



A Giant Swallowtail nectars on Butterfly Bush blossoms.

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She's Got The Lilt

Many delight in watching butterflies land on flowers to feed. However, I'd wager that almost as many do not think of the butterflies' broader needs enough to rationalize that the process of nectaring is quite simply one of many brief but necessary pit stops in a butterfly's otherwise all-encompassing, energy-demanding race to make more of its kind before it dies.

It's like watching the Indy 500, then being solely focused on the cars that have pulled off the track to refuel while paying no attention to the actual race itself, much less its outcome.

Indeed, in practice it is ironic that many gardeners plant flowers to attract nectaring butterflies while simultaneously working against the *overriding* purpose of this stage of their life cycles. Much of the naturally-growing plant life - the very nurseries required for each species to ensure the launch of the next generation - gets targeted for removal or is discouraged from becoming established at all; a lepidopteran version of 'not seeing the forest for the trees' if there ever was one.

And don't get me started about backyard spraying for mosquito and tick control; might as well call it 'Lepidoptericide.'

Most folks were also never given a reason to mindfully observe a butterfly in motion as it flits across their field of view in the yard, at a park or in some other airspace not far above the ground. However, it is advantageous to remember as you view one on a sunny spring or summer day that the adult leg of a lepidopteran's life is laser-tuned to reproduction.

Females tend to be more noticeable in the environment largely because, once mated (which usually happens within hours of eclosure from the chrysalis stage), they wander over a broad area in search of target plant species for egg deposition. By contrast males generally stake out relatively small territories - perhaps around popular nectaring beds - then patrol them for passing females and opportunities to mate.

Naturally, medium-to-large butterflies catch our attention more readily than smaller species. A fertile female in the process of searching for one or a few specific larval food plants appears not to locate the correct plant by sight as much as by touch – or perhaps *by taste*, if you will. All female lepidopterans (i.e., moths too) have chemical receptors on the tips of the front feet for this purpose.

When the butterfly flutters up to a given plant she lowers herself, helicopterlike, and ‘tickles’ a leaf’s surface with her feet. Up close it appears that she is running in place for a brief second while the wings continue to flutter over her back for balance. Most of the touchdowns are for naught. On contact, she instantly determines that a particular leaf is not the ‘right’ kind for her offspring. She deftly ascends then drops to the surface of another plant’s leaf, sometimes just seconds later if surrounding foliage abounds; then to another, and another, and so on.

It’s a bouncing flight, but so much more delicate than the stark bounce of, say, a rubber ball. More aptly, I’d say she ‘lilts’ from one leaf to the next. It should not take an informed observer long to notice such a telling flight path.

If inclined you can approach her with calm, cautious steps so as not to spook her. You just might get to witness the very act of egg deposition. To further increase your odds, it is immensely helpful to memorize the larval food plants, starting with those of large common species beyond the Monarch. Once you learn these plants by sight you can notice them *on-site* in real time if a butterfly is present in their vicinity.

Still further, whether a butterfly of a given species is present or not you can check for eggs or larvae whenever and wherever you encounter the known food plant over the growing season. There are good field guides to help you connect the butterfly (or moth) to its preferred food plants. I’ve copiously and effectively used the Princeton Field Guide, *Caterpillars of Eastern North America* by Daniel L. Wagner for decades.



Red Admiral, Comma (both pictured), Question Mark and Milbert’s Tortoiseshells seek Stinging Nettle on which to oviposit. Look for their larvae on it this summer.

If you prefer a quicker, more condensed turnaround to connecting local butterfly species to larval food plants contact us. We composed a sheet that lists some twenty such pairings and would be happy to email it to you.

Here is another option: Make an extended appointment with us this summer to take a personalized, guided “Butterflies and Larval Food Plants” walk. We will identify specific roadside vegetation around our rural North Williamston neighborhood, zeroing in on local herbaceous plants, shrubs, vines and trees while also inspecting many of them for larvae of the species that rely on them.

If you haven’t read it, or need refreshing, the opening column in the August 2024 newsletter (<http://naturediscovery.net/pdf/WILD%20TIMES%20Aug24.pdf>) is chock-full of information about the life cycle and ecology of the Giant Swallowtail, Michigan’s and North America’s largest butterfly. In it, I extensively discuss the Hoptree, a small citrus tree that occurs sporadically through Lower Michigan. It also happens to be an ecological ingredient critical to the perpetuation of this species in our state.



The Hoptree on the front of our driveway now fills the space between the towering Red Maple and Pignut Hickory on either side of it.

In the column I mention that when we moved here in the late '80s I could find no Hoptrees growing on our property; nor any on roadsides or other properties in our North Williamston rural neighborhood. In the late '90s I purchased a small one from a local native-plant nursery and planted it at the front of our driveway.

Fast-forward ten, twenty, and now nearly thirty years. The Hoptree stands fifteen feet high, its many branches not only densely-foliated, but by early autumn adorned with many dozens of ripening clusters of disc-like, quarter-sized, winged seeds.

Throughout the past decade volunteer Hoptrees of all sizes can be found just about everywhere around the unmown perimeter of our lawn and just about anywhere else where a lawnmower does not regularly pass. Yet, one more aspect to helping folks interact with the diverse natural world around them, we dig individuals up and transplant them in pots so that interested parties can take one home to establish in their own yard. Currently, we have four little potted transplants on the side of our patio, each only about a foot tall, awaiting relocation to someone else's backyard.

On a sunny, warm day a couple weeks ago I happened to glance out the open back door of the nature center in time to see a Giant Swallowtail fluttering across the far end of the lawn and along the overgrowth behind our fenced-in vegetable garden. Immediately, I could tell by the slow, liling motion that it was a female in egg-laying mode and that she was searching for leaves of Hoptree or the native shrub, Northern Prickly-ash on which to oviposit.

However, I also knew that no Hoptree volunteers were growing in the immediate area where this particular female was searching. She would have to wander elsewhere in the yard to find them.

Then the idea struck. Could I make a special delivery? A Giant Swallowtail Door Dash? I hurried out to the patio, picked up one of the potted saplings and rushed across the lawn toward her, then slowed when I got near so as not to scare her away.

Arms extended while grasping the pot, I closely trailed her meandering path hoping she would suddenly turn back and encounter the plant. I found myself whispering as I followed, "Here... This is what you're looking for."

After a couple of close passes she rose above me and over the top of the fence that encloses our vegetable garden. I hurried around the corner and through the gate to catch up with her.

Guided by the fence she flew in a linear fashion back and forth just a couple feet above the ground skimming the tops of random weeds that grew along the base. I stooped next to the fence in alignment with her altitude and extended my arms with the potted Hoptree. Sure enough, she backtracked straight at it. A fluttering hesitation ensued when she flew into the obstruction. Her forelegs descended and her front feet ran in place on one of the topmost leaflets for the briefest of seconds.



The volunteer Hoptree, potted and 'delivered.'

Her flash of recognition was clear, especially from such a ridiculously intimate perspective. As if zapped with an electric prod she suddenly popped into the air off the plant then broke into rapid, undulating circles around this small sprig of foliage. On about the fourth revolution, her flight stalled and she descended onto one of the lower leaflets. Her feet lightly pattered it, while her abdomen curled in a downward arc behind them. The tip made contact with the surface and a tiny orange dot appeared. She popped up, flew a few more circuits around the tree then settled to oviposit in the same manner on a leaflet located on the opposite side.

Apparently, two was enough on one plant. She took off, upward and over the vegetable garden's front fence. It only took a couple of flaps for her to cover the ten feet of lawn space between the fence and the bushy eight-foot Hoptree situated there. We had transplanted it in this particular spot some five years before, when it was barely larger than the one in this pot.

From inside the fence I saw her circle the tree several times then alight twice in succession to lay eggs. By the time I got through the gate to the tree she had already moved on and soon disappeared around the north wall of our house. When I reached the tree, a few minutes of targeted scrutiny revealed both eggs adhered to the tops of different leaflets.



Orange egg deposited atop a Hoptree leaflet.

This past week we were able to use the potted Hoptree with Giant Swallowtail eggs as live props in front of several audiences. The larvae hatched a few days ago. We will raise them in the nature center safe from a host of potential predators that may – more likely than not – get to the wild larvae that hatch from the eggs laid on the Hoptree. We will be able to show them to many more audiences of kids and adults as they grow to impressive larval maturity then molt to chrysalises around early July.



Three-day-old larva on the potted volunteer Hoptree.



Fourth-instar larva a few weeks after hatching.

By the first days of August they will emerge as adults and join a host of others in the wild, all coordinated to emerge in this same time frame. They'll find our Butterfly Bush, Bull Thistles and Joe Pye Weeds, not coincidentally rife with opening nectar-laden blossoms at this same time. They'll find each other and mate. Then females will get busy searching for, finding, and ovipositing '2026 Brood II' on Hoptrees and Prickly-ashes.

Motivated to attain your own Hoptree sapling yet? Make an appointment for a visit almost any day, and we'll send you home with one. From our lengthy experience, including feedback from many who have

taken and transplanted one or more volunteer Hoptrees, *if you plant it they will come.*

We provide even more opportunities to immerse yourself in lepidopteran life cycles this summer. For instance, arrange to take and raise huge Cecropia and Luna Moth larvae - just hatching here and available now - with complete care instructions. Details ahead...

- Jim McGrath

Raise Giant Silk Moth Caterpillars this Summer!



Fertile eggs or newly-hatched larvae of huge and beautiful Luna and Cecropia Moths are available throughout the month while supplies last.



Luna



Cecropia

**Four larvae of one species with detailed care instructions, only \$15.
Contact us to make an appointment to pick them up at the nature center almost any day.**



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Visit Our Nature Center by Appointment

*Suggested Minimum
Donation: \$5/person/hr*



The sky's the limit for natural science learning here – with a Michigan twist! Adults, couples and individual families are welcome to schedule an intimate indoor/outdoor visit to what we call “The Biggest Little Nature Center in Michigan,” and “Home to the Largest Zoo of Michigan-native Reptiles and Amphibians.” The unique hands-on experiences here are unrivaled at any other nature center or zoo! We will bring snakes, turtles, frogs and salamanders out of tanks to interact with adults or students of any age or grade-level.

Identify and feed “the grand slam of Michigan turtles” - all ten species native to our state as they swim and bask in pools on the patio! Meet, pet and feed “Milberta”, our hungry Red-footed tortoise.

Handle our Michigan-native garter snakes while learning how to tell them apart, then watch them gobble up worms. Hold or “wear” a gentle 6-foot Black Ratsnake – the largest in the state!



A wild male Luna mates with a female through our ‘mating cage.’

Many more snakes, turtles, frogs and salamanders to identify and feed. Identify birds up close at the feeders. Take a guided walk on our trails to identify breeding birds by their songs, plus insects, invasive plants and more.

See our mini-farm of Luna and Cecropia Moth caterpillars just hatched from eggs. Arrange to take some home to raise. Take home a Hoptree sapling, a larval food plant of the Giant Swallowtail. Contact us to schedule a day and time to visit.

Ask about personalized birding outings and butterfly larval food plant identification walks in our rural neighborhood or at a natural area of your choosing!

Around the State in June

- ❖ ***Saturday, June 6: 10am-2pm. MI Reptiles & Amphibians Exhibit, 'Giant Silk Moths' Presentation; Kirtland's Warbler Wildlife Festival, Roscommon.***
- ❖ ***Saturday, June 6: 10am-2pm. MI Reptiles & Amphibians Exhibit; Sturgeon Festival, Port Huron.***
- ❖ ***Sunday, June 7: 10am-2pm. MI Salamanders/Giant Silk Moths Exhibit, Williamston Farm & Artisan Market, Williamston.***
- ❖ ***Saturday, June 13: 10am-2pm. MI Reptiles & Amphibians Exhibit; Webber Township Get Outdoors Day, Baldwin.***
- ❖ ***Sunday, June 14: 2-3:30am. MI Snakes Exhibit; Waterloo Recreation Area, Chelsea.***
- ❖ ***Tuesday, June 16: 2pm. MI Wildlife Presentation; Whittemore Library, Whittemore.***
- ❖ ***Saturday, June 27: 10:30am. Michigan Turtles Presentation; Huron Co Nature Center, Port Austin.***
- ❖ ***Sunday, June 28: 11am. MI Butterflies & Moths Presentation; Webber Wildlife & Education Center, Clare.***



*We appreciate the many unwavering supporters of our mission through the years.
A special 'thank you' to our most recent donors...*

*Olivia Bograkos * Cedar Creek Vet Clinic
Will Gold * Grand River Bait & Tackle * Jan Heminger
Olivia Killips * Sabrina & Chris Potterpin * Ariela Silva*

More Reading for Americans

Concerned for Our Democracy and Environment

3,000 Species Are Killed for Supper. Why Do We Allow it?

https://www.nytimes.com/2026/06/08/opinion/fishing-bottom-trawlers-seafood.html?campaign_id=9&emc=edit_nn_20260609&instance_id=176888&nl=the-morning®i_id=97652655&segment_id=221177&user_id=e2b8dd8c9b543fb8c35d5dd30658067e

From Dave Dempsey's Substack

Death of a Political Powerhouse: Why the Demise of a Conservation Group is Bad for Michigan

https://open.substack.com/pub/dempseyd/p/death-of-a-former-powerhouse?r=dpj5a&utm_campaign=post&utm_medium=email

The latest from Political Historian, Heather Cox Richardson. Consider subscribing (free) to *Letters from an American*.

https://open.substack.com/pub/heathercoxrichardson/p/june-11-2026?r=dpj5a&utm_campaign=post&utm_medium=email

–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

The personal actions that cut climate pollution fast are to go flight-, car-, and meat-free. Start with the one that feels most feasible for you; if you can’t totally go without, aim to cut your consumption today at least in half. – Kimberly Nicholas, Under the Sky We Make

What if we had storytelling mechanisms that said it is important that you know about the well-being of wildlife in your neighborhood? – Robin Wall Kimmerer

Study nature, love nature, stay close to nature. It will never fail you. – Frank Lloyd Wright

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This newsletter thoughtfully and laboriously composed, written, and edited with no artificial input.



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