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# A 'Leg Up' on Hérons vs Cranes



Great Blue Heron. Photo by Greg Smith.

Over the years we've heard many uttered comments in which a Great Blue Heron is misidentified as a Sandhill Crane or vice versa. The following information should clear up any uncertainty...

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Standing at about four feet in height the Sandhill Crane is considered Michigan's tallest bird. The Great Blue Heron comes in at an almost imperceptibly close second. From head to toe, look at some additional anatomical parity - lengthy bills, necks and legs – and it is easy to understand the confusion.

However, given a semi-decent vantage, seasoned birders have little problem differentiating the two, whether in flight or while walking or wading. It turns out that identification becomes a cinch when you become familiar with the differences in their respective habits. Indeed, for all their physical similarity, they are behavioral *opposites* in so many ways. Even a few-second glimpse at what it is doing or how it is doing it will clinch its identification as crane or heron.

This shouldn't be all that surprising when you look at the taxonomic placement of each species within the vertebrate class, Aves. They are categorized not just in separate families; they're not even in the same avian order. Convergent evolution is the process where unrelated species evolve similar physical traits, and these two are stark, present day examples.

Hérons belong to Order Pelecaniformes, as do pelicans and cormorants. Awareness of this shared evolutionary branch prompts some comparative scrutiny. The loose, elastic skin on the chin, gullet and neck of a White Pelican or an Anhinga (a.k.a., Snakebird) allows it to swallow especially large fish that would choke most any other animal. The Great Blue Heron may lack the fleshy chin pouch, but the ability of the throat to expand in order to swallow exceptionally large prey items certainly rivals that of a snake. Herons are members of the Pelecaniform family, Ardeidae, which also includes egrets and bitterns.

Cranes are currently placed in Order Gruiformes. Fellow North American members include rails, coots, gallinules and the Limpkin. Watch a Virginia Rail (Family Rallidae) emerge from a wall of cattails like a tiny marsh chicken, then begin to pick at varied small invertebrates on a mudflat or coagulating bed of duckweed. Again, with 'taxonomic awareness' it's not hard to imagine a larger, 'leggier,' 'neckier' version that is a Sandhill Crane (Family Gruidae) as it forages in a similar manner. Since it is larger, it is capable

of preying on bigger invertebrate matter and even small vertebrates with ease, but don't ever expect it to attempt the circus-act swallowing feats performed by the Great Blue Heron.

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Generally, then, despite their shared usage of wetland habitats, there exists quite a dietary difference between the Great Blue Heron and Sandhill Crane, albeit, with some overlap. Most Great Blue Heron prey is *vertebrate*; think fish, frogs, snakes, small mammals and small birds, almost always in or near the water. Its predatory technique involves stealth and ambush. Most of the prey items that swim near a statue-still



*Sandhill Cranes forage often in field habitats.*

heron will not recognize it for what it is. The avian embodiment of patience waits motionless for as long as it takes before an eventual Bluegill, Leopard Frog, Mallard duckling or juvenile Muskrat swims or surfaces within range of its locked and loaded spear-bill.

Sandhill Crane prey is mostly *invertebrate*. Its foraging technique in vegetated shallows requires it to move around as it employs a visual dragnet for any small life form that swims, crawls, hops or flutters ahead of it. It also spends an inordinate amount of time foraging in field habitats near or far from water. Grasshoppers, earthworms, and an array of other terrestrial invertebrates are taken in a similar way when opportunity arises.

Unlike a heron, a crane will consume seeds and berries, too. Grain in agricultural fields is a late-season staple. In the spring, farmers are frustrated by the crane's habit of pulling corn sprouts to get at the soft kernel beneath the soil.

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A phrase has been coined that might aid the viewer in identifying a crane versus a heron when in flight. Grammatically twisted to force the rhyme, it goes something like: *Cranes fly with necks extended, Herons fly with necks bended.*

If a perched or wading Great Blue Heron decides to take flight the exertion needed to break the inertia requires that the neck be extended, however, once in the air and cruising at a sustained rate the neck is bent, elbow-like. The head is pulled back between the shoulders.

The neck of a Sandhill Crane in flight is fully straightened. In fact, from a distance it is easier for a birder to mistake an airborne crane for a goose, which, like all waterfowl, flies with neck extended, the head well in front of the body and wings.

Secondarily, heron wings appear somewhat bowed or humped as it flaps in the air. It rarely glides during sustained flight. Crane wings look straighter. It glides often, and even circles when catching a thermal, like a vulture, eagle or hawk. It also often characteristically 'snaps' the tips of its wings upward during the upstroke of a flap – unlike any other large bird in flight that I can think of.



*A Great Blue Heron in flight. Photo by Greg Smith.*

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The Sandhill Crane is a very territorial breeder in the spring. A pair that returns north in late February claims a particular marsh as the focal point of its home range. Often a grown yearling or two that had migrated south with the parents returns north still tied to their apron strings. However, once the mated pair

land on the marsh they will tolerate no other crane near them. The forlorn young are aggressively evicted from the premises. The pair frequently emits a primitive-sounding, staccato bugle that echoes across surrounding fields. To any other crane in hearing distance it is clear that this particular stake has been claimed.



Crane parent and colt.

Photo by Steve Sage.

Eventually a nest composed of stacked vegetation is fashioned within the marsh. The one or two young that hatch are *precocial*, meaning that upon hatching – like chicken chicks – they are wide-eyed, fluffy with down feathers and quickly mobile. The parents lead the young - called colts - into the adjacent fields, then forage for invertebrates to feed to them. The colts get the hang of it quickly and are increasingly able to secure their own insect and worm morsels unaided.

Conversely, a Great Blue Heron is adapted to breed colonially. A mated pair prefers close proximity to others. A rookery situated among the topmost branches within a cluster of mature trees can be comprised of a handful to dozens of large nests made of accumulated sticks. Vacant over most of the year, the group of bulky structures smattered through the treetops is especially visible in or near a wetland during months when the trees are lacking foliage. Watch for rookeries in rural areas along the sides of highways.

After returning in March, many pairs claim nests that were occupied the previous year. Then they mend and supplement it with new sticks. The female eventually lays a few eggs. The hatchling young are *altricial*, i.e., blind, fairly bare of feathers, and completely reliant on parental care. Similarly to the nesting habits of most songbirds, when the surviving nestling or two are old enough to fledge from the nest come mid-summer, they will not return to it. The heron nest will no longer be needed until the following March.



.Heron rookery at Kensington Metropark.

The Great Blue Heron's vocalizations are nowhere nearly as amplified as those of a Sandhill Crane. Given its lifestyle they don't have to be. The guttural squawks and rumbles emitted around the commune consist of communications between neighboring pairs, between members of a pair at the nest, or between hungry nestlings and their parents.

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The distinct contrast in the sociability of the two species during breeding time gets flipped once the young are able to fly. Sandhill Cranes become highly gregarious from late summer into the fall, then right through the migration process, and even on their wintering grounds around the Gulf Coast. Great Blue Herons generally prefer to keep to themselves.

For weeks after crane young hatch they cannot fly, so a family is bound to a particular breeding wetland and the surrounding fields that are within walking distance. By the start of August, though, the colts have grown as tall as their parents and become capable of sustained flight. Suddenly, territorial defense of the restricted area becomes moot. The family can now greatly expand its foraging area, flying to field habitats quite far from the original breeding ground.

The sight from the air of other cranes occupying a field hints at good availability of seeds and other foods. They descend to join them with little to no fuss. Territoriality's isolation yields to a 'safety in numbers' survival strategy.

Great Blue Heron young break bonds with their parents much more readily after fledging, hinting that the art of stalking, spearing and swallowing various prey items is more instinctive than learned. All herons prefer to separate themselves from others when hunting for food. Birders spot individuals in statuesque solitude along river banks, shorelines of lakes and in marshes.

Not to say that in certain circumstances you can't see many hunting herons at once. US 127 bisects the Maple River flooding a bit north of St. Johns. In late summer as the water level decreases fish become more concentrated, making hunting that much easier. Great Blue Herons and migrating Great Egrets abound. Over maybe twenty seconds that it takes to drive the highway across the flooding, northbound motorists can scan the expanse on the east side and see many dozens of hunting waders at once - spaced from each other as best they can in such a popular hunting ground.

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Near dusk, a Great Blue Heron ascends into the trees to roost, choosing height to separate it from ground-bound nocturnal predators. A Sandhill Crane accomplishes the same end by seeking water in which it will roost while standing. The depth must be shallow enough that its body and feathers remain dry above the surface, but deep enough such that a predator the size of, say, a Coyote, would have great difficulty pursuing it.

In accordance with their opposing preferences when it comes to company, expect to see a resting, preening or roosting heron perched overhead in solitude. In late summer cranes follow others that have found a marsh or lake with an area of suitable roosting depth. As the sun sets birds that have been feeding in fields for miles around will gravitate to a common suitable roosting wetland. They are very vocally communicative in the process.

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The act of migration for the Great Blue Heron is a relatively subtle phenomenon. Individuals head south on their own chosen timetable through the fall. Some will hang on quite late and even into winter in a given area if ice-free wade-able water is available in which to forage for fish.



Most cranes migrate out of the state in November and will do so in large vocal flocks; but before they go huge numbers accumulate to feed, roost and noisily socialize in choice locations in the southern Lower Peninsula. As the breeding marsh is the core of the home range in the spring for a family-minded pair of Sandhill Cranes, the roosting marsh is the epicenter of a crane 'staging' area in the fall.

*.Great Blue Heron migration is a subtle phenomenon compared to that of cranes. Photo by Greg Smith.*

In order to ultimately accommodate several thousands of birds simultaneously the wetland must offer a huge expanse of water at just the right roosting depth. Additionally, suitable feeding grounds must be available in abundance for miles in various directions around the roosting wetland. Farmlands rife with grain and grasshoppers fit the crane-bill.

In human terms, crane staging is not unlike a scout jamboree. Family units and young bachelor cranes that have subsisted through spring and summer in locations all over the Lower Peninsula amass in especially great numbers in two prime locations that possess the above criteria. It so happens that Haehnle and Baker sanctuaries are situated only about forty miles apart as the crane flies.

Both locations allow for a clear view of the marsh from a broad hilltop; perfect for viewing the cranes as they fly in from surrounding fields in all directions from late afternoon to dusk. Be aware that a pair of binoculars is critical to good viewing because of the distance; a spotting scope is even better. Through the

daytime a dozen or so species of migratory waterfowl can be identified by scanning with a scope. A number of solitary hunting herons can be found punctuated throughout the marshy expanse. Many other migratory birds, large and small, various raptors, and more are attracted to the bounty that the vast wetlands provide.

Haehnle Sanctuary in northeast Jackson County is owned by Michigan Audubon Society and maintained largely by Jackson Audubon Society, a local MAS chapter (<https://www.haehnlesanctuary.org/>). The expansive Mud Lake Marsh resides within over one thousand acres of protected natural area. It is here that cranes roost together by the thousands every night through much of the fall. A hilltop, maintained for visitors and just a short walk from the parking lot, provides an unobstructed view of much of the wetland's area.



*Cranes are often seen flying in sub-groups of 3 to 4, usually family units. Photo by Greg Smith.*

In northeast corner of Calhoun County MAS's Baker Sanctuary and the abutting Youth Conservation Area owned by Kiwanis Club of Battle Creek comprise a combined eleven hundred acres of natural area that includes Big Marsh Lake, the site of another major mass-roosting of cranes in the fall. The best view of the marsh is from a hilltop on the Kiwanis property. Through a limited time in the fall the gates to the conservation area are open to the public for crane viewing.

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Kiwanis of Battle Creek hosts CraneFest (<https://www.allaboutbirds.org/news/event/kiwanis-club-cranefest/>) over the second weekend of every October; this year, October 12 & 13. Conservation organizations, wildlife artists, vendors, food trucks and live animal displays are on hand across a several acre area behind the marsh-viewing hilltop.

Nature Discovery has been a fixture at the event for over two decades. Visitors can spend time at our interactive exhibit of Michigan reptiles and amphibians in a small building on the site and even join me on one of several guided nature walks on the trails each day.

*-Jim McGrath*

## ***Around the State in October***

- ❖ ***Wednesday, October 2: 6-8pm. MI Reptiles & Amphibians Exhibit; Olivet College Earthbound, Olivet.***
- ❖ ***Saturday, October 5: 11am to 3:30pm. MI Reptiles & Amphibians Exhibit; Harvest Festival, Williamston.***
- ❖ ***Saturday, October 12: 1-5pm. MI Reptiles & Amphibians Exhibit; Cranefest, Bellevue.***
- ❖ ***Sunday, October 13: 1-5pm. MI Reptiles & Amphibians Exhibit; Cranefest, Bellevue.***
- ❖ ***Sunday, October 20: 10am. Guided Birding Walk Williamstown Twp Park; Williamston.***





# Nature Discovery

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## Visit Our Nature Center by Appointment

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



*Hold any or ALL of our three Northern Watersnakes, then watch them catch and eat live minnows.*

The sky's the limit for natural science learning here – with a Michigan twist! Adults, couples and families are welcome to schedule an intimate 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 can take snakes, turtles, frogs and salamanders out of their enclosures to interact with visitors.



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 or live frogs. 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 as we encounter them.

Ask us about...

- ... a field trip to our center for academic classes, pre-K thru college.
- ... volunteer opportunities for middle-high school students and adults.
- ... a guided interpretive experience at a local natural area of your or our choosing for your small group of students, adults or families.

*We appreciate the backing of all our supporters,  
including donors this past month...*



*The hilltop at Haehnle Sanctuary  
on a foggy October morning.*

*Bob & Lee Ann Brunetz  
Emiliano Stockdill Garay \* Will Gold  
Grand River Bait & Tackle \* Jan Heminger  
Lyric Stock \* Gene Wasserman*

## *Reading for the Environmentally Concerned*

A Changing Climate is Scorching the World's Biggest River

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The Fires that Could Reshape the Amazon

[https://www.nytimes.com/2024/09/17/climate/the-fires-that-could-reshape-the-amazon.html?campaign\\_id=54&emc=edit\\_clim\\_20240922&instance\\_id=134914&nl=climate-forward&regi\\_id=97652655&segment\\_id=178515&te=1&user\\_id=e2b8dd8c9b543fb8c35d5dd30658067e](https://www.nytimes.com/2024/09/17/climate/the-fires-that-could-reshape-the-amazon.html?campaign_id=54&emc=edit_clim_20240922&instance_id=134914&nl=climate-forward&regi_id=97652655&segment_id=178515&te=1&user_id=e2b8dd8c9b543fb8c35d5dd30658067e)

'Red Flags' on Climate: U.S. Methane Emissions Keep Rising

[https://www.nytimes.com/2024/09/19/climate/us-methane-greenhouse-gas.html?campaign\\_id=9&emc=edit\\_nn\\_20240919&instance\\_id=134706&nl=the-morning&regi\\_id=97652655&segment\\_id=178239&te=1&user\\_id=e2b8dd8c9b543fb8c35d5dd30658067e](https://www.nytimes.com/2024/09/19/climate/us-methane-greenhouse-gas.html?campaign_id=9&emc=edit_nn_20240919&instance_id=134706&nl=the-morning&regi_id=97652655&segment_id=178239&te=1&user_id=e2b8dd8c9b543fb8c35d5dd30658067e)

Our Taste for Flesh has Exhausted the Earth

[https://www.nytimes.com/2024/09/21/climate/lab-grown-meat-future.html?campaign\\_id=54&emc=edit\\_clim\\_20240922&instance\\_id=134914&nl=climate-forward&regi\\_id=97652655&segment\\_id=178515&te=1&user\\_id=e2b8dd8c9b543fb8c35d5dd30658067e](https://www.nytimes.com/2024/09/21/climate/lab-grown-meat-future.html?campaign_id=54&emc=edit_clim_20240922&instance_id=134914&nl=climate-forward&regi_id=97652655&segment_id=178515&te=1&user_id=e2b8dd8c9b543fb8c35d5dd30658067e)

The Hidden Environmental Costs of Food

[https://www.nytimes.com/interactive/2024/09/19/climate/food-costs-protein-environment.html?campaign\\_id=54&emc=edit\\_clim\\_20240922&instance\\_id=134914&nl=climate-forward&regi\\_id=97652655&segment\\_id=178515&te=1&user\\_id=e2b8dd8c9b543fb8c35d5dd30658067e](https://www.nytimes.com/interactive/2024/09/19/climate/food-costs-protein-environment.html?campaign_id=54&emc=edit_clim_20240922&instance_id=134914&nl=climate-forward&regi_id=97652655&segment_id=178515&te=1&user_id=e2b8dd8c9b543fb8c35d5dd30658067e)

-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*

*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*



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