
THIS ISSUE

Sunday, January 11 Open Hours:

Winter Birds: Backyard & Beyond

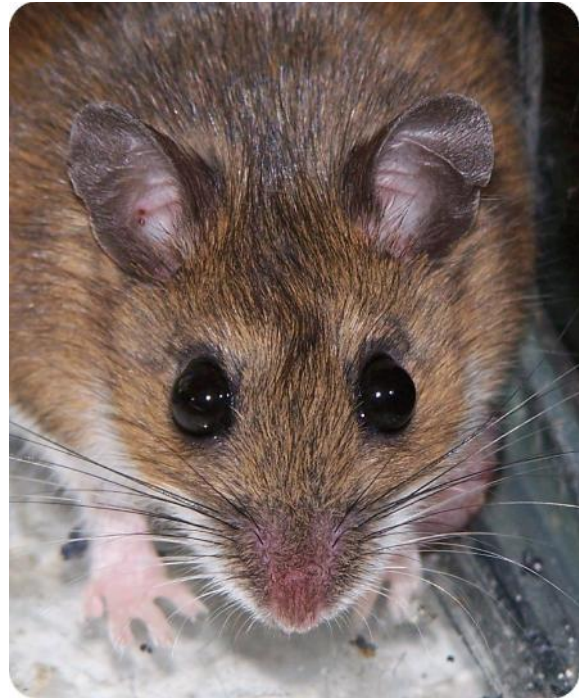
Coffee Break, January 16

MLK Day Camp, Jan 19

Lansing Area Birding Day, January 27

DTRT: A “Plastic” Resolution

***House Invaders
Unwittingly Join
“Varmints-to-Vittles”
Program***



Living in an old house in a rural setting requires - like it or not - sharing living quarters with wild creatures. I’m not referring to the myriad, mostly cold-blooded ones kept as part of our wildlife education business, but the cadre of critters that continuously infiltrates our remarkably porous, poor-excuse-for-a-fortress. Most of the uninvited, wild cohabitants residing at 5900 Williamston Road, are small, furry vertebrates – of course, mice - but also bats, flying squirrels, chipmunks and shrews.

We like the Big Brown Bats that inhabit our crawl-space attic. On spring and summer nights members of a thriving maternal colony swoop in and out of the vent under the eave that faces our driveway. One particular night at dusk Carol decided to watch and count how many flew out to begin their aerial foraging. By the time it became too dark to see, she had reached a whopping 54 exits with no returns. Despite the colony, we have not had a bat turn up on our side of the wall in nearly twenty years.

We also don’t have a problem with the Short-tailed Shrews. These mouse-sized mammals are confined mostly to the garage and the outside perimeter of the house, but one will occasionally wander into our living space in a tireless search for protein. If we spot one moving along the wall we can tell it is a shrew in an instant by its movement. A mouse has a bounce to its step. A shrew creeps.

This is not a rodent, but a member of the order, Insectivora, which also includes moles. Just look at the dentition. Shrew teeth are sharply-cusped and perfect for chewing through invertebrate exoskeletons. The incisors of mice and all other rodents are stronger, chisel-like and continuously-growing – perfect for gnawing through the hulls of seeds and nuts, and two-by-fours.

We definitely have a problem with the mice, but the chipmunks have long ago exhausted their ability to lay down the “cute” card, too. A number of chipmunk holes with entrances roughly two inches in diameter can be found among the bushes around the perimeter of the house. Similar-sized holes surrounded by mounds of soil are found regularly within the rock walls of our old Michigan basement.



A regular regiment of shoveling and filling is required to stave the relentless undermining activities of these pint-sized perpetrators. How can one not be driven to take more “permanent” measures?

Over many years we’ve found that deployment of these measures also needs to be relentless, which, I guess, makes them not so permanent after all. Although we rarely see more than two at a time - either at the bird feeders, in the garage or along the outside walls - the chipmunks here are surely fulfilling their impressive reproductive potential! One day I will successfully pick one off the feeder with the

pellet rifle. A few days later I’ll catch another in our small-squirrel-sized Havahart trap. Within a week, one, then two are at it again in any of these same places. This series of observation-and-removal plays out several times over the course of any given year.

The deer mice know. Our mouse-hotel is riddled with revolving doors. Unfortunately, we can’t see or get at most of them. At least their attraction to our inadvertent hospitality is only seasonal. They check-in through fall and winter, then check out – every one – once the landscape begins to re-green.

Our silverware drawer is a mouse-magnet. Who knows why? There is nothing to eat in there. I’d like to be a deer mouse for a day just to discover the appeal. The first evidence will show up every year around early November – fecal pellets and piddle drops adhered to the bottom of the drawer or to the topmost spoon, knife or fork in the silverware tray. Out comes the tray for a thorough washing of its contents. Then, we set our mouse-sized live box-trap in the drawer. (We own no snap-traps.) The following morning a mouse has been caught. We empty and reset it. The deer mouse parade continues for days, then weeks. For the following month, the silverware tray remains on the kitchen counter as the box-trap in the drawer keeps tripping. Every fall, we catch up to ten deer mice in this manner.

A hollow, partial wall separates our small, closet-sized laundry room from the kitchen. One day many years ago, family members began to hear the rustling, scratching and intermittent gnawing of a small animal coming from the laundry nook. We quickly determined the sounds to be coming from within this wall at floor level. We imagined a mouse crawling among the framing above the drywall ceiling, then falling down the opening between the walls. The drywall was apparently too smooth for it to scale back up, so it remained imprisoned. The rustling persisted for a couple days, then stopped. We assumed the mouse had died there. Several days later a mild but unmistakable odor of decaying flesh caught the attention of anyone passing by. There was nothing we could do about it, save going through the trouble of sawing a big hole in the wall to retrieve it. Several odiferous days passed. By the following week the smell had completely dissipated. The mouse’s desiccated, skeletal remains were out of sight, out of smell and out of mind.

About a year later the sequence was repeated... rustle, gnaw, silence, stink, then gone. Over the course of years we’ve tolerated this scenario almost annually. The mummified mice were surely piling up. Along this wall we keep a large plastic bag in which we accumulate other plastic bags for eventual recycling. One day, I pulled the bag away to reveal a gnawed hole, about an inch in diameter through the drywall near the floor. Apparently, thanks to the combined effort of the sharp incisors of many prisoners before it, this lucky mouse found a much thinner, more manageable layer of drywall separating it from freedom.

We were all set to patch the hole, but then, some consideration of options and consequences began to materialize... If we patched it, the cycle of imprisoned, dying, stinking mice would continue indefinitely, as it had since we moved here. If we left it open, any mouse that fell down there would

immediately be free to roam among us. Carol thought of a third option. We could push a piece of plywood against the wall to cover the hole. The next time we heard a mouse caught in the wall, we could figure out a way to uncover the hole and quickly place a box or other container against the wall with the open end facing the hole so the mouse would run into it. A small glass aquarium would be perfect since we could see the mouse's movements in order to catch and remove it. This system, with a few tweaks over the years, has worked beautifully.



One downside... With each trapped mouse the hole in the wall gets a bit larger. Each one has time to gnaw on the rim of the hole inside the plywood before we become aware of it. The hole has gotten so large now we've had to find a larger board! It is definitely time to patch this big hole, but not completely. We want to keep a *small* hole for them to exit.

We've invested in aluminum, box-style live traps over the killing snap-traps for a reason. The live-captures are not taken away to be released elsewhere. In our business mouse meat is at a premium! We currently maintain seventeen mouse-eating snakes of three species – all, incidentally, constrictors: the Black Rat Snake, Western Fox Snake and Eastern Milk Snake. This translates into over \$900 a year in frozen mouse purchases. While the snakes readily eat the thawed meals, like us, they definitely enjoy fresh food, too!

Contrary to many educators, we have never shied away from feeding a live thing to one of our menagerie-members in front of an audience. In fact, this is immensely popular with all ages. Only rarely are we required to placate a parent who is nervous about the possibility of a child being traumatized at the sight. Hey, it's a prominent dynamic of life on Planet Earth: animals eat other animals. This arc in the circle of life should not be ignored, minimized, hidden, or judged as something bad. It just is "the way it is," and there is much to be learned by observing the process among a variety of predators.



Audiences regularly see us feed worms to the bull frog or to garter snakes. They watch frogs, salamanders and box turtles snap up crickets, and water snakes devour minnows. However, the added drama of watching a struggling frog or mouse being overpowered and consumed by a snake nearly always requires more than up-front discussion of predator-prey relationships.

We stress that a predator like a rat snake is physically and behaviorally adapted to eat these specific prey items and is wired to capture and secure them in this and no other way. It has no choice. We also lead discussion that focuses on the frequency with which predator-prey

interactions occur all around us, though largely unnoticed; and, furthermore, how living in a society has allowed us to eat the flesh of other animals while avoiding participation in the messy act of predation required to secure it.

The response from all ages is overwhelmingly positive. A few individuals opt to not watch, but most, by far, are captivated by the drama. Contrary to the expectations of some, a constrictor's act of securing and eating a mouse is efficiently quick, clean, and almost always lacking even the slightest hint of blood.

When available, we will feed a live mouse to a snake in our day camps and within other programs here. With teacher permission we have also shown the process in many school classrooms. Students experience live predator-prey interactions on an annual basis at Montessori Children's House in Lansing, Stepping Stones Montessori in East Lansing and Okemos Nursery School - where we teach on Michigan wildlife topics on a weekly basis.

Rather than being traumatized, their fascination is totally piqued. They walk away from the experience harboring a healthy understanding and acceptance of a means by which energy transfers down the food chain, then, perhaps best of all, return home to excitedly relay their experience to family members.

-Jim McGrath



The Red-breasted Nuthatch, a bird of coniferous forests to the north, often spends the winter at area feeders.

Winter Birds: Backyard & Beyond

Sunday, January 11

Doors open from 1 to 5pm

Admission: \$5/person

While there are unquestionably more birds to be seen around Lower Michigan in summer than in winter, few people recognize that there are a slew of species that can *only* be seen here during the colder months. A wealth of unique birds migrates south every fall from Canada and the Arctic to call our area "home" in winter. Visit Nature Discovery on Sunday, January 11 for the 2pm presentation, *Winter Birds: Backyard & Beyond*. Beautiful Powerpoint images enhance this lecture highlighting northern visitors to your birdfeeders as well as those spending the winter in area fields, forests and waterways. Highlights include identification, behavior and audio recordings, as well as tips on where to go to find them. It's a great incentive to get outside in spite of the cold.

Visit and interact with our huge zoo of Michigan snakes, turtles, frogs, and salamanders. Our staff is always available to help visitors of all ages make the most of their time here.





Catch Nature Discovery on WLNZ Radio's morning show, Coffee Break

Jim is scheduled to appear this month on Friday, January 16 at 9:15am. The show airs weekdays from 9 to 10am on 89.7 FM. Listen live online at lcc.edu/radio/onair/ or watch it live (or later in the day at 6pm) online at lcc.edu/tv/watch.

We'll also post a Facebook reminder prior to the show.

MLK DAY CAMP

Monday, January 19

9am to 3pm

for K & older students

Join us for a full day of in-your-face nature. Indoor activities include lots of interaction with our snakes, turtles, frogs, salamanders and lizards, as we handle, feed, and learn about them along the way. Participants will keep their own bird checklists of species seen at the feeders. Among other outside activities, if there is snow, participants will make "snow candles" to take home. A hot lunch, snacks and plenty of hot chocolate are provided. Enroll in advance by email or phone. COST: \$55/student.



Shortly after dining on a Mourning Dove, this Merlin, a swift and agile northern falcon, perches in a tree top over the parking lot at Potter Park.

Lansing Area Birding Day

Tuesday, January 27

8am to 1pm

Join an intimate group for a week day of local guided birding with all transportation covered. We'll make stops at Potter Park, Moores Park, MSU farmlands, and other locations where unusual winter visitors, like Snowy Owls, are being reported on the internet. A personal checklist will be provided to help you keep track of the day's find. Maximum enrollment 5 adults. Meet at Nature Discovery or make arrangements for us to pick you up at your home or another convenient location.

FEE: \$35. Contact us in advance to reserve a space.

Thank You...

To the following supporters for their generous donations:

***Okemos Nursery School, Barb Paff, Kent & Cheryl Hall, Judy Marr
Krista Baumann, Bonnie Clark, Zachary Gietzel.***

DTRT: Join Us in Curbing Plastic Use



Part of my route on the annual Christmas Bird Count is along the river trail on both sides of Potter Park. Numerous times along the route this year I passed the snags of riverbank trees that had fallen into the current. The exposed and semi-exposed trunks and branches had become garbage-grabbing rakes. Every snag held back a large dam of plastic refuse. Single-use plastic bottles comprised most of the floating debris. Beyond the aesthetic assault, it doesn't take much of a leap to realize that the plastic junk caught up in these snags is a miniscule percentage of the volume endlessly passing in the current that does not get snagged. The Red Cedar is certainly no exception to the rule - across the state or across

the nation. Thanks to a glut of products with plastic packaging and a throw-away culture's addiction to single-use plastic the nation's rivers have become flowing slurries of nonbiodegradable petroleum-based junk in all shapes and sizes. How many tons of plastics are being dumped via these routes into our precious Great Lakes? As noted in the September issue, what's happening to our oceans is already well-documented:

http://education.nationalgeographic.com/education/encyclopedia/great-pacific-garbage-patch/?ar_a=1

In the September 2014 issue I also discussed the fact that our daily *Lansing State Journal* is delivered in a fresh plastic bag every day nearly 365 days a year. Extrapolating to every residence on our carrier's route, then every residence receiving delivery in the entire Mid-Michigan area, the number of plastic bags foisted on the public by the *LSJ* is mind-boggling. What was wrong with a simple rubber band? Even on rainy mornings, our paper rarely or barely gets wet in the mounted newspaper box.

When I called *LSJ* circulation about the issue I was informed that each newspaper carrier has the option to use plastic bags or not. I left a letter for our carrier in the box with a massive bag full of newspaper bags we'd been saving for two months (It was already the size of a large, stiffly-packed pillow!). In it I encouraged him to reuse these bags for future deliveries, and also explained that we wanted to exercise the option (like at a grocery store) to decline a plastic bag with our purchase. I further suggested he poll other recipients on his route about a plastic bag option. I'm happy to report that our newspaper is once again - like in the old days - delivered "in the raw." Not sure if he will follow up on the rest of his route.

In this season for resolutions why not add one regarding environmental responsibility? Become aware of personal plastic usage, then take steps to curb it, item by item. This is an admirable and attainable challenge, and, like the successful attainment of other resolutions, makes you feel good when you see the results. When using plastic is inevitable, be sure the plastic in question makes it into a recycling bin, not into a trash can or other location where its ultimate end is in question. The monthly household recyclable load that we deliver to MSU's excellent facility contains many times more waste than we leave at the curb over the same time. By volume, plastics easily make up 90 percent of it.

-JM

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