

# Thumb Land Conservancy News

## 2023 May 9

### Dead End Woods Sanctuary Spring Stewardship

#### Next 3 Saturdays - May 13, 20, and 27

#### From Noon to 3:00 PM

#### Fort Gratiot Township, Saint Clair County

We are conducting our annual spring stewardship in the Dead End Woods Sanctuary this coming Saturday, May 13, and the following two Saturdays, May 20 and 27, from noon to 3:00 PM.

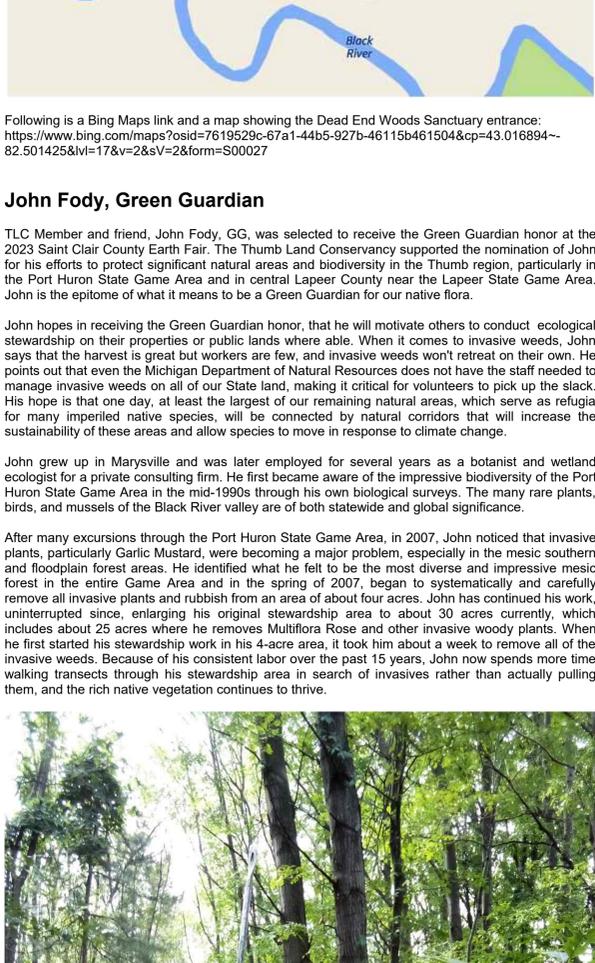
This is a great opportunity to learn spring wildflowers and other plants in this unique woodland preserve. The Dead End Woods is one of the most floristically diverse forests in Saint Clair County.

Our focus for 13 years has been removal of invasive Garlic Mustard, but we are now removing minor occurrences of Multiflora Rose, Japanese Barberry, and other invasive plants. We may even be able to move into a phase of vegetative enhancement soon, in which higher quality native plants will be propagated by transplant and seed to improve the natural community as a whole.

Meet us at the end of Wilson Drive at 3685 Wilson Drive in Fort Gratiot, next to the Dead End Woods Sanctuary. You should bring drinking water. Be prepared for rain and mosquitoes. Garlic Mustard is hand-pulled. Gloves are not necessary. We'll provide tools to remove other plants. We normally work more than 10 feet apart in the woods, so there should be minimal concern about COVID.

Garlic Mustard is very tasty and nutritious, originally brought to North America from Europe as a culinary herb. You are welcome to take as much home as you like, but don't spread it in your yard.

For more information, contact us at 810-346-2584 or e-mail [mail@ThumbLand.org](mailto:mail@ThumbLand.org).



Following is a Bing Maps link and a map showing the Dead End Woods Sanctuary entrance: <https://www.bing.com/maps?osid=7619529c-67a1-44b5-927b-46115b461504&cp=43.016894~-82.501425&lvl=17&w=2&s=2&form=S00027>

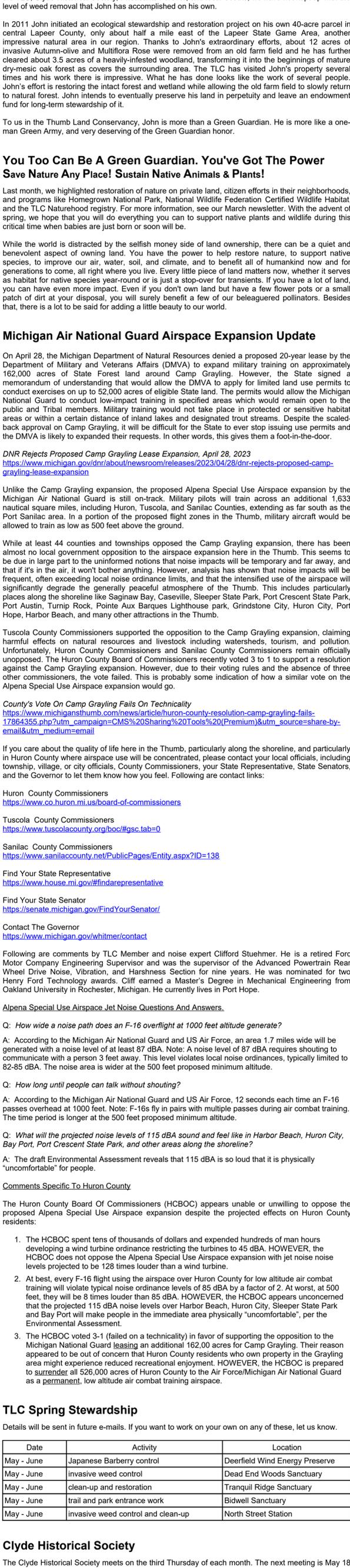
### John Fody, Green Guardian

TLC Member and friend, John Fody, GG, was selected to receive the Green Guardian honor at the 2023 Saint Clair County Earth Fair. The Thumb Land Conservancy supported the nomination of John for his efforts to protect significant natural areas and biodiversity in the Thumb region, particularly in the Port Huron State Game Area and in Central Lapeer County near the Lapeer State Game Area. John is the epitome of what it means to be a Green Guardian for our native flora.

John hopes in receiving the Green Guardian honor, that he will motivate others to conduct ecological stewardship on their properties or public lands where able. When it comes to invasive weeds, John says that the harvest is great but workers are few, and invasive weeds won't retreat on their own. He points out that even the Michigan Department of Natural Resources does not have the staff needed to manage invasive weeds on all of our State land, making it critical for volunteers to pick up the slack. His hope is that one day, at least the largest of our remaining natural areas, which serve as refugia for many imperiled native species, will be connected by natural corridors that will increase the sustainability of these areas and allow species to move in response to climate change.

John grew up in Marysville and was later employed for several years as a botanist and wetland ecologist for a private consulting firm. He first became aware of the impressive biodiversity of the Port Huron State Game Area in the mid-1990s through his own biological surveys. The many rare plants, birds, and mussels of the Black River valley are of both statewide and global significance.

After many excursions through the Port Huron State Game Area, in 2007, John noticed that the invasive plants, particularly Garlic Mustard, were becoming a major problem, especially in the mesic southern and floodplain forest areas. He identified what he felt to be the most diverse and impressive mesic forest in the entire Thumb area and in the spring of 2007, began to systematically and carefully remove invasive plants and shrubs from an area of about four acres. John has continued his work, uninterrupted since, enlarging his original stewardship area to about 30 acres currently, which includes about 25 acres where he removes Multiflora Rose and other invasive woody plants. When he first started his stewardship work in his 4-acre area, it took him about a week to remove all of the invasive weeds. Because of his consistent labor over the past 15 years, John now spends more time walking transects through his stewardship area in search of invasives rather than actually pulling them, and the rich native vegetation continues to thrive.



Green Guardian John Fody on his Lapeer County estate upholding his "Rod of Justice" which has brought an end to many an invasive shrub. To John's left and behind are his piles of invasive shrubs, each pile formed by John into what he calls a "boma", borrowing a Swahili word for a livestock enclosure of brush, which John builds to protect small native trees from deer, and lions perhaps.

John knows very well the ecological quality of natural areas like the Port Huron State Game Area as he has surveyed most of the State land across our region and parts of northern Michigan while contracted by the Michigan Natural Features Inventory. In 2010 through 2011, he assisted the MNFI in conducting some of the first extensive surveys of the Port Huron State Game Area to inventory species and assess the quality of plant and animal communities. John's work was used to produce the 82-page *Natural Features Inventory and Management Recommendations for Port Huron State Game Area*. Michigan Natural Features Inventory Report Number 2012-05, available at this link: [mfi.msu.edu/reports/MNFI-Report-2012-05.pdf](http://mfi.msu.edu/reports/MNFI-Report-2012-05.pdf)

In 2017, John encouraged the Thumb Land Conservancy to adopt our own stewardship area in the Port Huron State Game Area where we have removed Garlic Mustard and other invasive weeds from an approximately 2-acre area not far from John's stewardship area. Even with several volunteers from the TLC, Clyde Historical Society, Pheasants Forever, and local Scouts, we have not kept up with the level of weed removal that John has accomplished on his own.

In 2011 John initiated an ecological stewardship and restoration project on his own 40-acre parcel in central Lapeer County, only about half a mile east of the Lapeer State Game Area, another impressive natural area in our region. Thanks to John's extraordinary efforts, about 12 acres of invasive Autumn-olive and Multiflora Rose were removed from an old farm field and he has further cleared about 3.5 acres of a heavily-infested woodland, transforming it into the beginnings of mature dry-mesic oak forest as covers the surrounding area. The TLC has visited John's property several times and his work there is impressive. What he has done looks like the work of several people. John's effort is restoring the intact forest and wetland while allowing the old farm field to slowly return to natural forest. John intends to eventually preserve his land in perpetuity and leave an endowment fund for long-term stewardship of it.

To us in the Thumb Land Conservancy, John is more than a Green Guardian. He is more like a one-man Green Army, and very deserving of the Green Guardian honor.

### You Too Can Be A Green Guardian. You've Got The Power

#### Save Nature Any Place! Sustain Native Animals & Plants!

Last month, we highlighted restoration of nature on private land, citizen efforts in their neighborhoods, and programs like Homegrown National Park, National Wildlife Federation Certified Wildlife Habitat, and the TLC Neighborhood registry. For more information, see our March newsletter. With the advent of spring, we hope that you will do everything you can to support native plants and wildlife during this critical time when babies are just born or soon will be.

While the world is distracted by the selfish money side of land ownership, there can be a quiet and benevolent aspect of owning land. You have the power to help restore nature, to support native species, to improve our air, water, soil, and climate, and to benefit all of humankind now and for generations to come, all right where you live. Every little piece of land matters now, whether it serves as habitat for native species year-round or is just a stop-over for transients. If you have a lot of land, you can have even more impact. Even if you don't own land but you have a few flower pots or a small patch of dirt at your disposal, you will surely benefit a few of our beleaguered pollinators. Besides that, there is a lot to be said for adding a little beauty to our world.

### Michigan Air National Guard Airspace Expansion Update

On April 28, the Michigan Department of Natural Resources denied a proposed 20-year lease by the Department of Military and Veterans Affairs (DMVA) to expand military training on approximately 162,000 acres of State Forest land around Camp Grayling. However, the State signed a memorandum of understanding that would allow the DMVA to apply for limited land use permits to conduct exercises on up to 52,000 acres of eligible State land. The permits would allow the Michigan National Guard to conduct low-impact training in specified areas which would remain open to the public and Tribal members. Military training would not take place in protected or sensitive habitat areas or within a certain distance of inland lakes and designated trout streams. Despite the scaled-back approval on Camp Grayling, it will be difficult for the State to ever stop issuing use permits and the DMVA is likely to expanded their requests. In other words, this gives them a foot-in-the-door.

*DNR Rejects Proposed Camp Grayling Airspace Expansion, April 28, 2023*

<https://www.michigan.gov/dnr/about/newsroom/releases/2023/04/28/dnr-rejects-proposed-camp-grayling-lease-expansion>

Unlike the Camp Grayling expansion, the proposed Alpena Special Use Airspace expansion by the Michigan Air National Guard is still on-track. Military pilots will train across an additional 1,633 nautical square miles, including Huron, Tuscola, and Sanilac Counties, extending as far south as the Port Sanilac area. In a portion of the proposed flight zones in the Thumb, military aircraft would be allowed to train as low as 500 feet above the ground.

While at least 44 counties and townships opposed the Camp Grayling expansion, there has been almost no local government opposition to the airspace expansion here in the Thumb. This seems to be due in large part to the uniformed notions that noise impacts will be temporary and far away, and that if it's in the air, it won't bother anything. However, analysis has shown that noise impacts will be frequent, often exceeding local noise ordinance limits, and that the intensified use of the airspace will significantly degrade the generally peaceful atmosphere of the Thumb. This includes particularly places along the shoreline like Saginaw Bay, Caseville, Sleeper State Park, Port Crescent State Park, Port Huron, Turpin Rock, Pointe Aux Barques Lighthouse park, Grindstone City, Huron City, Port Hope, Harbor Beach, and many other attractions in the Thumb.

Tuscola County Commissioners supported the opposition to the Camp Grayling expansion, claiming that it affects natural resources and livestock including watersheds, tourism, and pollution. Unfortunately, Huron County Commissioners and Sanilac County Commissioners remain officially unopposed. The Huron County Board of Commissioners recently voted 3 to 1 to support a resolution against the Camp Grayling expansion. However, due to their voting rules and the absence of three other commissioners, the vote failed. This is probably some indication of how a similar vote on the Alpena Special Use Airspace expansion would go.

*County's Vote On Camp Grayling Fails On Technicality*  
[https://www.michiganradio.com/news/article/huron-county-resolution-camp-grayling-fails-17864355.php?utm\\_campaign=CMS%20Sharing%20Tools%20\(Premium\)&utm\\_source=share-by-email&utm\\_medium=email](https://www.michiganradio.com/news/article/huron-county-resolution-camp-grayling-fails-17864355.php?utm_campaign=CMS%20Sharing%20Tools%20(Premium)&utm_source=share-by-email&utm_medium=email)

If you care about the quality of life here in the Thumb, particularly along the shoreline, and particularly in Huron County where airspace use will be concentrated, contact your local officials, including township, village, or city officials, County Commissioners, your State Representative, State Senators, and the Governor to let them know how you feel. Following are contact links:

Huron County Commissioners  
<https://www.co.huron.mi.us/board-of-commissioners>

Tuscola County Commissioners  
<https://www.tuscolacounty.org/boc/#gsc.tab=0>

Sanilac County Commissioners  
<https://www.sanilacounty.net/PublicPages/Entity.aspx?ID=138>

Find Your State Representative  
<https://www.house.mi.gov/#findarepresentative>

Find Your State Senator  
<https://senate.michigan.gov/FindYourSenator/>

Contact The Governor  
<https://www.michigan.gov/whitmer/contact>

Following are comments by TLC Member and noise expert Clifford Stuehmer. He is a retired Ford Motor Company Engineering Supervisor and was the supervisor of the Advanced Powertrain Rear Wheel Drive Noise, Vibration, and Harshness Section for nine years. He was nominated for two Henry Ford Technology awards. Cliff earned a Master's Degree in Mechanical Engineering from Oakland University in Rochester, Michigan. He currently lives in Port Hope.

#### Alpena Special Use Airspace Jet Noise Questions And Answers.

Q: *How wide a noise path does an F-16 overnight at 1000 feet altitude generate?*

A: According to the Michigan Air National Guard and US Air Force, an area 1.7 miles wide will be generated with a noise level of at least 87 dBA. Note: A noise level of 87 dBA requires shouting to communicate with a person 3 feet away. This level violates local noise ordinances, typically limited to 82-85 dBA. The noise area is wider at the 500 feet proposed minimum altitude.

Q: *How long until people can talk without shouting?*

A: According to the Michigan Air National Guard and US Air Force, 12 seconds each time an F-16 passes overhead at 1000 feet. Note: F-16s fly in pairs with multiple passes during air combat training. The time period is longer at the 500 feet proposed minimum altitude.

Q: *What will the projected noise levels of 115 dBA sound and feel like in Harbor Beach, Huron City, Bay Port, Port Crescent State Park, and other areas along the shoreline?*

A: The draft Environmental Assessment reveals that 115 dBA is so loud that it is physically "uncomfortable" for people.

#### Comments Specific To Huron County

The Huron County Board Of Commissioners (HCBOC) appears unable or unwilling to oppose the proposed Alpena Special Use Airspace expansion despite the projected effects on Huron County residents:

1. The HCBOC spends tens of thousands of dollars and expended hundreds of man hours developing a wind turbine ordinance restricting the turbines to 45 dBA. HOWEVER, the HCBOC does not oppose the Alpena Special Use Airspace expansion with jet noise noise levels projected to be 128 times louder than a wind turbine.
2. At best, every F-16 flight using the airspace over Huron County for low altitude air combat training will violate typical noise ordinance levels of 85 dBA by a factor of 2. At worst, at 500 feet, they will be 8 times louder than 85 dBA. HOWEVER, the HCBOC appears unconcerned that the projected 115 dBA noise levels over Harbor Beach, Huron City, Sleeper State Park and Bay Port will make people in the immediate area physically "uncomfortable", per the Environmental Assessment.
3. The HCBOC voted 3-1 (failed on a technicality) in favor of supporting the opposition to the Michigan National Guard leasing an additional 162,000 acres for Camp Grayling. Their reasoning appeared to be out of concern that Huron County residents who own property in the Grayling area might experience reduced recreational enjoyment. HOWEVER, the HCBOC is prepared to surrender all 526,000 acres of Huron County to the Air Force/Michigan Air National Guard as a permanent, low altitude air combat training airspace.

### TLC Spring Stewardship

Details will be sent in future e-mails. If you want to work on your own on any of these, let us know.

Date	Activity	Location
May - June	Japanese Barberry control	Deerfield Wind Energy Preserve
May - June	invasive weed control	Dead End Woods Sanctuary
May - June	clean-up and restoration	Tranquil Ridge Sanctuary
May - June	trail and park entrance work	Bidwell Sanctuary
May - June	invasive weed control and clean-up	North Street Station

### Clyde Historical Society

The Clyde Historical Society meets on the third Thursday of each month. The next meeting is May 18 at 6:30 pm at the Ruby Lions Hall at 4535 Brott Road in Ruby. The Clyde Historical Society promotes history education and preservation in Clyde Township, including restoration of the historic Clyde Township Hall near the corner of M-136 and Wildcat Road, next to Bill Bearss Park. As usual, old maps and other historical items will be on display at the meeting.

Upcoming CHS events this year include:

- Veterans Picnic on May 21
- Pioneer Day on June 17

Both events will be held at the historic Clyde Township Hall. More details will be provided in future newsletters. For more information, see the Clyde Historical Society Facebook page at: <https://www.facebook.com/groups/1481890455361159/>

### Septophaga caeruleascens

By Tom Dennis



Black-throated Blue Warbler. Photograph by DickDaniels (<http://theworldbirds.org/>) This file is licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license. The photo is unedited.

The spring bird migration is well upon us and actually, it's about half-way complete. Most of the migrating warbler has headed north, as have many shorebirds and raptors. However, the neotropical migration is just starting. That's when birds that winter in Central and South America make their way back north to summer breeding grounds. Some of the late-April travelers such as Yellow-rumped Warblers have already been sighted in low numbers.

The highlight of spring migration for many birders, is when a host of little gems, collectively known as wood warblers, head north. Many of these tiny but colorful creatures will pass through here, some the most beautiful of the species in our summer homes in the Blue Water Area. We are situated on the migration path of the Black-throated Blue Warbler and slightly west of the edge of the breeding grounds in the dense woodlands of the Northeastern U.S. and Southeastern Canada but we do harbor a few that remain and nest locally. Let's take a look at this little beauty, what makes it so special, and where and for what to look and listen.

The Black-throated Blue Warbler is by far the most extreme example of sexual dimorphism of all wood warblers. The difference is so great that the males and females were originally thought to be two separate species. These small warblers average about 5 inches in length and weigh in at four tenths of an ounce. Males have a dark blue back, cap, and inner half of the leading edge of the wings; black face mask, throat, and side edging that contrasts a solid white breast. The balance of the wings are black with the exception of a small but bright white wing patch, mid-way along the length of the body. The female has olive-brown upperparts, olive-buff underparts, a white eyebrow, and the white wing patch that sets her apart easily from other similar colored warblers and links her, by this mark, to her male counterpart.

They feed on insects and other small invertebrates, foraging from the ground to high in the forest trees where they specialize in finding their prey on the underside of leaves. The nest is made of leaves and grass, lined with hair and spider web, and located in shrubs or young trees set near the ground. This nesting location practices, strong dimorphism, and the fact that they are more trusting and tame than other warblers, makes them an easy species for us to find and study. Their song is described as a husky, rising "zwee-zwee-zwee". A group of warblers has many collective and descriptive nouns but I like a "bouquet" of warblers because of their great variety and palette of colors. While on the color topic, I'll remind that when you see a blue-colored bird keep in mind the incredible design that gives us blue looking feathers. There is no blue pigment in feathers, the blue look is due to a structural design phenomenon of creation that allows internal prisms to precisely separate the blue light spectrum and hide the remaining spectrum of light, allowing us to enjoy the show!

Now, let's deal with the "Elephant in the Room", Avian Influenza (Bird Flu). We have heard warnings from MDNR and other agencies to stop feeding birds to stop the spread. This is a serious disease that largely infects domestic poultry, game birds and waterfowl. If your feeders are in a location frequented by the waterfowl or pheasants and quail (both of which are quite rare locally), you should stop feeding until the disease has run its course. This also serves as a reminder to keep your feeders clean to prevent a multitude of diseases and illnesses that can affect feeder birds. Hummingbird and oriole feeders should be out by mid-April. Also, let the insects live, birds need them for high-protein nutrition. Habitat is also a critical requirement and many birds succumb to habitat loss. You can easily make your property a bird friendly environment by planting red necker plants for hummers and you too will experience the health benefits and life of the creation!



You can learn more about birds and nature by attending Blue Water Audubon meetings held at The Point, 5085 Lakeshore Road, in Fort Gratiot on the first Monday of the month, October through May starting at 6:45 PM. You are also encouraged to visit the Blue Water Audubon Society Facebook page for local bird sightings, discussions, and events. Be sure to "friend" us!

Tom Dennis is a resident of Fort Gratiot where he and Laurie Melms Dennis, his wife of 47 years, tend to their bird and butterfly friendly gardens. He is a speaker and free-lance writer, passionate birder, advanced master gardener, creation scientist, and naturalist, with degrees from Michigan State University in Zoology and Biology. Tom is an active member of Blue Water Audubon Society, Master Gardeners of St. Clair County, Port Huron Civic Theater, Ross Bible Church, Tapestry Garden Club, Blueways of St. Clair, and is a steward of the Blue Water Riverwalk with Friends of the St. Clair River.

### Ecology News

If you have any ecologically oriented news articles you'd like to share, please e-mail them to us and they could be included in a future newsletter.

#### Years-Long Fight Over Gravel Mining Permits Resumes

Shouldn't the local taxpayers have the right to decide whether they want their community mined out and overrun by gravel trucks? This is just an effort to get around local communities that have denied approval in sensitive areas. We need to protect more of these areas, not open them to mining. There is a talk of the higher cost of sand and gravel, yet the pit owners are very wealthy and the State had a \$9 billion budget surplus in 2023 while major road projects have been a priority. Rather than save a nickel, lets save our natural areas.

<https://www.michiganradio.com/environment/climate-change/2023-05-04/years-long-fight-over-gravel-mining-permits-resumes>

#### Michigan Updates Its Endangered And Threatened Species List

There are now officially 407 Endangered or Threatened plant or animal species in Michigan, although the total should be higher considering how many rare species are not protected.

<https://www.wkar.org/wkar-news/2023-05-03/michigan-updates-its-endangered-and-threatened-species-list>

#### John Ball Zoo And Several Partners Are Working To Repopulate An Endangered Midwestern Butterfly

Our friends at the Michigan Nature Association and the Blue Heron Headwaters Land Conservancy in north Oakland County are working to protect the Poweshiek Skipperling butterfly. The species was relatively common only a few decades ago, but has nearly gone extinct due to pesticides, loss of prairie habitat, and climate change. Only small populations are known from Oakland County and Manitoba.

<https://www.wkar.org/wkar-news/2023-03-16/john-ball-zoo-and-several-partners-are-working-to-repopulate-an-endangered-midwestern-butterfly>

#### A Bug Newly Discovered In Michigan Is Hungry For The Invasive Garlic Mustard Plant

Thank you European Garlic Mustard Aphid.

<https://www.michiganradio.com/environment/climate-change/2023-03-28/a-bug-newly-discovered-in-michigan-is-hungry-for-the-invasive-garlic-mustard-plant>

#### 'A Wake-Up Call': Total Weight Of Wild Mammals Less Than 10% Of Humanity's

That's mostly about 6 pounds of wild mammals per person. By contrast, there is about 172 pounds of domestic mammal livestock per person, almost 30 times more than wild mammals.

<https://www.theguardian.com/environment/2023/mar/18/a-wake-up-call-total-weight-of-wild-mammals-less-than-10-of-humanitys>

#### Toxic 'Forever Chemicals' Found In Toilet Paper Around The World

While not exactly ecology, it's hard to leave this one out. It seems we just aren't going to get away from this stuff.

<https://www.theguardian.com/environment/2023/mar/13/toxic-forever-chemicals-pfas-toilet-paper>

#### US Food Pesticides Contaminated With Toxic 'Forever Chemicals' Testing Finds

There was talk of high PFAS levels in a local county drain a few years ago. It was a mystery as to why the levels were so high because the watershed is dominated by farm land. We probably know part of the answer now.

<https://www.theguardian.com/environment/2023/may/07/food-pesticides-toxic-forever-chemicals-pfas>

#### Deep-Sea Mining Vital To Climate Action, Deadly To Oceans

We must pursue renewable energy technology, but also be mindful of the true cost.

<https://www.dw.com/en/renewable-energy-technology-to-extract-lithium-cobalt-threatens-biodiversity/a-65219511>

#### Climate Change: Trees Grow For Extra Month As Planet Warms - Study

We have certainly been seeing this.

<https://www.bbc.com/news/science-environment-65037659>

#### How Light Pollution Disrupts Plants' Senses

We've known excess light is bad for decades. How it affects the complex relationships of plants and pollinators is now just being understood.

<https://www.bbc.com/future/article/20230308-how-light-pollution-disrupts-plants-senses>

#### Goodnet: Gateway To Doing Good - Planet, Environment

Here's a good web site.

<https://www.goodnet.org/planet/environment>

#### 'Not Just A Problem Of Science': How The Environmental Crisis Is Also Cultural

It could be argued that it's all cultural and science is just a tool. The first painting of girdled and burnt trees at the edge of a settlement in New York in 1794 is kind of shocking once you see everything. Considering the history of evictions, the painting of the cleared Central Park site is also stark.

<https://www.theguardian.com/artanddesign/2023/may/07/environment-civil-rights-exhibit-new-york-historical-society>

#### Going Local: Why Microadventures Are All The Rage

Sometimes being a tourist in your own community is the best thing.

<https://www.dw.com/en/going-local-why-microadventures-are-all-the-rage/a-64789440>

#### Ticks Suck. Here's A Guide To Identifying Them And Avoiding Bites

There are few good comparative guides to ticks.

<https://www.npr.org/sections/health-shots/2021/07/04/1012643351/tick-bite-disease-safety-tips>

#### Sun's Out, Ticks Out. Lyme Disease-Carrying Bloodsucker Season Is Getting Longer

Here's another article with good tick photographs.

<https://www.wkar.org/wkar-news/2023-04-18/suns-out-ticks-out-lyme-disease-carrying-bloodsucker-season-is-getting-longer>

#### These Tiny Creatures Are Losing Their Battle To Survive. Here's What We Can Do To Save Them

Birds all over the world are in trouble and need our help.

<https://www.cnn.com/2023/04/21/world/ivv-rufous-hummingbird-tipping-point-extinction-earth-day/index.html>

#### City Of East Lansing Following No Mow May To Promote Pollinators

The "No Mow" movement has really gained momentum. Let's make it "No Mow No More".

<https://www.wkar.org/wkar-news/2023-04-07/city-of-east-lansing-following-no-mow-may-to-promote-pollinators>

#### A Shortage Of Native Seeds Is Slowing Land Restoration Across The US, Which Is Crucial For Tackling Climate Change And Extinctions

We to make some cash? Consider your own native seeds seed nursery. This is sure to be a growing field.

<https://theconversation.com/a-shortage-of-native-seeds-is-slowing-land-restoration-across-the-us-which-is-crucial-for-tackling-climate-change-and-extinctions-199049>

#### Is The Healthiest Part Of Dandelion Its Flower?

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## Help Fund The TLC With CARS

Like many non-profit organizations these days, you can now support the TLC by donating old vehicles through CARS - Charitable Adult Rides and Services. CARS donates 70% of the net income from all vehicle donations to their non-profit partners such as the TLC.



# cars

**Built on Trust**

a 501(c)(3) Nonprofit

Depending on your tax situation, your vehicle may be more valuable as an itemized deduction than the income you might get by selling it. Not only do you avoid the hassle of advertising and dealing with potential buyers, but you don't need to get the vehicle in running condition. CARS accepts any vehicle, driveable or not.

To donate, see our donation page at: <https://careasy.org/nonprofit/thumb-land-conservancy>

Or call 855-500-7433

## TLC Membership

With your membership, the TLC is better enabled to protect important natural areas in our region. We offer two membership levels: Individual and Family \$40, and Business \$200. Members will receive our e-mail news. Membership is also available in trade for volunteer help. You can also make donations in honor or memory of someone or something. For donations of \$100 or more, your name will be listed on our web site. For larger donations, please contact us for details. Make checks payable to "Thumb Land Conservancy". Mail checks and forms to: Thumb Land Conservancy, 4975 Maple Valley Road, Marlette, Michigan 48453. Make sure you provide us with your mailing address and e-mail address. Providing a phone number is optional but helpful. You can also make donations through the Square link on our web site at [ThumbLand.org](http://ThumbLand.org)



**ThumbLand.org**  
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