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## ***High-Maintenance Milk Snakes, a Mouse Tail***

The Eastern Milk Snake is a relatively common species in rural areas throughout most of the state. Although not nearly as oft-seen as your typical Eastern Garter it is the species that generates the most calls, emails and texts to Nature Discovery. Check out this link to the September 2014 *Wild Times* issue for more about milk snakes and people: <http://naturediscovery.net/pdf/WILD%20TIMES%20Sept14.pdf>

Photos can be seen in the above column of the calm, cooperative, very handle-able adult female that we had kept and used in educational programs for years. She died the summer before last, so we needed to keep vigilant for a replacement. We typically see a milk snake a few times over the course of a year on our property or elsewhere, but there seems to be an unwritten law that a *searched for* snake shall not be found. Another whole year elapsed before we finally came up with another adult-sized milk snake.

The opportunity arose via a text from a family friend. He was in the process of helping his brother-in-law build a new house on a lot only a couple miles from ours. He texted a photo asking what kind of snake it was. We identified it as a milk snake then asked if we could swing by and take it off his hands. We were thrilled to finally have a replacement, a healthy-looking three-foot female. Now we merely needed to get it feeling comfortable with people and comfortable eating frozen, thawed lab-raised mice to begin its new life in the field of education.

Its disposition was calm from the outset. It showed no inclination to bite when we handled it, and, in fact, never even exhibited the signature, nervous tail-vibration of most wild milk snakes encountered.

Several days later we offered it a thawed mouse. The snake approached it casually with flickering tongue, but then turned away. The following week we thawed and presented a smaller, immature, more tender mouse that snake-keepers label fittingly as a “fuzzy.” A passing flicker, and yet again it passed.

Over the ensuing weeks I tried live adult mice purchased from a pet store (Like people, many snakes prefer fresh over frozen, too!), then live, tender, hairless baby mice. The snake wanted nothing to do with them. In our decades-long history with wild milk snakes taken into captivity this was entering uncharted territory. Luckily, medium to large snakes can go weeks or more without a meal with no ill effects.

However, amid regular fruitless attempts at feeding it, weeks turned into a month. Then, a month approached two. The snake was now very noticeably thinner and lighter than when we first acquired it. We became increasingly resigned to the prospect of having to release it. Maybe we'd get lucky and find a different individual before the end of another summer.

One last-ditch idea occurred to me. This snake obviously grew in the wild eating *some* sort of small, furry prey items. Perhaps the domesticated version of the alien House Mouse smelled foreign or otherwise unpalatable to it; this, in contrast to the enticing odor of the native, wild Deer Mouse - ubiquitous within the largely, unseen-to-the-human-eye world of holes, crevices, tunnels and other dark, tight places in which the milk snake has been evolutionarily designed to explore.

Need a live deer mouse? Set a box trap in our garage any night. Come morning, nearly fail-safe, one will be in it. Check out the opening column in each of these past newsletters for the backstory: <http://naturediscovery.net/pdf/WILD%20TIMES%20Jan15.pdf>  
<http://naturediscovery.net/pdf/WILD%20TIMES%20Feb18.pdf>



The next morning I dropped the freshly caught deer mouse into the milk snake and crossed my fingers. It was all over it! Within seconds the mouse was enveloped in constricting coils. For anyone unfamiliar with the uber-elasticity of a snake's mouth and body you'd be inclined to look at the size of this adult mouse, then over to the dinky snake head - smaller than the tip of your pinky - and state that there is no way *this* could be swallowed by *that*. Oh yeah? The entire process takes under fifteen minutes.

Thus, we've settled into a nice weekly routine. One night a week I'll set the trap in the garage before going to bed, then extract and feed the deer mouse to the milk snake the

next day. High maintenance? Yes, like *When Harry Met Sally* high maintenance, because this milk snake "likes it the way it likes it." After all, we're the ones who forced its indentureship. The adaptation required to make the arrangement work with this particular snake is destined to be a two-way street.

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We try to keep two specimens of each species. In early September Carol found a newly-hatched milk snake - no more than seven inches in length and less than half the girth of a pencil - in the vegetable patch along the south outside wall of the nature center. The feeding routine for this one is no picnic either.

Female milk snakes lay eggs in early summer. Around a country house the clutch may be deposited within a wall, or under/behind long-unmoved items in a basement, barn or garage like shelving units or utility cabinets. When the eggs hatch around the onset of September the spindly, brightly-patterned snake-lings are often discovered by startled humans as they disperse.

With a head only about a third the size of a pencil eraser the task of finding then consuming even the newest-born of mice presents a substantially more formidable leap than the one described above. No wonder the natural mortality rate for wild hatchling milk snakes is so close to one hundred percent. I'd be inclined to think most individuals never find a first meal small enough to consume.

We've tried keeping and feeding hatchling milk snakes that we've found in the past unsuccessfully. Whereas online searches yield instructions to simply drop a new-born mouse to it, we've never personally seen a newly-hatched milk snake choke one down.

Several years ago, while conversing with a snake-breeder in the pet trade I explained our baby milk snake dilemma. He suggested feeding it a mouse *tail*. Cut and thaw an inch-or-so from the tail of a small

frozen mouse, then carefully force-feed it to the tiny snake.

Carol held the snake on the sides of the neck between her thumb and forefinger, then slipped her fingernail into its mouth and pried it open. I held a pair of thin-nosed forceps poised with the mouse tail, ready to slip it into the opened mouth. I pushed it partially down its throat, then Carol let go and returned it to the tank. With the end of the tail protruding from its mouth, the tiny snake moved its head side to side, yawned... and dropped it. This wasn't going to be easy.

We repeated the procedure, but this time I gingerly pushed the tail with the forceps completely down its throat. We watched the lump slowly slide toward its stomach. It had eaten its first meal. Every five or six days we've been feeding it mouse tails in this manner. The snake seems to have grown accustomed to the routine. We've recently graduated to feeding it tails about two inches in length and we no longer have to stuff them down its throat. Once the base of the tail is placed in its flexible mouth it knows what to do and immediately "walks" it down the hatch.

Five months later the little snake has shed its skin twice and has noticeably grown! In another few weeks we will offer it its first new-born pinky mouse meal and see what goes down.

Would you like to see the little snake eat a mouse-tail? We'll feed it during open hours this Sunday.

-Jim McGrath



### ***Catch Nature Discovery on Coffee Break Friday, March 6***

Jim is scheduled to appear on WLNZ's *Coffee Break* show Friday, March 6 at 9:30am, discussing nesting boxes and other topics. The show airs weekdays from 9 to 10am on 89.7 FM. Listen live online at [lcc.edu/radio/onair/](http://lcc.edu/radio/onair/) or watch it live (or later in the day at 6pm) online at [lcc.edu/tv/watch](http://lcc.edu/tv/watch).

We'll post a reminder on our Facebook fan page.

## ***Around the State in March***

- ❖ ***Sunday, March 1: 2-4:30pm. MI Reptiles & Amphibians Exhibit; Winterfest, Southfield Pavilion, Southfield.***
- ❖ ***Thursday, March 5: 6:30-8pm. MI Reptiles & Amphibians Exhibit; Bennett Woods Elem, Okemos.***
- ❖ ***Thursday, March 12: 5-7pm. MI Reptiles & Amphibians Exhibit; N. Huron School, Kinde.***
- ❖ ***Friday, March 13: 6-8pm. MI Reptiles & Amphibians Exhibit; Beagle Elem, Grand Ledge.***
- ❖ ***Friday, March 20: 6:30-8pm. MI Reptiles & Amphibians Exhibit; Kinawa 5-6 School, Okemos.***
- ❖ ***Wednesday, March 25: 5:30-7pm. MI Reptiles & Amphibians Exhibit; North Elem, Lansing.***
- ❖ ***Thursday, March 26: 6:30-8pm. MI Reptiles & Amphibians Exhibit; Marble Elem, E. Lans.  
6:30-8pm. MI Reptiles & Amphibians Exhibit; Cornell Elem, Okemos.***





Photo © Steve Sage

## Open Hours

***Sunday, March 8,  
1 to 5 pm; \$5 Admission***

## 2pm Presentation

***Providing***

***for Bluebirds***

***and other Cavity-nesting Songbirds***

Bluebirds, chickadees, titmice and nuthatches begin searching for, and claiming nesting cavities throughout the month of March. Put a box up this month, and be amazed at how quickly birds begin to inspect it. At 2pm, we'll feature ***Providing for Bluebirds & Other Cavity-nesters***, a Powerpoint presentation featuring the array of "secondary" cavity-nesters - birds which, unlike woodpeckers, cannot excavate their own cavity, but must find an existing one. We'll also cover the life histories of two alien cavity-nesting birds, the house sparrow and European starling, which routinely destroy eggs, nestlings, and even kill adult birds in their drive to reproduce. We'll cover the best ways to deter them, and in so doing, maximize the nesting success of your backyard bluebirds and others. After the presentation we'll spend time viewing boxes in the yard, walk the trail and identify birds by sight and sound. Don't forget binoculars!

We'll have a limited number of bluebird nesting boxes for sale (\$25). We will also demonstrate a highly effective removable nest box trap accessory, available for sale (\$10). If you have a persistent house sparrow that has claimed a box in your yard, this will help you catch it. Feel free to contact us in advance to reserve a box or a trap.

With the aid of our staff, visit our highly interactive Michigan reptiles & amphibians zoo. Hold a snake, feed some turtles, drop a cricket to a frog. Enjoy the action at our bird feeders or ask for your own personalized guided walk on the trail.

Need help erecting a box in your yard? One of our staff can dig a hole, sink a post and install one for a reasonable fee. Contact us!





## *Spring Break Field Trip and Day Camp...*



### *Maple River Birding Field Trip*

**Monday, April 6, 9am-3pm.**

For 3<sup>rd</sup> grade & older.

Maple River State Game Area is peaking now with migratory ducks and a slew of other birds. See an active bald eagle nest, plus hawks and owls on nests, too. We'll hike dikes that surround the massive flooding, too. Students will tally up to 50 birds on personal checklists. Bring binoculars if you have them.

**COST: \$70.** Pack a bag lunch and water bottle, and be sure to dress for weather conditions. Advance registration required.

### *Spring Break Wildlife Day Camp*

**Tuesday & Wednesday, April 7 & 8,  
9am-3pm.**

For K & older.

Students can sign-up for one or both days of nature and outdoor-oriented activities. Each day will encompass feeding, caring for, and handling our huge captive collection of Michigan snakes, turtles, frogs, salamanders and lizards. We will also offer a variety of engaging outside explorations and activities dependent on the weather, including bird-watching and exploration of our vernal pond now alive with breeding frogs and invertebrates galore. Weather-permitting, students who wish to wade into the pond can bring old shoes, socks and pants, a change of clothes, and a towel. Boots are NOT recommended for wading.

**Cost: \$65/day.** Hot lunch and snack are provided. Advance registration required.



## Summer Youth Camps at LCC East

Carol will be teaching 4-day summer science camps for students entering grades 2-9 at LCC's East Lansing Campus. Morning classes, 9am-noon. Afternoon classes, 1-4pm.

July 6-9: AM – Fun with Physics (Gr 2-3). PM - Wetland Explorers (Gr 4-8).

July 13-16: AM – Rockets & Robots (Gr 6-9). PM – Classroom Arcade (Gr 4-5).

July 20-23: AM – Science Wizards (Gr 2-3). PM – Miniature Golf Challenge (Gr 5-8).

July 27-30: AM – Build A 'Bot (Gr 4-5). PM – STEAM Spinning Gadgets (Gr 5-8).

For details or to register, visit [lcc.edu/seriousfun](http://lcc.edu/seriousfun) and click on the summer tab.

## Environmental Reading for Every Concerned Voter

<https://insideclimatenews.org/news/26022020/clean-energy-michigan-emissions-cutting-california-solar>

<https://insideclimatenews.org/news/19122019/trump-climate-policy-record-rollback-fossil-energy-history-candidate-profile>

[https://www.nytimes.com/2020/03/02/climate/goks-uncertainty-language-interior.html?te=1&nl=morning-briefing&emc=edit\\_NN\\_p\\_20200302&section=whatElse&campaign\\_id=9&instance\\_id=16403&segment\\_id=21781&user\\_id=e2b8dd8c9b543fb8c35d5dd30658067e&regi\\_id=97652655ion=whatElse](https://www.nytimes.com/2020/03/02/climate/goks-uncertainty-language-interior.html?te=1&nl=morning-briefing&emc=edit_NN_p_20200302&section=whatElse&campaign_id=9&instance_id=16403&segment_id=21781&user_id=e2b8dd8c9b543fb8c35d5dd30658067e&regi_id=97652655ion=whatElse)

[https://www.theatlantic.com/magazine/archive/2020/03/the-2020-disinformation-war/605530/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=atlantic-daily-newsletter&utm\\_content=20200221&silverid-ref=MzI4Njc1NDk5NTIxS0](https://www.theatlantic.com/magazine/archive/2020/03/the-2020-disinformation-war/605530/?utm_source=newsletter&utm_medium=email&utm_campaign=atlantic-daily-newsletter&utm_content=20200221&silverid-ref=MzI4Njc1NDk5NTIxS0)

-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*



Less Beef = Less CO<sub>2</sub>  
Cowspiracy.com

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



RSPO.org



Worldwarzero.com

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