



THIS ISSUE

Coffee Break, July 15

Sunday, July 17 / Visit Our MI R&A Zoo

Raise Giant Silk Moths

Around the State in July

Michigan Reptiles & Amphibians Camps

Science vs. the New "Reality"

"Home" is Where the Frog Is

If you were a wild frog which would you prefer - a tiny "garden pond" only two feet wide and less than a foot deep made of formed, black plastic, and situated only a few feet from the back door of a human dwelling; or a half-acre weedy, mucky pond crawling with invertebrate life, flying and hopping insects of all sizes, and a lot more frogs of your species? Anyone would assume the latter. Come on... room to stretch your legs, abundant food, hiding places and limitless intraspecific mingling opportunities?

Well, the young adult female Green Frog that "found" our petite garden pond in the spring when she was a mere froglet showed us that she apparently seems to *prefer* its quiet simplicity to living la vida loca out back.

Just outside the back door of the small nature center attached to our house is a bricked-in pen filled with overgrowth next to the patio. During the daytime through the warmer months it is the stomping ground for our red-footed tortoise and box turtles. For years the pen contained a sunken, pre-formed plastic, three-foot-deep garden pond, but it somehow sprung a leak that we noticed this spring. After filling it with the hose it would slowly drain about half-way down. In the past, if the tortoise or a box turtle went into the pond we had arranged rocks such that either could easily climb out, but since the leak and the drop in water level, we've been worried that one of them might fall into it, then, unable to scale the smooth, exposed plastic wall, potentially drown.

Last week, our employee, Andrew, drained and removed the lining. In its place we would sink a much shallower, round lining with only about half the surface area of the original. A pond of this depth would guarantee no drowning accidents. As he was removing it this, now larger, female Green Frog jumped out of the way. He caught her and asked what to do with her. I suggested releasing her in our vernal pond situated through the trees beyond the back edge of our lawn.

"She'll probably be back tomorrow," I added, only semi-kidding. Andrew released her, then partially back-filled the hole, dropped the new, round replacement pond into place, then filled it with water and added a few flat pieces of limestone.

The next morning there she was - perched atop one of the rocks in her new, smaller, but acceptable digs. No one was too surprised. It had happened several times in the past with other frogs we have known. Although Andrew deposited her in the overgrowth at the pond's edge, she managed to hop the 150 odd feet through the woods, across the lawn and over the short brick wall of the pen to arrive "home."

As an ecological rule, of all Michigan frog species, we're the least fond of the Green Frog. If you missed our January 2016 newsletter you'll know why after reading the opening essay (<http://naturediscovery.net/pdf/WILD%20TIMES%20Jan16.pdf>). However, for us it's impossible to be indifferent toward a *frog*, of all things, that demonstrates a desire to live closer to us instead of - from a human perspective, anyway - where a better living arrangement surely exists out back... not to mention its crazy-remarkable homing instinct and ability!

Every year, young frogs dispersing from area wetlands - mostly on warm, rainy nights - suddenly show up in our little penned-in pond. As little as ten years ago a few Leopard Frog metamorphs would arrive with the young Green Frogs, then stay and grow before our eyes over the following weeks to adulthood.

(Despite our efforts to protect their breeding and foraging habitat, inhospitable climatic factors that trump even the best efforts at habitat preservation are decimating the local Leopard Frogs. One of the most prolific frog species on our vernal ponds and in the surrounding rural habitats is now a mere ghost of what it was when we moved here 28 years ago. Local observations like this corroborate the grim findings of scientists studying frogs around the country and around the world: <https://www.facebook.com/PopSci/videos/10154202075401411/>.)



Unfortunately, the little pond was shallow enough that, once winter arrived and these frogs attempted to overwinter at the bottom, they would inevitably be winter-killed. In the spring we would fish out the carcasses that floated on the recently-thawed water.

Given a choice, a frog would prefer an outside pond certainly to, say, a life stuck in an aquarium, right?

Our first experience with frog-homing happened several years ago and involved an adult Leopard and an adult Green Frog which we had had in our menagerie for well over a year. (We try to keep two of every species for our educational ventures, however, we had somehow acquired, and were caring for a third of each of these species.) One summer day, as we were discussing having too many mouths to feed, we decided then and there to release the spare Leopard Frog and Green Frog, so we removed them from their tanks and marched them to the vernal pond. The following morning *both frogs* sat at the threshold of the door, waiting to get back to where they belonged!

Over the years we have presented for a garden club or exhibited at an event whereby someone shares their dilemma of trying to capture wild frogs (and sometimes turtles) to release in their newly-installed backyard garden pond. The problem... they won't stay!

Experience with our returning frogs has prompted us to formulate an explanation that goes something like this: The frog captured on its home range seems to possess an inherent GPS-like sense of its proper point on the planet. Remove it from that point and it will (as also demonstrated in birds and in many other vertebrates) attempt to reorient back to that point. Probably, the best way to get wild frogs to populate your rural garden pond is to have the patience to allow dispersing metamorphs to find it on their own. If you don't want to wait, drive a country road on one of these warm, rainy nights and snatch a few transient young Green Frogs off the road. You would be catching them just as they are leaving their natal pond to set out and find their own place in the world in which to settle and call "home."

-Jim McGrath



Catch Us on Coffee Break Friday, July 15

Jim is scheduled to appear on Friday, July 15 at 9:15am, discussing Michigan wildlife topics. 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 post a reminder on our Facebook fan page.

Visit Our Interactive Michigan Reptiles & Amphibians Zoo

Sunday, July 17

Doors open from 1 to 5pm. Admission \$5/person.



Did you know Nature Discovery houses the state's only complete collections of all 13 species of native frogs and all 10 species of native turtles? Nine species of native salamanders and 12 species of Michigan snakes round out this impressive zoo.

Photo opportunities abound amidst up-close encounters with over 100 individuals of 43 Michigan species. Watch and feed turtles as they swim in pools at your feet. Feed mulberries to box turtles. Watch insects being fed to frogs and salamanders. Kids can help catch some on the grounds to feed to them. Watch various snakes gobble up worms, fish, frogs and other prey. "Wear" a huge Black Rat Snake, the largest, and one of the rarest snakes in Michigan!

Knowledgeable staff is on hand to help participants of all ages make the most of their visit.

ALSO, check out our "farm" of growing giant silk moth caterpillars. Cecropia, Polyphemus, and Prometheus Moth larvae are available with complete written care instructions at a special discount for Sunday's visitors.



There is Still Time to Raise Giant Silk Moths this Summer

*Cecropia, Polyphemus and
Promethea larvae will be
available for one more week.*

*This is like raising Monarchs
– on steroids!*

*Check the website for
purchase information details.*



Around the State in July

- ❖ Saturday, July 9: 7:30pm. MI Reptiles & Amphibians Exhibit; Ludington State Park.
- ❖ Tuesday, July 19: 7pm. MI Wildlife Presentation; Valley Court Park, East Lansing.
- ❖ Wednesday, July 20: 1pm. MI Wildlife Presentation; Mason Public Library, Mason.
- ❖ Saturday, July 23: 10:30am. Michigan Snakes Presentation; Huron County Nature Center.
- ❖ Sunday, July 24: 10am to 2pm. Michigan Turtles Exhibit; Williamston Farmer's Market.



Students will meet Michigan's rarest frog, the state-threatened Blanchard's Cricket Frog.

Michigan Reptiles & Amphibians Day Camps for Students 10 yrs & Older Still Have Openings

*A handful of openings remain for these
unique and intensive camps.*

*July 11-14 session (2); August 1-4 session (1)
Contact us to enroll before they're gone!*

<http://naturediscovery.net/pdf/summercamps.pdf>

Science vs. the New “Reality”

As the Republican Party acclimates to having been Trumped, the real estate mogul/reality TV star isn't hiding his disdain for “phony” climate scientists and the consensus of the rest of the world at the recent Paris climate conference. He is promising somehow to strike away restrictions on all manner of fossil fuel exploration and production for our unbridled consumption.

Here is a link, grounded in sound scientific research, neatly outlining the actual threat, the causes and potential solutions. Sticking your head in the sand is not one of them.

<http://www.nytimes.com/interactive/2015/11/28/science/what-is-climate-change.html>

Josh Fox, who produced the two *Gasland* documentary movies about standing up to the fracking industry, released a new movie recently shown on HBO entitled, *How to Let Go of the World and Love All The Things Climate Can't Change*. Viewing this 15-minute interview makes us want to see it.

http://dotearth.blogs.nytimes.com/2016/06/27/on-a-heating-planet-gasland-filmmaker-josh-fox-lets-go-and-likes/?rref=collection%2Ftimestopic%2FGlobal%20Warming&action=click&contentCollection=science®ion=stream&module=stream_unit&version=latest&contentPlacement=8&pgtype=collection

-JM



Become a fan of *Nature Discovery* on Facebook!

NATURE DISCOVERY 5900 N. Williamston Road Williamston, MI 48895

(517) 655-5349 naturedisc87@gmail.com www.naturediscovery.net