**MYSTERY BIRD**

Can you figure out what species this is by looking at this female? These sparrow-sized birds like grasslands, shrubby thickets, and small trees nearby. It is one of the birds that has been attracted to our Detroit Bird City Project’s first native grassland and wildflower planting at Callahan Park. Photo by Dan Pancamo

**Upcoming Field Trips**

Please join us for a field trip this fall or winter! We welcome birders and nature enthusiasts of all abilities and we even have binoculars to borrow, if you don’t have your own. Any field trip with a ($) next to it has a fee; otherwise field trips are free of charge. Go to www.detroitaudubon.org/field-trips to get details for each trip and to sign up!

**November**

1. Owl Prowl @ Oakwoods ($)
2. Elmwood Cemetery Walk
3. Point Edward and the Lake Huron Shore ($)
4. Belle Isle Winter Birding

**December**

1. Elmwood Cemetery Walk
2. Rockwood Christmas Bird Count Walk ($)

**January**

1. Elmwood Cemetery Walk
2. Point Mouillee ($)

**February**

1. Shiver on the River Winter Birding Field Trip
2. Elmwood Cemetery Walk

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**Front Cover Photo:** Indigo Bunting by Dongfan Chen. The Indigo Bunting is one of the species that has been attracted to the new native grassland we planted at Callahan Park as part of our Detroit Bird City Project (see story page 17). Photo © 2019 Dongfan Chen
What is it about birds that compels people to go out in all kinds of weather to see a life bird, or birds in general? To get up early, get out and spend hours searching, with no guarantee of successfully locating the bird? Every birder will have a different response, but here are mine.

Birds are beautiful and they are everywhere. You don’t have to travel great distances to see beautiful birds. We had an Indigo Bunting at the new meadow at Callahan Park right after we mowed it. Two of our most popular Beginning Birding field trips are (1) the Pheasant walk in the City of Detroit and (2) the Elmwood Cemetery walk, which combines birding and Detroit history; simple and great for all ages. So how far you travel to go birding is strictly your choice — how much of a carbon footprint do you want to create?

Anyone can go birding. I have birded from my car in a parking lot as well as hiked all day. An increasing number of trails are accessible for wheelchairs, walkers, and strollers. Some trails have guide ropes for vision-challenged birders. We are researching affordable, accessible path materials for the five (so far) vacant lots we are turning into meadows in Detroit.

Birding can be combined with any activity. Breakfast with the Birds; Bird Photography; Birds and Brews; Birding by Bike, Canoe or Kayak; Birding and whatever your second favorite activity may be.

Birding can be as competitive as college football (think Cornell’s Big Day) or as exciting as the first time your child points at a bird, squeals, and identifies it correctly.

Birds make people healthier. Once again, science is proving that birds create healthy neighborhoods. Early results from a new health study in economically challenged neighborhoods in Detroit are indicating that for every additional bird song heard, the stress level of residents measurably drops.

Birding is romantic. I know at least one person whose parents met on a birding field trip.

It’s simple; birds are a common denominator for everyone. Email your favorite birding memory to programs@detroitaudubon.org and we will include some of them in future Flyways or post them on the Detroit Audubon Facebook page.

I hope you take the time to read the fantastic articles and enjoy the beautiful photography in this issue of the Flyway. Detroit Audubon is doing amazing things to foster the appreciation and conservation of birds and the environment we share.

Finally, I would like to share the phrase that really spoke to diversity and inclusivity and was a huge part of the July 2019 National Audubon Convention in Milwaukee, Wisconsin:

“Let’s Go Birding Together.”
”The prairie is so cool!” “I saw a Robin and a Blue Jay!”
”Can we go and explore the animal tracks in the mud over there?”
”I heard the birds and wind blowing through the trees.”

These are the voices of excited fourth graders from Boggs School on our inaugural B.I.R.D.S. program field trip to Rouge Park one warm September day. We spent the day tromping through the woods, looking under logs, comparing forest and prairie ecosystems, looking for birds with binoculars, and having a wonderful time!

This field trip is just part of a new Detroit Audubon program called B.I.R.D.S. (Building Informed and Resourceful Detroit Stewards), funded by the Community Foundation of Southeastern Michigan to inspire a new generation of bird enthusiasts and environmental activists in Detroit. Detroit Audubon will work with fourth- through sixth-graders through a series of in-class lessons and field trips to natural spaces which will incorporate nature exploration, citizen science research, and stewardship/conservation projects.

Before venturing out to Rouge Park, I met with Boggs students on their home turf to spend some time exploring their knowledge of birds and the environment we share. This introduction included an activity exploring what makes an environmental citizen, field trip expectations, and looking at maps of Rouge Park, as well as exploring birds in their community with binoculars—some students used them for the first time! These pre-lessons help inform students of what to expect as they venture into the great outdoors as well as provide opportunities to discuss how their commitment to this program will help improve their own neighborhoods.

We met the busload of eager fourth graders on a Friday morning at the Rouge Park Stone Bridge Nature Trail. We first discussed their initial feelings about being in a new setting which included some excitement as well as fear about the unknown. As we ventured into the forest, we were forced to walk in single file on the narrow trail which allowed for some solitary exploration for each student.

When the trail opened up only a short way into a wide opening, students were surprised by the view from above of a stone bridge over a dry spring leading to the Rouge River and a vast sea of diverse trees as well as many other shrubs and plants. They were eager to rush down the hill and explore the bridge and dry riverbed, and I could tell that a lot of the initial fear within some of the students had been washed away by the breathtaking view. We spent some time investigating and observing from the bridge before moving on to the trail along the riverbed which led to a bend in the actual Rouge River.

At this point, students broke up into teams with an adult leader in order to further investigate this forest ecosystem. Using tools like thermometers to explore the soil type and temperature and bubbles to test the wind speed and direction, students became scientists gathering data for a later comparison with the prairie. After all groups had gathered information and wrote about their observations in journals, we continued along the trail to a clearing filled with tree limbs begging to be climbed on. After some exploring, the students settled in to draw a diverse set of sound maps of their surroundings, using words, symbols and drawings to represent the many sounds heard around them. This quiet activity helped the students experience nature in a solitary setting before breaking for lunch. During lunch out in an open field with trees, one student commented, “This is the
life! Eating in our own little private space.” After lunch, we boarded the bus and
taveled a short distance to a very different ecosystem: the prairie! Groups were
again challenged with gathering data about the temperatures, wind speed and
soil to compare with the forest. Students immediately noticed that there was a
lot more open space in the prairie with tall grasses and flowers surrounded only
by a few trees. The prairie became a playground as students walked through and
played among the dragonflies and butterflies.

In the coming year, these students and fourth- through sixth-graders from three
other schools will have the opportunity to explore their Detroit environment.
Detroit Audubon staff will work to support teachers and classes as they develop
their own specific interests around diverse and healthy cities. We will meet
with teachers and host professional development workshops that help teachers
utilize place-based environmental lessons in their curriculum. This will include
developing and implementing stewardship activities in their local environment,
conducting stewardship events (for example, adopt-a-beach and park cleanups)
and opportunities to increase habitat functionality with native plants through
student-driven projects.

Opportunities for youth to explore and just be in a natural space like a forest
or prairie are essential and can really make a difference in students who may
not be as successful in a traditional classroom setting. A teacher from Detroit
Achievement Academy shared that one of her students said while in the forest,
“When I get older, I am going to bring my grandchildren here,” as he proudly
displayed a detailed sound map. This student is one who often struggles to focus
on directions and schoolwork. It is essential that youth today make deep and
meaningful connections with and gain a love and appreciation for their natural
environment if we expect them to become environmental stewards in the future.
Through the B.I.R.D.S. education program, students will become connected to
different habitats within their local community while exploring their dual role as
environmental stewards and beneficiaries of the ecosystem benefits that healthy
habitats provide.

Mystery Bird REVEALED:

If you guessed Indigo Bunting, you were correct. At left is a female (Dan
Pancamo photo). She is brownish in color so that she blends in with the
nest and thus hides from predators more effectively than the bright colored
male. At right is a non-breeding male, which is brownish with some muted
and mottled blue mixed in (photo © 2019 Dongfan Chen). For a male in
full, glorious, iridescent breeding plumage, see the front cover of this issue.
The male has a loud, jumbled song to defend its territory that some have

Introducing Jensen Bigelow,
New Semester-In-Detroit Intern

by Jensen Bigelow

Hello, Detroit Audubon folks. My name is Jensen and I am excited to be the new
intern for fall 2019. I am originally from Grand Rapids, Michigan and am a junior
at Grand Valley State University (GVSU) majoring in Biology. Over the summer, I
took part in some avian research at GVSU including monitoring Tree Swallow nest
boxes and a project collecting bird building strike data, similar to Great Lakes Safe
Passage. I am participating in University of Michigan’s Semester in Detroit, taking
classes along with doing research and community events with Detroit Audubon
for the fall semester.

This fall I am working on Detroit Audubon’s Safe Passage research by monitoring
buildings on Wayne State University’s campus that commonly experience bird
building strikes. It is autumn—migration season for many birds—so it is
important to do this work now. I will be going on some Detroit Audubon school
field trips, too. I will also be attending some Detroit Audubon public events, so be
sure to stop by and say hello.

Some fun facts about me include:

My favorite birds are Mourning Doves
I enjoy photography and will be taking photos at the events I attend,
so if you want a picture, don’t be afraid to ask
Almost all my clothes are thrifted
I’m not the best cook, but love to find and try new recipes.
Birds, wildlife, and the environment in general have taken some big hits over the last several years. Here are some of the biggest ones:

CHANGES TO THE ENDANGERED SPECIES ACT REGULATIONS:

Signed into law by President Richard Nixon in 1973, the Endangered Species Act currently protects 1,600 listed species. Species that have recovered to the point of coming off the list include the Bald Eagle, Grizzly Bear, Humpbacked Whale, American Alligator, and just recently the Kirtland’s Warbler (see article on page 11). Probably THE linchpin of the act has been the provision that the listing of endangered and threatened species would be decided based on scientific evidence alone: if the species is shown to be in serious jeopardy by scientific data, it has to be listed. This provision would be eliminated by the new rules in favor of a cost-benefit litmus test and assessment of whether development would be halted. So, if it is determined to be too costly to the government or industry, or if listing it could potentially stop a desired development, the species simply will not be listed; it will thus not be protected, and will likely be left to simply go extinct. Officials who announced the change said that “nothing will change,” but the wording of rule belies that contention.

The new rule would also greatly reduce the amount of land designated as Critical Habitat (habitat required for the species to survive) which could put species in serious jeopardy. On top of that, a tool for assessing future harm to a species from Global Climate Change would be prohibited. In both cases, science is shunted aside. These rules seem to be primarily aimed at making it easier for oil and gas drilling and other industrial activities to move forward despite the presence or adverse effects on endangered species. One species that could be put in jeopardy is the polar bear, which has the highest concentration of dens in an area of the Arctic where oil companies most want to drill. Combine that with a prohibition on considering climate impacts, and the outlook for this species under these new rules could be pretty grim. Seventeen state attorneys general have joined in a lawsuit to stop these changes. Also, Sen. Udall of Arizona is proposing legislation to block these new rules.

According to Noah Greenwalk, Endangered Species Coordinator at the Center for Biological Diversity, “These changes crash a bulldozer through the Endangered Species Act’s lifesaving protections for America’s most vulnerable wildlife. For animals like wolverines and Monarch Butterflies, this could be the beginning of the end.” The Center has also vowed to go to court to stop these changes as well.

THE MIGRATORY BIRD TREATY ACT:

We just celebrated the 100-year anniversary of this law last year, which was enacted to implement the Migratory Bird Treaty in 1918. It is one of the oldest and most effective conservation laws ever enacted. One provision in place for decades prohibits the accidental “taking” (killing or harming) a migratory bird species without a permit (except for those designated as game species by the Act, and then only during a prescribed season under strict regulations). The rule change would preclude enforcement of the act if the “take” was accidental or unintentional. BP paid a huge fine for the damage the Deepwater-Horizon Oil Spill in the Gulf of Mexico did to millions of birds. That fine would not have been imposed if these new rules were in place. Of particular concern are the open oil pits that lure waterfowl into their deaths. There have been few suits filed under this provision, but its mere existence has acted as check on egregious behavior. Not a great way to celebrate the 100-year anniversary of this act. This change is being fought as well.

SECTON 404 OF THE CLEAN WATER ACT (Federal Water Pollution Control Act Amendments of 1972):

Wetlands greater than five acres in size that are part of “waters of the United States” are protected by Section 404 of the Clean Water Act, with the goal of “no net loss of wetlands.” This section does not protect these wetlands outright, but instead puts many restrictions on when development of or altering these wetlands would be allowed and then only with a valid permit. If draining, filling, or altering of a wetland was allowed under a permit, the permittee was required to restore at least 1.5 times the amount of wetlands destroyed or altered (this is called “mitigation”). If a particularly rare or valuable wetland was affected, a higher ratio of replacement wetland is often required. The new rule would redefine “waters of the United States” to include only navigable streams and thus would only protect wetlands that are along the shoreline of those streams or directly connected to them by surface water.

When rules were proposed and enacted under the previous administration to protect smaller streams and waterways that feed into the bigger, more navigable streams, the EPA indicated that nearly 60 percent of all US waterways and 81 percent in the arid Southwest are ephemeral or flow seasonally. Those waterways would lose protection. Even in Michigan many wetlands are only seasonally inundated with standing water—often referred to as
vernal (springtime) ponds, marshes, swamps. All are important to nesting and migratory birds. Of special concern are the isolated prairie potholes in the Dakotas that provide critical stopover habitat for millions of waterfowl where they refuel before resuming their northward or southward journeys.

The fact that this kind of change was being talked about at the federal level was the big reason Detroit Audubon did not join a few other environmental groups in endorsing a modified version of what had been deemed “The Michigan Wetlands Destruction Bill” in last December’s lame duck Legislative session in Lansing. Most of the worst provisions were stripped, but what concerned us was the provision of the new law that tied Michigan wetland protection to the Waters of the United States rule (WOTUS). This rule was changed, just as we feared, thus affecting Michigan’s wetland protection as well. In all, up to 50 percent or more of wetlands that had been protected will lose protection under these new rules.

This rule is being challenged by several environmental organizations. The late Rep. John Dingell, Jr., who represented SE Michigan and who received Detroit Audubon’s Conservationist of the Year Award in 2013, was the chief sponsor of the Act, and vigorously argued against Justice Scalia’s opinion that only navigable waters were protected under the Clean Water Act. Rep. Dingell said he was there and that the clear intent of Congress was the more expansive definition. He said that Scalia’s observation and a few others “muddled the waters” that led to the need to clarify the definition of “Waters of the United States.” It is that definition, that is being severely narrowed, which will leave millions of acres of wetlands unprotected.

SAGE GROUSE:

After a long, protracted fight about listing this species as endangered, a diverse group of stakeholders, from birders to agricultural interests to state and local governments, met together for years hammering out an agreement that would protect the Sage Grouse but keep it off the endangered species list, thus avoiding some unwanted restrictions. The Interior Department decided to scuttle that plan. It is unclear where that will leave the Sage Grouse. This does not bode well for plans devised to recover species before they are officially added to the endangered species list.

CLEAN AIR ACT - FUEL EMISSIONS STANDARDS:

Amazingly, the present leadership of the EPA has filed suit to prevent California from enforcing stricter standards for mileage and fuel emissions granted under the Clean Air Act due to severe pollution which still often does meet federal standards. The situation will get much worse in California if that state is prevented from enacting its more stringent rules which it has been doing for decades. This is being done even though the auto industry has indicated it wants the more stringent rules because they create certainty for them. How might this affect birds? Well, birds breathe the same air we do. While the impact of air pollution on birds is not well documented, it is likely that increased pollution will put more stress on already vulnerable bird populations. Birds have delicate breathing systems that include air sacs (some of which are in their hollow bones); the effect of increased air pollution could therefore be profound. Lawsuits are flying on this as well.

SUCCESSES AND POSSIBLE SUCCESSES:

See Recovering America’s Wildlife Act page 7-8, and Ocean Fish Legislation Reaches Overland to Michigan page 9.
Finally, some great news for wildlife! With 1,600 wildlife species on the threatened or endangered list, a new report from National Audubon showing 378 bird species are at risk from Climate Change, and 12,000 species identified by state wildlife agencies as needing conservation assistance in their federally approved State Wildlife Action Plans, there will finally be funding available equal to the task at hand if a bipartisan bill, the Recovering America's Wildlife Act (RAWA, HR 3742) passes both Houses of Congress and is signed into law by the President.

This bill was introduced in July by our good friend Rep. Debbie Dingell, who represents Michigan's 12th district in the US House of Representatives, and Nebraska's Rep. Jeff Fortenberry, along with 60 of their congressional colleagues. The bill will guarantee $1.4 billion in annual funding to state wildlife agencies and federally recognized tribes to implement action plans to reverse the decline of 12,000 Species of Greatest Conservation Need (SPGCNs) identified in the State Wildlife Plans, most of which have languished due lack of adequate resources. In Michigan, conservation actions for Black Tern, Bobolink, Sedge Wren, Common Tern, and several other bird species will have adequate funding, along with a long list of other vulnerable birds, wildlife and plants, which should be music to every birder's ear. It will be much cheaper to take actions to prevent a species from becoming endangered than to list the species on the brink and then pour in the vast resources needed to recover the species. By helping species before their populations reach a crisis state, this bill will also help industry by providing more regulatory certainty.

In 2005, each state submitted a State Wildlife Action Plan, that had to be approved by the US Fish and Wildlife Service in order to be eligible for its State and Tribal Grants program. Although economists estimate that it will take $1.3 billion annually to implement these plans, currently only $61 million was appropriated for this purpose each year. This bill will guarantee the $1.3 billion per year the state agencies need, and an additional $97.5 million for tribal agencies for their work to recover vulnerable species.

RAWA is the bipartisan product of decades of conversations and hard work by dedicated sportsmen, conservationists and business leaders who have long shared an interest in securing the funding needed for state fish and wildlife agencies to reverse population declines for at risk species. RAWA would redirect $1.4 billion of existing revenue annually to state and tribe-led wildlife conservation efforts, effectively allowing the states and tribes to more fully implement their State and Tribal Wildlife Action Plans.

Dan Eichinger, Director of the Michigan Department of Natural Resources (MDNR), made a pitch for this bill, which is strongly endorsed by the MDNR and Governor Gretchen Whitmer, at the ceremony to remove the Kirtland's Warbler from the endangered species list because it has now fully recovered (see article on page 

A Bobolink pair. Photo by Ruhikanta Meetei/Audubon Photography Awards

Common Terns by Bruce Szczesnawki

Two Landmark Pending US House Bills Boon to Birds and Wildlife If Enacted!
He emphasized that there is a critical need for conservation work for many other species in Michigan to keep them from reaching the point of being added to the endangered species list at the state and federal level. “I am sorry Rep. Debbie Dingell could not be here today, because the $1.4 billion guaranteed to state wildlife agencies by her Recovering America’s Wildlife Act would be a game changer for those species, helping us to recover declining species but also helping us keep common species common.”

In a private conversation after the ceremony, he went on to say that with declining numbers of people hunting and fishing, revenues will likely go down in the years to come, so other sources of funding are needed. He said that he sees this as the fourth great wave of wildlife funding that were also game-changers. The first three waves were:

Pittman-Robertson Federal Aid in Wildlife Restoration Act of 1937, which took an existing excise tax on firearms and ammunition and dedicated it to wildlife conservation efforts. A 10% excise tax on handguns and archery equipment was added in the 1970s. The states are required to match 25% of the funds they receive, which mostly comes from hunting and fishing license fees.

Dingell-Johnson Federal Aid in Sport Fish Restoration Act of 1950 authorized a 10% excise tax on sport fishing and boating equipment, that is used to provide financial assistance for state fish restoration and management plans and projects. This Dingell was John Sr., the father of the recently deceased Rep. John Dingell, Jr., who was succeeded in that same seat by his wife, Rep. Debbie Dingell. The Wallop-Beaux amendment of 1984 greatly expanded the fishing gear subject to the tax.

The Land and Water Conservation Act of 1965 dedicated revenues from federal offshore gas and oil leases to provide funds and matching grants to federal, state and local governments for the acquisition of land and water areas and easements on land and water areas. This was for the benefit of all Americans with an emphasis on recreation and the protection of national natural treasures in parks, protected forests and designated wildlife areas.

This new act, a fourth wave of major wildlife funding, may have the greatest impact of them all. It has broad bipartisan support, sponsored by a Democrat (Dingell) and a Republican (Fortenberry), and co-sponsored by a long list of colleagues from both sides of the aisle.

According on Nathaniel Miller, Acting Director and Director of Conservation for Audubon Great Lakes (Regional Office of National Audubon, our parent organization), “Without dedicated wildlife conservation funding, birds like the Black Tern and Bobolink that call Michigan home are at risk of becoming endangered.” He continued, “I would like to thank Congresswoman Dingell for her leadership in recognizing the importance of wildlife conservation funding to birds. By ensuring states receive funding to implement State Wildlife Action Plans, we can create successful solutions to conserving and recovering bird species in greatest need.”

To take action to support RAWS, which will secure the $1.4 billion in annual funding necessary for conservation of birds and other wildlife, please go to this url: https://act.audubon.org/onlineactions/7VcHBVowwkw0Mq5nCtu7Q2 or call the office of your congressional representative to tell them your views on this bill. Time is of the essence!

Please forward this information to friends and family members who also care about wildlife.

Note: Our Environmental Policy Coordinator Jim Bull discussed with Eichinger the idea of enacting a new law similar to Pittman-Robertson and Dingell-Johnson to create an excise tax on birding equipment, like binoculars, spotting scopes, birdseed, and field guides, so that birders and other more passive wildlife observers contribute more equitably to wildlife conservation and also have more skin in the game. What do you think? Email us with your thoughts at Flyway@detroitaudubon.org. We’ll print a selection of your thoughts in our next issue.
Introducing in April of 2019 by Detroit area Rep. Debbie Dingell and Rep. Brian Mast of Florida, the Forage Fish Conservation Act is a step in the right direction for birds that spend all or part of their life cycle around the sea.

“Forage fish” are defined by the bill as species at a lifelong, low trophic (feeding) level that contribute significantly to the diets of other marine life and that provide energy to species at a higher trophic level. This new legal definition includes anchovies, sardines, herring, and krill, along with other small crustaceans. With forage fish populations being depleted to make fertilizer, cosmetics, and fish meal for livestock and fish farming, this is an essential piece of legislation. It calls for a research-informed approach to fisheries management, which would consider the needs of native species that depend on these fish when creating guidelines such as catch limits. Why would a Michigan legislator sponsor a bill to conserve oceangoing fish?

The answer is that this bill has far-reaching implications. Though designed with marine life in mind, not all of these species are bound to the ocean year-round. Birds that frequent our freshwater seas—the Great Lakes and associated marshes—may spend breeding or wintering seasons along coastal shorelines or inland. The Black Tern is one such bird.

The Black Tern spends its summers in St. Clair Flats, part of the local Metro Detroit area, but winters on the open waters of the Gulf of Mexico, bringing the impact of the Forage Fish Conservation Act close to home. This year, Lake St. Clair’s colony of breeding Black Terns was about 100 to 200 birds strong. These numbers, gathered by Detroit Audubon’s Tern Monitoring Project, are serious business. Black Terns have declined by 70 percent in the state of Michigan since 1966 and are listed as a state species of “Special Concern.”

The Black Tern population in steady decline. The cause isn’t clear, and there are likely many factors at play. Landgraf says that unusual weather patterns, rising shorelines, plastic and predation risk are all potential explanations. “We are only able to study the terns for a small part of the year, so we don’t know what other factors outside the breeding area could also be driving the population down,” Landgraf said. One variable, out of reach of Detroit Audubon’s study, is assessing the effect of the loss of forage fish these terns depend on as they winter over the open ocean. Breeding Black Terns may find sufficient insects at Lake St. Clair to feed their chicks, but a lack of forage fish to sustain wintering adults could be disastrous for the species.

For species that travel between habitats, it is not enough to conserve only one. Quality breeding, wintering, and “stopover” habitats—for refueling during migration—are all critical for the species to thrive. That’s why the Forage Fish Conservation Act is a critical step towards conserving species like the Black Tern.

The bill will also benefit Osprey, Caspian Terns, Bonaparte’s Gulls, ParasiticJaegers, and American White Pelicans—birds that breed or rest in Michigan during their journeys, but spend winters and significant parts of their migration feeding in the open ocean and on adjacent shoreline habitats. The Red Knot, which we sometimes see in migration, is in serious decline because of the overharvesting of hermit crabs, whose eggs it depends on to supply fuel during its stopover along the ocean at Delaware Bay, before launching the second half of its 9,000 journey from the tip of South America to the high Arctic.

But this bill isn’t just for the birds. Fishery-dependent economies need a steady supply of the right kinds of forage fish, both to catch and to feed their catch. The bill would require that scientists monitor the balance between economy and environment, including continuous assessments of its impact on each. Communities reliant on coastal or marine ecosystems, including those invested in recreation industries like boating and sport fishing, stand to benefit from better management of forage fish populations. A good part of Michigan’s boat building industry depends on selling to ocean-going fisheries operators, which will only continue to buy boats if there are fish to catch; and that depends on whether those fish have sufficient forage fish to feed on.

Like the Black Tern, our success is tied to the humblest of fish. Unlike the Black Tern, we have the unique ability to make space for these fish, both in our waters and our legislation. For those of us who understand and cherish our connection to the environment, it’s imperative that we take this responsibility seriously.

Do you support the Forage Fish Conservation Act? Show it by calling your congressional representative to urge them to vote “Yes” and to consider co-sponsoring the bill, which could encourage other representatives to support it as well. To find your representative, go to https://www.house.gov/ and enter your zip code. For those looking for something a little simpler, there’s one thing we can all do: Vote.
Detroit Bird City is a program that Detroit Audubon’s Conservation Committee started in partnership with the City of Detroit, local community members, and others, to restore native bird habitat in disused city parks. The program is based on a strategy outlined in the City of Detroit’s 2017 Parks and Recreation Improvement Plan, where 19 city properties were designated to be transformed into “intentional meadows.” Detroit Bird City’s plan is to create meadows in five of those properties, and we are happy to report that the first meadow was successfully planted this spring!

The initial Detroit Bird City meadow is in Callahan Park, a two acre parcel on Detroit’s east side. This former dumping ground that consisted mainly of overgrown turf grass is now a beautiful wildflower meadow planted with 39 different kinds of flowers and 6 varieties of native grasses. Since the meadow has bloomed, several bird species have been spotted there, including the Indigo Bunting, American Goldfinch, Catbird, native sparrows, and the Ring-necked Pheasant. Many Monarch butterflies have been observed at the site as well.

An important achievement for the Callahan meadow is that the turf grass was removed without using any chemicals. The Detroit Bird City team decided to use mechanical means instead by digging out the turf grass with heavy equipment and disking the field several times to turn over and kill any remaining weeds. Once the site was prepped, the meadow seeds were planted densely to crowd out weeds, and the results exceeded all expectations.

The Callahan community strongly supports the project and has been active in design, implementation, and maintenance of the meadow. Local residents worked on the park cleanup, built a bulletin board for the park, participated in bird walks, and constructed a bug hotel to provide shelter for insects.

Other partners have also been important to the success of the program. The City of Detroit, owner of the properties, has been active in the design of the meadows, has supplied resources for implementation, and has been involved in community engagement. U.S. Fish and Wildlife Service has donated seed and habitat expertise. Detroit Audubon supporters Jerry Jung and Derek Sederlund have donated the equipment and labor for site prep and planting. National Audubon and National Geographic have provided grant funding for the program. And Urban Neighborhood Initiatives has provided community engagement support.

We have conducted baseline bird surveys in each of the Detroit Bird City locations. Once the meadows become more established, we will conduct follow-up surveys to determine whether bird populations and diversity have increased at the sites. In addition, Michigan State University is conducting human health surveys to measure whether the restored meadows improve the health and well-being of people who live nearby. Our hope is that these surveys will scientifically demonstrate that exposure to the Detroit Bird City meadows will benefit both birds and people alike.

We are planning to install the other four meadows in the spring of next year. We’re currently engaging with community members who live near those spaces, and are making plans to start site prep for the next round of planting. 2020 will be a busy year for Detroit Bird City!
Kirtland’s Warbler Endangered Species No More!

by Jim Bull

My father, Wilbur T. Bull, used to tell me about meeting Roger Tory Peterson, the famous pioneering field guide author, at the Audubon Camp of Maine. When Peterson found out that Dad was from Roscommon, Michigan—the heart of the Kirtland’s Warbler nesting grounds, he bent Dad’s ear at every break. He talked about how on the dining hall porch at night punctuated by chirps of migrating songbirds overhead that Peterson would point out, they talked about the possibility of conducting a census of the Kirtland’s. With its loud melodic call that can be heard for up to a quarter of a mile, and with their small numbers, Dad told him he thought an enumeration of every singing male would be possible. It was Dr. Joselyn Van Tyne, ornithologist at the University of Michigan who actually initiated the first census, but he recruited Dad to help organize it. Dad then worked as Conservation Education Consultant for the Michigan Department of Conservation (now the Department of Natural Resources or DNR).

Dad described how they walked singly in an S-shape through each mile section counting singing males and marking their location on a survey map. These days we usually survey in pairs and with some groups of three, especially when a new person is being trained. We also walk in straight transects through the habitat using handheld GPS units, stopping every 200 meters to listen and record any singing males we hear. The first census, held in 1951, counted 432 singing males. Double that number to get an estimate of the breeding population since on average there is one female for every male.

When I worked for the US Forest Service as the Biological Technician who led tours into the that same Kirtland’s Warbler Management Area in the spring and summer of 1977, a reporter from Bay City who came on one of my first trips told me this story. Several years before she had met with Vern Dockham, a Conservation Officer who spent much of his spare time studying the Kirtland’s Warbler. She said his house was full of Kirtland’s Warbler materials. In fact, his dining room table was so piled with data on the species list until now because the US Fish and Wildlife Service had to be confident that management would continue. Otherwise the species will decline to its former endangered status once again.

Although the warbler passed the 1,000 pair threshold in 2001, it was kept on the endangered species list until now because the US Fish and Wildlife Service had to be confident that management would continue. Otherwise the species will decline to its former endangered status once again.

That one found 502 singing males, or about a 16% increase! So, things seem to be going well, even though it still was a small number, and a rare species. The census results in 1971 sent shockwaves through the ornithological, birding, and conservation community—only 201 singing males were found that spring. An article about the situation ran in Audubon magazine that summer entitled, Panic in the Pines. Nathan Leopold, infamous for conspiring with Richard Loeb, a classmate at the University of Chicago, to kill 14 year old Bobby Franks, and who along with Loeb was spared the death penalty by the eloquent speech by their attorney Clarence Darrow, was a well-known ornithologist who apparently was first to identify nest parasitism by the Brown-headed Cowbird as a possible problem for the Kirtland’s Warbler population.

The Brown-headed Cowbird, a relative newcomer to Michigan, found an obliging host in the Kirtland’s. The cowbird lays its eggs in the Kirtland’s nests (and nests of many other species) and lets the Kirtland’s or other host birds raise its young at the expense of their own young. Studies by Nicholas Cuthbert at Central Michigan University found that 70% of Kirtland’s Warbler nests were parasitized, and that only an average of 0.51 young per nest were fledging (successfully leaving the nest), a sure prescription for species extinction. In 1972, the very next year after the precipitous drop in population was found, cowbird trapping using a design used for catching blackbirds on farms and ranches on the Great Plains began.
About 4,000 cowbirds were removed at the peak of this program. Parasitism went from 70% to 6% the first year after trapping began and never went any higher in the years since. The fledging rate per nest went from 0.51 per nest to 3.56 per nest, which is a rate at which steady population growth would be expected.

Yet, the Kirtland’s population hovered at around 200 pairs, even dipping to 167 pairs twice, during the period of 1971–1990—almost 20 years! While the species probably would have gone extinct without cowbird trapping, there was another serious barrier to its recovery—lack of sufficient habitat! That is what kept its populations from growing.

The Kirtland’s nests on the ground in stands of Jack Pine from about 4 feet tall to around 18 feet tall. It has seldom been found in stands less than 80 acres in size and prefers stands that are 1000 acres or more in size, clustering territories close enough for males to hear each other sing. Census counters use what is called counter-singing to help discern how many birds are being heard. Songs that overlap confirm multiple males.

These even-age young Jack Pine stands are only created naturally by fire. In fact, the Jack Pine cones only open when the heat of fire softens the resin that holds them tightly closed. Ash from the burned trees provides a nutrient rich seedbed. For years the method of choice was prescribed or controlled burning of Jack Pine stands. But it was extremely difficult to get the right conditions. The forest must be dry enough to burn but not so dry that it causes a conflagration. There must be enough wind to provide oxygen for the fire, but not so much that the fire gets out-of-control. In the summer of 1977, when I worked for the US Forest Service, I was promised that I could witness a prescribed burn, but that summer was unusually dry so no burn was ever scheduled because it would be unsafe. Habitat was thus severely limited.

Then, in 1980 about six miles south of Mio, on the east side of M-33, a prescribed burn was in progress. The planners knew the wind was supposed to kick up later, but it looked like a sure bet that they’d have time to finish this 1,000-acre burn with time to spare. However, the weather didn’t cooperate. The winds kicked up much sooner than expected and the fire spread west across M-33 burning 26,000 acres including the area around Mack Lake, which gave its name to this infamous fire. Much of what burned was mature Jack Pine, but some active habitat burned as well. Unfortunately, the wildlife biologist in charge of the the controlled burn, Jim Swiderski, died trying to put that fire out. There is a plaque to his memory on the stone structure framing the Kirtland’s Warbler monument in the center of the town of Mio (where the courthouse once stood until it too burned to the ground).

That fire created an enormous amount of habitat that caused the Kirtland’s population to soar. It also gave managers an opportunity to fine-tune their understanding of what constituted ideal habitat for the Kirtland’s. University of Michigan Forest Ecologist Burton Barnes, his graduate student Chow Ming and their associates painstakingly measured vegetation, took soil samples and other habitat measures. Their landscape ecosystem maps were then overlaid with census results enabling them to precisely describe what habitat factors led to earliest use of an area, which parameters characterized areas with the highest density of nests, and the longest duration of habitat use. Those characteristics then became guidelines for “designing” artificial habitat by clear-cutting Jack Pine, which can be used as pulpwood for particle board, and then planting seedlings to mimic fire-created habitat. After that 1980 fire, control burns would never be an option again. Today over 90% of Kirtland’s nests are found on plantations—areas that have been clear-cut and managed to mimic fire. Some habitat is still created by wildfires before they are brought under control.

It took about ten years for the young Jack Pines from this burn to reach the size necessary to attract the Kirtland’s and the populations just exploded from there. Guided by the Kirtland’s Warbler Recovery Team, which set a recovery goal of 1,000 breeding pairs on a sustained basis, each agency set target goals for creating new habitat based on Barnes’ model of ideal habitat, and as the saying goes in the film Field of Dreams, “If you build it they will come!” And come they did. In 1991, the population finally surpassed the 300 pair mark, with 347 pairs.

The population has increased steadily since, now standing at over 2400 pairs, with small population centers now in the Upper Peninsula (about 37 pairs), Wisconsin (about 19 pairs), and Ontario (3 pairs). Better yet, habitat management is starting to happen in those locations now as well.

Although the warbler passed the 1,000 pair threshold eighteen years ago (2001), it was kept on the endangered species list all this time in order for the US Fish and Wildlife Service to gain confidence that this increase also met the other important criteria, “on a sustained basis.” This is the first species to come off the Endangered Species List that is considered a “management-dependent species.” Management must continue or the species will decline to its former endangered status once again. What has given them enough confidence that they feel it is now makes sense to delist it?

**SIGNED AGREEMENTS IN PLACE:** All the agencies involved, the Michigan DNR, the Wisconsin DNR, the US Forest Service, the US Fish and Wildlife Service, and the Michigan National Guard have all signed Memoranda of Understanding (MOUs) pledging to continue habitat management. The government of the Bahamas is onboard as well.
THE KIRTLAND'S WARBLER ALLIANCE (KWA) IS FIRMLY ESTABLISHED: KWA is a 501(c)(3) non-profit organization dedicated to ensuring continued and increased public, legislative, and agency support and was formed under the aegis of Huron Pines, a northern Michigan environmental non-profit. I was appointed to serve on the founding board and currently serve as Secretary of that board. Just this summer KWA became a stand-alone nonprofit with an office in Okemos, MI. Among its important activities is lobbying state and federal legislatures to ensure continued support for Jack Pine Ecosystem management now that Endangered Species Act funds will no longer be available. You can donate to the KWA at: www.kirtlandswarbler.org.

THERE IS A $1 MILLION ENDOWMENT IN PLACE TO SUPPORT COWBIRD CONTROL: This fund was established with funds from a settlement with Enbridge Energy as a result of the oil spill in the Kalamazoo River watershed. However, under the leadership of ornithologists from the Smithsonian, cowbird trapping was curtailed in Michigan for the last two years with no sign of cowbird parasitism. Cowbird may have learned to avoid the area! Monitoring continues and control will resume immediately when if parasitism is found again.

THE AMERICAN BIRD CONSERVANCY (ABC) IS RAISING FUNDS FOR AN ENDOWMENT TO SUPPORT HABITAT MANAGEMENT for the Kirtland’s on the breeding grounds, in the Bahamas, and critical stopover migration habitat.

STUDIES AND CONSERVATION EFFORTS ARE ON-GOING IN THE BAHAMAS AND ON MIGRATION: Kirtland’s Warbler migration route is now more precisely known due to geolocators worn by a number of Kirtland’s Warbler banded by Smithsonian Institute researchers led by Nathan Cooper. Dave Ewert, retired from the Nature Conservancy and now working for ABC, is continuing his work to increase the capacity of Bahamians to undertake conservation, research, and public education about the Kirtland’s in the Bahamas.

HOW TO SEE A KIRTLAND’S WARBLER: During the breeding season, May through June, tours are given at three locations:
1. MIO, MI—tours given by US Forest Service Biologists
2. GRAYLING, MI—tours given by Michigan Audubon starting at Hartwick Pines State Park.
3. PINE RIVER—tours given by AuSable Valley Audubon near Comins, MI.
Tours also available at the annual Kirtland’s Warbler Festival in Roscommon on the second Saturday in June. For more information, go to www.kirtlandswarbler.org

ENDANGERED SPECIES ACT FUNDS WILL NO LONGER BE AVAILABLE. The status of the species has now changed but it won’t change the commitment of the people and organizations gathered here today! Thanks to all who made this day possible.

A KIRTLAND’S WARBLER CONSERVATION PLAN HAS BEEN WRITTEN to guide future management efforts and an accompanying business plan for funding it.

THE KIRTLAND’S WARBLER CONSERVATION TEAM IS IN PLACE: The Kirtland’s Warbler Recovery Team held its last meeting on March 30, 2016 and was replaced that same year by a new Kirtland’s Warbler Conservation Team. There is considerable overlap of membership. The task is now not how to recover the species but how to sustain a viable population in perpetuity. Sufficient time has passed for the USFWS to be assured that this new team will endure as stewards of the species going forward.

After being first listed as endangered in 1967 under the Endangered Species Preservation Act of 1966, and then under the expanded Endangered Species Act of 1973, the formal public announcement of its delisting was made on Tuesday October 8th at a press conference at the Kellogg Center at Michigan State University in East Lansing. I was there for this momentous occasion! Speakers included US Fish and Wildlife Service Kirtland’s Warbler Project Leader Scott Hicks, Michigan DNR Director Dan Eichinger, US Forest Service Deputy Regional Forester Steve Kuennen, Kirtland’s Warbler Alliance Acting Executive Director Bill Rapai, and US Fish and Wildlife Service Principal Deputy Director Margaret Everson.
Two-thirds of North American Birds at Risk of Extinction Due to Climate Change but it’s Not Too Late for Action to Lessen Impacts.

New Audubon Climate Science Report

On October 10th, the National Audubon Society, our parent organization, announced a groundbreaking climate report, *Survival by Degrees: 389 Bird Species on the Brink* (view it at www.audubon.org/climate/survivalbydegrees). “Two-thirds of America’s birds are threatened with extinction from climate change, but keeping global temperatures down will help up to 76% of them. There’s hope in this report, but first, it’ll break your heart if you care about birds and what they tell us about the ecosystems we share with them. It’s a bird emergency,” said David Yarnold (@davidyarnold), Audubon CEO and president.

“A lot of people paid attention to last month’s report that North America has lost nearly a third of its birds. This new data pivots forward and imagines an even more frightening future,” Yarnold said. “And, you can use a first-of-its-kind web tool to find threatened birds in your ZIP code, as well as a list of things everyone can do.”

Audubon scientists studied 604 North American bird species using 140 million bird records, including observational data from bird lovers and field biologists across the country.

Audubon’s ZIP code-based tool, the Birds and Climate Visualizer, helps users understand the impacts to birds where they live, making climate change even more local, immediate and, for tens of millions of bird fans, deeply personal. It also shows you predictions of the future for birds under three scenarios: average temperature rises of 3°C, 2°C, and the recommended Intergovernmental Panel on Climate Change (IPCC) target of 1.5°C. Using this tool, you can clearly see that if we take the bold action needed to keep the increase to no more than an average of 1.5°C, the future will be much brighter for birds and for us.

“Birds are important indicator species, because if an ecosystem is broken for birds, it is or soon will be for people too,” said Brooke Bateman, Ph.D., the senior climate scientist for the National Audubon Society. “When I was a child, my grandmother introduced me to the Common Loons that lived on the lake at my grandfather’s home in northern Wisconsin. Those loons are what drive my work today; I can’t imagine them leaving the U.S. entirely in summer, but that’s what we’re facing if trends continue.”

Dr. Bateman and her team also studied climate-related impacts on birds across the lower 48 states, including sea level rise, Great Lakes level changes, urbanization, cropland expansion, drought, extreme spring heat, fire weather and heavy rain. A vulnerable bird species was chosen for each state to symbolize what is at stake. For Michigan, that bird, which we could stand to lose in the worst-case scenarios is the Sedge Wren.

Another species Detroit Audubon has been working with for the last seven years that is feeling the negative effects of climate already is the Black Tern (see article on page 19). The largest colony of Black Terns in the whole Great Lakes region is at St. Clair Flats, where our Research Associate Ava Landgraf heads up our end of the joint research project with Audubon Great Lakes and several other partners. The historic levels of flooding this year destroyed many of their nests which are situated on fragile mats of bulrush and cattail. If this continues, we may have to provide artificial floating platforms and hope the terns will use them. We certainly need to do what we can to keep the situation from getting worse.

“We already know what we need to do to reduce global warming, and we already have a lot of the tools we need to take those steps. Now, what we need are more people committed to making sure those solutions are put into practice,” said Renee Stone, vice president of climate for the National Audubon Society. “Our elected officials at every level of government must hear from their constituents that this is a priority. Audubon is committed to protecting the places birds need now and in the future and taking action to address the root causes of climate change.”

Audubon has outlined five key steps:

*Reduction of energy use is key to our success.*

Ask your elected officials to expand consumer-driven clean energy development that grows jobs in your community — like solar or wind power. Reduce the amount of carbon pollution released into the atmosphere. In order to drive down carbon emissions, we will need innovative economy-wide solutions that address every sector of the economy — like a fee on carbon. Another option is to address carbon emissions one sector at a time, like setting a clean energy standard for electricity generation.

Advocate for natural solutions such as increasing wetlands along coasts and rivers that absorb soaking rains, protecting forests and grasslands that are homes to birds and serve as carbon storage banks, and putting native plants everywhere to help birds adapt to climate change.

**Ask elected leaders to be climate and conservation champions.** Rep. Rashida Tlaib, who received our President’s Award for Environmental Leadership in 2016, is one of those champions. She is one of the sponsors of the Green New Deal, a comprehensive approach to dealing with the climate crisis. You can read this 14-page proposal which does not prescribe specific policies but established key values to guide specific actions. Other legislators are taking different approaches as they champion bold action to deal with what Greta Thunberg reminds us is “an emergency!”
A Wonderful Season of Birding

All photos by Bruce Szczechowski unless otherwise noted.

At far left, Black-throated Green Warbler at Lake Erie Metropark, young ones at Eliza Howell Park by Jim Bull, Ruby-crowned Kinglet at Lake Erie Metropark, Sanderling at Point Pelee.

This page: Turkey Vultures kettling; Eastern Phoebe; and (below right) Rusty Blackbird, all at Lake Erie Metropark.
Detroit Audubon was represented by four delegates at National Audubon convention in Milwaukee, Wisconsin July 25-29, the largest Audubon convention of the millennium and right here in our own Great Lakes Region! (Detroit hosted one back in the 1940s.) Six hundred strong, we gathered at the Hilton City Center Motel in downtown Milwaukee. Detroit Audubon delegates were President Rochelle Breitenbach, Research Associate Ava Landgraf, volunteer Jessica Egerer, and me. Two of those delegates were given scholarships from National to attend!

The conferences are now held every two years—the last one was in Park City, Utah. At that convention a serious commitment was made to open up Audubon to people from all walks of life, so this time there were many more people under the age of thirty, including representatives from some of the 61 new college Audubon chapters working hand-in-hand with local chapters (maybe we can help organize one at Wayne State, which is right next door to our office) and many more people of color. We also heard about a program in several local chapters to intentionally involve the LGBTIA community, “Let’s Go Birding Together,” using the letters LGBT, and there was even a gathering of “inked” birders (with tattoos)! I told David Yarnold, current President and CEO of National Audubon, that he has been a breath of fresh air to us, that we feel that chapters are valued again, and that we now have an active regional office (Audubon Great Lakes) that not only is listening but helping us grow and build capacity. Rebecca Sanders, who until recently was our Regional Vice-President and CEO of Audubon Great Lakes, has now been promoted to take her good work on chapter and local development nationally. Yarnold told me that chapters are the strength of National Audubon and why that network makes us the most formidable force in the environmental movement. Through that network, for instance, four states (South Carolina, Arkansas, Pennsylvania, and New York) have passed laws to mandate conversion to renewable energy. Yarnold is proud of the steps taken to diversify Audubon. National Audubon has 40 interns, over 40% of whom are people of color, and he reports that they are making good on his goal of having every employee feel that they can come to work every day and BE their authentic selves. “We are on a journey,” he said, “and we will never fully arrive, but we are getting there.” Detroit Audubon has much to learn and emulate on that score, for sure. Yarnold’s keynote speech is posted on Facebook and on our website now.

We also heard from Native American economist, activist, and author Winona LaDuke, who also raises hemp and promotes solar energy on her First Nation’s land in Minnesota. And we heard about research on mobilizing and organizing for effective social action from Dr. Hahrie Han from Johns Hopkins University. Another plenary presenter was our friend from the state just below us, field guide author Kenn Kaufman. Their speeches will be posted into a revised Audubon magazine guide on selecting binoculars. So, be on the lookout for that in an upcoming issue of that magazine.

All in all, a very rewarding experience! Can’t wait for the next one, set for August 2021 in Tacoma, WA. Maybe you want to help represent Detroit Audubon at that one—think about it!

Detroit Audubon Delegation at National Audubon Conference in Milwaukee July 25-29, 2019: Jim Bull (board member), Jessica Egerer (volunteer), Ava Landgraf (Research Associate), and Rochelle Breitenbach (president)
Volunteer Spotlight: Guadalupe Cummins

by Ava Landgraf, Research Associate

Guadalupe is the type of volunteer that allows Detroit Audubon to function. She is also the volunteer who made my first year as Detroit Audubon’s Research Associate way less stressful than it could have been. She began as a volunteer for the Black Tern research in 2016. She is so helpful and valuable that I now align the Black Tern monitoring days with her schedule.

On Black Tern field days, we meet at 7AM and end the day around 7PM. Guadalupe helps me get the boat in the water and keeps a lookout for the Black Terns. While I focus on driving the boat, Guadalupe counts the number of individual terns we see flying around at each sub-colony. Counting around 30 birds flying overhead while trying not to recount individuals, or count any Forster’s Terns or Red-winged Blackbirds, takes some practice. She is always ready to jump in the water, and can handle staying there for several hours searching for nests. She taught me how to identify Phragmites, Cattails, Bulrush and Burreed so we can record what type of vegetation the terns are nesting on. Guadalupe even hand-made our own bird holding bags. The bags are made of a thin fabric so the birds don’t get too hot, and have a French hem so there are no loose strings that could tangle on a bird’s foot. I really enjoy my days in the field with Guadalupe. She is a tremendous support and great team member while looking for terns or waiting for the birds to go in a trap.

This year, Guadalupe helped with another project after the Black Tern season ended. We needed to measure the plant and bird biodiversity of the Detroit Bird City parks before and after restoration to use as a measure of our success. Measuring the avian biodiversity was easy for me, but I am no plant expert. Thankfully, Guadalupe was willing to lend me her ID skills and even design the methods for the plant surveys. We spent several hours at each park recording all the plant species we found and their general abundance. Because there are so many plant species and variations, we had to take many pictures and samples, so that Guadalupe could ID the plants later using books and Internet references. Sorting through each plant and looking at the tiniest detail to decipher the species is not easy and can take a very long time. Because Guadalupe saved me so much time, I was able to put more time towards outreach around the parks.

Detroit Audubon is incredibly lucky to have a volunteer like Guadalupe. I am so thankful she has been willing to assist us in so many ways. Not only is she an amazing naturalist and a dedicated worker, but she is also genuinely enjoyable company. At this point, working with Guadalupe just feels like spending time with a friend.
This summer was my first season managing the Black Tern monitoring effort at St. Clair Flats State Wildlife Area, and also my first summer as Detroit Audubon's Research Associate. Before I even started searching for the birds, I had to learn how to drive a boat using a tiller, learn how to back a boat into the water on a trailer, and learn my way around the flats. On top of that, the water levels were extremely high, making it very difficult to walk in the water without flooding one’s waders. This required us to carry a kayak in our motorboat, so we could still quietly approach nests. Despite the challenges, it was a successful Black Tern monitoring season with plenty of data recorded.

We attribute our progress this season and over the past few years to the dedication of our partners. The Michigan Department of Natural Resources (DNR) staff at St. Clair Flats (SCF) has been assisting us with the Black Tern research since 2013. For each day we spend in the field, they let us use their boats and provide us with all the gas we need. If we are low on volunteers, they send staff members to assist us. If the boat dies, we know we can call them and they’ll walk us through the process of fixing it or send a rescue crew to retrieve us. The DNR has a reputation for conserving wildlife habitat in general, but the Michigan DNR at St. Clair Flats goes above and beyond for our Black Terns.

Audubon Great Lakes (AGL) has also been an invaluable partner since the beginning. They support us financially and assist with the coordination of all our partners. During the peak capture week—when it’s easiest to capture the adults for banding—they send out staff members so we are able to double our trapping efforts. AGL funded the Black Tern monitoring at Wigwam Bay in 2018 and 2019, allowing us to study the difference between the Wigwam and SCF colonies. Within the next couple of years, they will be using all of the monitoring data since 2013 to create a model of the Black Terns’ population. With this model we can better understand the causes of the population decline and develop a conservation strategy.

A third continued partnership is with Dave Moore from Environment Canada. Dave monitors the Black Terns in Canada and uses his information and techniques to assist our endeavors. He placed nine geolocators (tiny GPS tracking devices) on adult
terns, which allowed us to track the Black Tern’s migration routes to Central and South America. This data showed us where the Black Terns stop to rest along their migration routes, which are important areas to conserve. Similar to AGL, Dave also comes to St. Clair Flats for the peak capture week.

Alex Jahn and Izzy Krahling are our new partners from Indiana University. Alex and Izzy focused on placing nanotags (another tiny radio telemetry tracking device) on juvenile birds right before they fledge in order to get a better understanding of fledging success. The tags should also last long enough to study the birds’ first migration to their wintering area. The chicks must be at least 50 grams and not yet flying in order to attach the nanotags, which is extremely difficult to time properly. We worried they wouldn’t be able to deploy all 15 of the nanotags, but with our help, and the discovery of a new nesting subcolony, they did it. The data we get from the nanotags will improve our understanding of first-year Black Terns’ success and migration patterns.

Another new partner this year is Jenni Fuller, a master’s student at the University of Michigan. Her master’s thesis focuses on how increasing storms, water level changes, and suitable nesting habitat availability impact Black Tern nesting success. By using a combination of long-term field monitoring, recorded weather data, NOAA water levels, and remote sensing data, she hopes to help us better understand how changing climate and habitat impact Black Tern nesting success. Jenni was a natural at finding the tern nests and helped keep much better track of our data. The monitoring season might have been a bust if Jenni hadn’t been there to help. Jenni received funding from the Michigan Sea Grant Graduate Student Fellowship to continue studying the Black Terns next summer, and we are very excited to continue working together.

Although our monitoring went well, the Black Tern population at St. Clair Flats appears to have decreased for the second consecutive year. We hope that with the continued commitment of our team and continued awareness and concern from the public we will be able to reverse this trend. This year the unusually high water swamped many of the nests which are placed on fragile floating Bulrush or cattail mats—the mats, sometimes with nests on them, just came apart. With climate change, this may be the new norm. As a result, we are considering installing floating nesting platforms next year. We tried that a few years ago, but the terns didn’t use them probably because there were lots of thick mats for placing their nests. Sometimes they’d nest on a natural mat right next to a platform. With the high water and the paucity of thick floating mats, we think they may be more willing to use them this time around. We also plan to create more educational materials and signs to provide information to SCF boaters to help decrease disturbance to nesting sites. Ultimately, saving the Black Tern will depend on slowing the rate of climate change, building public support, and preserving the resources that the terns depend on for survival.
A Season on the Wind: Inside the World of Spring Migration

Book Review by Jim Bull

Kenn Kaufman of field guide fame, and author of Kingbird Highway, a chronicle of his teenage birding quest across the continent, has penned a moving homage to both the miracle of migration and to Magee Marsh, which is probably the best place to observe the phenomenon in all North America. (See the feature article in the Spring/Summer 2019 Flyway.) Ken was born in South Bend, Indiana and raised in Wichita, Kansas. After his teenage birding odyssey, Ken settled in Arizona which, along with with Texas, probably has the richest diversity of avifauna of any state in the Union. When he decided to move to Northwest Ohio, his birder friends were puzzled and asked him, “Why?” They assumed it was because his new love interest and now-wife, Kimberly Kaufman, lived there (and worked at Black Swamp Bird Observatory).

Kaufman writes, “But (moving to be with Kimberly) wasn’t really a complete answer. Kimberly was not nailed down there...I was a freelance writer and artist, and I could have made my living anywhere with an Internet connection. We wound up here, forty miles from her former home and two thousand from mine, because she had a connection to bird migration in northwestern Ohio. The migration—that was the thing. That was the deciding factor.”

Kaufman relays how astounding this phenomenon is, to see birds that may have come from several thousand miles away and might have an equally long journey ahead of them. Each species has its own unique story. Kaufman said he really had to go back to “square one, learning the basics all over again,” because this was a crucial aspect of birds’ lives that he didn’t know a lot about. He writes, “I had no idea how much I still had to learn.”

He takes us on three intertwined journeys. The first is about the wonder of this incredible avian phenomenon called migration. The second story chronicles the history and magic of Magee Marsh while exposing and educating the reader about the threats these migrants face. The third story focuses on one of these threats, and the battle the Black Swamp Birds Observatory, other Northwest Ohio environmental groups, and the American Bird Conservancy fought to block a wind turbine development on a nearby military base. This development could have been devastating to birds, who face countless other perils and desperately need rest and fuel, but may meet their demise in the turning of the long turbine blades. It was an uphill battle that kept me on the edge of my seat, but an important one. It offers many lessons for folks who care about birds and about moving quickly to fossil fuel alternatives to combat climate change, which National Audubon researchers and other experts tell us is the biggest threat to our native bird populations.

While he takes us through the seasons, month by month and even week by week, each with its own featured avian creatures, he singles out the bird group that most attracts birders to Magee Marsh: “Imagine we had decided to invent the ideal group of birds for avid birders, perfect for firing up the most dedicated watchers.” What would the ideals be for that group? 1. Variety, preferably dozens of kinds; 2. Tiny active birds adept at hiding but with bright colors so finding them would be both a challenge and greatly rewarding; 3. Some easy to recognize, others difficult; 4. A variety of habitats, some in tree tops, some hiding in thickets to keep folks looking all around; and 5. Strongly migratory so folks would not tire of them but look forward to the next season to see them again. “In other words, Kaufman asserts, ‘we would invent the American warblers.’

He writes eloquently about the history and appeal of the best places to see these colorful little birds during the first three weeks of May. Magee Marsh started out as duck hunting club. The local game warden laid out a trail through the woodland in the 1970s when he realized the tiny wooded areas near the lake were concentrating large numbers of songbirds, especially warblers. However, it became widened and side trails proliferated as more birders used the area. Thus a boardwalk was proposed to prevent birders from loving the area to death. It was paid for with a voluntary checkoff for wildlife on state income tax forms (the first project funded in this way). Though the boardwalk is 3/4 of a mile, it can take me four hours to walk that distance when there is big migrant fallout.

Some have criticized Kenn and Kimberly for creating the Biggest Week in Birding Festival, headquartered at Maumee Bay State Park near Magee Marsh, and for making the area so well known that it can get crowded. In answer to these critics, Kaufman writes, “I’ll sacrifice my spring solitude because I see the good that results from the crowds. I see people greeting old friends...I see people coming here for the first time, gazing around in open wonder. I see veteran birders sharing their knowledge with brand new beginners...I see people arriving with a singleminded aim to add more species to their life list and leaving with a new determination to help protect bird populations...I see more and more variety among the humans on the boardwalk, people of all skin colors, all ages, all backgrounds coming together over a shared interest. If Kimberly and I had any kind of influence in making this happen, then yes, we will gladly shoulder the blame.”

With regard to the crowds, I’d add that all those folks have eyes to help spot birds, and most have helpful attitudes to help others spot them too, and folks good-naturedly let you squeeze by them.

The pages make obvious Kaufman’s love affair with birds, bird migration, and with this gem of a birding spot in Northwest Ohio, a love that is infectious and that will hopefully motivate many more to enlist in the cause to protect that area and to protect the resilient feathered survivors that stop there on their perilous and wondrous journeys. Go on your own, or with one of Detroit Audubon’s field trips to Magee Marsh, or visit the other places in this region to take in this annual spectacle and experience firsthand the excitement and the wonder that jump off the pages of this book. I know Kenn would take that as the sincerest form of praise and thanks for this wonderful book.

Sure, you've hit all the great birding spots in Michigan. You've spotted Kirtland's Warblers and Snowy Owls. But isn't it time you spread your wings and take off to some place a little different? Detroit Audubon's very own field trip leader and former board member Bruce Szczechowski invites you to join him on a once-in-a-lifetime wildlife safari to Kenya! Kenya is a global biodiversity hotspot not only famous for its extraordinary viewing of elephants, lions, and rhinos, but it is also world renowned as a bird watcher's paradise. We tried having this trip this last summer but not enough folks signed up, so we are giving you a second chance to take part in this incredible adventure!

Located in the Rift Valley of East Africa, Kenya hosts 1054 species of birds—60 percent of all African birdlife! These birds are distributed in the most varied of habitats, ranging from tropical savannah and dry volcanic-shaped valleys to freshwater and brackish lakes to montane and rain forests. When added to the amazing bird life, the beauty of the volcanic and lava-sculpted landscapes in combination with the incredible concentration of iconic megafauna, the experience is truly breathtaking. Everything is right here in East Africa's Great Rift Valley with its unparalleled diversity of wildlife and equatorially-located ecosystems. Kenya is truly the destination of choice for the birdwatcher and naturalist.

Experienced birder, research ornithologist, traveler, and trip leader Szczechowski has crafted a one-of-a-kind 16-day itinerary to show you the best birds and other wildlife Kenya has to offer. This trip will be jam-packed with visits to national parks, forest reserves, and even a rice plantation, with incredible opportunities to view and photograph potentially hundreds of bird species. The experience includes visits to many regions and parks including: Amboseli National Park, Mt. Kenya Forest Reserve, Lake Nakuru National Park (with its millions of flamingos), the only remnant of East African tropical rainforest at Kakamega Forest, and Lake Bogoria National Reserve. Each night you will stay in a comfortable lodge or hotel where you can often bird right from your room.

The price is $5,750.00 per person for a double occupancy room (single occupancy will be an extra $750). Airfare is separate and for you to arrange. For more information, a detailed daily itinerary, and species you can expect to spot in each location, please visit www.detroitaudubon.org/kenyan-bird-and-animal-safari/

A meeting for those interested in going on this trip will be announced later on Facebook, so keep your eyes peeled. A deposit of $750 to hold your spot is due by March 1. Final payment must be made by May 15, 2019.

Karibu (“Welcome to”) Kenya!
American Goldfinch

Story and photo © 2019 Jim Bull

Glowing yellow in the sun, with contrasting black cap and wings, the male American Goldfinch has a chattery song that some say sounds like, “Potato chip, potato chip, potato chip.” American Goldfinches nest much later in the season than other songbirds. They frequent fields, but usually make their nest in a small shrub, lining the nest with thistledown, which is diagnostic. The advantage of nesting in late July and August is probably that by doing so they avoid parasitism* by the Brown-headed Cowbird, which is long finished with egg-laying by then. Females are an olive to brown color which helps them blend in with the nest. Males take on a plumage very similar to the female in winter. In late fall and early spring, males can be seen mottled olive and bright yellow as they molt one way or the other. One of Detroit Audubon’s early presidents, Dr. Walter P. Nickell, who was also ornithologist at the Cranbrook Institute of Science, published a paper in Auk, entitled, “Studies of the habitats, territory, and nests of the Eastern Goldfinch” in 1951.

*Brown-headed Cowbirds lay their eggs in other birds’ nests, and most often their young survive at the expense of the host young.