated the rainfall during those time periods, paying particular attention to four droughts. She determined that average annual rainfall did not correlate with dune movement, therefore rejecting her hypothesis. "It is likely that other factors control the rate of dune movement, including sand supply, vegetation cover, topography, and wind."

TACO Day Results

By Sue Leskiw

FOAM was among the many nonprofit environmental education groups that participated in the fifth annual Take a Child Outside (TACO) Day held March 18 at the Arcata Marsh. Hard rain during most of the morning depressed attendance by about half, but 153 people still checked in at the welcome table in the South G Street parking lot, including teachers, children and their families.

FOAM president Elliott Dabill took visitors out on the Log Pond dock to quietly observe wildlife, while volunteers Katy Allen, Sue Leskiw, and Mary Ann Madej staffed an activity table inside the Interpretive Center where kids decorated clay ornaments depicting Marsh critters (otters, frogs, dragonflies, and mallards) and received a "fun facts" card about the animals. Gretchen O'Brien and her daughter Alex ran a few demonstrations of the new wetland model purchased by FOAM.

Alex and Gretchen O'Brien show off the wetlands model. Photo by Sue Leskiw.

What's New at AMIC

By Gretchen O'Brien

► The Marsh is green with spring! It's interesting to see which of the plants in the native plant garden are thriving and which didn't do well. Most of them are coming back nicely and look well established.

► AMIC has a new display of local insects donated by HSU entomology professor Michael Camann.

► The Citye obtained a "beach" wheelchair using a Coastal Commission grant. It will be available for free public use soon. Once the checkout procedure is finalized, folks will be able to borrow the wheelchair for assisted traversing of Marsh trails. (It's not a self-driver; it requires someone to push it.)

► The HSU River Otter Citizen Science Project has a poster on display describing how people can help by report otter sightings. Over the past 15 years of the project, there have been 3,540 sightings in Humboldt County, many of them at the Arcata Marsh. You can report your sightings at the Interpretive Center or by sending a message to otters@humboldt.edu.

► The bookstore now has FOAM tote bags made of recycled cotton sporting the gorgeous logo by Gary Bloomfield.

The intrepid bird art hanging bunch.

Rock owl. Photo by Sue Leskiw.

Godwit Days Volunteers

By Sue Leskiw

FOAM sends out a heartfelt thank you to the following people who volunteered to help with FOAM activities at the 22nd Annual Godwit Days Festival in April:

FOAM's Bird Fair booth was staffed by Gail Coonen, Bob Gearheart, Sue Leskiw, Karolyn Merz, and Janet Zich, plus HSU students Bayan Ahmed and Francie Brower.

Helpers who hung the 819 pieces of student bird art were Katy & Tom Allen, Ken Burton, Sue Leskiw, Cindy Moyer, Syn-dee Noel, HSU student Karen Oakden, Susan Penn, Bill & Carolyn Prescott, Barbara Reisman, and George Ziminsky. Thanks to Donna Clark, Alexa DeJoannis, Sue Leskiw, Janet Zich, and Kwalyn Robinson (a Fortuna CCC member) for taking the show down. Jay Seeger snapped photos of the winners at the awards ceremony and Alex Stillman set up the refreshments.

Katy Allen, Sue Leskiw, Braden O'Brien, Mary Romaidis, and HSU students Dasha Bespalova, Sara Carpenter, and Michelle Harris welcomed about 50 children plus their parents during 2 hours of nature craft activities. Stations were clay bird (owls, marsh wrens, and mallards) ornaments, paper bird hats, peace dove hand prints, rock owls, bird hangers and calls, and oyster shell refrigerator magnets.

Katy Allen led a children's bird walk at the Marsh, while George Ziminsky and Dave Couch led a bird walk/wastewater treatment plant tour.

Bird hat. Photo by Sue Leskiw.

Owl ornament. Photo by Sue Leskiw.

County Library Raises Money via Student Bird Art

By Sue Leskiw

Last July, I was contacted by the vice-president of the Humboldt Library Foundation. She asked if that nonprofit group could feature some winning artwork from the 13th annual Student Bird Art Contest—co-sponsored by FOAM and Redwood Region Audubon Society—on bookmarks to raise money for the children's nonfiction collection.

I said sure, as long as the students approved of their creations being used in the "Buy a Book" campaign and credit was given to the contest's sponsors. I sent samples of artwork from which the designer could select, along with artist contact information, helped write the permission letter, and reviewed the final results before printing.

It turned out to be a lengthy process, but in January, the two organizations' boards of directors received samples of the three colorful bookmarks that featured a Pileated Woodpecker, American Crow, and Red-breasted Nuthatches. The bookmarks are available for free at all 10 branches of the Humboldt County Library.

If you would like to help update the children's nonfiction collection, donations can be made at www.humboldtlibraryfoundation.org.

Bird handprint. Photo by Sue Leskiw.

Some of the February 4 work crew.

February Work Day #1

By Javier Nogueira

The City of Arcata, in cooperation with FOAM, hosted a volunteer event at the Arcata Marsh on February 4 that lasted 3.5 hours. An amazing 53 volunteers showed up, including the HSU Natural Resources Club, FOAM members, and a visiting sorority from Sacramento. The focus of the event was to remove invasive plants from the Marsh and to pick up trash from the adjacent Little Lake property.

George Ziminsky led about 35 volunteers to remove several cubic yards of invasive plants from the area surrounding the Interpretive Center and edges of the trail around the Log Pond. I supervised about 15 volunteers to remove approximately 15 cubic yards of trash, 3 cubic yards of metal (mostly bike frames and bike tires), and 20 hypodermic needles—about 2/3 of the trash scattered across the Little Lake parcel. The volunteers also fixed a fence.

February Work Day #2

By George Ziminsky

On Sunday, February 12, FOAM and the Fortuna office of the California Conservation Corps (CCC) provided 19 volunteers to remove invasive plants at the Marsh. Most of the CCCers were one week out of training and at the Marsh for the first time in their lives.

We staged at the railroad tracks on South I Street, working areas to the north. The South I Street pond's southeastern bank was cleared of hemlock, fennel, and most teasel. *Vinca*/periwinkle along the tracks was pulled to keep it from spreading. Teasel, Himalayan blackberry, and fennel were removed between the tracks and the parking lot, continuing along the trail towards the footbridge. Green waste was piled on site in out-of-the-way locations. FOAM shared the cost of a pizza lunch.

We Volunteer!

By Cindy Kuttner

In February, FOAM volunteers "of a certain age" assembled at the Arcata Marsh to star in a publicity video that aired on KIEM-News Channel 3 from mid-March through the end of April. Retired Senior Volunteers Program (RSVP) coordinator Maureen McGarry filmed our volunteers, tools in hand, in an area that had been restored, happily saying "We volunteer!"

Similar scenes were filmed at Friends of the Dunes Nature Center and the Humboldt Bay National Wildlife Refuge. The cameos were put together for the TV spot to generate more interest in volunteering in our community.

There are many opportunities for seniors to help people and nature here in Humboldt County. Contact RSVP to find an activity that suits you at 630-5081. To find out about volunteer opportunities at the Arcata Marsh, call 826-2359. Helping others or your favorite place in our community is fun and feels good. You might want to give it a try!

Volunteers Needed!

The City Naturalist has been scrambling to find enough help to keep the Interpretive Center open on weekends. It only takes a half hour to be trained how to staff the welcome desk. Here's your chance to give back to the Marsh and meet interesting people while you're doing it. Please call 826-2359 today!

News from the "Clean Up Your Dog's Poop Group"

By Cindy Kuttner

For those of you who still don't want to pick up after their beloved dogs at the Marsh, here are some facts from an article by "DoodyCalls" (Pet Waste Management).

Dog feces are one of the most common carriers of the following diseases: whipworms, hookworms, *corona,* roundworms, tapeworms, *parvovirus, giardiasis, Salmonellosis cryptosporidiosis, and campylobacteriosis.*

According to the US Centers for Disease Control and Prevention (CDC), some of these diseases can be passed to humans (and other animals).

When we leave our dog's waste on the side of trails, it does not fertilize the soil. Actually, liquefied poop runs into the water, creating nutrients for weeds and algae. These plants limit the amount of light that can penetrate the water and causes oxygen levels to decrease, literally asphyxiating fish and native plants (EPA).

We love our dogs. And we love the natural wonders at our Marsh. We can take care of both, by bagging, carrying, and disposing of our pet's poop.

FOAM and the City have made it easier for us to do this. FOAM underwrote a new poop bag dispenser at the first South I Street parking lot. Full bags can be disposed of near the Interpretive Center (where there are more bags) or at the bird blind near Brackish Pond (where there are more bags). Bags and dispensers are now located together at the Klopp Lake parking lot and at No-Name (Stanley Harris) Pond.

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Local Watershed Rehab from Riverine to Estuarine Reaches (or Watersheds from Peaks to Reefs)

By Jane Wilson

This was a great talk on January 20 and a good subject for me to cover because I have never understood the concept of watersheds. So I listened, took notes, and, most importantly, reviewed the Powerpoint presentation on the public computer in the Interpretive Center. [NOTE: There is a Powerpoint of every FOAM-sponsored lecture on that computer. I recommend that you come and check out talks that you missed or that you didn't quite understand.]

Craig Benson is the division director and watershed program manager for Redwood Community Action Agency. He is in charge of the *Spartina* (cordgrass) eradication that you see in the Marsh. He's an enthusiatic speaker and a very good organizer.

What is an estuary? A partially enclosed coastal body of water with one or more rivers or streams flowing into it that is connected to the ocean (e.g., Humboldt Bay). A better question is when is an estuary? In the winter, the estuary reaches out toward the bay. In the summer, it stretches way up the rivers.

A watershed is a unit of land where all water that enters it from rain or any other source drains out at the same point. Watersheds tell a wondrous story: they make the land and are made by the land. There is no universally recognized minimum or maximum size.

The Mad River, long and skinny, flows northwest 100 miles through a 500-square-mile watershed. The Elk River flows west by northwest for 25 miles through an 80-square-mile watershed. They both flow into Humboldt Bay. Jacoby Creek, Freshwater Creek, and Salmon Creek also flow into Humboldt Bay and each has a watershed. Combine them all together and you get something called the Humboldt Bay Watershed. We have a dynamic watershed great at growing trees, a resilient community.

And guess what, we have to protect it. Many practices have endangered it. Our cities, parks, and organizations have made great strides in restoring watersheds. Road building had been the major threat because of erosion. But our main threats now are the 10,000 trespass marijuana growers on public land. Forest clearing, grading, water withdrawals, and chemical fertilizer are having cumulative impacts. Our streams are being diverted. Seventy percent of wildlife has some degree of rat poison in their systems. Many die.

Cryptic Lives of Gall Formers, Part II

By Jane Wilson

John DeMartini, a master storyteller, continued sharing his beautiful pictures of galls, his stories of the creatures that form them, and the dangerous world in which they live during a FOAM lecture in February. We are fortunate that he has a gall co-detective, his wife Julia, who is an excellent sleuth. We can't hear the larvae within galls scream when penetrated by parasitic wasps or eaten by their larvae because they don't, at least from vocal chords. But if we could, the world of galls would sound like the scary world of predator and prey that it is.

A gall, a little environmental home to insect larvae, supplies shelter, relative protection, and food (the gall lining). Some galls produce honeydew to attract and feed ants, who then protect the galls against parasitoid wasps. In order to identify insect gall formers, the vegetation they're living on has to be identified first. Julia collected some galls from a coyote bush and midges hatched out in time. Little holes in galls indicate its occupants have emerged. But you can't count the holes and expect to know how many insects emerged, because more than one insect can come out the same hole.

This lecture concentrated on wasps, most of which are less that 2 mm long. (One inch is 25 mm.) There are many kinds of wasps. Sawflies have a broad attachment of the thorax to the abdomen. Their larvae look very much like caterpillars without legs, any appendages, any solid, hard body parts except jaws with which to eat the inside of their gall home. They eat until they are bigger than the wasps that will later emerge. You can see why they'd make a tasty meal for a parasitoid wasp.

Many kinds of wasps, including the ichneumonid, a parasitoid, have very thin waists, attachments between the thorax and the abdomen. Inquiline cynipidae wasps use galls formed by others to shelter their young.

Dusk Wildlife at Arcata Marsh

By Jane Wilson

Alan Peterson is a remarkable, creative, patient photographer who knows his subjects. While you or I might not suspect there is anything to see, he observes small signs, sets up his viewing place, and patiently waits until his subject—a vole, bittern, sora, or raccoon—shows itself to be photographed. His results are astounding: a very secretive vole darting across the screen, an egret successfully catching a meal, an otter pup being taught by its mother to fish. Alan would not be so successful if he didn't know his subjects so well, establishing where their feeding spots are in order to get his wonderful, action-packed pictures that he shared with us in March.

At dusk, the photographer has warm, soft, evening light that highlights the many kinds of iridescent feathers of the ducks. In the last two hours of daylight, fish feed closer to the surface, making a perfect setting for the drama of birds and other creatures feeding.

California voles are numerous, sneaky, and quick because every predator looks at them as a snack. They are not easy to see: you have to be ready and look quick. If you don't have the sharp eyes and ears of a harrier or weasel, look through the grass and weeds for runways until you find a tunnel, a round cleared place in the weeds. Then pretend you're a White-tailed Kite "kiting" or an owl and wait patiently. Alan

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Student Bird Art Results

By Sue Leskiw

Some 819 Humboldt County K-12 students entered the 14th Annual Student Bird Art Contest held in association with Godwit Days in mid-April. FOAM and Redwood Region Audubon Society (RRAS) cosponsored the competition. Judges were Louise Bacon-Ogden, Gary Bloomfield, Sue Leskiw, Lauren Lester, and Sara Starr.

All entries were displayed at the Arcata Community Center during the festival, and copies of the first-, second-, and third-place winners, as well as Best Bird in Habitat awards, are hung at the Marsh Interpretive Center during May and June. A downloadable booklet containing the artwork, as well as group photos of the winners taken during the award ceremony, will be posted at www.rras.org.

Prizes totaling $650 were given out, thanks to FOAM and RRAS. Forty-one were monetary prizes, plus 33 honorable mentions. The winners were:

Kindergarten

First Place: Bony McKnight, Coastal Grove Charter, Varied Thrush

First Place: Coral Ventuleth, Kneeland School, American Avocet

Second Place: Elora Steffen, Coastal Grove Charter, Bald Eagle

Second Place: Eli Wilson, Dow's Prairie School, American Goldfinch

Third Place: Drew Brady, Dow's Prairie School, Western Grebe

Third Place: Amaya Teraoka, Dow's Prairie School, Tufted Puffin

Grade 1

First Place: Carina McDonald, Union Street Charter, American Robin

First Place: Jordan Andersen, Union Street Charter, Osprey

First Place: Jordan Todd, Salmon Creek School, Hairy Woodpecker

Second Place: Jadyn Dunn, Union Street Charter, Red-shouldered Hawk

Second Place: Glenys Stockwell, Union Street Charter, American Goldfinch

Second Place: Makena Cecchin, Union Street Charter, Spotted Owl

Third Place: Lyla Porter, Union Street Charter, Spotted Owl

Third Place: Brianna Helms, Dow's Prairie School, Great Blue Heron

Grade 2

First Place: Melia Paliaga, Redwood Coast Montessori, Black-crowned Night-Heron

First Place: Brenden Knight, Trinity Valley Elementary, Chestnut-backed Chickadee

Second Place: Mackenzie Coleman, Casterlin School, Spotted Owl

Second Place: Carlo Campagna, Redwood Coast Montessori, Osprey

Third Place: Gavilan Loetterle, Redwood Coast Montessori, American Goldfinch

Third Place: Oni Orcutt, Trinity Valley Elementary, Bullock's Oriole

Grades 3&4

First Place: Sophie Griffin, Six Rivers Montessori, American Avocet

First Place: Asa Jules, Fuente Nueva Charter, Steller's Jay

Second Place: Catarina Freitas, Mattole Valley Charter, Common Yellowthroat

Second Place: Joey Hodges, Union Street Charter, Western Grebe

Third Place: Marcella Romero, Fuente Nueva Charter, Red-breasted Nuthatch

Third Place: October Mintey, Freshwater School, Cedar Waxwing

Grades 5&6

First Place: Josephine Mizer, Alder Grove Charter, Chestnut-backed Chickadee

First Place: Vinny Trucks, Mattole Valley Charter, Steller's Jay

Second Place: Alexis Maldonado, Mattole Valley Charter, Great Blue Heron

Second Place: Phoenix Williams, Mattole Valley Charter, American Widgeon

Third Place: Kaleb Redman, Mattole Valley Charter, Pileated Woodpecker

Third Place: Meguire Bartosz, Alder Grove Charter, Peregrine Falcon

Grades 7 through 12

First Place: Gabriel Fugate, Mat-

tole Valley Charter, Purple Finch

Second Place: Tori McConnell, Academy of the Redwoods, Marbled Godwit

Third Place: Lilia Mizer, Alder Grove Charter, Barn Owl

Best Depiction of Bird in Habitat

Nathan Bareilles, Grade 1, Union Street Charter School, Pileated Woodpecker; Kyla Previte, Grade 2, Dow's Prairie School, Pileasted Woodpeckers; Madyson Nelson, Grade 4, Union Street Charter School, Snowy Plover; Saanvi Virnave, Grade 4, Fuente Nueva Charter School, Western Meadowlark; Rogue Russell, Grade 6, Sunny Brae Middle School, Great Blue Heron

Honorable Mentions

Kindergarten: Jessica Rodriguez, Stanwood Murphy Elementary, Spotted Owl; Logan Wissing, Dow's Prairie School, Bufflehead; Cabella Carper, Dow's Prairie School, Tufted Puffin; Nicole Davis, Dow's Prairie School, Spotted Towhee; Lilia Mendes, Dow's Prairie School, Western Grebe; Naiya Castillo, Dow's Prairie School, Steller's Jay. **Grade 1:** Emma Taft-Hovie, Fuente Nueva Charter, Belted Kingfisher; Krae Laier, Dow's Prairie School, Pileated Woodpecker; Sophia Castillo, Dow's Prairie School, American Goldfinches; Payten Burchett, Dow's Prairie School, Common Yellowthroat; Ricardo Freitas, Mattole Valley Charter, Downy Woodpecker. **Grade 2:** Reina Williamson, Dow's Prairie School, Great Blue Heron; Bryce Gruetzmacher, Dow's Prairie School, Belted Kingfishers; Disco Keenan, Salmon Creek School, American Redstart; Tessa French, Blue Lake School, Anna's Hummingbird; Ernesto Aberson, Fuente Nueva Charter, Pileated Woodpecker; Jasper Gilkerson, Redwood Coast Montessori, Peregrine Falcon. **Grades 3&4:** Slate Savra, Fuente Nueva Charter, Barn Owls; Everett Smith, Fuente Nueva Charter, Bald Eagle; Caleb Pitlock, Washington School, American Robin; Bailey Anne Brown, Cutten School, Snowy Plover; Owen Hiscox, Cutten School, White-tailed Kite; Ella Kelley, Arcata Elementary, Great Egret. **Grades 5&6:** Silmaren Parker, Mattole Valley Charter, Barn Owl; Molly Gillespie, Mattole Valley Charter, Hummingbird; Cameron Hoffman, Mattole Valley Charter, Golden Eagle; Tabitha Walker-Bom, Six Rivers Montessori, Marbled Murrelet; Bodhi Jennings, Six Rivers Montessori, Red-shouldered Hawk; Sadie Breen, Sunny Brae Middle School, Black-crowned Night-Heron. **Grades 7-12:** Perrin Turney, Six Rivers Charter High School, Red-breasted Sapsucker; Jo Turney, Six Rivers Charter High School, Purple Finch; Kolby Blinn, Sunny Brae Middle School, Belted Kingfisher.

Student Bird Art Contest winners (from top): Grades K-1; Grades 2-4; Grades 5-12; Best Bird in Habitat awardees. Photos by Jay Seeger.

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did that and was rewarded with an action series.

Black leather slugs and rough-skinned newts are not appealing, unless you're a bittern. Incidentally, rough-skinned newts reportedly are not poisonous in the Marsh and surrounding areas, but I still beware.

Pennywort and duckweed are great hideouts. When ducklings are being pursued by a predator, who might have hidden under the duckweed to approach them, they swim as fast as they can to pennywort where they can hide while their mother tries distraction tactics.

If you missed this lecture, I'm so sorry. You would have loved it. You can see many of Alan's pictures on Facebook, "Redwood Planet Media."

Mountain Lions in Northern California: Tracking Elusive & Misunderstood Big Cats

By Jane Wilson

Phillip Johnston is a great speaker who has his audience laughing a lot on subjects he obviously cares about. He's a professional wildlife tracker working for the Hoopa Valley Tribe studying ecology of mountain lions and fishers. We last heard from him about weasels and otters. Usually FOAM doesn't schedule lectures on subjects that don't affect the Marsh, but since mountain lions are in the vicinity and we enjoy Phil's talks so much, we went for it and are so glad we did. Sixty people showed up in April to fill all the chairs at AMIC!

Why are such powerful, intelligent animals elusive? Mountain lions evolved with animals far more powerful than they, such as the saber tooth tiger. They still have to surrender their meals to black bears. Occasionally, if the bear is less than 200 pounds, even though lions are solitary carnivores, they will gang up to fight the bear off and perhaps kill it. If the bear weighs over 200 pounds, the lions run. In the Hoopa Valley area, there are 4 bears per square mile. Mountain lions have never been at the top of the food chain.

In the late 1500s, only years after Europeans saw their first *Puma concolor*, they offered Native Americans a bull for every dead lion. By 1963, when California ended its bounty on mountain lions, 12,461 had been killed. Today's population in the state is 4000 to 6000.

Mountain lion home ranges extend 80-130 square miles. They are sexually dimorphic, with males weighing up to 130 pounds and females only 80 pounds. The males have a huge home range, while females' home ranges satellite around the males. Their trails through their ranges are the easiest way to go, the way you would choose. Roads and paths are ideal. Males do not allow other males in their home range. That could lead to a fight to the death.

But people are another matter. They're interested in us. My husband and son were cutting firewood in the mountains near Piercy when they discovered a mountain lion was watching them. The trio eyed each other until the mountain lion got bored and went on its way. Attacks by mountain lions on people are very rare, occur in overpopulated areas where habitat has been taken away, and are almost solely by disabled cats that can't bring down anything else.

Tracking mountain lions is much easier using their scrapings than their footprints because they scrape the ground every 150-300 feet. They use both hind feet to make the scrape, going about it very slowly, not frantically like a dog. Often, they urinate on it. This marks their territory and attracts mates. Remember, the female ranges satellite the males.

Phil told us how he came across tracks of a mother and two mostly grown kittens. Now they are all dead due to illegal marijuana grows and the poison they put out. Mountain lion ranges are so big that they often encompass several illegal trespass grows in parks and tribal lands.

Phil will be returning to talk on marijuana grows and how they are killing animals, polluting and drying up streams, and ruining protected land.

Kelp Swirl by Melissa Zielinski.

JULY/AUGUST ARTIST MELISSA LAWSON ZIELINSKI Mill Creek Glass

I have always loved color and sunlight, so it is natural that I love the beauty of light streaming through colored glass. I began designing and creating stained glass windows in 1985, which eventually lead to working in fused glass in 2005. Fused glass differs from stained glass in that is created using a kiln that heats the glass components to a high temperature so they melt together.

Shapes and subjects found in nature inspire my work, so many of my pieces involve leaves, sea stars, shells, jellyfish, dragonflies, and other interesting plants and animals. I have been a nature educator through most of my career working in natural history museums and I see my glass art as another way of teaching.

I work with iridized translucent glass—glass that you can see through but with a special chemical coating added that gives a subtle sparkly rainbow effect. I draw patterns for my designs, cut and grind the glass pieces, and assemble each piece using ground glass (frit), stringers (long, thin noodles) or glass confetti .The glass is fused in the kiln at 1450 degrees in my 24" x 24" kiln, cooled and then is slumped, or softened, to take the shape of a mold in a second firing, if it is a bowl or platter. There is some unpredictability with each firing, so it is a surprise each time I open up the kiln. This appeals to me and is a marked difference between traditional stained glass and fused glass.

I hope that, through my artwork, others can share my appreciation for the beauty in nature.

Custom inquiries welcome. www.millcreekglass.com; 496-8227.

Calendar of Events

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

May & June—Winners of 14th Annual Student Bird Art Contest

May 19—Wildflowers & pollinators lecture, Pete Haggard, 7:30 pm (see p. 1)

June 8—FOAM Board Meeting, 6:30-8 pm

June 16—Sea level rise lecture, Michael Furniss, 7:30 pm (see p. 1)

July & August—Nature art glass by Melissa Zielinski

July 13—FOAM Board Meeting, 6:30-8 pm

July 21—Barn owls lecture, Dane St George & Xeronimo Casteñada, 7:30 pm (see p. 1)

Visitor Log

The Interpretive Center had 909 visitors in January, 1010 in February, 1348 in March, and 1416 in April.

Thanks to Our Supporters, Mid-January through April 2017

► **Best Friends** ($100+): Elliott Dabill (NEW Life Member!); Karen Isa; Anna & Mark Stewart (El Dorado Hills)

► **Sponsors** ($50-99): Gail Coonen; Esther & Neil Gilchrist; Glen & Dee Anne Jones; Cynthia & James Rudick (Canton, OH)

► **Friends** ($18-49): Kimberly Bushing*; Pamela Brown; April Caito; Ann Diver-Stamnes & Steve Stamnes; John Helie & Monica Simms; Joyce Hough & Fred Neighbor; Alan Laurent; Maggie & Heal McKnight*; Audrey Miller; Paul Pitino; Jean Santi & Whitney Buck; Katherine White; Robb & Phyllis Willis

► Donations: Nancy Reichard ($100); Trinity Associates (Aldaron Laird) ($100); Amazon Smile ($10.86); $356.53 (AMIC donation box)

* = New member

FOAM
Friends of the Arcata Marsh
PO Box 410
Arcata CA 95518

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Mark Your Calendar for:

Flowers & Pollinators lecture, 5/19
Sea Level Change lecture, 6/16
Barn Owls lecture, 7/21

MEMBERSHIP APPLICATION

Name _____

Address _____

City, State, ZIP _____

Phone _____ E-mail _____

Please check the appropriate membership category:

___ Individual $25 ___ Family $35 ___ Student/Senior $18

___ Sponsor $50 ___ Best Friend $100 ___ Life Member $750

___ I would like more information about volunteering for FOAM,

FRIENDS OF THE ARCATA MARSH, PO Box 410, Arcata CA 95518 **arcatamarshfriends.org**

A tax-exempt, nonprofit 501(c)(3) organization, EIN #68-0232871. All donations are tax deductible.

If you are receiving a complimentary copy of this newsletter, please consider joining FOAM.
If you were a member, but have allowed your membership to lapse, please renew.
(See mailing label for your expiration date.)
Interpretive Center street address is 569 South G Street, Arcata.
FOAM mailing address is PO Box 410, Arcata CA 95518. You can reach us by phone from 9 am to 5 pm Tuesday through Sunday and 1 to 5 pm Monday at 707-826-2359.