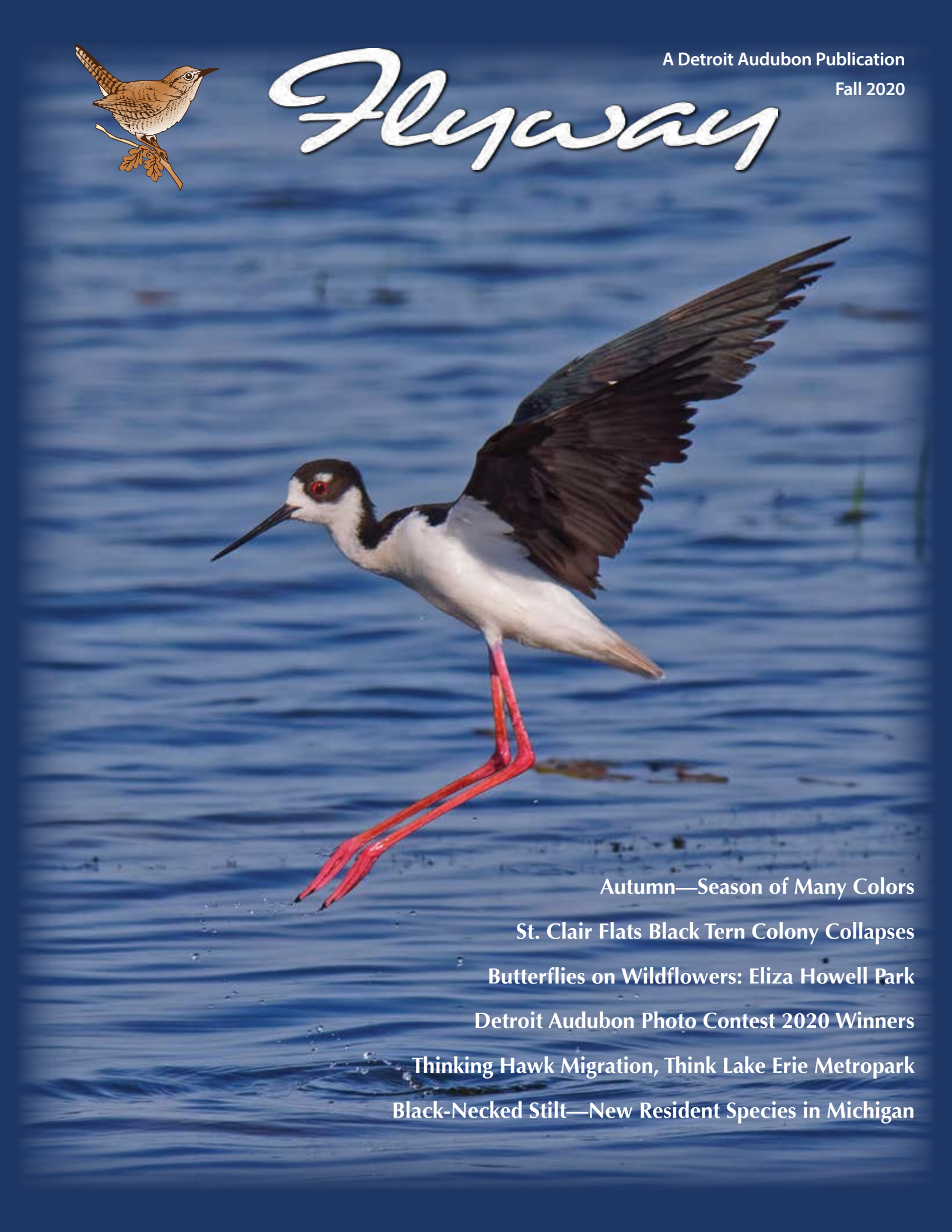
A Detroit Audubon Publication
Fall 2020

Flyway



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A publication of Detroit Audubon

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Flyway is published four times a year for Detroit Audubon members with at least basic membership status. Back issues are uploaded to our website.

Original articles, photos and art welcome at Flyway@detroitaudubon.org

The mission of Detroit Audubon is to foster the appreciation and conservation of birds and the environment we share. Our three mission areas are: Education, Research, and Action.

Upcoming Field Trips

Detroit Audubon is slowly re-entering the world of in-person field trips, but in order to respect social distancing, numbers have been kept small and we have safety protocols in place. In small groups of less than ten at a time, field trippers have explored birds at Pointe Mouillee; and butterflies, wildflowers, and praying mantises at Eliza Howell Park. Upcoming field trips will be available to members first, so please contact us if you are interested!

Sat, Oct 2	**Young Birders Palmer Park**
Sat, Oct 10	**Lake Erie Metropark**
Sat, Nov 7	**Young Birders Palmer Park**
Sat, Nov 28	**Belle Isle**
Sat, Dec 5	**Young Birders Palmer Park**

MYSTERY BIRD

Can you identify this bird?
Check your answer on page 12.

Photo by Dongfan Chen

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Cover photo: Black-necked Stilt coming in for a landing at Pointe Mouillee by Dongfan Chen.

Great Egret in flight by Bruce Szczechowski

Holiday Gift Guide: Green Edition! *By Rebecca Minardi*

With the unprecedented fires in the West that have destroyed millions of acres of forest and the devastating research that points to drastic declines in many species of birds, we as human beings on this shared planet can help to reverse our collective carbon footprint by decreasing our consumption. What better time to start cutting our consumptive habits than during the holidays? This season, consider giving gifts that don't involve driving to the store or scrolling through Amazon. Instead, we can shift our focus to gifts that involve learning, togetherness, and supporting causes that respect the natural environment. Because no one really needs another Instapot.

Do you have a burgeoning birder on your gift list or a friend who wants to dive deep into a birdy topic? What about an online bird class? Cornell Lab's Bird Academy offers myriad courses covering photography, field sketching, bird behavior, bird song, and even a nifty class that focuses solely on the American Crow (**academy.allaboutbirds.org**). In this time of quarantine, an online course is the perfect way to build birding skills.

In recent years, more people are eschewing physical gifts for a donation in someone's name. Many charities and nonprofits are happy to send a certificate noting the donation and may even include something cool to commemorate it. (I know, I know more stuff, but at least for a good cause!) Audubon's Adoption Center (**gifts.audubon.org/adoption-center**) lets you choose a bird to support and provides the gift recipient a plush version of the bird you've adopted (my son loves his American Robin that his uncle adopted for him). Audubon also has other gift ideas (**gifts.audubon.org/gifts-for-birds**): you can give the gift of being a "climate hero" (supports research and advocacy) or the "place to call home" gift (supports the Arctic National Wildlife Refuge). There are many conservation organizations you can support through a gift of a donation. Consider large organizations such as the Nature Conservancy, the Environmental Defense Fund, and American Forests. Or consider a local organization such as, what else, Detroit Audubon!

Finally, it's never been more important than today to spend time with those we love. Sharing experiences is often more meaningful than a tangible gift. If you have an outdoor hobby or skill set, share it! Consider taking a friend who has shown interest in birding on a beginning bird walk. When I first got into birding, walking one-on-one with an experienced birder was a priceless experience. You can also share other skills. Know how to mountain bike, fly fish, or forage? Gift that experience! You may inspire a new hobby for them.

Though giving literal gifts is still largely the norm during the holidays, these types of intangible gifts will be more memorable than a funky sweater. And who knows, you may inspire the recipient to update her gift-giving practices herself!

Amazon Smile: an Easy, Painless Way to Give

If you shop at **amazon.com** for anything at all, you can help raise funds for the work of Detroit Audubon by simply signing on to **smile.amazon.com** instead. It is part of Amazon and the products and prices are the same as for **amazon.com**. The only difference is that the first time you go to **smile.amazon.com** you will be asked to sign up and then you will be asked to choose your favorite charity (we suggest Detroit Audubon!). From that point on Amazon will donate a percentage of what you pay for items you buy to Detroit Audubon.

What could be easier? You get the same products at the same price, but Detroit Audubon gets a donation in the process at no cost to you whatsoever.

Kroger has a similar script program that you can arrange for us to get a donation with every purchase as well. Ask to sign up next time you shop for groceries.

LOOK FOR US ON

Immature male Northern Cardinal by Paul Stenquist

Black-Necked Stilt—Cute New Resident Species in Michigan

by Jim Bull • Photos by Dongfan Chen

With bright red 8- to 10-inch legs attached to its 14-inch-tall body, the Black-necked Stilt may have the longest legs in relation to its size of any bird in existence. It is the picture of daintiness, with its slender black and white body and head, slim wings, and needle-like bill. But its cuteness belies a fierce parental instinct that includes using its breast to splash water on a would-be predator.

The stilt's range is a bit scattered. It breeds during the summer in the Pacific Northwest to Colorado and Nevada, extreme southern California, Texas, New Mexico, Kansas, Louisiana, and Florida, but it is a permanent year-round resident in southern and central Mexico and all along the Gulf Coast.

It is new to Michigan. There are only 33 total records for the state, with the first being two nesting pairs reported by Detroit Audubon friend Allen Chartier at Pointe Mouillee in 2003. Between the two nests, Allen wrote that there were a total of seven to eight young, with four of them fledging (leaving the nest successfully). Pointe Mouillee has the most records, but other sightings have been documented in Berrien County in extreme southwest Michigan, a couple in Hillsdale, Pinkney, and Macomb Counties in southeast Michigan, and north at Nayanquing Point State Wildlife Area in Bay County as well as one sighting in Isabella County. They have also been reported near Ludington and Saugatuck on Lake Michigan in Mason and Ottawa Counties.

Like most birds that are monomorphic (sexes look alike, although the female's plumage is bit duller sometimes), Black-necked Stilts are monogamous and can be loosely colonial. The male and female take different shifts during incubation, with the female taking the night shift and the male the day. Once the eggs hatch, the precocial young mostly feed themselves under the watchful eye of their long-legged doting parents.

The birds feed on insects, small crustaceans, fish, and some seeds, which they pick up while wading in shallow waters; but they do sometimes go in right up to their bellies; at first glance you may think they are floating on the water, but they aren't. Although found in both marine and freshwater environments, they seem to prefer fresh water, which may make its new Great Lakes home ideal.

It is likely that these new Michigan residents fly south to the Gulf Coast or Florida for the winter, but nobody knows for sure. That would take banding studies to figure out, perhaps including some radio telemetry with nanotags or geolocators.

Welcome to this new very cute but feisty immigrant to Michigan! Who knows, they might just give us a splashing good time on one of our future Pointe Mouillee field trips! Being splashed by a Black-necked Stilt would be an honor, although I'd never intentionally intrude on their nest close enough to cause their alarm, and, I suspect, neither would you.

Butterflies on Wildflowers: Eliza Howell Park

Text and photos by Leonard Weber, volunteer and former Detroit Audubon President

The summer of 2020 was a great butterfly season in Eliza Howell Park, a City of Detroit park on the west side. The prairie wildflowers bloomed prolifically, and the butterflies came flying.

Joe Pye Weed and Eastern Tiger Swallowtail

Three flower species in particular seemed to be especially irresistible to butterflies from the end of July until the end of August. The three, each a shade of purple, are Purple Coneflower, Joe Pye Weed, and Ironweed. Often this summer I placed myself nearby, phone in hand, to see what I could capture digitally.

On July 31, this Eastern Tiger Swallowtail above was nectaring on Joe Pye Weed. Joe Pye Weed grows six feet tall, with long-lasting blooms. There is something very satisfying about taking a butterfly picture with trees and sky in the background.

Joe Pye Weed is named after a Native American who, according to tradition, was a healer living in Massachusetts about 1800. He adopted or was given the name "Joe Pye." This flower was one of the plants that he used medicinally.

Eastern Tiger Swallowtail is common in our area, but a similar-looking species seen in northern Michigan is the Canadian Tiger Swallowtail.

Two other swallowtail species came near enough on July 31 for good looks. One is the Black Swallowtail.

Above, Black Swallowtail on Purple Coneflower, and here, Black Swallowtail caterpillar.

It was sipping nectar on a Purple Coneflower, a species that many butterflies visit. Purple Coneflower is a native wildflower that has become a common garden flower, one of the best to have in a backyard butterfly garden.

Black Swallowtails lay their eggs on plants in the carrot family. The caterpillars can be found in vegetable and herb gardens (on such plants as carrots and parsley). This caterpillar was found on Queen Anne's Lace in Eliza Howell Park.

The third swallowtail of the day was a Giant Swallowtail, shown at left, also on a Purple Coneflower.

The Giant Swallowtail is more of a southern butterfly, not widespread in Michigan. Its relative rarity, combined with its size and striking colors, tend to elicit a "Wow!" reaction whenever it is seen in southeast Michigan. It is the largest butterfly north of Mexico.

The most common of the large butterflies seen in Eliza Howell Park is the Monarch, shown on page 6 on an Ironweed.

Monarchs are well known and need little commentary. There were many in the park all summer.

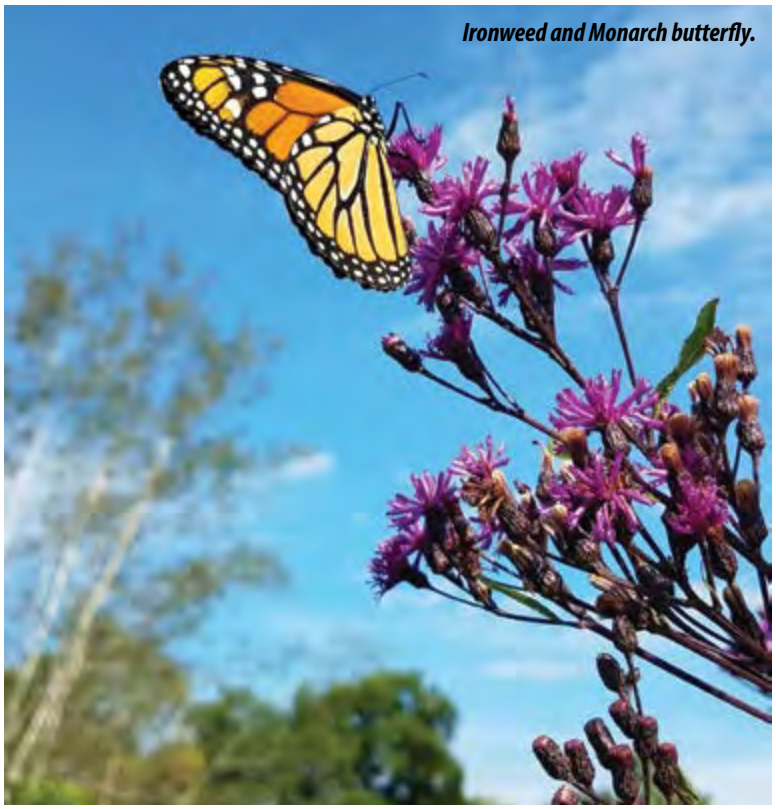
Ironweed grows even taller than Joe Pye Weed, up to eight feet. It gets its name, as I understand it, from the toughness of the stems. I have heard many park visitors, when seeing it, comment on the intense purple of the flowers.

While the Monarch is well known, participants on butterfly field trips sometimes confuse the Viceroy with the Monarch. This is perfectly understandable, since the Viceroy looks so much like a Monarch.

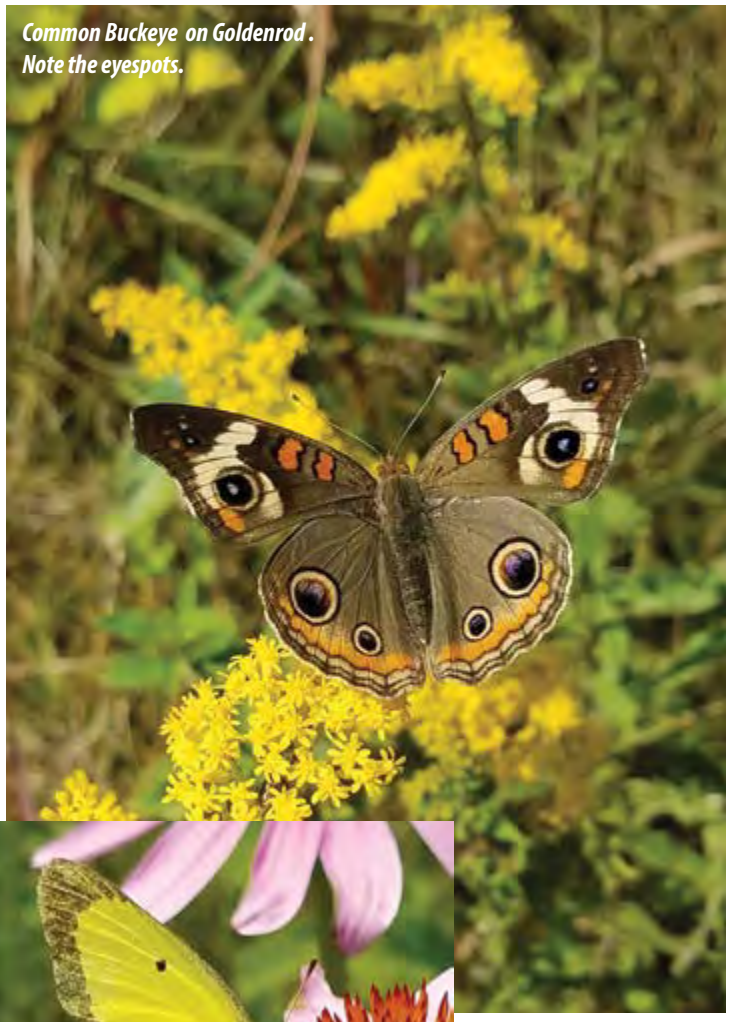
Coneflower blooms are at the top of the plant, usually about three feet high, thus providing excellent views of the many butterflies that come to eat. And nectaring butterflies often let one get close.

The Viceroy is often referred to as a "Monarch mimic," a species that developed a similarity to the Monarch to deceive predators. Monarchs are noxious to most predators and so are usually left alone. Looking like a Monarch can provide a survival advantage.

When their wings are open and when they are flying, it is more difficult to tell the difference between the two species than it is in the above pictures of them nectaring.



Ironweed and Monarch butterfly.



Common Buckeye on Goldenrod. Note the eyespots.

Purple Coneflower and Viceroy.

Clouded Sulphur.

A common yellow butterfly in our area is the Clouded Sulphur.

The Clouded Sulphur is usually seen flying. The yellow is obvious when it flies, but the distinctive features, like the dark border, are not usually as visible as they are in this picture.

A less-common Sulphur, the Orange Sulphur, is also found in this area.

By September, many of the summer wildflowers are going to seed. Later bloomers, especially Goldenrod, now dominate. This is where one is likely to find the butterfly species that seek out flowers at this time, like the Common Buckeye, shown above.

Michigan residents might need to be reminded that the "Buckeye" in the species name does not reference Ohio. Rather, the name comes from the eyespots on the wings, which reminded someone of the eyes of a buck/deer. One can find these butterflies very attractive without being disloyal!

The Common Buckeye is not common in Michigan and is rarely seen here until quite late in the season. Usually when I do see them in Eliza Howell Park, they are on the ground or on grasses and leaves near the ground. It is only when summer is turning to fall that they are likely to seek out blooming flowers.

Detroit Audubon sponsored a wildflower and butterfly field trip at Eliza Howell Park in 2020. Those interested can look for a similar opportunity in the summer of 2021.

Detroit Audubon Photo Contest 2020 Winners

This summer, Detroit Audubon held its very first Photo Contest, and we received many amazing photos from across Metro Detroit.

Thank you to those who participated! We are excited to announce the winners, who will be receiving a complimentary membership to Detroit Audubon and are featured here!

Renee Wilson: Cedar Waxwing (top)

Dongfan Chen: Tufted Titmouse (left)

Howard Thompson: Red-tailed Hawk (right)

We expect to make the Detroit Audubon Photo Contest a yearly opportunity and look forward to more members and friends participating in the future.

Lifsitz Playground: Next Native Grassland in Detroit Bird City Project

By Noah Levinson, Office Administrator

This is the third in a series profiling the history of each of our five Detroit Bird City (DBC) sites. Before European contact, the Fox, Sauk, Potawatomi, and Wyandot tribes, among others, called southeast Michigan home. Theirs was a home filled with sunflowers, milkweed, asters, and innumerable grasses. As we return these places to their native habitats, we have the opportunity to reflect on their history and the people and places that have been there.

As I strolled through Lifsitz Park, differences with other DBC parks were readily apparent. Whereas the others consist primarily of open spaces, fields, and turf grass providing a clean slate that practically begs for replanting, this one contains an old basketball court, and remnants of bygone concrete paths, and is bisected by Gladstone Street—the northern half will become part of DBC. Numerous big trees provide some temporary obstacles to redevelopment, but also a whole world of creative opportunities.

Lifsitz Park is situated just northwest of Midtown in a small unheralded neighborhood called Jamison, seemingly a leftover bit of "unclaimed" space in between the more established LaSalle Garden, Petoskey-Otsego, Northwest Goldberg, and Boston-Edison neighborhoods. Perhaps due to this odd alignment, connecting with the community surrounding the park has proved much more challenging than with those surrounding the other DBC spaces. While connections have been made with many residents in nearby LaSalle Garden, the quiet Jamison community adjacent to the park seems hesitant to work directly with the city, perhaps because of lingering trust issues dating back to the 1967 civil unrest that started just a few blocks away at 12th and Clairmount.

Nevertheless, we are moving forward undeterred, but at a little slower pace than first anticipated. In addition to requiring more time to make deeper connections in the community, COVID-19 has delayed the process as well. Several meetings lined up for the spring had to be cancelled out of safety concerns, and are just now being rescheduled.

Detroit Audubon Research Coordinator Ava Landgraf points out that "Lifsitz is an irregular shape. There will be more prep work because of the court and concrete to be removed. Callahan was a simple wide open field and now we have to think about where to put things and how to build around existing trees. It's going to be more challenging than the others and require a lot of work, but it's going to be great. That's why we want to get the neighborhood involved as soon as possible, to make sure we meet the needs and wants of this community." So, the delay here may be a blessing in disguise.

The park is named for Mortimer Nathan Lifsitz, who lived his all-too-brief life just a little north of here in the then-thriving Jewish Dexter-Linwood neighborhood. Records show that he graduated from Central High School, and lived at 2615 Webb St. with his wife, Shirley. The only child of Max and Sophia Lifsitz, Mortimer worked briefly in his father's furniture business before enlisting in the U.S. Army in May 1943 during World War II. Private Lifsitz, who served in Company B of the 116th Infantry, lost his life in battle, and is now at final rest in Machpelah Cemetery on Woodward Avenue in Ferndale.

His commanding officer, In a letter to his mother, described what happened that fateful day (November 17, 1944): "Company B was suddenly halted by decimating enemy fire. Seeing that the majority of its leaders had become casualties, Private Lifsitz, attempting to lead an assault, jumped to his feet and calling on the men to follow, started forward on the run. While charging toward the enemy positions, Private Lifsitz fell mortally wounded by enemy fire. Private Lifsitz lost his life in this encounter but in doing so displayed such personal courage and tenacity in the face of great danger that he materially influenced the results of the encounter. His actions reflect great credit upon himself and the Military Service." Lifsitz was awarded a Purple Heart and an Oak Leaf Cluster, posthumously, for his service.

It is our most sincere hope that the work ahead on the park will lead to a beautiful space worthy of the name of this great Detroiter, and a fitting honor to his memory.

Special thanks to Laura Williams, Director of Cultural Resources at Temple Beth El, for her diligent research on Mr. Lifsitz.

Note: To visit this park, search Litsitz Playground on Google Maps—note the difference in spelling which is an obvious typo.

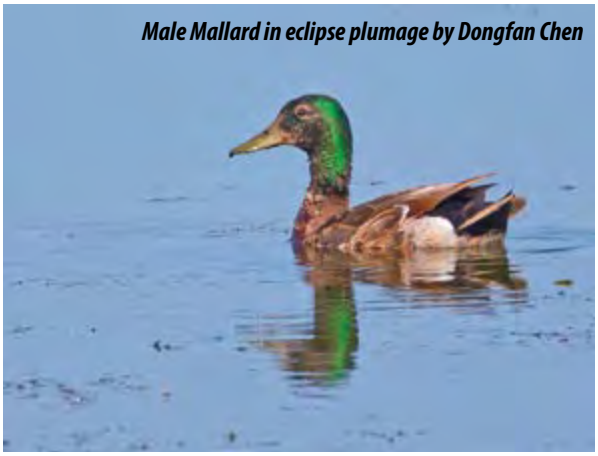
Fall Is Migration Season's More Subdued Half, but Just as Fun!

By Rebecca Minardi, board member

I know, I know, spring migration gets all the oohs and ahhs, the fanfare and excitement, the downright manic birders clearing their calendars for weeks. But let's not forget about the birding world's other big event—fall migration! Much more understated, fall migration has a lot going for it. It rewards the patient birder and can be full of surprises. For me, fall is a more leisurely time to bird. I'm often shocked when I see a Black-and-White Warbler and remember, my goodness, it's time! The warblers are heading back through! The hot sticky months of summer are winding down, birds are done breeding, and they are gearing up to head back down to their warmer winter homes.

Greater Yellowlegs eating frog by Dongfan Chen

Birding in the fall can be an exercise in patience. Many warblers are in their basic (non-breeding) plumage and are therefore much more muted. Birds tend not to sing as much or at all during this time of year as they do not need to find a mate or mark territory. Fall migration also spans much more time than spring. In fact, a lot of "fall" migration occurs before autumn officially starts. Some birds, including many species of shorebirds, start heading south in early summer, while others, including many waterfowl species, may stick around through late fall. Late September through early October tends to be a wonderful time in southeast Michigan to spot all manner of migrants, including vireos, warblers, thrushes, and sparrows. As in spring, migration occurs at night for most species and is carefully timed with daily weather. Species drop down during the day to refuel and rest in order to gear up for another night of long-distance flying (though a bird may stay in one location for several days). Depending on the species, the bird may be flying hundreds or even thousands of miles to get to its winter home.



Male Mallard in eclipse plumage by Dongfan Chen

For me, two factors make fall migration special. I love spotting all my old bird friends from last winter, as for some species, Michigan is downright hot compared to the winters of their breeding grounds! These species include White-throated Sparrows, Dark-eyed Juncos, American Tree Sparrows, and my absolute favorite, the diminutive Golden-crowned Kinglet. These birds will stick around until spring, at which time they head back north to breed. Another amazing spectacle during fall migration is watching a Chimney Swift roost. Before European settlers arrived, Chimney Swifts primarily nested and roosted in the hollows of large dead trees. Today, they are almost completely dependent on man-made structures such as, you guessed it, chimneys! In autumn, some chimneys will host thousands of these small acrobats who circle the structure like a vortex at dusk. As you watch, individuals break off to tumble and dive into the chimney where they perch and sleep through the night. And then suddenly, as happens every autumn, I one day look up into the sky and realize with a pang that all the swifts are gone, flown back to the warmer climes of their winter homes.

Black and White Warbler by Bruce Szczechowski

Chestnut-sided Warbler in fall plumage by Bruce Szczechowski

This in a nutshell is what migration season is all about. Species we may have spent time with all summer have disappeared. Species we just glimpsed during spring migration pop into our lives for a week or two and then are gone again. This is why we bird. To find a species we love only to know that we won't see it again for months. We then wait patiently through the cold dark days of winter until suddenly one day, our friends are back again.

Autumn—Season of Many Colors

Text and photos by Jim Bull

Cool crisp air, bright blue skies, apple cider and doughnuts, pumpkins, our summer birds heading south, and scary costumed figures ringing doorbells or shouting "Trick or Treat" are all part of what has to be one of my favorite times of year—autumn. But the signature feature of autumn in Michigan and throughout the Midwest and northeastern tier of states is seeing the spectacular tapestry of trees painted in vibrant yellow, oranges, and reds. We revel in the beauty, people travel here from around the world to see this show, but we often take it for granted. Why do the leaves change colors?

Well, it starts with that magical substance that is essential for life as we know it—water. One of the peculiar characteristics of water is that it is less dense as a solid (ice) than it is as a liquid. That is a good thing—it means that ice floats so ponds and lakes do not freeze solid, thus making ice fishing possible as a popular pastime here during the coldest time of winter. But it also means water expands when it turns to ice. You may have experienced that if you happened to leave a water bottle on your porch on a winter night and came back the next morning only to find that the bottle has broken.

Think what would happen if trees kept their watery sap flowing in the veins of xylem and phloem all winter—when the water turned to ice, the trees would crack and likely die or at least be more susceptible to insect and fungi infestations. So trees in this climate zone extract the sugar from their watery sap (no more than 2% sugar at its sweetest in Sugar Maples and Black Maples), and store it as starch in their roots. The water is dissipated in the soil. Around March when there are warmer days, the soil warms up, ice melts, and water makes its way into the roots. It then breaks down the starch back into sugars and begins flowing upward in the phloem to nurture the buds which will expand into new leaves. While there are still freezing nights to accompany warm days, some of the sap or maple water can be collected and boiled into maple syrup or maple sugar (40 gallons to make one gallon of syrup!).

So, what does this have to do with leaves changing colors? Leaves are a tree's sugar-making factories which take the raw materials of water, sunlight, and carbon dioxide and mix up batch after batch of sugar to fuel the tree's energy needs. Without water, the tree's leaves shut down, fall to the forest floor, and decompose. Their chemical constituents are recycled into the soil and eventually into new leaves and other plant fungi, or other organisms.

As the water drains away, a corky layer forms between each leaf and the branch it is attached to called an abscission layer. With colder weather the green chlorophyll that made photosynthesis possible is broken down into colorless compounds, allowing the yellow and orange pigments, xanthophyll and carotene, to have a chance to show their colors for a brief time. They've been present in the leaf all summer, but masked by the green chlorophyll.

Red is more complicated. Anthocyanin, the pigment chemical responsible for red leaves, also produces the purple of beets and some cabbages, and blue in blueberries. A host of factors influence the color we see when anthocyanin does its artistry. For red leaves to happen, it requires two things—sugar and sunlight. Remember that abscission layer? If that corky layer forms quickly some of the water sap is trapped in the leaves. If the sugar content in the leaves is high enough and there is enough exposure to sunlight, the anthocyanin will turn the leaf red.

Next time you're out in the field notice that red leaves are almost always where the leaves get plenty of sun—that's why staghorn sumac can set our roadways ablaze with color! It is also why apples and tomatoes turn red when they ripen. Sunlight does not cause them to ripen (they actually ripen faster in a closed paper bag); but as the starch breaks down into sugar during ripening, the sugar and sunlight interaction produces the red color.

So that's how this colorful autumn show in Michigan comes to be each year. But there is another explanation that comes from a Native American legend from this area. You probably know the constellation the Big Dipper, right? Well, to many cultures around the world, including the native people of this area, that constellation is known as the Big Bear or Ursa Major. To some of them, only the dipper was the bear, while the three stars in the handle were actually people—the first and third ones with their bows and arrows with which to hunt the bear, while the middle person carried a pot to cook the bear in (if you have good eyes you might see that the middle star is really two stars—Mizar and the smaller Alcor, the pot). The hunters chase the bear through the sky all year, but this time of year they finally shoot the bear and eventually cook it. The bear's blood drips down from the sky onto the leaves, coloring them red. The fat dripping down on the trees below is responsible for the yellows and oranges. But the bear is a magical bear, and is resurrected during the winter and the hunt starts all over again.

No matter which story resonates with you (maybe both do), get out and enjoy this Michigan show! It's a show that doesn't happen many other places on earth, and we are so lucky to have it happening all around us in our Great Lakes state—the ultimate 3D experience!

Thinking Hawk Migration, Think Lake Erie Metropark

by Paul Cypher, naturalist at Lake Erie Metropark.

Let's play a word association game. I'm going to say something and you can compare your first thoughts with mine.

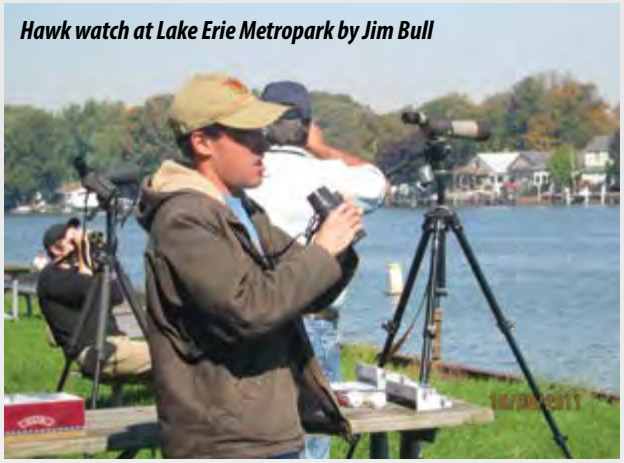
Lobster. Maybe you thought "hot butter."

Blizzard. Maybe you thought "snow shovel."

Hopeless. Maybe you thought "Detroit Lions."

Hawkwatching. I hope you were thinking of "Lake Erie Metropark."

Fundamentally, hawkwatching is a Citizen Science-based population study. Basically, you count the numbers of hawks flying past you (both numbers of species and individuals). If you do this sort of thing year after year, you can start to plot out population trends and see what is happening to bird of prey populations over time. The hope is that if anything nefarious is happening in the environment, it can be detected and dealt with before it's too late.



Hawk watch at Lake Erie Metropark by Jim Bull

Here in southeast Michigan, we have a "perfect storm" of characteristics that come together to create one of the most spectacular animal migratory shows that nature can muster.

We can thank physics. As the mid-morning sun heats the earth, rising columns of warm air called thermals dot the landscape. Migrant birds of prey, looking to conserve energy, enter a thermal, get pushed higher into the sky and then glide on to the next thermal. They save tremendous amounts of energy with this flight style. Warm air rising is a critical dimension to their travels.

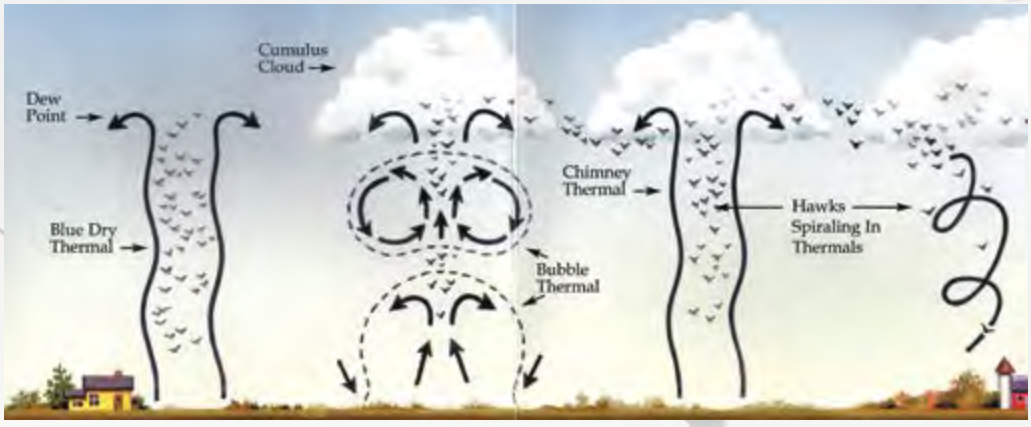
We can thank the chemistry of water. That all important ingredient for life takes a while to warm up. That is why the pot of pasta water might be cold while the pot itself or the heating element below it might be hot. For hawks, they are uncomfortable flying over boiling pasta. . . no, wait, that's not right. I mean open water. . . they don't fly over water. Why? The water never really heats up fast enough and the thermals don't form. Flying over open water means they would be spending too much energy. They tend to fly around it. It's simply easier that way.

We can thank the glaciers. As they made their final retreat north beginning 14,000 years ago, the meltwater filled in the giant depressions that the glaciers themselves had scoured for years and years beforehand. If the depressions (which today we call the Great Lakes) were never there, the water would not have collected. Presumably (come on, work with me here. . .), it would have made its way to the oceans and the area that we now think of as a Great Lake would be, well, land. If it were just land, there would be no need for the hawks to fly around anything. Maybe we could think of it as the Great Lakes acting as bumpers in a pinball machine and the hawks are the ball. The shorelines bounce them around the region until they find a way around the lakes.

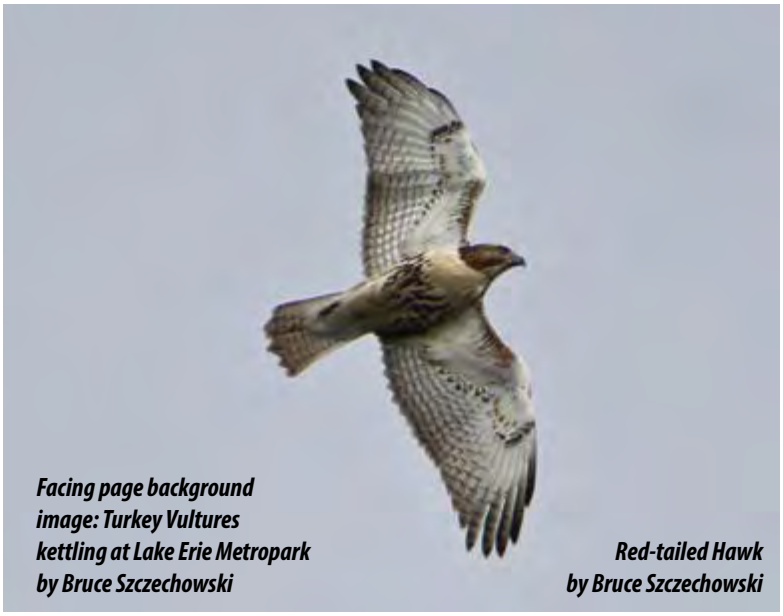
We can thank the birds themselves, especially the Broad-winged Hawk. They have a tremendous population in Canada (the source of "our birds"). After what we would hope is a successful breeding season, the numbers would basically double, leaving us with numbers in the hundreds of thousands. Second, for whatever reason, they have the fun habit of basically moving together. That provides observers the opportunity to see thousands of birds at a time and hundreds of thousands in a day.

In the same sense that a perfect storm of characteristics generates awesome flights in the region, each month, based on the timetables of the migrants, brings its own flavor. September is all about the numbers. Tens of thousands of hawks moving *en masse* overhead is pretty exciting whether you are the seasoned hawkwatching veteran or someone experiencing it for the first time. By the time October's cooler weather sets in, variety replaces mass transit as all 16 species are recorded. In fact, if fate has deemed it so, late early season migrants and early late season migrants can share the skies providing the opportunity for a 16-species day. November's chill seems to lessen considerably when a Golden Eagle, Northern Goshawk or Rough-legged Hawk sallies past.

Make no mistake – the characteristics and flavors of hawkwatching at Lake Erie Metropark provide some of the best hawkwatching on the continent. Few locations see what we see as readily as we see it. Objectively speaking, numbers generated at the Detroit River Hawk Watch (operated by the Detroit River International Wildlife Refuge and the International Wildlife Refuge Alliance) are tremendous. It is not unusual for a single day to exceed a week's or month's total from other, smaller sites.

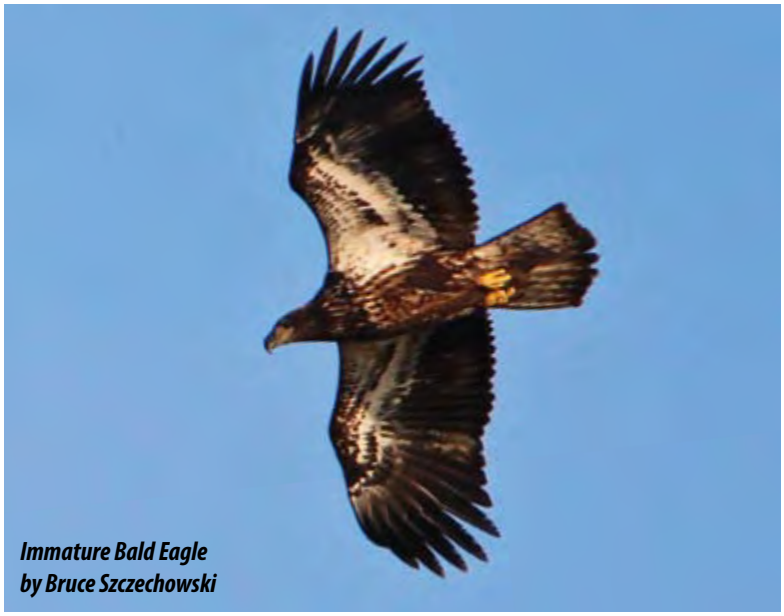


How Thermals Work in Hawk Migration, illustration by Larry Croft. Reproduced with permission from Gommi BW:* Hawks in Migration. *Bloomfield Hills, MI: BWG Publications; 2003.



Facing page background image: Turkey Vultures kettling at Lake Erie Metropark by Bruce Szczechowski

Red-tailed Hawk by Bruce Szczechowski



Immature Bald Eagle by Bruce Szczechowski

So, great, now you want to visit and hopefully see the show. There are a few things to consider. Bring binoculars and a spotting scope, if you have one. Let's face it – the birds can sometimes be a bit distant. Munchies are mandatory if you are looking to spend the day there (though there is food available locally). Sunscreen is recommended, for sure. Seasonally appropriate clothing is critical, too. Remember, you are on the shore of a Great Lake. The winds can be frigid in the latter parts of the season, but you could be quite hot Labor Day weekend. Be prepared. Don't forget field guides and other reference material.

Most importantly, pack your patience if you are new to this sort of thing. The hawkwatching arena is not really like other aspects of birding. The cadence of a wingbeat or a peculiar feature of a distant silhouette might the difference between correctly assigning a name to a passing bird or leaving it as "unidentified." Others around you might be calling out accurate identifications at incredible distances while you might still be trying to figure out how to get the lens cap off your binoculars. Remember - everyone was a beginner once. Just take your time and learn as you go.

So let's go back to the word association game…

Lake Erie Metropark. Awesome.

Hawk migration. Awesome.

Editor's note: *For years Hawk Mountain in Pennsylvania has been THE place most birders think of when they think of hawk migration. It is a wonderful place, but we have more hawks migrating through SE Michigan than they have, and the focal spot for seeing it best is Lake Erie Metropark. To give you an idea of how spectacular it can be, on September 17, 1999 over 555,000 Broad-winged Hawks were counted there on just that one day!*

Mystery Bird Revealed

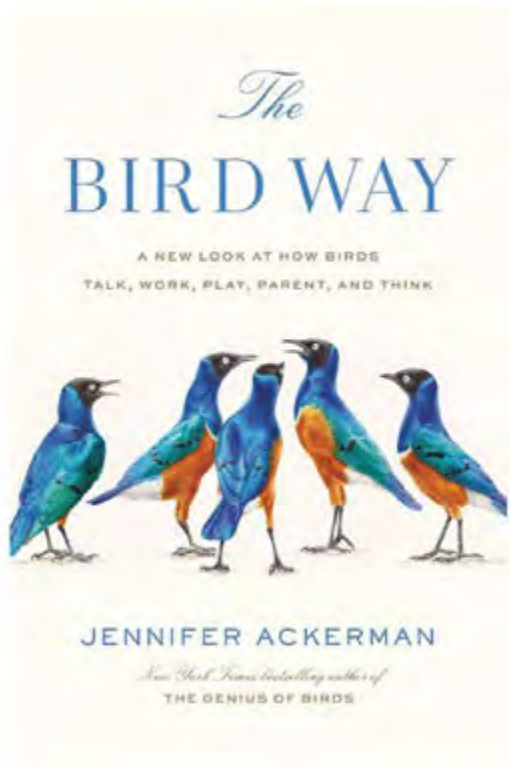
If you said Bobolink, you were right. The photo on page 1 is the female, which at first glance might look somewhat like a sparrow, but it is much bigger and has a thicker bill. The photo on this page, also by Dongfan Chen, is a male. Both were taken in or around Pointe Mouillee.

Bobolinks are blackbirds that nest on the ground in grasslands. Ted Black, in ***Birds of Michigan***, indicates that when agriculture first came to Michigan, these birds thrived on the extensive artificial grasslands thus created, but with modern farm practices and early harvesting, they have fewer and fewer suitable breeding areas. The male, with his white wing and rump patches on a black body, and cream-colored back of the head, is strikingly handsome and too distinctive to be confused with any other species. Their name comes from their bubbly, "Bobolink, spink, spank" calls made during aerial displays. The area known as the "antenna fields" on Hagerman Road at Labo Road, near Pointe Mouillee, is one of THE best places to find them in the late spring and summer. They feed mostly on both insects and seeds. From Michigan they migrate almost 6,000 miles to the southern part of South America, where they spend the winter in large flocks in the extensive grassy Argentinian Pampas.

The Bird Way:
A New Look at How Birds Talk, Work, Play, Parent, and Think

By Jennifer Ackerman • Book review by Emily Simon

Do you sometimes marvel at the fact that we have already lived 20 years into the 21st century? It seems that some of the biggest lessons humankind has learned, or is at least starting to learn in this no-longer new century, concern the ways our biases influence the way we think, behave, and interpret the world we live in.



In *The Bird Way*, Jennifer Ackerman takes on perhaps one of our strongest and oldest biases: that humans alone occupy the highest realms of animal intelligence. In her follow-up to her popular work *The Genius of Birds*, which also looks at bird intelligence (see book review in the Spring/Summer 2019 *Flyway*), she both surveys bird research and travels with international researchers who are discovering how extreme examples of bird behavior reveal birds' advanced cognitive skills. These include decision-making, finding patterns, problem solving, planning for the future, and behavioral flexibility—skills traditionally thought to be solely possessed by humans.

Ackerman looks at bird behavior in five "arenas": talk, work, play, love, and parenting. She provides beautifully described and entertaining examples of the sophisticated ways birds communicate, sustain themselves, court, breed, raise their young, and just simply have fun.

In a fantastic chapter on bird sound, Ackerman explores the familiar dawn chorus, alarm calls, and mimicry. She notes how recent findings that female birds may engage in song more often than was previously believed are upending conventional thinking that male birds are always the primary singers. And there is growing evidence that songbirds possess the ability to combine various vocalizations to create complex meaning, as human language does.

In the section on work, Ackerman shows how recent research is demolishing the long-held assumption that birds generally have a poor sense of smell. Researchers have learned that seabirds can track food sources via their olfactory systems from thousands of kilometers away by sniffing out tiny amounts of di-methyl sulfide, a chemical compound released by their prey. A very interesting chapter explores how Ocellated Antbirds and other bird species in Costa Rica capitalize on prey stirred up by swarming army ants. The chapter "Hot Tools" casts doubt on the notion that humans were the first to learn to use fire, setting us "above" the rest of the animal world.

Interestingly, many of the birds demonstrating some of the most distinctive behavior occur in Australia, where, Ackerman notes, birds occupy more ecological niches than birds anywhere on earth, and they tend to be longer lived and more intelligent. It is believed that a majority of the world's bird species trace their ancestry there. Bowerbirds, Lyrebirds, megapodes, Pied Butcherbirds, Superb Fairy Wrens, and the Australian Magpie are just some of the bizarre and charismatic Australian species highlighted as exhibiting advanced forms of intelligent (and very interesting) behavior.

The chapters on nest building and defense from brood parasites are spectacular. Researchers who study nest building are increasingly finding that this activity amounts to much more than our prevailing view of it as a simple instinct-driven behavior. Rather, nest building requires sophisticated cognitive abilities: determining how to create a structure from a large number of smaller objects, making informed decisions about materials and location to best protect against weather and predators, and collaborating with mates during construction. Birds may actually use past experience in choosing nest sites and show flexibility in response to their environment. A later chapter examines the behaviors of cowbirds and cuckoos and the clever, adaptive, cooperative defenses of the multiple species they try to get to raise their young.

The Bird Way is a wonderful blend of mind-bending ideas and jaw-dropping accounts of truly amazing natural histories. Keep your cellphone or tablet handy as you read so that you can treat yourself to Internet photos and videos, especially of the Australian Brush-Turkey, the different species of incredibly beautiful fairy wrens, and the courtship display of Lance-tailed Manakins in Central America, to name just a few of the many, many species mentioned. If there is one lack, it is that the book does not include any photos of the extraordinary creatures portrayed in it.

The Bird Way ends like most books on natural science topics do these days, lamenting recent gut-wrenching population declines as well as warning of threats from brush fires, habitat loss, climate change, and other hazards. But Ackerman also echoes what she has convincingly shown to be a real hope: that birds' advanced cognitive abilities may well provide them with an arsenal of skills that will aid them in surviving the havoc we humans are wreaking on the planet.

Detroit Audubon Goes Virtual

by Sarah Halson, Program Coordinator

At left: Ava Landgraf, Detroit Audubon Research Coordinator, presenting a webinar on gardening for birds.

Below: Catherine Lindell presenting a webinar on "American Kestrels and Ecosystem Services in Michigan's Fruit-growing Region."

Bottom of page: Holly Vaughn of the Michigan DNR discusses Grassland Creatures.

On March 14, 2020, Detroit Audubon had our monthly Elmwood Cemetery walk scheduled and our registrants had hopes of seeing some early migrants on that brisk Saturday morning. As the news of the severity of Covid 19 in Michigan began to sink in, we reluctantly made the call to cancel this popular field trip. We had hopes that we would still have the opportunity to experience the wonders of spring migration in April and May, but soon realized that could not be done in a group setting after all.

Along with the rest of the world, Detroit Audubon had to make adaptations to programming this spring as we were unable to come together for our usual field trips during spring migration. Cancelling field trips to amazing locations like Magee Marsh, Pointe Mouillee and Elmwood Cemetery was heartbreaking, but this opened up an entirely new opportunity never done before by Detroit Audubon. Offering free webinars across topics from a number of our amazing partners allowed Detroit Audubon to reach a brand new audience. We are now looking forward to including virtual webinars into the future beyond the immediate need for social distancing.

Since April, we have offered 15 webinars reaching over 700 participants and highlighting experts from the Michigan Department of Natural Resources (DNR), Huron-Clinton Metroparks, Bird Center of Washtenaw County, City of Detroit, Wayne State University, National Wildlife Federation and our own staff and volunteers from Detroit Audubon. Participants have had the opportunity to learn more about birding and gardening in Birding 101, Backyard Birding in Corktown, Creating a Bird-Friendly Space and Native Plants for Birds. We have offered webinars about specific birds including the Black Tern, American Kestrel, Kirtland's Warbler, and Hawk migration. We are looking forward to many more in the coming months including Nocturnal Animals on Belle Isle highlighting animals captured on their trail cam and Regenerative Ecology with Dr. Ventra Asana. All of our webinars are available as recordings from our website and YouTube page where you can become a subscriber!

Although our webinars are available to all without cost, we have been extremely appreciative of those who have offered a donation during this time. In addition, Detroit Audubon has acquired over 20 new members through registration on webinars, which is very exciting indeed! Webinar schedules are available on our website and through the Flyway Express, our e-newsletter. Please be sure that Detroit Audubon has your email address so you don't miss any upcoming opportunities!

St. Clair Flats Black Tern Colony Collapses due to High Water Induced by Climate Change

by Jim Bull

Our Black Tern research at St. Clair Flats, in its tenth year, continued as normal, but outreach programs in the community, including our popular Black Tern cruises had to be cancelled this year due to COVID-19. More sobering and concerning is the heavy toll the continued high water and storms, which will only increase with warming due to climate change, have been taking on tern nests. The thick floating mats of vegetation on which the terns build their nests thinned and even came apart, either destroying nests or severely limiting the available nesting spots. Black Terns, unlike many species, usually re-nest if their first or even second nest fails. Unfortunately, our Research Coordinator, Ava Landgraf, tells me that every nest except one (mostly second and third nesting attempts), was destroyed by two big storms in mid-July. So, what was THE largest and most productive colony in the Great Lakes was a bust this year.

One aspect of our research that will be stepped up now, is looking for nest platform designs and other habitat mitigation measures to help Black Terns adjust to this new high-water reality. The nest platforms we provided this year were rejected by the terns, so next year we will be exploring other designs as well as other habitat mitigation measures, which will be crucial to helping Black Terns continue to thrive in a warming world. When we hit upon successful measures, we will also export those to other marshes in the Great Lakes areas to re-establish vanished colonies.

Above from left, a normal Black Tern nest, two chicks, and Research Coordinator Ava Landgraf with one of the mats that has come apart.

Below, an adult Black Tern eating an insect by Jim Bull.

Detroit Audubon and Audubon Great Lakes launched this study to help ascertain why the Black Tern population in the Great Lakes has been in steep decline. Up until last year, the fledging rate (the rate at which chicks are successfully raised to adulthood) was very high in this colony, pointing to possible problems during migration or on the wintering grounds, which is actually the open ocean in Central and South America. After fledging young birds spend two years in that environment before venturing north to nest.

Detroit Audubon joined a National Audubon "Save The Seabirds National Virtual Fly-In" in mid-July to ZOOM meet with Michigan's congressional representatives and staff about the importance of building in measures to protect the marine forage fish that Black Terns and other seabirds depend on, as do the large predatory fish that are so important to the sea food industry. If the Black Terns do not have adequate and nutritious food during the time they spend in the open ocean, our mitigation measures on the breeding grounds will be for naught. Breeding, wintering, and stopover migration habitat are all critical.

We are committed to research, education, and conservation measures to ensure the survival of this amazing species.

Field Trip Photos

From top:

Black-crowned Night Heron by Dongfan Chen

Leopard Frog at Pointe Mouillee by Jim Bull

Lobelia at Pointe Mouillee by Jim Bull

Blanding's Turtle at Pointe Mouillee by Dongfan Chen

Bumblebee and Spotted Cucumber Beeetle on thistle
by Bruce Szczechowski

Field trips have resumed, with masks added to the usual outdoor gear.
Photo by Jim Bull

Pte. Mouillee marsh by Jim Bull

Pearly Wood-nymph by Bruce Szczechowski

Birding with masks by Jim Bull

Flyway

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Green Heron with crest up at Pointe Mouillee by Dongfan Chen