The Sandpiper

Dec '20/Jan 2021

Redwood Region Audubon Society

www.rras.org

In This Issue: • Shorebirds and Humboldt Bay • Avian Botulism in Lower Klamath Basin • American Pipits

Winter Programs!

RRAS Presents Online Programs:

Christmas Bird Count P(r)ep Talk and Photo Sharing

December 11, 2020 at 7 pm

(Above) Finding surprises in birds and nature © Rahul SN.

This year's Christmas Bird Count will be unlike any other in the count's 120-year history. COVID has affected us all – but the Count will still happen!

Each individual Christmas Bird Count is performed in a circle having a 15- mile diameter. It is a fun event, held between December 14 through January 5, involving tens of thousands of volunteers throughout the Americas who may brave snow, wind, or rain to take part in the effort. At least ten volunteers, including a compiler to manage things, count every bird they see in that circle. National Audubon and other organizations use data collected to assess the health of bird populations and to help guide conservation action. It all started on Christmas Day 1900, when ornithologist Frank M Chapman, an early officer in the then-nascent Audubon Society, proposed a new holiday tradition – a "Christmas Bird Census" that would count birds during the holidays instead of hunting them! The Count is the longest-running citizen science survey in the world.

Veteran christmas bird counter Ken Burton will lead an interactive discussion of the bird count's various aspects, including its history, methodology, and scientific value; tips for counters, especially documenting your effort and estimating bird numbers; local counting opportunities; and bird identification as requested. The content and direction of the program will be driven largely by participant input. We can discuss anything relevant to the count; what would make you a better counter? The program will conclude with an opportunity to share one or two of your local bird photos from the past year, so pick out your favorites!

Ken Burton has been involved with RRAS since moving here in 2005. He is the author of *Common Birds of Northwest California* and *A Birding Guide to Humboldt County*, both published by RRAS. He coordinates the Chapter's Saturday morning Arcata Marsh walks and has participated in the Christmas Bird Count almost every year since the mid 1970s, including counts in Arizona, California, Indiana, Mexico, and New York.

Humboldt Bay National Wildlife Refuge (HBNWR): – The Old and the New. **January 8, 2021 at 7 pm**

Retired Refuge Manager Eric Nelson and new Refuge Manager Cashell Villa will discuss the history of the National Wildlife Refuge System, key points where Audubon fits in, the history of HBNWR, and where HBNWR and the Refuge System might be headed into the future.

Eric is from Sonoma County. He received his BS and MS in Wildlife Management from HSU and worked at refuges in AK, WA, OR, WY, and CA. The last 17 years of his career were spent as Refuge Manager at HBNWR Complex. In retirement he's enjoying family, birding, traveling, hiking, camping, biking, and politics (just kidding).

Cashell is from San Luis Obispo, California and received her BS in Wildlife Biology from the University of Alaska, Fairbanks. She has worked as a biologist in refuges across Alaska, including Arctic, Tetlin, Selawik, and Yukon Delta. She served as the Deputy Refuge Manager at Hakalau Forest National Wildlife Refuge on the Big Island of Hawaii until late 2019, when she accepted the Refuge Manager position at HBNWR Complex. Cashell and her family enjoy hiking, biking, camping, traveling, and exploring their new Humboldt Bay home.

For more information about programs or the Christmas Bird Count, visit our website at rras.org.

(Below) Mixed flock of Godwits and Willets at HBNWR. Photo by Leslie Scopes Anderson.

Quote from *What the Robin Knows*, by Jon Young

According to birdlanguage.com this is a book about how "deep bird language is an ancient discipline, perfected by Native peoples the world over. Finally, science is catching up…."

After travelling to the Kalahari, Young noted a reflection on San culture by a San Bushman in Botswana:

"If one day I see a small bird and recognize it, a thin thread will form between me and that bird. If I just see it but don't really recognize it, there is no thin thread. If I go out tomorrow and see and really recognize that same individual small bird again, the thread will thicken and strengthen just a little. Every time I see and recognize that bird, the thread strengthens. Eventually it will grow into a string, then a cord, and finally a rope. This is what it means to be a Bushman. We make ropes with all aspects of the creation in this way."

Young notes he "was able to experience (the) relationships between the San and the land directly. The San are the most nature-bonded people I've ever spent time with."

Please view this website for information on the struggle for survival by the Indigenous, San Bushmen in Botswana: www.survivalinternational.org/tribes/bushmen.

First Humboldt County Record of Roseate Spoonbill!

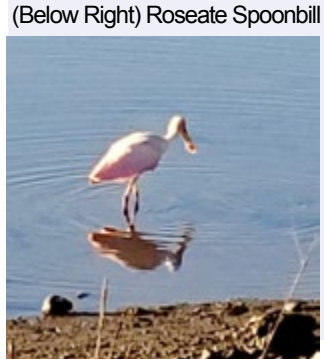
By Alex Benn

On the morning of October 31 around 9 am before heading into work at the Lanphere Dunes, I spotted an unusual-looking bird in the Mad River Slough. I normally start my morning with a quick glance at the shoreline to see what species are out and about, but this bird was not any of the usual fauna I'm used to seeing. While parked on the side of the narrow road right before crossing the bridge to enter the dunes, I watched her/him forage for about two minutes and began to take notes on the anatomically prominent features. I remember noticing the tall, flamingo like body; dull pink coloring on the backside; and long, duck-like bill. Admittedly I am not an expert birder when it comes to species outside of Northern California, so I decided to take a 30-second video on my phone *(see video at rras.org)* and make an identification after I got home from work. Unfortunately, I didn't have my professional camera equipment with me, so I had to settle for a less-than-perfect picture with my phone (see below).

Later that evening I identified the bird as a juvenile Roseate Spoonbill, which according to the range map in my bird book, posed more questions about why s/he was here. I decided to email Mark Colwell, my ornithology professor from HSU, in regards to why s/he was so far out of normal range – the Pacific Coast of Mexico. The vast majority of Roseate Spoonbill records are from the Salton Sea, with some vagrants recorded in other Southern California counties. The only other Northern California record of this species is from Monterey County, present Jan-Feb 1978. After some much-expected doubt about whether I had identified it correctly, it was confirmed by Rob Fowler to indeed be a Roseate Spoonbill. I had no idea at the time that what I was looking at was a rare bird, but thanks to Humboldt State wildlife professors, I've learned to bring my binoculars with me whenever possible. Unfortunately, of the many times I crossed over the bridge that day, that was the only time I saw the spoonbill. The sighting was submitted to the California Birds Record Committee for review on November 4, 2020.

In the following few days, many birders all around the county were on the lookout, but s/he was not to be seen again until photographed by a California Fish and Wildlife game warden along the Eel River near Fernbridge on November 8. Birders also looked for her/him in the Eel River delta but s/he was not refound. Maybe s/he's still out there, or maybe s/he decided to head back to warmer climes!

(Below Left) Roseate Spoonbill by Alex Benn.
(Below Right) Roseate Spoonbill in Louisiana by Joyce E Ritchie.



Thinking of Joining the National Audubon Society?

If so, please use the coupon below. By sending in your membership on this form, rather than replying to solicitations from National Audubon, **$20 is sent directly to our chapter**. This is how National rewards local chapters for recruiting. (Otherwise, the share of membership dues that RRAS receives is only a couple of dollars.) Thanks!

Yes, I'd like to join. Please enroll me as a member of the National Audubon Society and of my local chapter **(RRAS C24)**, and send AUDUBON magazine and my membership card to the address below. My check for $20 is enclosed (introductory offer).
NAME .....
ADDRESS .....
EMAIL .....
Local Chapter Code: C24. Please make checks to the National Audubon Society, and send with this coupon to Box 97194, Washington, DC 20090-7194.

President's Column

By Gail Kenny

December is the month that RRAS mails its membership the ballot for officers and directors for upcoming terms. Along with the ballot we normally would be inviting you to our annual banquet in February and appeal for year-end, tax-deductible, donations. However, due to COVID-19, there will be no banquet ,which has put a hole in our annual budget. We depend on the banquet and the silent auction to help balance our budget.

A part of our expenses is publishing *The Sandpiper*. This year, we have almost doubled our publication expenses by publishing monthly, instead of every other month. But this allows us to have increased communication with our members and the public, especially in this time of COVID.

Please consider being extra generous in your year-end donation to RRAS by giving what you normally might have spent at the annual banquet on dinner and the silent auction, to help us make up our budget shortfall. In addition to publishing our newsletter more often, it will help to support our environmental conservation efforts, fund restoration at Wigi Wetlands, and sponsor scholarships for local students, along with contributing to our operating expenses.

A really easy way to donate to RRAS is to go to our website rras.org and scroll down on the righthand side until you see a large green "Donate Now" button. Otherwise, please mail a check to RRAS, PO Box 1054, Eureka, CA 95502.

We really appreciate your support of our efforts, to advocate for environmental conservation, teach people about birds and their habitats, and support environmental education, as well as restoration and protection of wetland habitats.

The Ups and Downs of Tail Pumping

By Ken Burton

Recently, while searching (unsuccessfully) for a rare bird in the Loleta Bottoms, I had plenty of time to observe flocks of American Pipits. That led me to ponder and subsequently do some research on the adaptive value, if any, of tail pumping by pipits and other birds.

The American Pipit is perhaps our most numerous winter grassland bird. Anyone who has watched walking or perched pipits has noticed that they continually pump their tails up and down for no obvious reason. (See my video on the RRAS website at rras.org.) Other local birds known to do this include Black Phoebes, Spotted Sandpipers, and Palm Warblers. In some cases, such as with *Empidonax* flycatchers, the predominant direction of tail pumping is actually a useful identification tool. It would seem that this activity would waste valuable energy and perhaps even draw unwanted attention to the bird. So why do they do it? Well, it turns out we really don't know. There are a lot of hypotheses, some of them conflicting, but very little literature.

Here are some of the prevalent hypotheses:

- It helps the birds maintain balance while perching.
- It's a means of social signaling, keeping other individuals of the same species at a comfortable distance, helping maintain flock cohesion or alerting others to danger.
- It facilitates prey capture by flushing prey into motion, like a mockingbird flashing its wing patches or a Snowy Egret waving its foot. (The fact that tail pumpers are pretty much all "predators" does lend some credence to this idea.)
- It helps camouflage birds against moving backgrounds such as flowing water and waving grass.
- It's a way of releasing nervous energy, just as bill-wiping or a cat twitching its tail might be.
- It's a means of signaling to potential predators, either to indicate that the bird is aware of their presence, healthy, and ready to flee (and therefore not worth chasing) or to draw attention away from more valuable parts of the body. Many lizards are well known for wriggling their tails, which can be severed and regrown, to divert attack away from the head. Birds similarly can shed and regrow their tails and are, after all, really reptiles. Tail pumping in the presence of a predator could also signal danger to other potential prey.

Let's think about that last one for a moment. If it has merit, the behavior should occur more frequently or more vigorously in the presence of a predator. Do birds do it at all when they feel completely safe? We have no idea what they're doing when we're not watching and our mere presence (as potential predators) could trigger it. One might presume they do it at a baseline level all the time in a "better-safe-than-sorry" mindset, but if that were the case, it wouldn't take long for predators to figure out (in an evolutionary sense) that it didn't signal awareness, although it could signal general health.

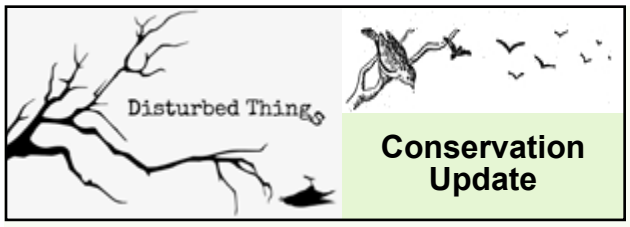
In the only real study of this behavior I could find, Gregory Avellis studied tail pumping in Black Phoebes and found that pumping rate did not depend on where the phoebes were perched or whether they were foraging. He also found that playback of the Black Phoebe song did not affect pumping rate, even when it did elicit other territorial reactions. However, Avellis found that playback of Cooper's Hawk calls caused pumping rate to triple! He concluded from this that the phoebes were saying, in effect, "Don't bother trying to catch me, I'm on to you!" (although I wouldn't rule out the nervous-energy-release hypothesis, based on these results).

Tail pumping, like other repetitive behaviors such as wing-flicking (e.g. by kinglets), remains something of a mystery and may serve multiple functions, different functions in different species, or even no function at all. It could be merely an evolutionary holdover that once had some adaptive value in some ancestral species but no longer serves a purpose. The one thing it is safe to say is that it's not maladaptive or it would have been selected out of existence. It evidently does not consume significant amounts of energy or attract predators.

Obviously, there's still plenty of mystery and room for discovery out there in the natural world. If you pay attention and think outside the box, maybe you can come up with a hypothesis for the function of a previously unexplained behavior.

*Write to **The Sandpiper** editor Gisèle Albertine at giseleandco@gmail.com and let us know what mystifies and fascinates you about bird behavior!*

(Above) American Pipit. Photo by Ken Burton.



How to Set Up a Tripod

By Jim Clark

When setting up a tripod to use a spotting scope, each leg is adjusted so that the head is level to create a vertical reference point on which the scope can rotate. Level ground means all legs can be the same length. A slope or uneven ground requires the legs to be adjusted to different lengths. Once set properly on firm ground, horizontal panning and vertical adjustment allows distant birds to be found and followed more easily than with a poorly set tripod. It could even mean the difference between seeing and missing the objective bird. In some cases, as with this metaphor, the legs reach the limit of their extension. In which case another observation point may be a wise choice.

When I helped form Tulare County Audubon Society years ago, I was by impressed the three principles that drive Audubon action: Science, Law, and Education. Much like the legs of a properly set up tripod, if the three principles are in balance, adequate, and on firm ground, the chances of accomplishing something meaningful through action is more likely than if they are not.

Our Chapter was started by successful action to re-route the Highway 256 bridge over Humboldt Bay to avoid the egret rookery. Our next major action was successfully securing a settlement that allowed us to acquire tidelands that we later sold to the Fish and wildlife Service to expand Humboldt Bay National Wildlife Refuge and essentially double our investment. We now have a wetland and sanctuary fund ready to put into action more quickly than public funds to protect important bird and other wildlife habitat.

As I look back over my 38 years with this chapter, the number of actions that we have taken on behalf of bird conservation is impressive. Also impressive is the loss-to-win ratio. The outright wins are the proactive, positive things like establishing an Important Bird Area and raising it to hemispheric status and weekly Arcata Marsh walks. Wins on projects that we oppose are more mixed. Stopping the traffic congestion relief bypass, (aka Waterfront Drive Extension) and acquisition of the development rights over Wigi Wetlands was pretty much a total win. Other action, like the Adesa Organic cannabis operation, less so.

We joined Friends of the Mad River in an appeal to the Humboldt County Board of Supervisors to reject the Planning Commission's approval of the Adesa Organic industrial cannabis production facility eight miles south of Maple Creek, within two miles of a golden Eagle nest. The appeal itself was not successful. The result was a project that was scaled back from the original proposal. The applicant probably got what they expected, but less than they hoped for. Typical of environmentally impactful development proposals, the proponent almost always tries for as much as they hope they can get, then scales back to what they expect to get as a show of "environmental consciousness" and reasonableness. Without pushback, these projects would not be scaled back. We should consider the combined effects of this reduced impact a success, yet strive to do better.

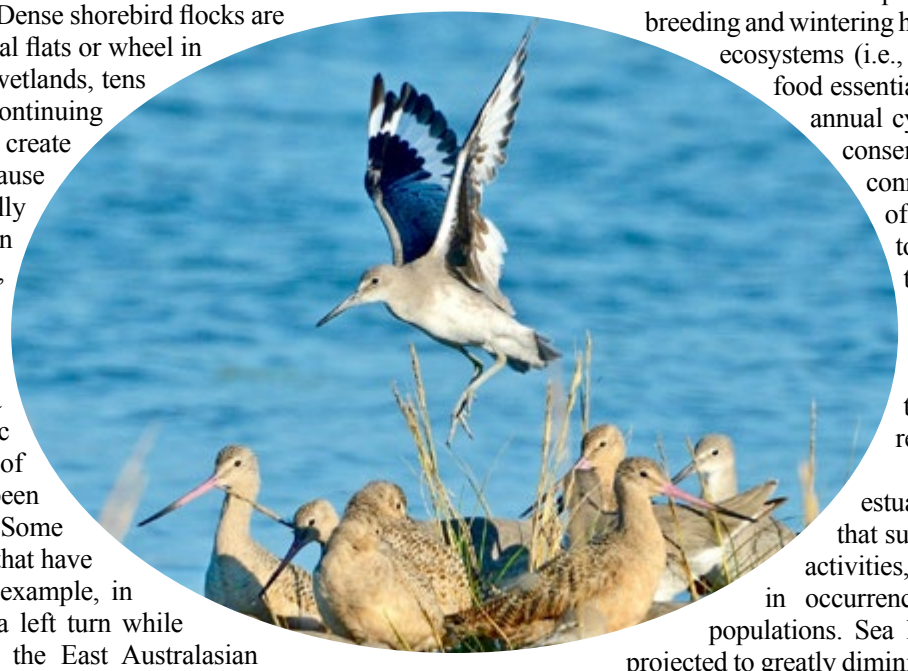
The Adesa Organic case is one example of the coming "green rush" to the rural working lands of Humboldt County. Unfortunately, the county's cannabis land use ordinance encourages this green rush sprawl by requiring that cannabis cultivation be on a relatively small part of large parcels, is restricted by total canopy area per watershed instead of direct water use restrictions, and is taxed based on canopy area rather than yield. This generally results in widely dispersed, intense agricultural operations in remote areas of Humboldt County. That, in turn, has the potential to fragment wildlife habitat. The problem, then, is not cannabis or legal cannabis growers, it is our system of regulation. In order to fix it, we will need to carefully set up the tripod of science, education, and law.

Within our chapter's membership, we have the combined experience, knowledge, and wisdom to build a substantial tripod and pursue significant conservation action, if we all participate. Feel free to contact me at clarkjimw@gmail.com regarding any of our ongoing efforts to protect birds and other wildlife and their habitats.

Humboldt Bay Critical to International Shorebird Conservation

By Mark A Colwell, Wildlife Department, Humboldt State University

Shorebirds, true to their name, frequent edges of productive wetlands year-round, including arctic tundra, prairie marsh, and coastal estuaries. These habitats provide abundant invertebrate prey (i.e., food) necessary to fuel successful episodes in the annual cycle, such as breeding and migration. Dense shorebird flocks are especially impressive as they forage across tidal flats or wheel in unison to evade a predatory falcon. At some wetlands, tens of thousands of shorebirds concentrate before continuing their migratory flights. These concentrations create challenges to conservation of populations because sites that are attractive to shorebirds are equally valued by humans. Moreover, human population density is highest along the world's coastlines, which exacerbates conflicts.



Worldwide, shorebirds migrate along eight principal flyways connecting breeding and nonbreeding habitats. Humboldt Bay is a special place for shorebirds along the Pacific Americas Flyway. Nearly one quarter (52) of the world's 215 species of shorebird have been observed in the region over the past 60 years. Some (9) of these species are rarities (or "vagrants" that have wandered outside their typical flyway). For example, in late summer 2018, a Wood Sandpiper took a left turn while departing its Siberian breeding grounds on the East Australasian Flyway and ended up in the wetland adjacent to Centerville Beach. Stan Harris's *Birds of Northwestern California* (2005) details other rarities that likely took a similar route: Lesser Sand-Plover (Jul 2005) and Common Greenshank (Aug 2001). Other species, such as White-rumped Sandpiper (Oct 2018), wander "off course" within North America.

However, most of the 52 species that have been recorded in the Humboldt Bay area are common or abundant, depending on the time of year and habitat. For instance, a winter population of 8,000 Marbled Godwits frequents tidal flats and pastures adjacent to the bay. This local aggregation derives from two distinct subspecies: a small population (2000) that breeds on the Alaskan Peninsula and the prairie-breeding race (160,000). Recent work tracking Alaskan godwits marked with small radio transmitters suggests that individuals from this small population spend most of the year on Humboldt Bay. *Godwit Days*, the local annual festival celebrating birds and birding, could not have chosen a better namesake recognizing the international nature of migratory birds.

Shorebirds, like other migratory organisms, illustrate the global perspective needed for successful conservation. Specifically, shorebirds migrate annually between breeding and wintering habitats. Along the flyways, they rely on healthy ecosystems (i.e., estuaries like Humboldt Bay) to provide the food essential to complete the chain of events that link the annual cycle. The analogy of the chain extends to the conservation of entire populations: they rely on the connectivity of critical wetlands, with the breakage of a critical link rendering populations vulnerable to decline and extinction. Specifically, given the abundance of shorebirds year-round that occur on Humboldt Bay, it is essential that conservationists work to conserve habitats and minimize human activities that degrade these areas critical to individual survival and reproduction.

Humboldt Bay is a comparatively "pristine" estuary with large amounts of high-quality habitat that support a rich shorebird community. But human activities, even seemingly small in extent or infrequent in occurrence, can have serious impacts on wildlife populations. Sea level rise associated with global warming is projected to greatly diminish the extent of tidal flats available to foraging birds. Proposals to expand oyster culture activities in Arcata Bay will only exacerbate this habitat loss. Humboldt Bay has been designated the highest level of recognition (i.e., a site of International Importance) under the Western Hemisphere Shorebird Reserve Network owing to its diversity (52 species) and incredible abundance (850,000) of shorebirds year-round. "Sustainable" development rests on the assumption that benefits derived by humans (e.g., oyster culture, fishing) from such productive habitats do not compromise the populations of wildlife that rely on the same healthy ecosystems. The challenge is to ensure that the principle of sustainable development is not a mere catchphrase but backed up by earnest conservation efforts.

(Above) Willet and Marbled Godwits on Humboldt Bay by Mike Anderson.

Avian Botulism Response in the Time of COVID

By Marie Travers, January Bill, and Monte Merrick, Co-directors, Bird Ally X

In 2018, a severe avian botulism outbreak spread across the Lower Klamath Basin on the Klamath Basin National Wildlife Refuge (KBNWR). Arcata-based rehabilitation and wildlife response organization, Bird Ally X (BAX), was tasked by the US Fish and Wildlife Service with mounting a response. This involved building a field hospital for impacted wildlife just off State Line Highway 61 that divides Oregon from the part of California that is more Sagebrush Rebellion than treehugger.

Our response was set in motion by one of BAX co-founders and co-directors January Bill, who has extensive experience in the field of emergency wildlife response, especially with wildlife impacted by oil spills. She brought in Marie Travers, another BAX co-director with similar experience, to co-manage the response.

Since the 2018 response, BAX has partnered with KBNWR to provide emergency rehabilitation during botulism outbreaks. The first year, we cared for 494 birds; in 2019, it was 233. But just like so much of life in 2020, this year's outbreak was unprecedented in scope and scale, epic in both volume and complexity. Long-time refuge staff say it was the worst botulism event at the wildlife refuge in decades, with an estimated 60,000-plus birds perishing due to heat, drought, and lack of water.

Avian botulism is caused by a type (c) of the bacteria, *Clostridium botulinum,* that is commonly found in soil. During dry, hot spells around the world, as well as in the American West, as water levels drop and water temperatures rise, insects and other invertebrates experience a die-off. Their remains, along with nitrogen and other common pollutants, create a fertile ground for rapid growth of the bacteria. Waterfowl and shorebirds who feed on these elements become sick. Avian botulism is neuro-toxic, causing paralysis and death. Infected dead birds contribute to the virulence of the outbreak, as their carcasses become nutrients for the bacteria. Because lack of water is at the heart of the problem, managing the conditions is fraught with all of the political obstacles that water wars in the West have historically presented.

COVID-19 made the response much more complicated. Our plan was to keep our bubble as small as possible by hiring interns, rather than relying wholly on volunteers. As a staff of two, we knew it would be a long haul to October and we had to stay healthy. With one intern at the outset, we hired another after a few weeks. We also had a few incredibly dedicated volunteers who have worked every botulism response with us. They drove up from the Bay Area and paid for their own food and lodging to join the effort. A few local volunteers helped at the hospital, cleaning, doing laundry, and entering data. This small but mighty team consisted of two to nine people working each day. By comparison, during the 2007 Cosco Busan oil spill in San Francisco Bay, 400 volunteers cared for 1,100 birds.

The first patient this year came in on July 17, a full month earlier than in previous years. Area wildfires restricted bird collection, allowing the disease to spread unchecked at the beginning of the response. Once search and collection were in full force in early August, the number of birds coming in skyrocketed, averaging 75 birds a day. One day, we received 167 birds. Soon, we had hundreds of ducks and shorebirds at the field hospital to care for and were releasing birds on a daily basis to make room for the new ones arriving each afternoon. Our days resembled "Groundhog Day": feed birds, clean birds, swim birds, move birds, dry birds, intake birds, and release evaluations. Each new day also threw us some kind of crazy curveball.

Just like so many hospitals treating coronavirus patients, our waterfowl hospital reached maximum capacity. With so many birds coming in, we spent nights fundraising to buy additional enclosures and pay for the interns now desperately needed. Miraculously, every single time we asked for help, we got it. Organizations and individuals stepped up in ways we could never have imagined. People offered up pools and affordable intern housing options. Volunteers sponsored intern stipends and paid for vital equipment. And several nonprofits – including Friends of Malheur NWR, multiple Audubon chapters (Klamath Basin, East Cascades, Willapa Hills, and Mt. Diablo), and so many other awesome organizations – made significant donations that saved birds and our sanity. It was truly inspiring. Despite COVID, it worked. During this year's response, 21 humans were able to care for 3,059 birds in 75 days.

If all so-called stake-holders are each afforded their own piece of the Klamath River, then preventing the conditions that lead to avian botulism outbreaks is a tricky path. Waterfowl hunters and irrigation districts that deliver water to agri-business tend to blame the Endangered Species Act (ESA). The Klamath was once home to the third largest run of Coho salmon in North America and three federally endangered fish indigenous to the Klamath Basin historically used the entire 253-mile river. Both agri-business and hunting advocates fault the ESA with limiting water availability in the Klamath Basin. With wetlands as drastically reduced in the Central Valley and high desert north of Shasta as they are today, compared to 150 years ago when the Klamath was first being divvied up like loot, the Refuge in the Lower Klamath Basin is critical to wildlife, especially Pacific Flyway migrants, Mallards, and other ducks that hunters like to see in great abundance. Meanwhile, Native American tribes along the river, such as the Yurok and Hoopa nations, have a deep stake in the survival of endangered salmon; a physical and cultural relationship that stretches back to time immemorial.

For our part, at BAX, we are here for one thing first and foremost: to alleviate suffering in injured wildlife by providing the care they need. For more information about this response, please visit birdallyx.net/bax-botulism-response/.

Donations to support relief efforts are always welcome – contact the Humboldt Wildlife Care Center at 707 822-8839 or mail a check to HWCC, 2182 Old Arcata Rd, Bayside, CA 95524.

Left: Duck patients in care at the field hospital. Photo courtesy of Bird Ally X. Watermarks: Mallards.

Southern Humboldt Wildlife Photographer Captures All Three Local Types of Northern Flickers

By Ann Constantino

In the fall, you can hear their loud, piercing call almost anywhere in Southern Humboldt. Northern Flickers are unusual for a woodpecker in that they eat ants and bugs off the ground, so that is where we often see them. They are known for their loud territorial drumming in the spring, sometimes plaguing local homesteaders.

Here you can see the three types of Northern Flickers who live in Humboldt County. The Red-shafted is the most common. Both sexes have a gray face with reddish-orange under the tail and wings; the male has a red malar or moustache and no nape markings. The least common is the Yellow-shafted, more an Eastern bird. Both genders have brownish faces and yellow under the tail and wings. The male has a black malar and a red nape marking. Also shown is a hybrid intergrade, showing features of both Yellow-shafted and Red-shafted, with the red malar and red nape marking. All three birds were photographed near Garberville on the South Fork of the Eel River in October 2020.

(Below L-R) Red-shafted, Yellow-shafted, and intergrade Northern Flickers by Ann Constantino.