



September 3, 2018

**Thumb Land Conservancy Yard Sale
Yale Bologna Festival**

The TLC held our first annual yard sale at the Yale Bologna Festival on July 27 through 29. Thanks to new TLC board member Fred Fuller for donations and lending us his yard, and to Fred's son, Will Fuller, for helping. A special thanks to Terry and Marvin Gill, the Gill family, and Ameriscapes Landscaping in Yale for their help and generous donations. Thanks to Dan Rhein for donating some of his impressive paintings. Thanks also to Kay Cumbow, Cheryl Collins, Traci Brown, and Tiffany Reagin for donations and help. Thanks to Jim Bearss of the Clyde Historical Society and Pheasants Forever, and Peter Eldracher, who rode his bike a few miles, for visiting. With everyone's help, the TLC raised nearly \$500 to replenish our general fund. I'm told we will do it again next year, so if you have any items to donate, please contact us.

September - October Work

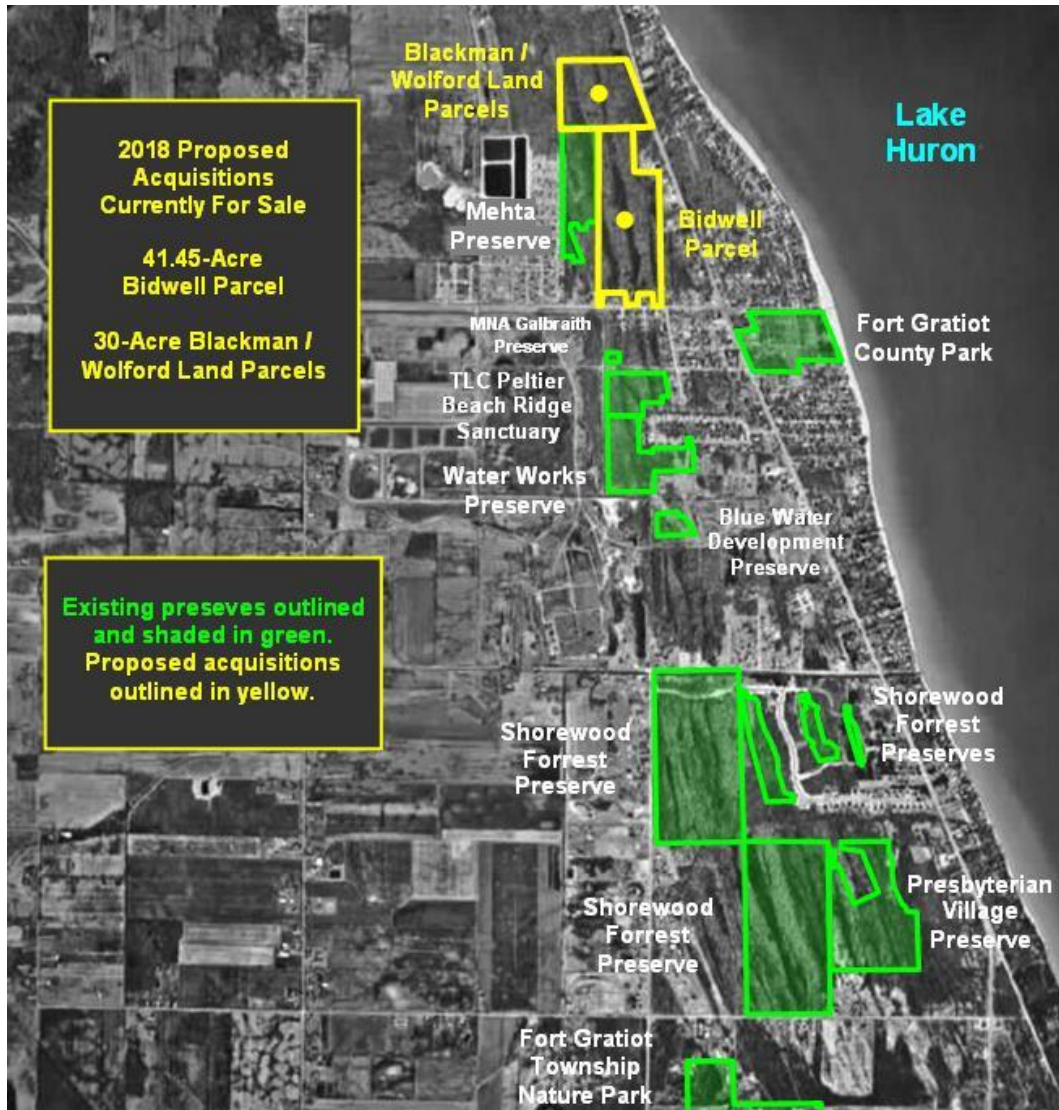
Would you like to help the TLC this fall? Our focus will be Japanese Barberry control at the Deerfield Preserve near Port Hope in Huron County, and on repair and clean-up of the historic North Street post office, rail station, and general store in North Street, Clyde Township, Saint Clair County. It's best to let us know ahead if you plan to attend so we can coordinate rides, supplies, and food. Call 810-346-2584 or e-mail us at mail@ThumbLand.org. See our schedule below.

- September 08 – Japanese Barberry control, Deerfield Preserve, Huron County, noon until dark
- September 15 – Japanese Barberry control, Deerfield Preserve, Huron County, noon until dark
- September 22 – Repair and clean-up, North Street Station, North Street, 11am until 4pm
- September 29 – Japanese Barberry control, Deerfield Preserve, Huron County, noon until dark
- October 13 – Repair and clean-up, North Street Station, North Street, 11am until 4pm
- October 20 – Repair and clean-up, North Street Station, North Street, 11am until 4pm
- October 27 – Repair and clean-up, North Street Station, North Street, 11am until 4pm

**Beach Ridge and Swale Project
Burtchville Township, Saint Clair County**

The TLC is attempting to work with various partners to protect key properties that would complete an approximately 4.5-mile corridor on the beach ridge landscape connecting Port Huron to Lakeport State Park. Two properties are currently for sale that are important pieces of a future coastal park; the 41-acre Bidwell parcel and 30-acre Wolford Land parcel as shown in yellow on the 1995 aerial photograph below. Existing protected lands are shown in green. The

Bidwell and Wolford Land parcels are some of the best remaining examples of the beach ridge and swale landscape remaining in Saint Clair County. Note the dark wetland swales which show very well on the 1995 aerial photo.



The beach ridge and swale landscape is a very unique formation of parallel sand ridges and muck wetlands, that were deposited from about 4,500 years ago as high post-glacial lake levels receded as the new St. Clair River outlet down-cut rapidly. The landscape contains a unique forest community with uncommon species found in few other parts of Michigan, including: Purple-flowering Raspberry, known from only seven Michigan counties and the Lower Peninsula equivalent of the Upper Peninsula Thimbleberry; Yellow Lady-slipper orchid, infrequently found in muck and sand wetlands; the Eastern Hog-nosed Snake, whose primary range is in the west-central US but found occasionally in Michigan dunes and other open sand habitats; and a great abundance of migratory birds, including many uncommon and rare warblers. What remains of the landscape in Fort Gratiot and Burtchville is the only occurrence from Ohio up to the tip of the Thumb where there is a similar formation at Port Crescent and Sleeper State Parks and along parts of Saginaw Bay.

Being a linear landscape, the coastal beach ridge and swale forest is naturally suited as a greenway corridor. A proposed walking and biking trail would traverse the entire park from Port Huron north to Lakeport State Park, providing an excellent opportunity for interpretive signage describing the landscape, geology, and natural community. We believe the park would be a significant destination for birders as the coastal forest is a major corridor for migratory birds moving up and down along Lake Huron. When completed and with some promotion, this coastal park could attract birders on a level similar to Point Pelee National Park in Ontario.

Are you interested in helping with this project? If so, please contact us at 810-346-2584 or mail@ThumbLand.org.

Ecology News

Outdoor Recreation Advisory Council

Our June 21 news featured an article about a national decline in hunters and the funding problems this is now presenting for our public lands: <https://www.npr.org/2018/03/20/593001800/decline-in-hunters-threatens-how-u-s-pays-for-conservation>. I see this as an opportunity for all outdoor enthusiasts to band together in a broad coalition to fill the funding gap and to have a bigger voice for multiple recreational uses of lands that have traditionally been managed primarily for hunting.

I was aware, before I wrote the June news, that there was an initiative to do just that, but I didn't know the details until I read a July newsletter from Heart of the Lakes describing a proposed multi-state Outdoor Recreation Advisory Council (ORAC). So far, a total of 8 states, including Colorado, Montana, North Carolina, Oregon, Utah, Vermont, Washington, and Wyoming, have created ORAC offices and signed an accord to commit to four principles with specific action plans to promote outdoor recreation. The four principles include conservation and stewardship, education and workforce training, economic development, and public health and wellness. The full accord is available at this link:

https://gallery.mailchimp.com/5e21eb4b111d9673d171e6ad1/files/07ca76e7-86b0-42c7-9d33-c468899de05e/Jul_25_Confluence_Accords_Signed.pdf?mc_cid=01d77a55cf&mc_eid=dc5fa1748d

Michigan, Maryland, Arkansas and Kansas are also planning to create state ORAC offices and sign the accord. The Michigan ORAC had its first official meeting in June. I think many outdoors people would agree that this a step in the right direction that should result in much needed action and support for our public lands. Details of the Michigan ORAC are available at this link: <https://content.govdelivery.com/accounts/MIDNR/bulletins/1f37837>

Protect Key Habitats, Not Just Wilderness, To Preserve Species

<https://www.sciencedaily.com/releases/2018/08/180829143818.htm>

In our June 21 news, I also wrote about the need for protection of more of the Earth's natural areas. Most ecosystem services on which humanity relies are provided predominantly by areas that are not officially protected, or roughly 83 to 90% of the Earth's surface. There has been increasing attention given to a call to protect at least half of the Earth. But, as the co-author of a

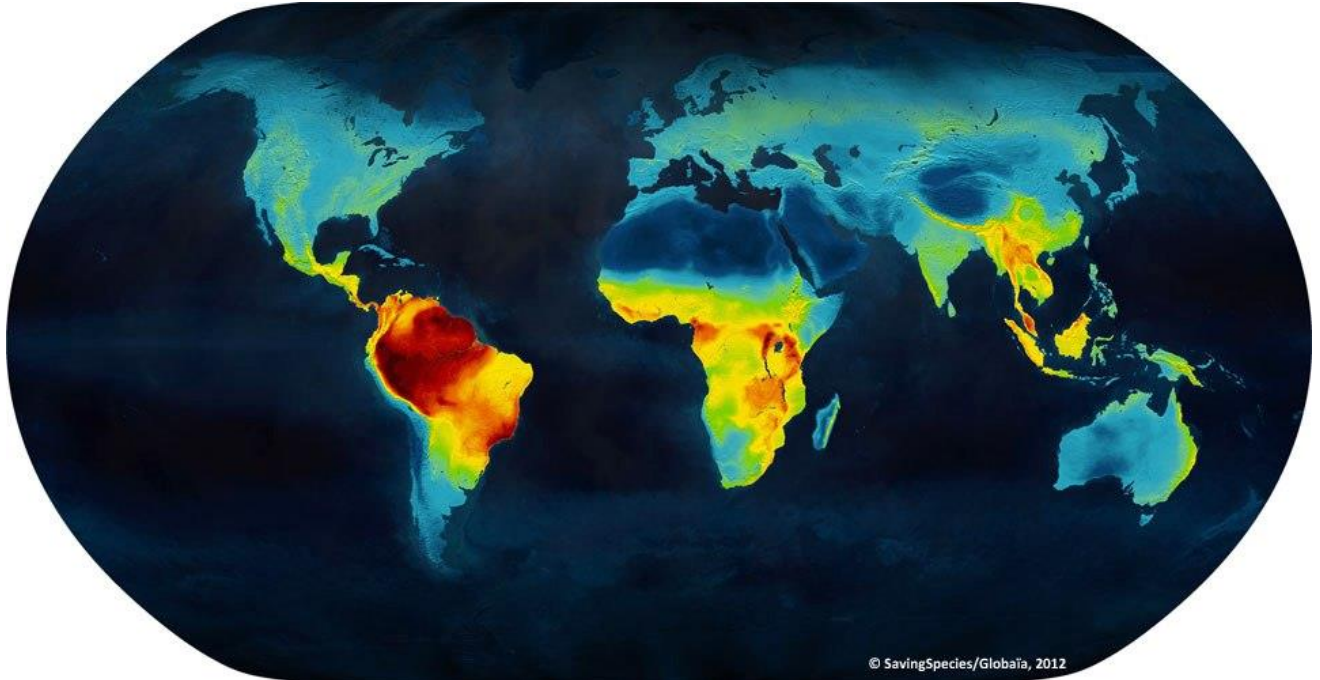
recent study puts it, what half should we protect? Well, that's part of the big dilemma that humans have created for themselves and future generations. The impact of human activity is now so intense and widespread, and mitigating responses so generally ineffective, that we are in a position where we need to engage in what I call "ecological triage". It means concentrating protection efforts on the best remaining natural areas, and letting the rest go, or leaving it to local conservancies and other groups to pick up the slack. Ecological triage is basically a survival strategy. Such prioritizing is necessary because of funding limitations and other practical issues, but it should not be mistaken for the sole effort that Creation deserves. At best, protecting only global biodiversity hot spots will merely limit the precipitous loss of species anticipated worldwide due to global warming and increasing human population. Unfortunately, this is just one part of the sad state we now find ourselves in.

The new study finds that it's the quality, not merely the quantity, of land we protect that matters. The authors state that governments should expand their conservation focus beyond wilderness and current protected areas, and they identify where some of the most urgent conservation gaps occur. I don't interpret these findings as opposed to the concept of protecting half of the Earth. Rather, their findings reinforce previous studies calling for protection of new areas outside of existing parks and wilderness, and simply fine tune priority target areas.

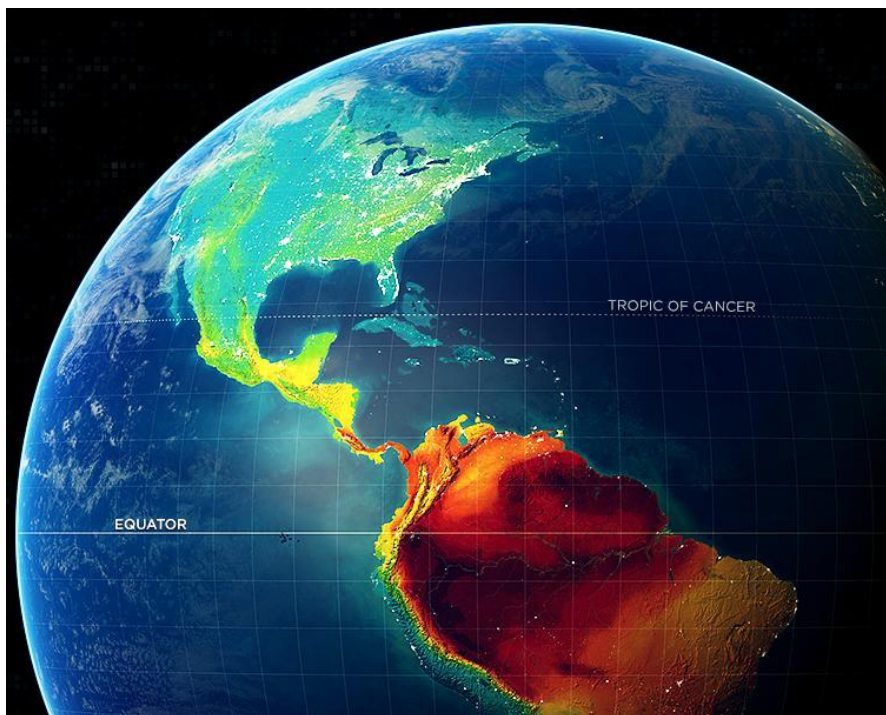
Stuart Pimm, Doris Duke Professor of Conservation Ecology at Duke's Nicholas School of the Environment, lead author of the new study, says, "*The predilection of national governments is to protect areas that are 'wild' -- that is, typically remote, cold, or arid. Unfortunately, those areas often hold relatively few species. Our analysis shows that protecting even as much as half of the world's large wilderness areas will not protect many more species than at present.*" Pimm and his coauthors conclude that to protect as many at-risk species as possible, especially those with small ranges, governments should expand their conservation focus and prioritize the protection of key habitats outside existing wildernesses, parks and preserves. The study team used geospatial analysis to map how existing protected areas overlap the ranges of nearly 20,000 species of mammals, birds and amphibians. They found critical gaps exist worldwide, including biodiversity hotspots such as the northern Andes, the coastal forests of Brazil, and southwestern China. Again, in my opinion, this is not necessarily saying anything that conflicts with the call to protect half the Earth. They have just pinpointed where we should prioritize global protection for the sake of saving as many species as possible.

The authors of the new study lead a nonprofit organization called SavingSpecies: <https://www.savingspecies.org/> that partners with local conservation groups in South America, Asia and other regions to protect critical lands. The Science Advisory Board of SavingSpecies is comprised of some of the world's top conservation biologists, including E.O. Wilson, Tom Lovejoy, Peter Raven, Patricia Wright, Trevor Price, and Stuart Pimm. Based on a brief review of their web site, it appears they are making a very good effort to focus on land acquisition, followed by transfer to local partners for long-term restoration and management. It is refreshing to see an international organization that clearly recognizes the importance of land acquisition with an emphasis on frugality and transparency.

Following is a map of global animal biodiversity available on the SavingSpecies web site. This map shows relative concentrations of bird, mammal, and amphibian species across the world. Red areas contain the highest concentrations of animal species, followed by orange and yellow areas with high concentrations, green areas with moderately high concentrations, followed by light blue and dark blue areas with the lowest concentrations. Not surprisingly, the tropics and sub-tropics are highest in species concentrations.



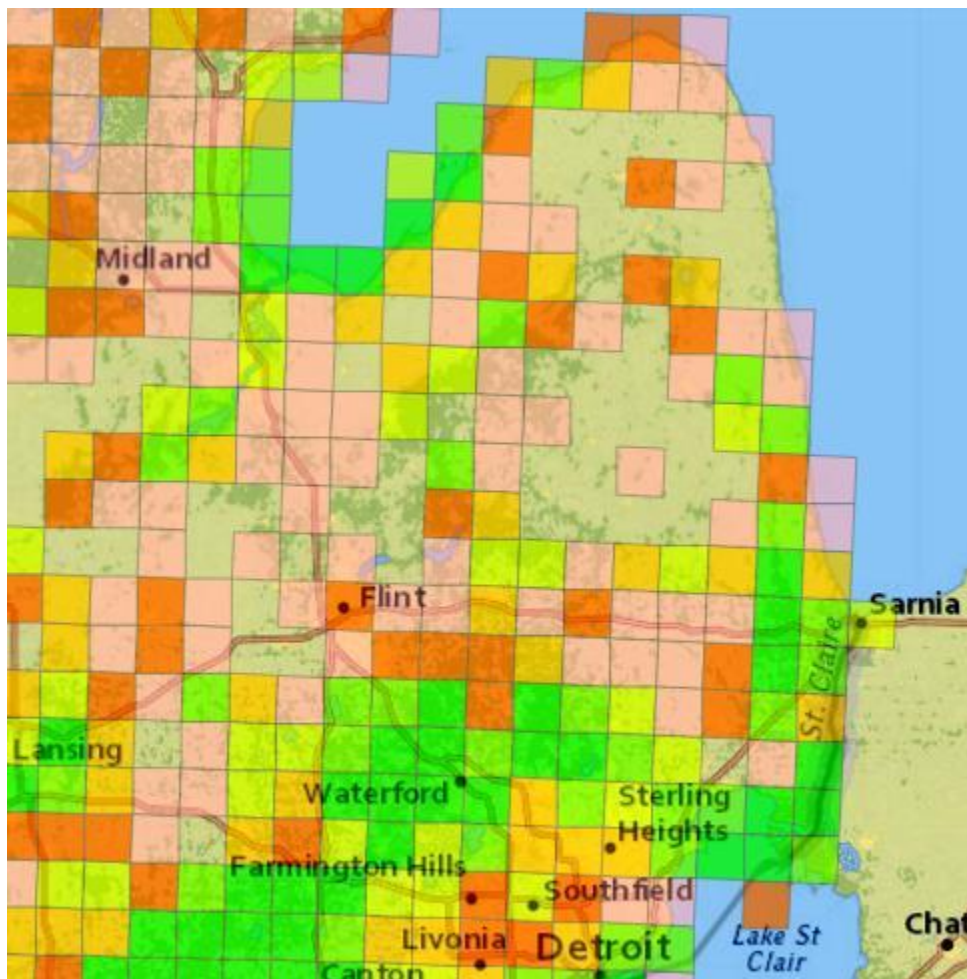
If you are waiting for big global organizations to focus on protecting natural areas here in the temperate zone, in eastern North America, and especially here in the Thumb, definitely don't hold your breath. As you can see on the map below, our region doesn't look very wonderful for animal diversity, and we are pock-marked by white urban and suburban development. It looks like the eastern United States was hit by about a hundred meteorites or nukes.



But, this map doesn't mean that we have nothing here worth protecting. Keep in mind, the map shows only mammal, bird, and amphibian species. It doesn't include other animals or plants. It is also a map of species concentrations on a global scale, which anyone familiar with global ecosystems knows already that the tropics has a huge number of species compared to the temperate zone. On a regional scale however, southeast Michigan and the Thumb are home to many wonderful species. And in the bigger picture, our region is part of the critical breeding range for many migratory bird species that winter in Central and South America.

As the following Michigan Natural Features Inventory biological rarity index map shows, parts of our region rank quite high in terms of rare species concentrations:

<http://mnfi.anr.msu.edu/data/rarityindex.cfm>



Dark green areas show the highest concentrations of rare species, followed by light green with high concentrations, yellow with moderate concentrations, light orange and orange areas with low concentrations, and whitish areas with very low concentrations. As shown on the map, rare species hot spots are the Saint Clair River delta and Algonac State Park area with lakeplain prairie and Great Lakes marsh, the Saint Clair River, Belle, Black, Mill Creek, and Cass Rivers with rare mussels and fish, Minden Bog being one of the southern-most raised bogs in North America, the Port Huron State Game Area with rare plants and forest birds, Port Huron, Kimball, and Clyde Townships with the only known populations of Endangered Painted Trillium in Michigan, the glacial interlobate hills and kettle lakes region of Macomb, Lapeer, and Tuscola

Counties, the dune and swale landscape at the tip of the Thumb, lakeplain prairie and Great Lakes marsh along Saginaw Bay, and other areas.

The good news for the Thumb, if we can extrapolate from the new study to a much smaller regional scale, is that they found many of the important unprotected habitats are small parcels of land in areas where human impacts are already felt, disqualifying them for protection as wilderness. Granted, much of the land in our region is highly degraded and patches of anything resembling a natural community, often quite small. But it doesn't need to be a big wilderness park to be important, even if just serving as a temporary stop-over for pollinators or migratory birds. The Thumb Land Conservancy and other organizations have been saying this for a long time. I often think part of the reason why we have been unable to do more preservation here in the Thumb is that most landowners just simply don't perceive the significance of their land in the greater scheme. Have no doubt; every little scrap of land is important in some way, and more nature is better than less. In addition to species, there is so much more to consider in land protection. Most of us want some semblance of nature around us. It's hard to enjoy the shade, or fresh air, or clean water, or beautiful flowers if it's only at a park or wilderness area thousands of miles away from where you live. The Thumb Land Conservancy and other conservancies are about protecting not only species, but the natural functions of our local environment that make our region livable. We are about protecting natural landscapes, wetlands, waterways, forests, unique natural features, scenic beauty, recreational access, and places where people can enjoy and learn something of the natural world.

Monarchs on Harsens Island

This is not so much news as a timely message on behalf of the Monarch butterfly and other migrating insects. I had the pleasure of working on Harsens Island a few days ago. While I have been doing wetland work for over 28 years, I rarely get to experience the Great Lakes marsh of our coastal areas. So, I usually learn something new when on the Saint Clair River delta or up along Saginaw Bay.

While I was concentrating on marsh flora, and listening to Aretha Franklin's funeral live on WDET, happening just about 30 miles southwest across Lake Saint Clair, I couldn't help but notice the abundance of Monarch butterflies all over Harsens Island. It seemed like I was seeing one at least every 2 or 3 minutes. Driving on South Channel Drive, I nearly hit a few. There is one spot where the road is closest to the South Channel, that appeared to be a popular route for Monarchs to cross the over the road and head into the marsh to the north. Unfortunately, it's also a Monarch kill zone. I stopped to rescue two that were hit by cars but still alive on the road. One died and one is still alive here at the TLC office. I don't think it's going to make the migration to Mexico though. I guess no one will move the road or think of a creative way to help the butterflies across, but if people would drive a little less like idiots, it would go a long way to help.



Monarch butterfly departing from goldenrod near the southwest tip of Harsens Island on 2018 August 31.

This is not the first time I've noticed an abundance of butterflies along or near the shoreline of Lake Saint Clair. I've worked along Anchor Bay in the late summer and early fall when goldenrods and other asters were flowered out, with butterflies and other insects fluttering and buzzing all over. Having visited Point Pelee National Park a few times over in Ontario, Canada, I hypothesized that butterflies too, especially Monarchs, must congregate along the shoreline before crossing over a large body of water like Lake Erie or Lake Saint Clair. Possibly they had already crossed to the Michigan side from Ontario, but they would have headed back north a bit, so I wasn't sure. Crossing Lake Erie heading north or south makes sense, but crossing Lake Saint Clair seems mostly unnecessary to head south, that is, until I considered the amount of urban development along the western shore of the lake and Detroit area in general. It may be that the butterflies avoid that area, head south across the lake to the largely agricultural land east of Windsor, Ontario, and then cross western Lake Erie or move along the less developed western shoreline of Lake Erie south of the Downriver Area of Detroit.

Based on a little searching and a few articles on the internet, apparently, the Monarchs may prefer to migrate over the Great Lakes to take advantage of the winds. Regardless, based on my observations, it appears that shoreline areas of the Great Lakes are very important for Monarch butterflies in migration. For anyone with property on or near the lakeshore, especially peninsulas and islands, I want to encourage you to leave or create butterfly habitat. That means

leaving unmowed fields full of goldenrods and asters they can feed on in the fall. Most of the milkweeds are done flowering by the end of July, but some extend into August. Butterfly-weed – *Asclepias tuberosa* and Swamp Milkweed - *Asclepias incarnata* usually bloom into September. You can find lots of plant lists for butterflies and other insects on the internet.

The following web sites are just a few regarding Monarch butterflies and their migration:

http://msue.anr.msu.edu/news/migrating_monarchs_across_our_great_lakes_coastlines

https://www.fs.fed.us/wildflowers/pollinators/Monarch_Butterfly/migration/index.shtml

<http://www.pollinatorconservationassociation.org/monarch-butterfly.html>

<https://www.monarchwatch.org/>

<https://xerces.org/monarchs/>

By the way, Monarch butterflies are not the only migratory insects in North America, but are the most famous. Other migratory insects include many species of butterflies, moths, and dragonflies, along with a few grasshoppers, seed bugs, leafhoppers, aphids, hoverflies, and beetles. More species have recently been found to migrate. The huge scale of global insect migration has been revealed only in the past few years with new technology.

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