

THIS ISSUE

Visit Us by Appointment

Muskegon Guided Birding, November 27

Thank You Donors!

COP26 Summit and You.

Migrants Over Mackinac



In 2019 a national record was set at Mackinaw City for migrating Red-tailed Hawks: 22,420!

Over the past several years (*sans* the COVID year) I've begun scheduling guided fall U.P. birding trips for small groups where, en route, the Straits of Mackinac is always a purposeful and often lengthy stop. Big Mac may loom impressively across the water from surrounding shorelines, but the state icon serves as a mere backdrop to another more fleeting spectacle that is broadly unacknowledged - to the detriment of legions of other travelers that cross the Straits in either direction.

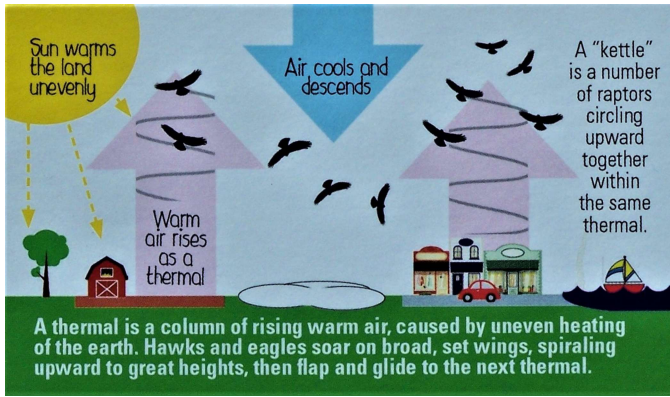
This is a significant hotspot for bird migration. The bordering land masses serve as a topographical funnel for a wide diversity of raptors (i.e., eagles, hawks, owls, etc.), as well as for a veritable slew of songbirds, all driven by instinct to embark on timeless semi-annual movements to and from more hospitable latitudes where they spend the winter months. It becomes easy to envision the Straits as a heavily-trafficked avian passageway when you study the contour of the state while keeping in mind this immutable truth: With the exception of waterfowl most birds are reluctant to fly over large bodies of water.

Migrating up to several thousand miles requires remarkable energy and endurance. A migrant must stop, rest, and refuel multiple times along the way. Not for the faint of heart nor for any but the most fit, the bird that dares to take the short-cut by crossing an expanse of one of our Great Lakes flies a literal do-or-die route. Exhaustion is not an option. No doubt, death by drowning is the fate for many thousands every migratory season as evinced by the number of lifeless feathered bodies of all sizes found on Great Lakes beaches every spring and fall.

Self-preservation demands then that most migrants fly over land whenever possible, even if it means traveling many extra miles in order to avoid crossing "big water." Scan a Michigan map from south to north, then imagine a spring migrant destined for the Canadian North traversing it in this direction. The contour of Michigan's Lower Peninsula tapers in that direction and comes to an apex at the Straits of Mackinac creating a natural bottleneck for migrants on the move.

Birds of prey and vultures are particularly averse to crossing vast expanses of water. Their wing design is evolved for gliding and soaring on air currents. Flapping in order to remain airborne or to propel themselves forward takes far more energy per wingbeat than for most smaller birds, so they strive to minimize their wingbeats to get where they want to go whenever they can.

That's where thermals come in. When the sun shines, warm air ascends over land masses. No matter the season, when rays strike the land's surface, the ground warms causing the air immediately above it to warm, which then of course, rises. However, various natural and manmade landscapes - like rocky outcrops, sandy beaches or asphalt pavement - warm more rapidly and to a relatively higher temperature than others, creating stronger columns of air rising above them. Soaring birds with wide wingspans locate and take advantage of these strongest of upward currents by circling over them. The effect is comparable to pushing the *up* button on an elevator. On an optimally sunny day during migration a Red-tailed Hawk could potentially glide from one strong thermal column to the next without a wingbeat for hundreds of miles.



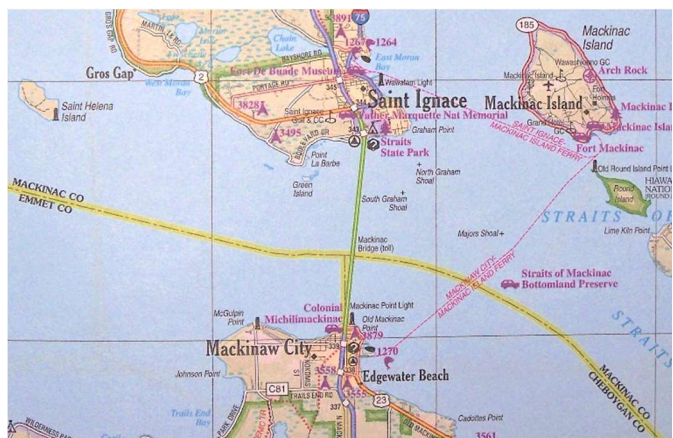
The back of an information card provided by Mackinac Straits Raptor Watch explains how thermals aid these birds in flight.

Conversely, on overcast days, clouds that block the sun's rays from warming the ground result in air that is relatively bereft of thermals, so such days are less suited to energy-efficient raptor migration; rainy days, obviously, even more so.

Sunny conditions or not, though, the air over bodies of water carries no uplifting thermal currents. Like a toy kite, the combined physical effect of lightness and wind-catching surface area keep a raptor afloat longer than other objects, but gravity is bound to win over the long run. A raptor that does not beat its wings to maintain altitude when over water experiences an inevitable state of descent. Occasionally, a Great Lake-traversing raptor may find itself in a life or death predicament if it loses altitude too quickly. It must beat its wings non-stop the rest of the way to shore or fall into the water, physically exhausted, inevitably to drown.

Going back one hundred years or more people have looked skyward from this constricted point between the Upper and Lower Peninsula land masses and noticed the marked concentration of vulture, hawk and eagle movement in the spring and fall. Only in the past decade or so, however, have concerned birders and ornithologists begun to utilize the corridor as an annual raptor monitoring and data collecting site, thanks to the impetus of Ed Pike (who first started watching the spectacle back in the 80s) along with other dedicated individuals and organizations. Cooperative measures between members of Straits Area Audubon Society, Petoskey Audubon and others formed what has become today the nonprofit organization, Mackinac Straits Raptor Watch (<https://www.mackinacraptorwatch.org/>).

MSRW contracts professional hawk counters to station themselves at key locations in order to identify and tally every one they see. In the spring a counter is positioned to view northward drifting raptors at a spot near McGulpin Point a bit west of Mackinaw City. In the fall, southward migrants are identified and tallied across the bridge at Point LaBarbe, a short hop south of U.S. 2.



Point LaBarbe and McGulpin Point jut from opposite shorelines west of the bridge. From www.delorme.com.

The fact that the overall number of passing raptors is not as great in the fall as in the spring is largely a function of Great Lakes geography. While northward movement through the Lower Peninsula is funneled

to an apex by longitudinally-aligned lakes Michigan and Huron, birds moving southward from Canada are hampered by the vast east-to-west watery barrier that is Lake Superior. Many raptors that turn east along its shore may then continue down the Canadian side of Lake Huron. Others that show up in the Straits area are most probably birds that rounded the eastern edge of Lake Superior then crossed the St. Mary's River into the U.P. at Sault Ste. Marie.

Diurnal raptors aren't all that is tallied at these points. Weather-permitting, mist nets are spread overnight to capture and tag migrating owls, like the diminutive Northern Saw-whet. In the fall, volunteers net and tag migrating Monarch butterflies around Point LaBarbe. Additionally, a contracted migratory waterbird counter is situated on the shoreline near McGulpin Point in both seasons scanning the often choppy waves and turbulent air for loons, grebes, gulls, terns, and ducks of nearly two dozen breeds.

Volunteer observers are often on hand to assist the official counter, if for no other reason than that two sets of eyes scanning the expansive skies for birds (some on the brink of visibility) are better than one...



But, there is a reason important to another aspect of their mission - to inform and inspire the public about these majestic birds and their annual movements. Visitors are encouraged to stop any day to enjoy the aerial show. Volunteer observers greet then help them spot and identify the species as they pass. They answer questions and converse with ease about specific behaviors, movement patterns, owl netting, monarch tagging, and pretty much anything else related to "natural Michigan."

A visitor in possession of a good pair of binoculars can feel not just welcome but helpful to the cause. The more sets of eyes to the sky the less likely a passing raptor will be missed, and visitors occasionally spot birds across the massive expanse of sky that were likely to slip by the counter's scan.

Visitors are also handed a clipboard on which to add their name, address and email. That way your presence is officially documented on the counter's daily report. It is submitted to a much larger database compiled by the Hawk Migration Association of North America (<https://www.HMANA.org>). Data from more than 200 hawk-watch sites in North America, sixteen of them in Michigan, are available on the site for free access to scientists and citizens, alike.

On October 19-20, three participants joined me for an overnight guided birding trip to Whitefish Point. A stop at Point LaBarbe was on the itinerary on the way up and again on the way back the following day.

Located about seventy miles north of the bridge, Whitefish Point juts into the eastern end of Lake Superior to effectively delineate Whitefish Bay. This is another popular hotspot for raptor migration in the spring and also registered with HMANA, but the above discussion about Lake Superior's effect on fall movements of raptors helps explain why a raptor counter is not even stationed in the fall at the same location. However, waterfowl migration past the point in the fall is huge, and the area has a reputation for attracting unusual migrants, some of which pop up over a thousand miles from their usual migration routes.

We exited the car at Point LaBarbe near a few other parked cars. An erected "Hawkwatch" sandwich board sign let us know that this was the place. In short order, MSRW board member and volunteer observer for the day, Ed Pike, introduced himself to us as well as to the official hawk counter, Calvin Brennan.

We spent about ninety minutes but wished it could have been longer. Under mostly blue skies with a mild breeze from the southwest that helped produce an early afternoon temperature near seventy degrees

we enjoyed a steady flow of Red-tailed Hawks, some gliding at various altitudes and many more soaring in circles to gain altitude before making the crossing. Turkey Vultures drifted into view over the tree line to the north in sporadic troves. Where one minute a mere handful were in sight, a few minutes later fifty or sixty of the big dark birds wheeled through the sea of azure. Amid frequently raised binoculars all around Ed pointed, identified, and conversed with the visitors. Meanwhile, hawks continued to materialize over the north tree line in a steady flow. Redtails and vultures dominated, but a number of smaller, more “flappy” Sharp-shinned Hawks came and went more quickly over, under and between them. An occasional Bald Eagle or Rough-legged Hawk presented an instantaneous contrast to this day’s raptor “regulars.”

We reluctantly departed to continue our drive to Whitefish Point, but had barely gone a mile eastward along the shoreline when I spotted a large “kettle” of raptors riding an apparently very attractive thermal. We piled out of the vehicle, binoculars raised, and marveled as a towering column of over seventy redbails roiled high into the sky. These birds were surely out of view for the counters behind us and served to solidify a previously undiscussed assumption. Far more unaccounted raptors cross the expanse of the Straits in a day than the ones tallied by the counters from their designated spot.

On our return route the following day we were excited to be back at the hawkwatch by noon, and this time spent almost three hours... which still seemed to fly by! Overnight the wind had shifted and now blew gently out of the northwest. It brought with it a series of low, rolling clouds in ever-varying shades of water-laden gray. Rain was forecast to start up later in the afternoon.



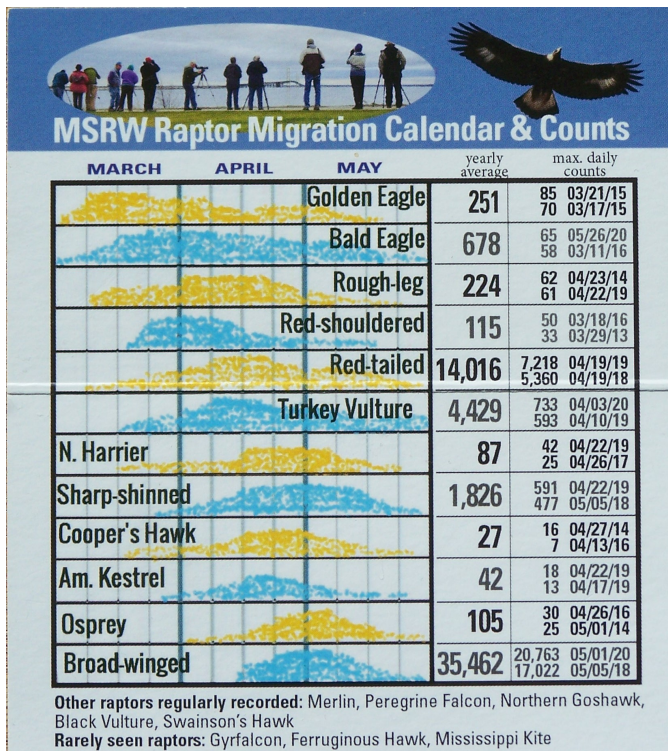
Our October 19-20 birding trip gang poses at Point LaBarbe. L to R, Will Gold, Gregg Landick and Carolyn Malmstrom join Jim.

In addition to Ed Pike, fellow MSRW board members, Russ Edmonds and Kathy Bricker, were in attendance along with Kathy’s husband, Jim (If the Brickers sound familiar to our regular newsletter readers, their names have surfaced in numerous past issues on the topic of “Michigan snakes,” most recently in this March 2019 column: <http://naturediscovery.net/pdf/WILD%20TIMES%20Mar19.pdf>).

I expected the cloud cover to hamper the flow of redbails and vultures, but this turned out to be far from the case. The activity overhead was at least as busy as the previous day despite the dreary backdrop. However, the vastly different lighting conditions made identification substantially more challenging. At



Left: Turkey Vultures provide quite a spectacle as they gain altitude over our heads before setting out over the Straits. Right: One of the lower passing Red-tailed Hawks presents a photo op for participant, Carolyn Malmstrom. Although named for it, the red tail is not the best field mark to identify this hawk in flight overhead. The dark “patagium,” the leading edge of the wing on each side of the head, is unique to this raptor and far more noticeable from a distance than the color of the tail.



This side of the information card distributed to visitors at the Hawkwatch site gives a synopsis of migrating raptor species in the spring, the peak movement window past the Straits for each species, plus yearly and daily maximum counts for each.

migration period is winding down and peak volume for the season is already behind us. However, the migration window of the Golden Eagle, a species rarely seen by most people within our state, is peaking now. Pick a day within the next week or so with a dry forecast and take a drive to join the counter and attending volunteer observers at Point LaBarbe. You can also consider arranging a special appointment with us to guide your own *personalized* Mackinac birding day trip either now or next spring.

Speaking of spring, mark your 2022 calendar for MSRW's Mackinaw Raptor Fest, scheduled for the first weekend in April. You can watch their website and Facebook page for updates and a programming schedule in due time.

Want to learn more about identification of raptors in flight, owls, bird banding and more from experts in the field? Check out informative recorded lectures which are available on the website's events page here: <https://www.mackinacraptorwatch.org/events/>.

all altitudes the birds appeared in silhouette to our eyes. Additionally, the higher migrants became partially shrouded in the cloud vapor. No doubt, others passing at even higher altitudes were completely hidden from our view. Yet, we were convinced by the time we had to reluctantly say goodbye to our hosts that we had seen more raptors on this day than on the sunny day before, including Red-shouldered Hawks and a Northern Harrier - two species we had not seen the day before.

Shortly after returning home I visited the HMANA website, navigated to the Mackinac Straits pages and was pleasantly surprised to see that totals for October 19 and 20 had already been posted by counter, Calvin Brennan. Our names were indeed listed as participating visitors on each day. Additionally, a surprising comment stood out of the October 20 observation notes: A new single-day record for Red-tailed Hawks had been achieved at Pt. LaBarbe - 1,234 birds!

If the above information has inspired you to head up and check it out, be aware that the fall raptor migration window of the Golden Eagle, a species rarely seen by most people within our state, is peaking now. Pick a day within the next week or so with a dry forecast and take a drive to join the counter and attending volunteer observers at Point LaBarbe. You can also consider arranging a special appointment with us to guide your own *personalized* Mackinac birding day trip either now or next spring.



In 2015 at Mackinaw City, MSRW tallied 374 Golden Eagles, a national record for a single location east of the Mississippi.
Photo by Gregg Smith.

-Jim McGrath

Nature Discovery

5900 N. Williamston Road
517.655.5349

Williamston, MI 48895

naturedisc87@gmail.com

www.naturediscovery.net

Visit Our Nature Center by Appointment

**Suggested Minimum
Donation: \$5/person/hr**



Feed a cricket to this brilliantly patterned leopard frog.

The sky's the limit for natural learning here – with a Michigan twist! Adults, couples and families are welcome to schedule a safe, intimate indoor and/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.” We will bring snakes, turtles, frogs and salamanders out of tanks to interact with adults or students of any age or grade-level. Visitors are asked to wear a mask during indoor time.



Hold a cute yearling hognose snake.

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 live tadpoles. Hold or “wear” a gentle 6-foot Black Rat Snake – the largest in the state!

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

Ask us about...

- ... field trips for academic classes, pre-K thru college.
- ... weekly or biweekly drop-off visits with experiential activities for your elementary thru high school student(s).
- ... volunteer opportunities for high school students and adults.
- ... arranging a guided interpretive experience at a local natural area of your or our choosing for your small group of students, adults or families.

Nature Discovery

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

Muskegon Area Guided Birding

Saturday, November 27
6:30am to 4:30pm



Northern Shoveler.

Photo © Steve Sage

On Saturday, November 27 join us on a guided trip to the Muskegon area for some great, late-fall birding. Jim will lead and drive a maximum of five adult participants on this full-day odyssey to tally as many species as possible through habitats that harbor *thousands* of birds.

Wastewater treatment facilities are typically hot birding locales. The expansive Muskegon Wastewater Facility, several miles from Lake Michigan, allows birders to acquire a special permit to access their facility. Jim has one! Vast holding ponds of various depths are waterfowl magnets. The water birds in turn, attract predatory hawks, eagles and owls.



A Purple Sandpiper on the breakwater.

Miles of dikes surround the ponds crammed with thousands of ducks of over a dozen species, plus geese, swans, grebes and more. Open area north and south of the ponds offer potential for a slew of other species, including eagles, Rough-legged Hawks, kestrels, shrikes, Snow Buntings and lots more.

We'll head to Lake Michigan to pick up more birds from the shore and on the breakwater. Diving ducks, loons, grebes and more, forage here. The uncommon Purple Sandpiper migrates along Lake Michigan in late fall. With luck, we may find one foraging on the rocky breakwater.

Weather-permitting, we should tally nearly 50 species. The only extended walking will be on the breakwater. Participants will receive a Michigan Birds checklist to tally the day's finds.

COST: Only \$70/person, includes transportation. Meet at Nature Discovery. With notice, we can also arrange to pick you up at another more convenient location. Contact us to reserve a spot.



Green and brown phases of the Northern Leopard Frog on display at Nature Discovery.

The COP26 Climate Summit and You

While the COP26 Climate Summit plays out, there is currently access to a glut of associated stuff to educate and inform every global citizen about this complex and increasingly harrowing reality. Here are two recordings worth watching entitled “TED Countdown at COP26,” Sessions 1 and 2, that might just give you the incentive to become a part of the solution. Catch up on the science that explains the catastrophe in the making, where we are - scientifically, politically and individually - in relation to its complications, and where we are headed – the direction of which depends more than anything on whether we have the political and *personal* will to act with due accordance and urgency. The solutions are already in front of us.

<https://www.youtube.com/watch?v=0DZ1KX0LYmk>

<https://www.youtube.com/watch?v=YtL6zQza45Q>

“Status quo in consumption patterns and growth will not take us to the Paris range [1.5°C]. This is about equity but it’s also about lifestyle change and behavioral change.” – *Johan Rockström*

-JM

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

*Scientific findings should never be distorted or influenced by political considerations.
- from President Biden's Memorandum on Restoring Trust in Government through Scientific Integrity and Evidence-Based Policymaking.*



Less Beef = Less CO₂
Cowspiracy.com

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



Worldwarzero.com



RSPO.org



insideclimatenews.org

Become a fan of *Nature Discovery* on Facebook!

NATURE DISCOVERY 5900 N. Williamston Road Williamston, MI 48895

(517) 655-5349 naturedisc87@gmail.com www.naturediscovery.net