The Sandpiper

September 2025

Redwood Region Audubon Society

www.rras.org

Wind Energy with Birds and People in Mind

Join us Thursday, September 18, at 7:00 p.m. for a presentation by ***Bridget Mulkerin, Senior Manager of Climate Policy at Audubon California***

Offshore wind, when responsibly sited, is supported by the National Audubon Society as reflected in their January 2025 report, "Birds and Offshore Wind: Developing the Offshore Wind that Birds Need." You can read the report at audubon.org/our-work/climate/clean-energy. Bridget will share insights from this report with additional information on California's offshore wind sector, including how Audubon California has been involved in ensuring this energy source is developed responsibly with birds and people in mind. The presentation will be around 30 minutes to allow time for questions and discussion.

Programs are held on the third Thursday of the month, September through May, at Six Rivers Masonic Lodge, 251 Bayside Road, Arcata. Drinks and goodies are served at 7:00 p.m., the program begins at 7:30. You can also find it on Zoom—go to rras.org *for the link.*

RRAS FIELD TRIPS IN SEPTEMBER

Every Saturday, 8:30-11am. Join RRAS at the Arcata Marsh and Wildlife Sanctuary for a free guided field trip with an experienced birder. The meet-up spot is the parking area at the end of I St. (Klopp Lake). Bring binoculars and scopes if you have them. If not, come on out anyway! *Trip leaders for September:* Sept 6, Larry Karsteadt ~ Sept 13, Dan Greaney ~ Sept 20, Tamar Danufsky ~ Sept 27, Elizabeth Meisman

Saturday September 13, 7am-4pm. Join our monthly pelagic trip out of Humboldt Bay aboard the *Steller Sunrise* with Captain Lowell Wallace Jr. and his crew. The *Steller Sunrise* is an ideal platform for birdwatching and whale-watching. Experienced guides will be on board and on the lookout for birds seldom seen from shore. Cost is $150 per person, with student discounts available. To reserve a spot for this or future trips, contact Sean McAllister (707-496-8790 / *whiteouters@gmail.com*).

Sunday, September 14, 9-11am. Join trip leader Ralph Bucher for a walk at the Humboldt Bay National Wildlife Refuge. This two-mile walk is along a wide, flat, gravel-packed trail easily accessible on foot. Email Ralph to sign up at thebook[at] reninet.com.

Saturday, September 20, 9-noon. Join us for a birding walk around the recently developed Elk River Estuary Restoration Project at the south end of Eureka. Since its completion, this site has already been hosting good numbers of both

continued on page 2

Humboldt Bay Bird Observatory Helps Track Animal Migration with a Motus Tower, *by Vitek Jirinec, Integral Ecology Research Center*

At the Lanphere Dunes just west of Arcata, a cluster of antennas reaches skyward near the banding lab of the Humboldt Bay Bird Observatory (HBBO). This setup is part of the Motus Wildlife Tracking System, a growing international network quietly transforming how we study the movements of small animals—birds, bats, even insects—as they migrate across continents. To date, our Motus station has detected 21 individuals of 6 species, including 10 Dunlin, 4 Swainson's Thrushes, and 4 Hoary Bats. The tracks of these animals directly link Humboldt Bay to Alaska, British Columbia, and Sinaloa in Mexico—and many places in between. The station demonstrates the interconnectedness of today's world despite the efforts of some to divide it.

My own journey to Motus began just a few miles from here, during my undergraduate days at Humboldt State University (now Cal Poly Humboldt). Back then, wildlife tracking was largely low-tech: I spent long days hiking Jamaican coffee farms, antenna in hand, following beeping signals from radio-tagged warblers for a project led by professor Matt Johnson. The birds mostly stayed put in small territories, and even then, manual tracking was a sweaty, time-consuming challenge.

Later, during my graduate research in Virginia, I faced a new problem: Wood Thrushes

continued on page 3

Vitek (left), with Jon Tenberge of Integral Ecology Research Center and Patrick Lorch and Sasha Robinson from the Southern Sierra Research Station, install a Motus receiver at HBBO, Sept 2023.

DID YOU KNOW?

Cat Proximity and Birds

Birds can be affected by free-roaming domestic cats through their mere appearance, presence, or scent. Fear responses can influence a bird's feeding, physiological stress responses, protective behaviors, body condition, vulnerability to other predators, and the feeding of young. All the more reason to keep our cats indoors or otherwise apart from birds! Thank you.

Source: Arie Trouwborst, Tilburg Univ., the Netherlands, "Domestic cats and their impact on biodiversity: A blind spot in the application of nature conservation law."

President's Column

Planning the Future of the Redwood Region: Your Board's Goals for the Year Ahead

By Kathryn Wendel

The RRAS Board of Directors dedicated its July board meeting to identifying priority goals that will direct our chapter's activities over the coming months. RRAS was established over 55 years ago and continues to be one of the most active chapters in the state, reflecting the incredible engagement and expertise of our volunteers and members. Our future impact depends on getting more people involved as current leadership works to pass the torch to the next generation. Our goals:

Increase membership and recruitment of volunteers: How can we best broaden our membership and volunteer base? The Volunteer Coordinator chair has been vacant for a while, and this position is essential for the coordination of the different committee efforts that require volunteers, from wetland restoration, to guided bird walks, to the Christmas Bird Count.

Promote local conservation/habitat restoration: We have a Wetlands Conservancy Fund dedicated to preserve wetlands for bird habitat and facilitate their public use for the appreciation and protection of birds. We will continue to use it for the restoration and conservation of the Wigi Wetlands. We are currently working on adding the Lucas Street Parcel—a green strip of riparian habitat along the Third Slough in Eureka—to our wetlands restoration projects as well.

Stay active and informed in local, state, and national conservation issues: The Conservation Committee needs help! How can we recruit people to keep members informed on current and future key local conservation issues?

Continue sponsorship of the Christmas Bird Count (CBC): The annual CBC is a long-standing RRAS tradition. We need more volunteers to help with the bird counts and also serve as organizers. That means finding ways to get the word out, using the RRAS bird walks as recruitment opportunities, and improving details provided on the website.

Big dreams: Thinking of bold ideas for the longer term, the Board discussed building an Interpretive Center on land that we manage to serve as our chapter's headquarters and a place for board meetings. This would also promote public awareness of RRAS, and serve as a place for the public to view and appreciate birds and wildlife. These options should all be considered as part of the strategic planning process for use of the Wetlands Conservancy Fund.

Name change? The Board also discussed removing "Audubon" from our chapter name. Suggestions include Redwood Region Avian Society (thus keeping RRAS acronym) or following the majority of the 48+ name-changed chapters across the US to become Redwood Region Bird Alliance. A plan still needs to be crafted on how to get broad input on whether to make the change, what the new name should be, and then the logistics required to make the change. We need volunteers to help with this!

WE WANT YOUR INPUT!!!

Please contact me or anyone listed in the Chapter Leaders box to the left if you have ideas for RRAS priorities and/or can volunteer your time in any of these endeavors.

RRAS Field Trips, continued

resident and migratory waterbirds. Let's go see what fall migration produces here! Meet at the parking area, 5300 Tooby Road. Bring binoculars and spotting scopes if you have them. Contact Sean McAllister (707-496-8790 / *whiteouters@gmail.com*) for more information and to register for this free event.

Sunday, September 21, 9-11am. Ralph Bucher leads a walk on the Eureka Waterfront Trail, starting at the foot of Del Norte Street and continuing on a flat, paved trail that is **wheelchair accessible**. Email Ralph to sign up at thebook[at]reninet.com.

Saturday, September 27, 9-11am. Wigi Wetlands Volunteer Workday. Join a fun group of volunteers to create bird-friendly habitat in a section of the bay trail behind Bayshore Mall. Bring water and gloves. We provide tools and snacks. Contact Susan Penn at *susanpenn60@gmail.com* for more information.

Sunday, September 28, 8:30-12. Crab Park with Ken Burton. This little county park overlooking the mouth of the Eel River has produced over 230 bird species. There is typically a good variety of gulls, ducks, cormorants, and other waterbirds present, and interesting migrant landbirds can show up as well. Meet Ken (shrikethree AT gmail DOT com) at Herrick Park & Ride at 8:30 or Loleta Grocery at 8:45.

Motus Wildlife Tracking System, continued from page 1

we tagged for a breeding habitat study began shifting their home ranges midseason. One day the bird would be there, the next it was gone. I spent countless hours hiking through forests with handheld antennas, hoping for a signal blip that often never came. That experience hammered home a basic reality: manual tracking works only for certain questions, in small areas, and at great effort.

But what about migration—when birds travel hundreds or thousands of miles? Manual tracking is out of the question. Over the years, I tried both of the traditional options available to migration researchers: 1) satellite tracking, which requires heavy and expensive transmitters—typically only practical for large birds. I deployed two satellite tags on Ruddy Quail-Doves in Brazil (at $1,800 each) and never received a single data point back. 2) Archival biologgers, like light-level geolocators or GPS tags, which store location data onboard but require recapturing the bird later. Our project deploying geolocators on Swainson's Warblers in Louisiana had better results: we recovered about 50 percent of the tags the following breeding season, revealing that these birds wintered in Cuba and the Yucatán. Still, it was a lot of effort for a small sample of birds.

Motus: A New Way to Track Small Animals Over Large Distances

Motus offers a different solution. Birds carry tiny, lightweight tags that emit a unique coded radio signal. These signals are automatically detected by any Motus station within range of passing birds—no need for recapture, no satellite fees, and suitable even for small songbirds. Motus offers a global web of listening posts, but data resolution depends on the availability and distribution of its receivers.

The HBBO station became operational in September 2023, thanks to the initiative of CJ Ralph, with help from collaborators like myself and others in the local bird research community. Detection highlights include an American Robin tagged in British Columbia, several Dunlins that were subsequently detected in Alaska, and a Western Sandpiper also hailing from Canada. The signals coming from passing animals are intercepted by the antenna array, processed by a computer in the building below, and detections are transmitted into the centralized Motus database where anyone can view them.

Each detection adds a new piece to the puzzle of how animals move through the Pacific Flyway, a corridor still underrepresented in the Motus network compared to the eastern US and Canada. The HBBO station helps fill this critical coverage gap along California's North Coast.

HBBO's Kim Hollinger with a Swainson's Thrush tagged with a Motus transmitter

Local Birds, Local Research

Beyond detecting birds tagged elsewhere, we have also taken the next step: launching our own Motus project with Swainson's Thrushes and White-crowned Sparrows, pairing our local tags with the HBBO Motus receiver. These efforts have already produced interesting results, including a Swainson's Thrush last detected in central Mexico and a White-crowned Sparrow that moved *north* to Oregon during fall migration, only to be detected a couple of weeks later in California's Bay Area.

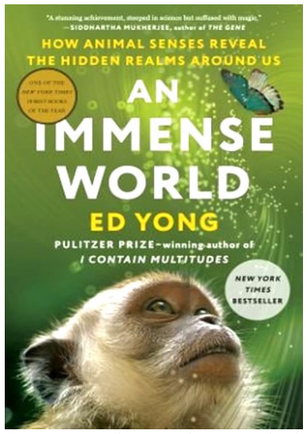
For me—as someone who once spent days chasing beeps in the Jamaican sun, wandered Virginia forests after elusive thrushes, and gambled research dollars on satellite tags—the Motus network is a great addition to the research toolbox.

Read more of Vitek's work at *vitekology.org*, and learn more about the Integral Research Center at *iercecology.org*. You can also explore recent detections from our station at *motus.org*, where data updates in near real-time.

MOTUS IN THE NEWS: Motus is a key part of a project in the Central Valley (CA) designed to protect the state-threatened Tricolored Blackbird. Private wetlands managers, farmers, and scientists are working to delay harvesting within designated nesting boundaries. A movement study using Motus and Argos technology complements the work by documenting how these nomadic birds shift between breeding and winter sites across the Central Valley (*audubon.org/california*, June 11, 2025).

Immense Awe

Book Recommendation by Tamar Danufsky



There are a lot of reasons I like to watch birds: they're beautiful and entertaining, and paying attention to birds has made me more aware of all the other critters and plants around me. The more I see and learn, the more I am in awe of nature. In his 2022 book, *An Immense World*, Ed Yong explores the myriad ways animals perceive their worlds, and he is here to tell us that when it comes to awe, we ain't seen nothin' yet.

We humans are visual animals (did you notice how many times I used visual references in the preceding paragraph?). While we are certainly helped along by other senses, vision is the dominant sense we use to experience the world around us (of course, unsighted people have a very different story to tell). Not so for many other animals. Not only have we often been oblivious to how animals see, hear, smell, taste, and touch differently than we do, but scientists have often overlooked the existence of senses that differ vastly from our own.

In this book, Yong presents a different sense (or aspect of a sense) in each chapter with amazing examples of how animals use senses we are familiar with, and those we have never considered, to navigate their worlds. Through interviews with biologists, and firsthand encounters with many of the animals, Yong introduces us to embryonic frogs that escape from snakes' mouths by initiating hatching when they sense the vibrations of a snake attack. We meet tiny treehoppers that communicate sound to each other by vibrating the plants on which they are feeding, and moths that can sense the earth's magnetic field. There are fish that generate electricity, a jumping spider with different eyes for different purposes, insects with ears on their knees or taste buds on their feet, catfish with taste buds all over their bodies, a brittle star whose entire body is an eye.

Even vision, our dominant sense, has a multitude of variations in the animal world. We are probably in the minority of animals that cannot see in the ultraviolet spectrum. What would the world look like if we could? When I think about something as obscure as the ability to sense the earth's magnetic field, I wonder if there are additional animal senses still awaiting discovery. In the meantime, read *An Immense World*, and be prepared to have your sense of awe jump-started.

A Little History and Fun Facts About Anna's Hummingbird (*Calypte anna*), *by Dan Greaney*

The genus *Calypte* means *hooded*, and is shared with Costa's Hummingbird, a rare visitor here, and the male of which, like the Anna's, has brilliant gorget feathers not just on the throat but in a hood over its head. The specific epithet, *anna,* credits the Duchess of Rivoli, Italy, in 1829, where the species was first formally described. But in Rivoli the specimens had been taken 6,000 miles from home. Back then their Pacific woodland breeding extended only from Baja to San Francisco. Since then Anna's Hummingbirds have learned how to use people and their gardens, and they now breed and live year-round all the way into British Columbia.

That range extension took some doing. Even in their tropical homes, the heat-generating metabolism of hummingbirds runs on a frenetic two breaths and ten heartbeats per second, rates fatal for most of us mortals. Our climate could easily exclude these tiny biobits. Fortunately for us, however, Anna's are among the giants of the hummingbird tribe. They tip the scales at almost the weight of a nickel, and that relative heft no doubt helps them endure our colder temperatures.

Hummingbirds also cut corners on their metabolic rate. They can go into overnight torpor, a sort of mini-hibernation in which their body temperature lowers some fifty degrees, reducing energy consumption until they can feed again at daybreak. Occasionally these torpid hummers will flop over on their twig and hang upside down. If you see that odd apparition, fear not! The bird will likely warm with the advance of day and resume its normal activities.

Of course hummers, like all birds, retain heat with nature's finest insulation, feathers. In their case, the feathers add brilliance from microscopic layers that amplify certain wavelengths of light. The male's magenta scintillance is his special gift, and he will orient himself to a female and the sun so that she is most likely to be dazzled. His tail feathers have a further special role. They make the loud pop as he curls through the *J* of his diving courtship display.

The female, meanwhile, builds an inconspicuous nest, camouflaged in lichen and bound in spider silk. After mating, she lays a couple little bean-sized eggs and incubates them for about two and half weeks. On her own, she feeds the hatchlings insects, spiders, nectar, and sap, regurgitating meals to them in the nest for some three weeks, then remaining nearby for another week or so as the fledglings develop.

Anna's male (top center) and female on nest by Jeff Todoroff; Anna's male (lower center) by Larry Jordan

JOIN US! Your membership in Redwood Region Audubon supports our field trips, programs, education, and conservation efforts. You may join us online at *rras.org* or use this coupon. We have two different types of memberships:

Local membership For just $15 a year you will receive *EcoNews*, with *The Sandpiper* inserted. To join locally mail a check for $15 made out to RRAS with your name, address, and email address to:
Redwood Region Audubon Society
PO Box 1054, Eureka, CA 95502

National membership Join National Audubon and receive *EcoNews* with *The Sandpiper* along with *Audubon* magazine. Please use our Chapter Code C24 so that we receive our share of your membership.
National Membership Application:
My check for $20 is enclosed. (Introductory Offer)

Name:…….
Address:…….
City:……State:……Zip:……
Email:……..
Local Chapter Code: C24
Mail form and check to: National Audubon Society
Attn: Donations
225 Varick Street, 7th Floor
New York, NY 10014

Update on eBird Protocol Tips: Distance Calculation

By Ken Burton

To all of you contributing eBird lists to Cornell Lab of Ornithology's database, there's been a significant improvement to the app's system for tracking the distance you cover on your trip. In the October 2024 *Sandpiper*, I offered several tips for not including backtracking in eBird (and Christmas Bird Count) distance calculations. Both programs want *unique* distances only, and including backtracking (retraced ground) produces artificially low bird densities. The good news is, the latest eBird Mobile update makes those tips not only unnecessary but impossible! The app's tracking feature now recognizes when you are backtracking (defined as covering ground within 30 meters of previously covered ground, 30 meters being the threshold for a traveling count) and automatically subtracts that distance from your total. No matter how complex your route, the app, at least in theory, will make all necessary adjustments and calculate your total and unique distances. I long wished the track could be stopped and resumed to account for backtracking, but this is even better!

The update has one major drawback, however: Once you stop your track, you *cannot* manually adjust your effort data. If, for example, you get back to your car and stop your track and then hear new birds, you can't add time to your checklist duration to account for the additional detections unless you first delete the track. Similarly, if your track is accidentally stopped prematurely, you can't continue birding and then enter the correct distance and duration without deleting the track. In other words, your reported effort must match your track's distance and duration. Be certain you're done birding and ready to submit your checklist before stopping your track.

This lack of flexibility and other glitches are a hot topic on the eBird Community Facebook Discussion Group, but all in all, the update is a step forward. For more information, go to News on the eBird website and select the June 17 entry.