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Squirrel Du Jour, Chipmunk Again

Nine species of squirrels can be found within Michigan's borders, six of which we see or hear here on our six acres north of Williamston: Eastern Gray Squirrel, Eastern Fox Squirrel, Red Squirrel, Eastern Chipmunk, Southern Flying Squirrel and Woodchuck. To complete the state list, the other three are the Least Chipmunk, found in the U.P.; the Northern Flying Squirrel, largely occupying the Coniferous Forest Biome, the transition to which begins a bit north of Mt. Pleasant; and the Thirteen-lined Groundsquirrel, a more colonial, burrowing species that requires an abundance of open, grassy habitat not found in our immediate neighborhood.

Individuals of some species, while filling their rightful niche within the natural community, also manage to come into conflict with human endeavors around the home and garden. In our own experience over three decades the gray, fox and red squirrels have largely limited their nuisance status to raiding the bird feeders. Woodchucks have always occupied our acreage, but the presence of one of these large-scale excavators too close to the house or garage should make any homeowner uneasy. We've only had to deal with a digger next to our foundation twice in all these years; not bad for country living.

On an occasional still night we hear the thin, shrill squeaks of flying squirrels emanating from the nut trees in front of the house. Like owls, we hear them far more often than we see them, but we actually hear them most often *inside* the house. No doubt, generations-worth have been living in the crawl-space attic of this old edifice long before and ever since we showed up. It didn't take long after we moved in to grow accustomed to their circadian scurries across the ceiling. Many years later, the rapid bound of larger-than-mouse-sized feet overhead rarely elicits a comment or even an upward glance.

Activity curtails through the roughest stretches of winter, but otherwise, almost like clockwork at dusk sporadic, muffled activity will commence when the flying squirrels first awaken. Minutes later all is quiet again after they have exited the vent under the peak of the roof. They launch then glide across a span of about thirty feet to the outermost curled fingers of the hickory limbs that stretch over the driveway to begin their night of foraging. Then, appropriately, just as a glow begins to grow in the eastern sky another

clamor ensues over the ceiling when they return. Momentarily, the scuffling ceases. They've nestled in for the day.

Others may be uncomfortable, if not alarmed at the idea of tolerating these terms of cohabitation, but in a strange way that perhaps only "wildlife people" could understand we accept, and yes, appreciate their presence as we do the many other diverse wild things *outside* our residence that so enrich our country life. Until we note some structural damage or suffer any other malediction due to the unseen activities of our ever-present, ethereal housemates (with no such indications in over three decades) we will continue to deem the flying squirrels as benign.

Not so, the chipmunks. This squirrel is for us the most consistently troublesome species of the bunch. In conversation on the subject neighbors and other rural homeowners concur.

The Eastern Chipmunk that occupies a climax or - more commonly on a local level - subclimax deciduous forest natural community fulfills its ecological roles as a herbivore, a seed and nut consumer and dispersal agent, an insectivore, and as a prey item for a variety of large snakes, weasels and raptors, not to mention foxes, coyotes and bobcats. A chipmunk is also an accomplished and copious burrower of tunnels and subterranean chambers under the forest floor. It caches food, nests, rests, and spends the harsh periods of winter in more prolonged periods of inactivity within these chambers. The tunnels, in turn, are used secondarily by a long list of other vertebrate as well as invertebrate organisms within the ecosystem. Although we may see the larger squirrels more often than the chipmunk on a walk through the woods, it is merely because the chipmunk is smaller, less apt to climb trees, and quick to hide out of sight in the leaf litter, behind logs or in any of the many holes it has dug into which it can disappear in an instant. It is definitely and by far the most common squirrel species in many local wooded areas, including rural yards with a mostly wooded landscape.

By way of dozens of cheek-stuffed trips over the course of a day a chipmunk can drain a sunflower feeder faster than any gray or fox squirrel. These species prefer to crack and eat each seed one-by-one where they perch. When they are full they leave. For a chipmunk the amount of seed gathered is limited not by its stomach but by the size of the storage facility it has excavated.

If this weren't frustrating enough to the cost-conscious feeder-filler chipmunks love to burrow in close proximity, and even directly against the foundations of houses, garages and other buildings. The excess water from heavy precipitation events - increasingly common over recent years due to more extreme climate change-driven weather - result in excess water running down the holes and eroding the earth adjacent to the foundation. I circumvent the house and garage many times a year filling holes dug by chipmunks. The same holes or new ones are excavated only days, or sometimes hours later. Who can blame a body for opting to incorporate more permanent solutions?



This corner outside the house is a favorite burrowing site for our chipmunks. Entry holes are typically about 2 inches in diameter. They also always lack any indication of excavated earth around them.

Carol and I have talked with many rural homeowners who have effectively used the simple sunflower seed-in-a-bucket-of-water trap. For those not familiar with it, just place a three or five-gallon bucket half-filled with water next to an outer wall. Scatter enough sunflower seed on top of the water that it creates a floating mat, then place a board or other flat object as a ramp from the ground to the rim of the bucket. A sunflower-seeking chipmunk will eventually find it, jump in for the seed and drown. Our next-door neighbors started to do this with successful results, but felt badly enough for the chipmunks that they decided instead to drive live-trapped individuals a few miles away and release them.

We pointed out that for a variety of reasons the Michigan DNR strongly discourages relocating chipmunks, raccoons, opossums, woodchucks, or any other live-trapped terrestrial mammals that the homeowner considers a nuisance. Basically, if you decide to trap it they recommend going the distance by employing some means of euthanization.

So, what were our neighbors to do? They live-trapped then delivered them to us to dispatch! Now, if you know us, what we do, and what we have, you already know where this is going...



Among our huge educational menagerie of Michigan-native reptiles and amphibians we are currently maintaining five adult Black Ratsnakes ranging in size from five feet to almost seven feet in length. This is the largest snake species in the state, a formidable constrictor, and rare enough to warrant “special concern” protective status by the MDNR. We think anyone who studies this snake’s ecology would agree that, rather than naming it after an alien rodent that shows up in barns it would be much more accurate and correct to name it for a prey item that is a critical natural component of its ecology in a forest community: *Black Chipmunksnake*? (For more discussion

about this impressive species check out the opening column of our December 2015 newsletter: <http://naturediscovery.net/pdf/WILD%20TIMES%20Dec15.pdf>)

In addition to the adult rat snakes we also have several young ones, as well as an adult milksnake and foxsnake, all of which require small furry food items. We purchase frozen mice and small rats in bulk to the annual tune of about a thousand dollars. Thus, it is not lost on us that abundant, fresh, natural, *free* food sources exists right outside the door.

We’ve always owned a small-squirrel-sized Hav-a-hart trap, but it wasn’t until the summer of 2018 that I decided to start setting it with more regularity along the outside walls of the house. All in all I probably trapped and fed a good twenty chipmunks over the course of that summer and fall. However, sometimes, because of other work or distractions I would not reset the trap until days or even weeks after capturing one. Despite trapping this many, however, we continued to see just as many chipmunks and their associated handiwork around the outside of the house.

This past summer I decided to get even more serious about chipmunk-trapping here. Beginning June 1, I challenged myself to see how many individuals I could catch and feed to the ratsnakes over the following months, this time with more diligence in setting then resetting the trap. Last week I captured and fed Chipmunk Number 44.

Early in the summer the trapping rate was crazy, I suspect due to the emergence of grown young into the environment. In fact, during a two week period in late June I began to become concerned that our five stuffed ratsnakes could not keep up with the rate of incoming food! On one particular day I caught three chipmunks within hours of each other. A knock at the door would reveal our neighbor with yet another occupied cage in his hand.



As fall has progressed toward winter the number of captures has steadily dropped, perhaps not so much from the incessant trapping as from a natural decrease in activity as freezing conditions become more frequent. However, as we move into December an odd chipmunk still appears at the sunflower feeder and a fresh hole magically appears next to the foundation.

Could over forty chipmunks really thrive at once around our yard and residence? Definitely not. Pairs are quite territorial and will chase others away from their burrows. We've never seen more than a few individuals outside the house on any particular day. Rather, the continuous trapping likely acts as a very



localized “sink” to the vast population that surrounds us on all sides. When individuals disappear from this prime piece real estate complete with ample food and pre-dug holes, individuals from the surrounding population fill the void like water running into a basin. While not good news for a rural homeowner looking for respite from the chipmunk-riddled ground next to the house, it serves our serpentine menagerie and frozen rodent bill quite well. More so, physiologically, how can one not marvel at the energy and reproductive prowess inherent in this diminutive mammal; and ecologically, at the tremendous resilience its population exhibits in the face of intense (albeit, man-made) predation?

We've never been timid as educators in sharing the real-time ratsnake/chipmunk interaction with audiences of any age during our open Sundays or day camps. The entire process – strike, constrict and swallow – is quick, clean, efficient, not gory in the least, and over in less than ten minutes. For any child or adult who witnesses the act firsthand the realization is clear. Within the complex jigsaw puzzle that is the deciduous forest ecosystem these two particular pieces were made for each other.

- Jim McGrath

Catch Jim on Coffee Break December 6

Jim is scheduled to appear on Thursday, December 6 at 9:15am, discussing chipmunks, ratsnakes, our open Sunday, the annual Christmas Bird Count and more. 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.



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OPEN HOURS

Michigan's

**Black Ratsnake:
Extra "LRG"**

Sunday, December 8

Doors open 1 to 5pm

Admission \$5/person



That's Extra "Large, Rare and Gentle!" Few Michigan citizens could name our state's largest snake, much less, know anything else about its habitat, its behavior, its struggle to survive among us, and its gentle disposition. Meet and interact with Black Ratsnakes of all sizes all afternoon. At 2pm, we will present *Michigan's Black Ratsnake: Extra LRG*. Through Powerpoint images and use of live specimens learn about the identification, behavior, and ecology of this forest-dwelling tree-climbing constrictor. Learn the human-related factors contributing to its decline, and what you can do to better its chance to survive here.



Meet and hold ratsnakes and other species. Wear the large ones around your shoulders! After the presentation, we will feed frozen, thawed mice to each of the ratsnakes. Audience members will also have the opportunity to witness snakes constricting and consuming wild deer mice!

Visit the rest of our huge interactive Michigan reptiles & amphibians zoo, too! Hand-feed a huge array of frogs, turtles, salamanders and other snake species. Kids also love feeding our big, free-roaming Red-footed Tortoise, Milberta. Knowledgeable staff is on hand to help visitors of all ages make the most of your time here. Photo ops, galore!



**Plus, enjoy a bowl of Carol's award-winning meatless
Two-Bean Butternut Squash Chili! (Details on Page 7.)**



Lansing Area

Winter Youth Birding Day

Monday, December 23 8am to 3pm

For 4th grade students and older. Join Jim for a whirlwind day of winter birding in a number of Lansing area locations. Potter Park and the river trail skirting the Red Cedar are noteworthy for waterfowl, eagles and many other birds. We'll check out the Peregrine Falcons that nest and roost at the Eckert powerplant across from Moore's Park, plus other birds and locations based on what has been reported earlier in the week by local birders. Each student will be provided with a Michigan Birds checklist to keep a tally of species through the day. We may be able to arrange for your student to be dropped right at your door at day's end! Pack a bag lunch, binoculars, and dress for the weather. Enrollment limited to 5. COST: \$75/student. Contact us to register.

Michigan Owls & Owling

Friday, December 27; 7-9pm

The evening begins with a Powerpoint presentation over hot beverages and a snack. We'll present *Michigan Owls Up Close*, featuring all 10 species found in the state, covering identification, vocalizations, behavior and ecology of various species. Weather-permitting, we will then go out and attempt to "call one in" with audio recordings. Dress warmly, and don't forget your binoculars and camera! Advance registration required. Maximum 10 participants, so sign up early. Not recommended for small children. Fee: \$12/person. Do you have a small group of family/friends that would like to get together for an owling night? Contact us to make your own special appointment!



New Year Day Camps

**Thursday & Friday, January 2 & 3
9am-3pm**

Recommended for students, K & older. Enroll for either or both days of hands-on Michigan nature. Participants will interact with over 100 animals within our Michigan reptiles & amphibians zoo! Identify, handle and feed many of our snakes, turtles, frogs and salamanders. We'll watch and identify birds at our busy feeders and check them off on personal checklists. Lots of time outside and on the trails, as well! A photo of your student in action will be emailed to you. Hot lunch, hot chocolate and snacks provided. \$65/student/day. Advance enrollment required.



Carol's "Award-winning" Meat-free Chili: Good, Good for You, and Good for Shrinking Your Carbon Footprint!

In our November 2018 issue we discussed the environmental (not to mention *health*) merits of meatless eating. We included an original recipe for Carol's "Two-Bean Butternut Squash Chili." We then offered it for participants to enjoy during that month's open Sunday.

Imagine our surprise when Dave Sluyter, an ND-supporter from Kalamazoo, recently participated in our birding trip to Allegan County, then handed me an extra check for \$50.

Dave writes:

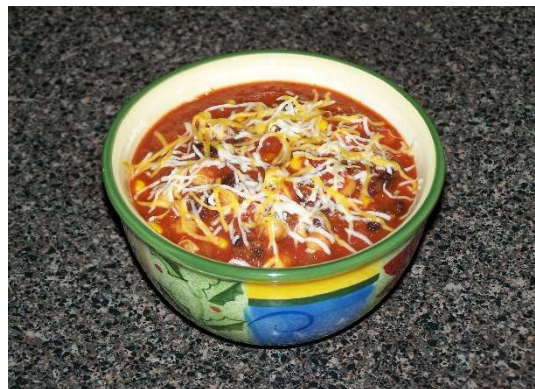
My church hosts a chili cook-off as a fundraiser once a year. This year, amid a rising consciousness about the environmental costs of beef, there were eight (out of 20) vegetarian entries, and two prizes - one for vegetarian and one for meat based chili.

I had seen and been intrigued by Carol's recipe for Two-Bean Butternut Squash Chili in one of the newsletters. I made the chili, and won the vegetarian prize of 50 bucks. I am sending the \$50 along as a donation to support your good work.

Thank you, Dave! With that kind of feedback we can't resist printing the recipe again. Please let us know if you decide to make it and how it went over with your family or guests. As an encore, during this Sunday's open hours, Carol will whip up another batch for participants to enjoy!

Two-Bean Butternut Squash Chili

28 oz can Organic Crushed Tomatoes
½ Organic Butternut Squash, diced small
½ Onion, diced small
1/3 Red Pepper, diced small
¾ cup Organic Corn, fresh or frozen
15 oz can Organic Garbanzo Beans
15 oz can Organic Black Beans
Chili Powder and Chipotle Pepper Hot Sauce
Extra Sharp Cheddar Cheese and Light Sour Cream



Place diced butternut squash in a 2 ½ quart (or larger) pot, cover with water and boil for 5 minutes. Drain, add all vegetables and drained garbanzo and black beans to pot. Add chili powder and chipotle pepper hot sauce to taste. Cover pot, bring to boil over medium heat, then reduce heat and simmer, stirring occasionally. Adjust seasoning to taste after 20-30 minutes. Top each bowl with cheese and sour cream if desired. Makes about 7 cups of chili.



The topic of palm oil production, consumption and associated rainforest destruction has not come up in recent newsletters, but that doesn't mean we aren't continuing to bring our reading glasses to the grocery store to check out the ingredient labels. Some of our historically favorite foods are off the grocery list indefinitely unless we see the Certified RSPO label. More reading on it here:

https://news.mongabay.com/2019/08/peru-aims-to-eliminate-palm-oil-deforestation-by-2021/?fbclid=IwAR0sVPx36r5bTli8091lpQ5X_PQZ7IsicYuVGLkoWoiRl6ezUS8qLybxUFQ

<https://www.worldwildlife.org/pages/which-everyday-products-contain-palm-oil#>

-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



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