

THIS ISSUE

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Garlic Mustard Season: 500 a Day



Highly invasive, alien Garlic Mustard has this patch of native Violets surrounded..

Unlike so many homes, we have almost no flowers planted in beds to beautify the perimeter. We'd like to, but our priorities march to a beat that relegates the act of traditional gardening for beauty's sake low enough on the list that it rarely gets realized...

Something ominous that we just can't ignore is spreading throughout wooded areas all over Mid-Michigan and elsewhere. We call it a quiet ecological crisis - quiet because most people could walk through the woods surrounded by the symptoms of this contagious "sickness" and never recognize it.

In our never-ending battle with invasive plants on our six acres, the woody species – Amur honeysuckle, Oriental Bittersweet, and, to a lesser extent, Autumn Olive – can be pulled or cut any time of year. However, once spring arrives all hands (Carol and my four) are on deck to pull as much Garlic Mustard as possible before it begins to drop seed in mid-June. The only other necessity to get the job done happens to be one precious, rare commodity this time of year: time. Our April and May schedules are the most intensive of the year.

This aggressively-colonizing biennial is especially insidious because of its remarkable tolerance to shady places. Therefore, it grows and spreads profusely in wooded areas. Neither deer, rabbit, nor insect will touch its strong-tasting leaves, and each plant will drop hundreds of seeds by early summer. As a result, nearly every native woodland wildflower has become an endangered species in woods where this plant has been allowed to proliferate.

Native wildflowers in the wooded portions of our property have declined, but not as badly as those in areas where no one is working to eliminate the invaders. Indeed, the woodlands at some of Mid-Michigan's most popular natural areas and nature centers are choked with Garlic Mustard (as well as with other invasives). Some nature centers attempt annually to rally citizens to come and help them pull plants through the weeks of spring, but they cannot muster nearly the broad interest and participation required to put a dent in growth covering tens to hundreds of acres. Furthermore, once Garlic Mustard has become established on a given acre, up to seven years of annual, complete pulling is necessary to finally exhaust the latent seed bank in the soil.

Despite our busy schedule and, cognizant of the fact that we are the only stewards on which our six acres can rely, I began last year to assign myself a daily quota of five hundred plants to pull through

May until the seeds drop. The task can usually be accomplished with about an hour of nonstop pulling. However, at this stage in my life I may not be able to stand erect again if I pulled for that long without a break. I will usually split the task into two or three shorter sessions. On days that I have more time I may pull a thousand or more in anticipation of days ahead where I am out of town or gone all day. Conversely, consecutive days of other work can easily put me into a 1,000 to 1,500 deficit.

Long-term diligence is paying off. In some areas of our property that were carpeted with it years ago, only a handful of mustard plants now sprout.

We'd appreciate any extra hands to fight the cause. During this month's Open Sunday (May 15) we'll be happy to take you on the trails out back to investigate Garlic Mustard, other invasives, and the trees and native wildflowers in jeopardy. Contact us if you can spare an hour or more to help us pull any other day.

We were surprised late this January to witness the act of coitus among our large rat snakes. They've bred annually for years, but never this early. Normally, eggs hatch in early summer. This year, just last week! Ten snakelings have joined our menagerie, three of which are albinos. Needless to say, we can't keep them all.



Nature Discovery will offer a young black rat snake to any educational institution - school, nature center, or otherwise, that books a presentation or exhibit with us, while supplies last. This is Michigan's largest snake, and also one of the rarest. It is a state-listed species, and, therefore, requires a permit from the MDNR just to possess one. We can help initiate the permit process for you. We can even sell you frozen mice at a much discounted rate compared to regular pet store prices. Contact us to make arrangements or for more information. Come visit the new hatchlings on the 15th!

-Jim McGrath

Our 2016 Summer Day Camp Rosters **are filling up! Here is the list of camp weeks and the number of spots remaining in each as of May 6:**

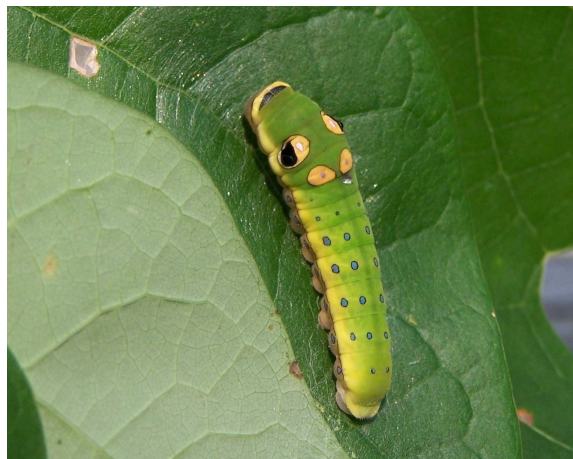
June 13-16 Michigan Field Birding (10 & up) : 2 spaces
June 20-23 Nature Discovery (7-9 yrs) : FULL
July 5-8 MI Herp Atlas Field Camp (MS-HS) : 3 spaces
July 11-14 MI Reptiles & Amphibians (10 & up) : 3 spaces
July 18-21 Budding Naturalists (5-6 yrs) : FULL
July 25-28 Nature Discovery (7-9 yrs) : FULL
August 1-4 MI Reptiles & Amphibians (10 & up) : 4 spaces
August 8-11 Budding Naturalists (5-6 yrs) : 3 spaces
August 22-25 Insect Collecting (10 & up) : 4 spaces

Carol is also offering science, engineering and design classes at LCC East for various ages. Click this link for our complete schedule.

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

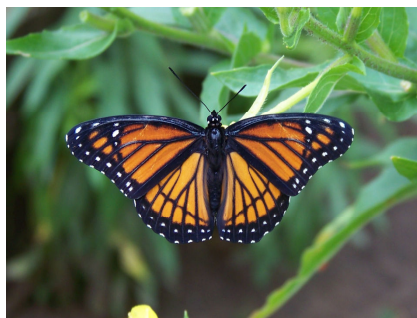


Fourth Annual
Biodiversity Day
Sunday, May 15
Featuring
Beyond the Monarch



The ornately-patterned Spicebush Swallowtail larva feeds almost exclusively on the leaves of Sassafras.

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



Monarch? NOT! The larva of the similar but slightly smaller Viceroy feeds largely on the leaves of willows.

The Monarch is one Michigan butterfly that everyone knows. Most also know that the caterpillar of this species feeds solely on milkweeds and that its populations have declined precipitously over the years. However, there are over one hundred species of other butterflies in the state, too, and many of these are experiencing declines as well. The larvae of most of them also feed on only one or a handful of specific plants in the environment.

At 2pm, sit in on the Powerpoint presentation, *Beyond the Monarch*. Beautiful images will enhance this presentation highlighting species that reside in Mid-Michigan and the critical food plants necessary for each of them to reproduce and thrive.

Before, during or after the presentation here is a list of other activities offered to help you become more knowledgeable about the tremendous but underappreciated natural diversity that surrounds us. Knowledgeable staff will be on hand all day to assist in a range of highly-interactive, indoor and outdoor biologically-diverse encounters for all ages. Take the challenge to encounter 100 species of Michigan life in a single afternoon here!

Stations and activities include:

- ✓ Take a Michigan Frogs Quiz with live specimens.
- ✓ Identify "The Grand Slam of Michigan Turtles" on the premises, featuring all 10 species found in the state. Help feed them, too!
- ✓ Meet 12 of our state's 17 species of snakes. Lots of handling and feeding opportunities, too.
- ✓ Identify over 20 species of birds by sight and by sound.
- ✓ Identify a long list of wildflowers, shrubs, vines and trees.
- ✓ Identify insects encountered around the yard and trails.
- ✓ Inspect pans teeming with diverse invertebrate life from the vernal pond.
- ✓ Identify a host of invasive species that are eroding natural diversity in our natural areas.
- ✓ Plant a milkweed seedling to take in a home-made, folded newspaper mini-planter.
- ✓ More!

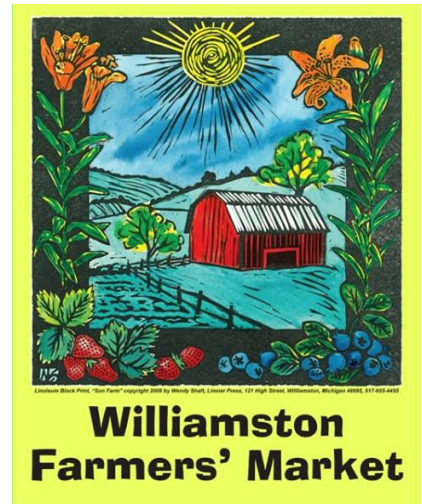


High School Volunteers Wanted!

If your high school student has time to spare this summer we could use the help! Duties would include maintenance of our nature classroom, including our huge zoo of Michigan reptiles & amphibians, outside grounds maintenance, and some teaching assistance responsibilities, while becoming familiar with all aspects of a busily-functioning private nature center. Looks great on a resume, too! Contact us now to learn more or to schedule a personal introduction.

Catch Us at Williamston Farmers' Market Sunday, May 22

We will be at the market highlighting some aspect of Michigan wildlife one Sunday a month through September. On the 22nd we will be featuring "The Grand Slam of Michigan Frogs," all 13 species native to the state. At 11am, Jim will lead any interested participants on a guided birding walk through McCormick Park. All participating adults/families will receive a free Michigan Birds checklist to keep track of bird species encountered. Meet at our tent and don't forget your binoculars!



Bill Nye on Climate Change & Politics

In this interview Bill Nye names names associated with sophisticated misinformation and misdirection campaigns aimed at influencing you and me to do nothing to curtail our fossil fuel consumption. The next time such information hits the media pay attention as to whether the source is one of this list of "shills" - bought and paid by the powerful fossil fuel industry or one of its supporting institutions.

<https://www.yahoo.com/katiecouric/bill-nye-thinks-climate-change-key-to-2016-162730128.html>

-JM

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

350.org

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