

**NUMBER 169** DECEMBER 2023



The Peregrine Falcon is phylogenetically closer to a parrot than to a hawk or an eagle. Photo by Greg Smith.

# THIS ISSUE

Visit Our Nature Center by Appointment Owling by Appointment Gift Ideas Thank You Donors The Climate Math is not Adding Up

# "Polly Want a Pigeon"

Anyone might note a falcon's physical features (hooked bill, grasping talons) and behavior (predatory) and agree on where to perch it on the taxonomic 'tree of life' – among the hawks and eagles, of course. Far into the past ornithologists had been comfortable with the place they assigned to falcons on the tree's avian limb, and would have remained so unless other evidence emerged that should belie what their eyes led them to assume. It did.

Alas, as critical as human senses are to our understanding of the world and to our very survival, we are also aware that they have their limitations. We're surrounded by realities we can't detect with our senses alone (If only your dog could tell you all the interesting odors you're missing.).

Convergent evolution has always been the mischievous monkey on a taxonomist's back. Totally unrelated organisms, shaped over time as they strive to survive in similar environmental conditions, come to possess

physical traits that are so similar to one another that they could easily be - and have been - misconstrued as close relatives.

However, many of the curveballs that convergent evolution lobs our way are now being straightened. In recent decades, technological advances, especially in relation to DNA analysis, have given us a perspective of organisms' origins and relationships that makes the old school see-and-match method seem like child's play.

For instance, the New World Vultures (i.e., Turkey, Black, California Condor, etc.) used to also be grouped with the hawks. Turns out their genomes are more closely in line with those of storks. And falcons? Far more closely related to parrots.



I still have a field guide from my youth that features the 'Sparrow Hawk' and 'Pigeon Hawk' (Golden Guide to Birds of North America © 1966).

It takes some getting used to, but to be cognizant that a Turkey Vulture circling overhead is like a big, dark, short-legged carrion-seeking stork and that a Peregrine Falcon is like an exceptionally fast flying, duck or pigeon-pursuing, predatory parrot are more accurate perceptions of these birds than of their possessing some kinship to hawks. How can this new knowledge not generate a different feel and maybe even a different attitude and altered appreciation toward the bird we previously thought we knew? Check out this February 2015 installment of *BirdNote* for further clarity: https://www.birdnote.org/explore/field-notes/2015/02/parrots-and-falcons-long-lost-cousins

\*\*\*

Don't expect to see a falcon on a walk through the woods. These are birds of open spaces that prefer high perches from which to scan the world around them for potential prey. This propensity makes them relatively easy to spot for anyone who possesses the awareness to look up. In flight, their contours and acrobatic maneuvers give the impression of exceptionally robust swallows. Four falcon species appear on the state list of Michigan birds; from largest to smallest, the Gyrfalcon, Peregrine Falcon, Merlin and American Kestrel.

## THE PEREGRINE



Peregrine Falcon. Photo by Greg Smith.

Of these, the Peregrine is hands-down the most well-known. Appearing on every continent except Antarctica this is possibly the most cosmopolitan raptor in the world. Its status as the fastest bird on the planet doesn't hurt its popularity either. It has also been somewhat of a poster raptor after having been driven to endangered status in the mid-twentieth century, then brought back from the brink through reintroduction efforts in cities throughout the country. Now, pairs commonly nest and roost on tall edifices in urban environments where pigeons and/or ducks are available in abundance to sustain them.

Averaging about eighteen inches from crown to tail tip, the Peregrine's stature hovers about halfway between that of a common Rock Pigeon and the well-known Red-tailed Hawk. Pairs have successfully nested on the Eckert Power Plant in Lansing going on two decades. Located directly across the river from Moore's Park, anyone visiting the park any month of the year can look up and scan the building's abundant perching spots to find

one. I see them most often on the building's east side which happens to also be where the nest is located. If you are lucky enough to catch one in flight over the river its movements exude an unmistakable combination of power and grace (For more: <a href="https://www.lbwl.com/community/falcon-cam">https://www.lbwl.com/community/falcon-cam</a>).

On a daily basis the Peregrines head downtown – barely a one-minute commute as the falcon flies – to chase down and feed on members of the abundant pigeon population. Scan the roof edges of tall buildings like Boji Tower, antennae, and other structures at or near the tops of buildings that act as potential perching spots.

In recent years another pair has taken up residence atop Spartan Stadium at MSU. I suspect nearly all of the campus' human population is oblivious of their presence, and, whether perched or in flight, would fail to recognize this world-class wonder as anything more than 'just some bird.'

If you visit one of these venues with a purpose to see them, binoculars, or better yet, a spotting scope will greatly enhance your experience.

### THE GYRFALCON

Speaking of 'world-class' the arctic-breeding Gyrfalcon (pronounced JER-falcon) is the largest falcon species in the world. An average total length (twenty inches) and wingspan (four feet) places it slightly larger than a Red-tailed Hawk. Holarctic in distribution, it mostly nests on cliffs along oceans and other large bodies of water where ducks and other waterfowl are abundant. It ventures inland too, to chase down avian prey as large as ptarmigan as well as snowshoe hares and other prey when available (https://www.allaboutbirds.org/guide/Gyrfalcon/overview).

Over most winters individuals may wander as far south as the northern U.S. In Michigan a few are reported nearly every winter in various locations across the U.P., including areas around Sault Ste. Marie and Marquette.

My first Gyrfalcon sighting occurred in the early 2000s in the Soo while leading a small group on a U.P. winter birding excursion. We were viewing waterfowl that were attracted to the open water next to the old, stone-walled power plant along the St. Mary's River when we spotted a lone adult Bald Eagle with something in its talons flying southward over the ice shelves on the river. Seeming to materialize out of nowhere a pure white bird - visibly smaller than the eagle - began chasing it. Apparently flummoxed by the attack, the eagle landed on the ice, but the Gyrfalcon continued to dive-bomb it relentlessly like a missile on the end of a pendulum.

Finally, the eagle seemed to realize, whether in the air or on the ice the assault would continue when and *only* when the Gyrfalcon decided to stop. There was no evading this faster, more agile dervish. It launched itself from the ice, prey still in tow, and continued flying southward down the river, the falcon on its tail, until it was out of sight.

On rare occasion in the winter a Gyrfalcon may drift even further and into the southern Lower Peninsula. A few years after the above incident a first-year Gyrfalcon - mostly brown in color -was reported at a



This juvenile Gyrfalcon appeared in Wayne County in November, 2019. Photo by Greg Smith.

complex of tall office buildings near I-696 in Southfield. A friend and I drove there on a Saturday to see if we could find it.

We spotted it immediately right where we expected it to be - true to falcon form, perched high atop one of the buildings. Extended viewing time through the spotting scope from the vantage of the empty parking lot paid big dividends. Eventually, a Mallard flew past the building. The falcon abruptly launched from the ledge in pursuit. A second later both birds disappeared from our view behind the building. We hustled across the lot and around the corner of the building scanning the sky and expansive lawn ahead of us in the process. Our vantage abruptly opened onto the drama: there, on the ground about one hundred feet in front of us the falcon perched on top of the duck's supine body. It had already commenced plucking feathers and feeding on the flesh. It surely was aware of our presence but gave no indication that it cared if we watched from that distance. We opened the tripod and enjoyed a veritable front row seat to its complete dining experience.

Thirty minutes later the duck's torso was almost completely gone. The Gyrfalcon took wing in our direction and passed only twenty feet over our heads, now seeming much more sluggish than it had when it had taken flight from the roof.

### THE AMERICAN KESTREL

Since we're acknowledging the phylogenetic line connecting falcons to parrots, it seems appropriate then that the smaller falcons be likened to predatory *parakeets*.

Only about the size of a Mourning Dove, the American Kestrel barely reaches twelve inches from crown to tail tip. It is the most common falcon, thus, the easiest to encounter. Its mien comes off as light and dainty compared to Michigan's other falcons – an ultralight plane among fighter jets.

This may at least partially explain a diet that relies far less on chasing down fleet-winged avian prey than on more manageable, ground-bound, animate morsels. Kestrels can commonly be found on perches over

open spaces that offer a vantage to scan grassy expanses below for small mammals; and in the warmer seasons, grasshoppers, crickets, other large insects, and an occasional small snake.

The most frequent opportunities to spot Kestrels occur through the windshield of your moving car if you have the awareness to watch for them on roadside utility lines, posts and exposed tree limbs. In the city, especially from fall through winter as northern migrants drift southward, Kestrels can be found perched along overgrown embankments bordering expressways where meadow voles and other small mammals are plentiful. When a Kestrel in flight spots something of interest below it, the bird will commonly hover in place with fluttering wings and fanned tail.

This is the only North American falcon that is an obligate cavitynester. As long as it is adjacent to open acreage, an abandoned hole chiseled by a large species of woodpecker or any other suitablysized hollow on a dead trunk or large limb of a tree will suffice.



A Meadow Vole dangles from a male American Kestrel's talons. Photo by Greg Smith.

Like many secondary cavity-nesters, such as bluebirds and others that cannot fashion their own cavity for nesting, the Kestrel's ability to breed in an otherwise sustainable location is rendered moot only by the lack of a cavity.

When we first moved to this rural area north of Williamston circa 1990 I never saw Kestrels during the breeding season. Aware of the above limiting factor, I built five nesting boxes then attained permission from local rural neighbors across several miles to secure them high on barns and silos. Amazingly, the following spring four of the five boxes were occupied by a Kestrel pair!

Nesting boxes can be found for sale online as are specifications for building your own. Indeed, more Kestrels would be capable of breeding in rural settings and in cities, especially along highway corridors, if appropriate cavities were made available, so it's a worthwhile conservation effort for a local Audubon club or an eagle scout.

However, be prepared for some intense competition. The invasive and abundant European Starling is an aggressive cavity-nester. Although a Kestrel carries the equipment to give the starlings a battle, their sheer numbers around city and farm pose complications for many nesting box projects. So do squirrels.

### THE MERLIN

In stature a Merlin comes in a smidge taller than an American Kestrel, but viewing this falcon either perched or in action leaves little doubt; more muscle is packed under its contour feathers, and those comparatively powerful wing strokes confirm it. In the enjoyable read, *Hawks in Flight*, Pete Dunne's

metaphor defines the difference with an accurate visual: 'A Merlin is to a Kestrel what a Harley-Davidson is to a scooter.'

Here's another noteworthy contrast in Merlin behavior when it comes to viewing in the field... A Kestrel does *not* like to be watched. If you see one on a roadside wire from your moving vehicle the bird will tolerate the 'drive-by,' but if you dare to stop too close to it, gone! On the other hand, a Merlin perched in the same spot appears to simply not care. As you view it through binoculars from the car or even after



A Merlin dines.

Photo by Greg Smith.

having stepped out of the car, it will look down, aware of you, then look away, apparently far less interested in you than *vice versa*.

In line with the poisoned plight of so many raptors in the midtwentieth century, a chain-reaction wrought by the overzealous application of DDT was likely responsible for marked declines in populations of what was then called the 'Pigeon Hawk.' Although I caught the birding bug in my early teens it took another decade to finally train binoculars on my first one in the wild.

Again, in step with other previously decimated raptor populations, the Merlin has rebounded nicely. This bird is a northern breeder occupying open habitats across Canada's coniferous forest biome as well as the northernmost states, including northern Michigan. In winter individuals move south and secure seasonal home ranges where small bird prey is plentiful.

The East Lansing Christmas Bird Count takes place each year on a Saturday in mid-December (For details, read <a href="http://naturediscovery.net/pdf/WILD%20TIMES%20Jan21.pdf">http://naturediscovery.net/pdf/WILD%20TIMES%20Jan21.pdf</a>). The designated 'count circle' spans fifteen miles and has a focal point in East Lansing near the corners of Coolidge and Lake Lansing roads. It has been divided into eleven sections. A leader is assigned to each one and is responsible for coordinating other birders then amassing all avian species and numbers of individuals seen through the period. This year will be my twentieth year leading Area 7, the rough boundaries of which are north-to-south from Saginaw to Mount Hope and east-to-west from Harrison to beyond Waverly Road.

A scan through ELCBC data in the 80s and 90s shows that a Merlin had never been reported. However, since the turn of the millennium at least six counts have tallied a Merlin, five years of which I've seen at least one in Area 7. Outside of the count day I continue to spot Merlins with increased frequency.

Potter Park has yielded the most sightings. An individual will perch on a high bare branch of one of the many tall oaks across the lot. It will rest, preen, and watch for potentially catchable feathered prey from the exposed lookout. Thus, when one is present it is fairly easy to find as long as you have a propensity to look up.

In recent winters I've also seen a Merlin in a treetop over Evergreen Cemetery across Mount Hope from Potter Park, on a powerline post along Burcham Drive next to the sports field at McDonald Middle School, several times over the past few winters in the treetops along Michigan Avenue directly behind Sexton High School, and last winter just a few miles south of us adjacent to farm land on Williamston Road.

\*\*\*

Nature Discovery offers guided winter birding field trips by appointment for individuals, couples or small groups. A 'falcon-centric' outing can include Potter Park, Moore's Park and a few other locales where Peregrines and Merlins are commonly sighted. From there, it is relatively easy to pick up a Kestrel adjacent to I-496 or elsewhere to round out a potential three-falcon day - a local birding feat that would have been unheard of more than twenty years ago.

- Jim McGrath



5900 N. Williamston Road Williamston, MI 48895 517.655.5349 naturedisc87@gmail.com www.naturediscovery.net

# Visit Our Nature Center by Appointment Over the Holidays Suggested Minimum Donation: \$5/person/hr



The sky's the limit for natural science learning here — with a Michigan twist! Adults, couples and individual families are welcome to schedule an intimate indoor or outdoor visit to what we call "The Biggest Little Nature Center in Michigan," and "Home to the Largest Zoo of Michigan-native Reptiles and Amphibians." The unique, in-person, hands-on experiences here are unrivaled at any other nature center or zoo! We will bring snakes, turtles, frogs and salamanders out of tanks to interact with adults or students of any age or grade-level.

Identify and feed "the grand slam of Michigan turtles" - all ten species native to our state! Meet, pet and feed "Milberta", our always hungry Red-footed tortoise.

Handle any or all of Michigan's three species of garter snakes while learning how to tell them apart, then watch them gobble up worms and tadpoles. Hold or "wear" a gentle 6-foot Black Ratsnake –

the largest in the state!



A screech-owl is spotlighted in the yard.

Many more snakes, turtles, frogs and salamanders to identify and feed. Take a guided walk on our trails to identify birds, trees, vines, and invasive plants.

Ask about arranging a special evening visit. Weatherpermitting we can step outside and attempt to attract a wild screech-owl with recordings.

Contact us for additional information or to make an appointment most any day.



5900 N. Williamston Road Williamston, MI 48895 517.655.5349 <u>naturedisc87@gmail.com</u> <u>www.naturediscovery.net</u>

# By Appointment Over the Holidays...

# Go "Owling" at Nature Discovery



Schedule a 90 minute appointment for your small group (recommended max. 8) to visit almost any evening after dusk, and we'll attempt to draw a wild owl in for a close-encounter!

The evening begins with Powerpoint images and recordings to help you become familiar with Screech, Great-horned and Barred Owls - the three permanent residents found in Lower Michigan. Learn about six other species - migrants from Canada - that drift southward into our area to hunt for prey over the winter, including where to go to see them.



Then, we will go out the back door into the darkness to try to get one to respond to recordings. If an owl comes close we will attempt to spotlight it for viewing. Bring binoculars and a camera if you have them.

Before or after the owling experience visitors may also wish to view and interact with specimens from our huge zoo of Michigan-native reptiles & amphibians.

Base suggested donation: \$100.

Do you live in a rural area? Arrangements can also be made to have this program come to you whereby you may get a chance to meet your own neighborhood owl face to face. Contact us for details or to make an appointment, here or there.

Note: The likelihood of attracting an owl is diminished in windy or precipitating conditions. If possible, arrange to schedule a visit after confirming a favorable weather forecast. If you schedule a date further in advance, feel free to cancel and reschedule on short notice if the forecast calls for poor conditions.



# Give a natural gift this season

# "FROGS OF THE GREAT LAKES REGION"

Instructional and environmental listening featuring our own original recordings of the breeding calls of 13 native species compiled from wetland habitats across the state. Load the app onto a phone or tablet! \$15. Check our website for details.

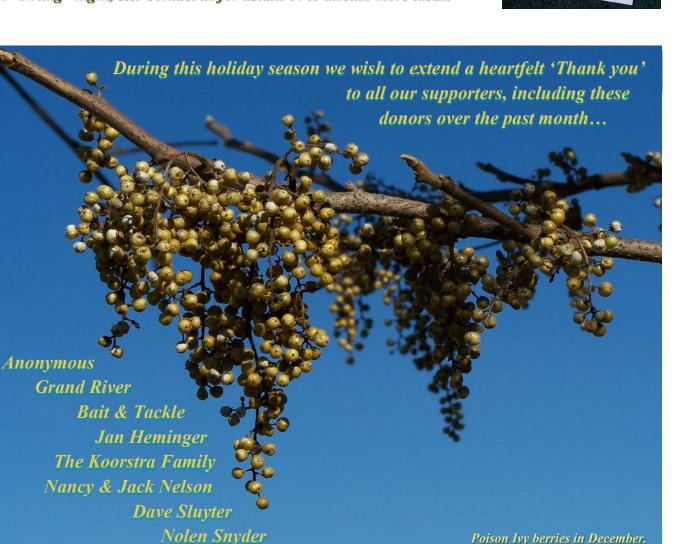
Nature Discovery

\* Gift Certificate \*\*\*

# NATURE DISCOVERY GIFT CERTIFICATES

A guided experience for adults, couples, or families at our nature center located north of Williamston. Base rate is \$30/hr. Upon payment we will email you a certificate to print and present to the recipient.

Gift certificates are also available for outdoor guided functions for adults and families, i.e., interpretive walks or birding outings at local natural areas, an "owling" night, etc. Contact us for details or to discuss more ideas.



# The Climate Math is not Adding Up

One Huge Contradiction is Undoing Our Best Climate Efforts

"...disjuncts are allowed to persist as if they are not contradictions."

https://www.theatlantic.com/science/archive/2023/11/climate-change-policies-

contradictions/675967/?utm\_campaign=atlantic-daily-

newsletter&utm\_source=newsletter&utm\_medium=email&utm\_content=20231110&utm\_term=The+At\_lantic+Daily

1 Day, 3 Million U.S. Fliers: Holiday Record is Broken, with More Jam-packed Records Ahead <a href="https://www.latimes.com/california/story/2023-11-27/number-of-airline-passengers-traveling-forthanksgiving-holiday-breaks-">https://www.latimes.com/california/story/2023-11-27/number-of-airline-passengers-traveling-forthanksgiving-holiday-breaks-</a>

record#:~:text=During%20the%202019%20Thanksgiving%20weekend,the%20Fourth%20of%20July%20holiday.

<u>Flightfree.org</u>

The next generation would be justified in looking back at us and asking, "What were you thinking? Couldn't you hear what the scientists were saying? Couldn't you hear what Mother Nature was screaming at you?" -Al Gore

I don't want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. I want you to act. I want you to act like you would in a crisis. I want you to act like your house is on fire, because it is. - Greta Thunberg

The personal actions that cut climate pollution fast are to go flight-, car-, and meat-free. Start with the one that feels most feasible for you; if you can't totally go without, aim to cut your consumption today at least in half. – Kimberly Nicholas, Under the Sky We Make

What if we had storytelling mechanisms that said it is important that you know about the well-being of wildlife in your neighborhood? –Robin Wall Kimmerer



Less Beef = Less CO<sub>2</sub> Cowspiracy.com

# Union of Concerned Scientists Science for a healthy planet and safer world







insideclimatenews.org

Become a fan of *Nature Discovery* on Facebook!

NATURE DISCOVERY 5900 N. Williamston Road Williamston, MI 48895