



THIS ISSUE

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Guided Birding by Appointment

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Evidence-Based Decisions

“Birding by Ear” A February Primer

A Black-capped Chickadee begins to deliver its breeding song many weeks before winter’s end. Photo courtesy Daniel Behm. See more of his images at <https://fineartamerica.com/profiles/daniel-behm>.

The human affliction known as seasonal affective disorder (appropriately, SAD) is largely blamed on our physiological response to the dimmest stretch of the northern hemisphere’s circannual photoperiodic cycle. As the solstice in late December marks the point of the year in which there is the least amount of daylight, we cling to what we know of the science to give us a glimmer of hope. Winter may have just begun, but Earth’s sun-orbiting steadiness promises that with each new day the amount of sunlight will be incrementally longer and brighter than the day before.

Last month’s column opened with a link to an article highlighting scientific research that correlates increased happiness in people who experience more diversity of wild birds in their lives. In case you missed it:

<https://www.ecowatch.com/birds-happiness-study-2649413979.html?rebelltitem=1#rebelltitem1>

If you’re feeling SAD – with the condition perhaps compounded by pandemic-isolation, an antidote flies and *sings* right out your door...

The songbirds around your neighborhood in the winter evince far more sensitivity to the incremental increases in daily light than we do. Step outside now at about 8am, stop for a minute and listen... Do you hear it? Just a few weeks ago mornings outdoors were relatively quiet. Now, cued by our lengthening daylight, chickadees, titmice, cardinals and a number of other non-migratory songbirds have begun to sing their breeding songs.

Learning to identify wild birds by sight is a useful skill, however, when you gain the ability to “bird by ear,” you graduate to a level of avian awareness that blows away identification by sight alone. February is definitely the best month to start. A manageable number of common species have started to sing their breeding songs now, but as migrants return, the number of songs out your window increases steadily. By

mid-May, we can hear the vocalizations of a mind-boggling forty species or more in a single morning from our country yard!

I noticed it a few weeks ago, on a typically gray, mid-Michigan winter morning when I stepped outside to fill the bird feeders. Like an auditory ray of sunshine a distant, shrill *tea-cher!* drifted from the trees behind our lawn to reach my reddened ears. A **Black-capped Chickadee** had just delivered its breeding song. Though a common rural bird, it had been months since I had heard one sing those particular sweet notes, so of course I would take notice (Listen on this video: <https://www.youtube.com/watch?v=JKIEIP8SWEU>).

Functionally, songbirds are so named because the males of the species employ a special breeding or territorial song to secure a mate, then announce to others of their kind claim to a defined area within which they will nest and raise young. “Calls” are differentiated from breeding songs in that the former are communications for reasons other than territorial intent. The chickadee is named for its scratchy, sprightly *chick-a-dee-dee-dee* call that one may hear any time of year as they communicate among themselves. Many express surprise when they hear the breeding song, that such a radically different sound could be coming from the same bird.

A few mornings later I heard it again, and coming from the same direction. The chickadee sang several rounds this time. Then, from the woods to the north a different chickadee echoed the tune. A minute later, though, both reverted to silence. Fast forward a few more days. Chickadees everywhere were beginning to sing the *tea-cher* song. With each passing day the number of vocalists as well as the frequency of their songs rose as incrementally and as assuredly as the sun’s northward shift. On one morning just last week during my 3.4-mile trek around the country block I counted this territorial tune from at least a dozen different individuals.



Tufted Titmouse. Photo by Steve Sage.

Granted, other birds have been making, and continue to make their own noises too. Crows harshly caw from the treetops and jays raspily scream their names any month of the year. Alien house sparrows, especially around cities and farm structures, cheep and chatter among themselves any time, too, but with increasing intensity of late. Among the *native* songsters though, the chickadee may be the first heard vocalizing, but the songs of other species follow closely in step.



White-breasted Nuthatch.

To wit, within a few days of hearing the season’s first chickadee vocalization, I heard the repeated two-noted territorial whistles of a **Tufted Titmouse** in the yard. Not as shrill as the chickadee, and therefore, more easily imitated through pursed human lips, the repeated descending whistle might accurately be assigned the word handle, *peter-peter-peter*... Two to five or so are often strung together. In general, titmice are not as abundant across a rural or semi-rural landscape as chickadees and so their breeding songs are not as prevalent, however, by the end of January the morning hours are regularly punctuated by this simple, cordial whistle (https://www.youtube.com/watch?app=desktop&v=JBbLvj_lHRI).

In basic communicative mode throughout the year **White-breasted Nuthatches** call to one another while multi-tasking - mostly head down, as they busily investigate the trunks and branches of trees. Amid their foraging activity they emit sporadic, nasally vocaliza-

tions best put to words as *hank-hank*. The supposed breeding or territorial “song” - hardly songlike - starts in very close proximity to the onset of chickadee and titmouse announcements early in January. With almost no vocal range to an already decidedly unmusical nasal tone, a nuthatch would be politely culled from the church choir tryouts quite early in its audition. However, in the nuthatch world territoriality is serious business. I often note that when the bird in view, perhaps from a high perch in a deciduous tree, delivers its twangy breeding song - *Wha-wah-wha-wha-wha* - it is decidedly *not* multi-tasking. The endeavor to claim, then effectively hold a territory against all competing nuthatches in its periphery is far too critical to the end-game of its life purpose - reproductive success (https://www.youtube.com/watch?v=o0_1mSkLuSs).

In most winters I note the startup of these first three species within days of each other. Invariably, **Northern Cardinals** begin singing in January, too, but I typically don’t hear the first in our rural neighborhood until later in the month, one or two weeks after the first chickadee song.



Northern Cardinal.

Photo by Steve Sage.

In contrast to the first three, the cardinal’s song is slightly more elaborate and more varied within a single bird’s repertoire as well as between individuals. One thing is consistent in all cardinal song, however – the quality of the notes is loud, clear and far-reaching. On a winter morning devoid of wind and peripheral noises it is easy to hear one belting it out from a tree top a good quarter mile away. Among the varied songs I hear two distinct patterns most often, which can be phoneticized with the word handles, *CHEER-CHEER-CHEER-wit-wit-wit-wit-wit...* and *BirDEE-birDEE-birDEE-birDEE-birDEE....* The number of syllables is variable in either one.

The Northern Cardinal can be found over much of the country, yet, as with many other wide-ranging species, there are regional dialects. I’m reluctant to play the cardinal songs from the *iBird* app on my phone for audiences during “Birding by Ear” presentations because the recorded individuals from Arizona, Missouri and Florida emit “phrases” that I *never* hear around here. Here are some video examples of songs that are close to our “locals”...

This cardinal is emitting *Cheer-cheer-wit-wit-wit-wit-wit* however, each “cheer” is rising. The “cheers” are usually falling in the songs of local cardinals:

<https://www.birdnote.org/explore/sights-sounds/video/2016/07/northern-cardinal-singing>.

This one is mostly singing the *BirDEE-birDEE-birDEE-birDEE-birDEE* variation:

<https://www.dailymotion.com/video/x32h9ts>.



House Finch.

Photo by Greg Smith.

The first **House Finches**, too, emit breeding vocalizations well before January ends. However, the rapidity with which the raspy song is delivered makes it difficult to come up with a helpful word handle. The notes may sound as if they are being delivered through a sore throat, but they burrily bounce along in energetic fashion over a several second duration.

Since the House Finch can now be found virtually coast-to-coast (not always the case, and not gaining a foothold in Michigan until the 80s) there are videos of singing individuals from around the country that don’t sound quite like the locals. This one is close to what I hear in this area:

<https://www.youtube.com/watch?v=kOJrBbmB4gA>.

You can hear fairly regular territorial vocalizations from the **Carolina Wren** in the month of January, as well, but unlike the others I can't say that it necessarily "starts" in this month. This historically southern species' range has been advancing northward into Michigan over the last few decades. On our property the first pair didn't begin to nest until the spring of 2017 (For more on the Carolina Wren, I wrote about this species in the opening column of our May 2017 newsletter: <http://naturediscovery.net/pdf/WILD%20TIMES%20May17.pdf>).



Carolina Wren.

Photo by Greg Smith.

Indeed, since the onset of 2017 there hasn't been a month of any year in which I *haven't* heard territorial and other vocalizations coming from these now permanent fixtures around the yard. I can't help but speculate that Carolina Wren pioneers expanding into new territories on this warming northern frontier may show up in a new area most any month of the year. However, once a pair claims a territory, they stay put through all seasons. Then, in earshot of any potentially-passing vagabond they regularly and loudly declare, "This claim is staked. Move on!"

Most field guides use the words *Teakettle-teakettle-teakettle-teakettle...* as a handle to its loud, rich cadence of cascading phrases. I often think of the word, *giddyup*, rapidly repeated, as an even a more accurate jog: <https://www.youtube.com/watch?v=HujjAUnJubc> .

If you've got a territorial pair nearby you will undoubtedly hear other vocalizations from them. Listen to the repertoire featured in this link from Cornell Laboratory of Ornithology: https://www.allaboutbirds.org/guide/Carolina_Wren/sounds.

Although all woodpeckers emit territorial vocalizations, each species also regularly "drums" on a tree trunk or limb as a song substitute. Thus, aligned with the onset of chickadee, titmouse, nuthatch, cardinal and house finch song, the rapid-fire reverberating first drum of a **Downy Woodpecker** pierces the air of a bright late-January day.

Since the diminutive downy is the most common on a short list of permanent resident woodpeckers in our area its drumming is almost invariably the first and most often heard. However, the quality of the sound produced varies widely because the physical quality of the surface it chooses is so variable. The density of the wood, whether it is dead tissue or live, whether it is hollow inside or not, as well as how expansive the cavity is, all contribute to the quality of the sound produced.

It is not easy to tell which species is drumming but as a general rule, the larger the species, the slower its drumming rate will be. A **Red-bellied Woodpecker** isn't that much larger than a downy, and its drumming rate is largely indistinguishable to my ear from that of a downy; this, in contrast to the drum of the crow-sized **Pileated Woodpecker** – notably slow, deep and heavy thuds that seem closer to rapid raps from a hammer than from a bird's beak. It is worthwhile to have a listen to their varied vocalizations, as well.



Downy Woodpecker.

Photo by Steve Sage.

One permanent resident woodpecker bucks the increased size/lower drum-rate trend, however. As explained in his informative book, *The Singing Life of Birds*, Donald Kroodsma analyzed recordings of the downy and the larger **Hairy Woodpecker** and found that the typical downy drums at an average rate of 15 taps/second while the hairy averages closer to 25 taps/second. The difference in their drumming rates surely goes right over those heads bearing uninformed human ears, but since becoming armed with this awareness I feel I've grown quite adept at recognizing a drumming hairy, and so can you. Watch/listen to each of these videos for comparison:

https://www.youtube.com/watch?v=guKQe0L_3eQ

<https://www.youtube.com/watch?v=FCBlA13T2jI>

Red-bellied: <https://www.youtube.com/watch?v=wn9tgYHf27I>

Pileated: https://www.youtube.com/watch?v=3ZiuqQ2_nvI

Largely shut from late summer through early winter, the “auditory door” of avian diversity is now ajar, and the sounds produced by the above relative handful of permanent residents are wafting through. The



By late February, inclement weather can't even quell the coos of doves, nor other early singers.

door will crack a bit wider, then a bit more as February advances. Their vocal (and drumming) activity only gains momentum in the crisp air of these late winter mornings. Inclement conditions can barely keep them quiet. Keep your ears peeled for the first cooing Mourning Dove. I usually hear mine in the vicinity of Valentine's Day. A week later, the rattling calls of the first returning Sandhill Cranes echo across local agricultural fields. By month's end mornings have become downright *noisy*, yet, this is a mere pittance in light of what is to come. Myriad southern migrants – species by species – begin returning to their breeding grounds around us; and when they do, they too will burst into song to fulfill their reason for “being.”

-Jim McGrath



The backing of so many private supporters thru these arduous months has made a huge impact in mitigating our losses. Again, we thank you, including these generous supporters over the past month...

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by Appointment

For Adults, Students, Families



See a Bald Eagle nest at Potter Park. Photo © Steve Sage.

For individual adults, adult couples, families, and other small groups, and a great remedy for the COVID-winter blues! **Parents**, this is an excellent way to get your home-bound students out of the house and into the fresh winter air while providing a fun and educational opportunity that may very well bloom into a lifetime interest! **Adults/Retirees**, a first excursion might just hook you... You may find yourself propelled into an engaging hobby that you'll wish you had found years ago!



See Peregrine Falcons. Photo by Greg Smith.

We are now offering guided birding by appointment almost any day of the week. Jim will meet you at a local natural area of your or our choosing. The goal? To find and identify as many bird species as possible during our time together, by sight and “by ear.” Each participant will receive one of our Michigan Birds checklists to keep a running tab of species encountered. Some birds can be viewed even closer through our high-powered spotting scope. Two potential destinations are highlighted in the accompanying photos: Potter Park to view the Bald Eagles and their nest, or Moore’s Park across from the Eckert Power Plant to view Peregrine Falcons and their nesting site located high on the building.

Contact us today to arrange a day and location. We also have spare quality binoculars to lend. Suggested minimum donation: \$20/hr plus mileage stipend.

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The sky's the limit for natural science learning here – with a Michigan twist! Through the duration of pandemic restrictions individual adults, couples and individual families are welcome to schedule a safe, intimate outdoor or indoor 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 a welcome relief to a student’s screen-learning time! 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 required to wear a mask during all indoor time.

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 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, trees, vines, and invasive plants.

Ask about arranging weekly or monthly visits, or regarding custom natural science lessons to supplement your student’s interests and grade-specific science requirements.

Contact us for more info or to make an appointment.



Feed crickets or worms to our recently acquired hyper and voracious Short-tailed Shrew.

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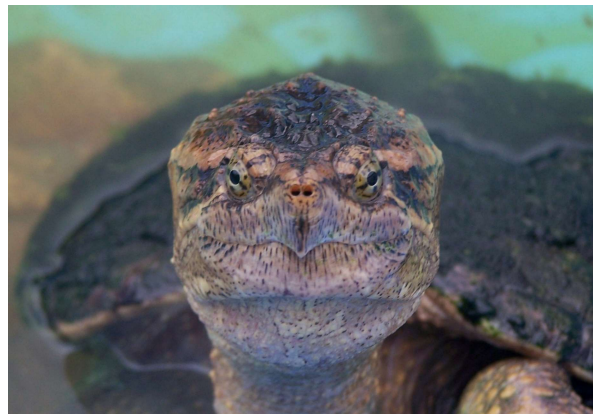
Your personal tour guide will take you tank to tank identifying, then giving viewers up-close looks at the creatures within while throwing in interesting and useful tidbits of information about each one and answering your questions along the way.

Nearly any of our cold-blooded menagerie can be taken out of tanks for even closer views on request. We can also feed them a wide range of foods, including crickets, worms, minnows and even frozen-thawed mice.

Base suggested minimum donation \$25/hr/household.

Ask about special arrangements for multiple-household sessions.

Contact us for further information or to schedule a date.



To Make Evidence-Based Decisions...

After the blatant obfuscation the country and the world has had to endure the past four years the opening paragraph of President Biden's *Memorandum on Restoring Trust in Government through Scientific Integrity and Evidence-Based Policymaking* reads like a breath of fresh air to the majority of Americans who continue to instill its integrity as instrumental for the common good...

It is the policy of my Administration to make evidence-based decisions guided by the best available science and data. Scientific and technological information, data, and evidence are central to the development and iterative improvement of sound policies, and to the delivery of equitable programs, across every area of government. Scientific findings should never be distorted or influenced by political considerations. When scientific or technological information is considered in policy decisions, it should be subjected to well-established scientific processes, including peer review where feasible and appropriate, with appropriate protections for privacy. Improper political interference in the work of Federal scientists or other scientists who support the work of the Federal Government and in the communication of scientific facts undermines the welfare of the Nation, contributes to systemic inequities and injustices, and violates the trust that the public places in government to best serve its collective interests.

<https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/>

We're going pro-active to battle the frivolous usage and waste of unrecyclable and undegradable plastic that is choking the planet's land, water and air. This byproduct of 21st Century consumerism has reached epidemic proportions, courtesy of the petroleum industry. Their mantra might as well be, "Go ahead... Try to buy *anything* without consuming our plastic." It takes vigilance, mindfulness and plenty of research to hurdle this formidable wall.



<https://foodsforliving.com/>

Kroger without the plastic packaging. Stop in and check it out, take a few empty dry containers while you're at it, and tell them you read it here. Don't see a dry food product in their bins that you wish you could buy in bulk? Ask the management if they can arrange to carry it.

-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.



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