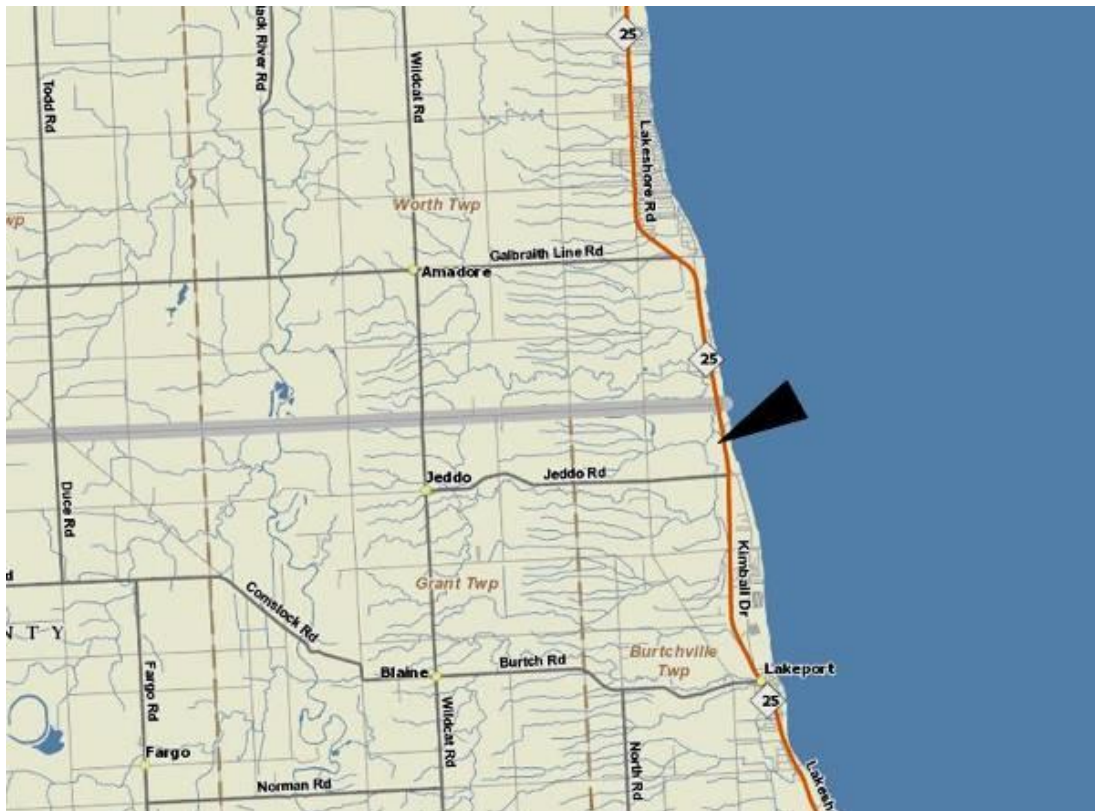


Thumb Land Conservancy NEWS

September 28, 2020

Indigenous Naming Ceremony and Bidwell Sanctuary Dedication Ode Zibi and Bidwell Sanctuary, Burtchville

The Blue Water Indigenous Alliance will hold a public indigenous naming ceremony for our TLC preserves on Saturday, October 3 at Ode Zibi in Burtchville. Members of the BWIA have chosen indigenous names for each of the preserves in the languages of native First Nations people including Anishinaabemowin, Huron-Wendat, Lenape, and Lakota. The public is invited. Lunch will be served from noon to 1:00, provided by Moe's Corner Deli of Port Huron (moesonline.com). The cost for lunch is about \$5 to \$10 depending on what you want. The naming ceremony begins at 1:00. Ode Zibi is located at 8749 Lakeshore Road (M-25) about ½ mile north of Jeddo Road on the west side of M-25. Look for signs at the driveway entrance. For more information on the Blue Water Indigenous Alliance, see their web site at BWIAPH.org.



After the naming ceremony, at about 2:00, we will head to the Bidwell Sanctuary in Burtchville for our public dedication. The Bidwell Sanctuary is located at 3540 Metcalf Road about 1/3 mile west of M-25, about half way between M-25 and Indian Trails modular park, on the north side of Metcalf. The entrance is almost directly across from West Montevista Drive. Look for a sign along Metcalf Road. After the dedication, we will walk part of the new Lake Huron coastal trail, now under construction, and point out some of the natural features that make the beach ridge and swale complex such a unique place.

After the Bidwell Sanctuary dedication, we will head to the end of West Montevista Drive, only 600 feet south on the Fort Gratiot side of Metcalf Road. From there we will walk south just 300 feet where we will visit both Bertha's Haven Sanctuary and Peltier Beach Ridge Sanctuary, which are separated by only about 150 feet. We will take a short walk on both preserves.

Then we will head south to the Dead End Woods Sanctuary in Fort Gratiot, located at 3685 Wilson Drive at the dead end of Wilson Drive, about 1/3 mile north of North River Road and about 1,000 feet west of State Road. From State Road, turn west on either Wilson Drive or Blueberry Lane and then take Wilson Drive north to the dead end and main entrance to the sanctuary. We will take a short walk into the Dead End Woods.

After the Dead End Woods, we will head down to the Loznak Sanctuary in Marysville located at 2506 Wills Street, about 1/3 mile north of Busha Highway.

Naming Ceremony and Dedication Schedule (Approximate Times)

Noon	Arrive at Ode Zibi
Noon to 1:00	Lunch
1:00 to 2:00	Naming ceremony
2:00	Leave Odi Zibi for Bidwell Sanctuary
2:30	Dedication ceremony at Bidwell Sanctuary
3:30	Leave Bidwell Sanctuary for Bertha's Haven, Peltier Beach Ridge, and Dead End Woods Sanctuaries in Fort Gratiot
5:00	Leave Dead End Woods for Loznak Sanctuary in Marysville

If you are planning to attend, please RSVP so we can get a better idea of how much food to order for lunch. Contact the TLC at 810-346-2584 or mail@ThumbLand.org.

Ruby Cemetery Tour

Clyde Historical Society

Another of our partner organizations, the Clyde Historical Society, is holding a tour of Ruby Cemetery in Ruby on Sunday, October 4 at 1:00 PM. The tour will be led by Rob May, a retired history teacher and Civil War reenactor who wrote a book entitled, "*The Men of Clyde. Their Civil War Story.*" The tour will feature the stories of Civil War veterans

that are buried at the Ruby Cemetery which is located not quite ½ mile southeast of Ruby on the south side of Abbottsford Road.



Help Us Restore Local History in Clyde Township **North Street Station, 5200 North Road, North Street**

The North Street Station will soon be ready for a long-overdue paint job. After we finish working on a small part of the roof, we are considering the possibility of exposing the original siding on the main rail station structure which dates back to around 1900. In the meantime, we will start painting the newer structural additions and we still have a lot of clean-up remaining.

We will be working out there on Saturday, October 10 from noon through 5:00 PM. The North Street Station is located on the east side of North Road, directly across from the US Post Office. Bring gloves and drinking water. We will provide trash bags and tools. Jimmy Rankin's Meat Market on Lapeer Road in Port Huron Township (jimrankinmeats.com) has provided hotdogs. If you are interested in helping, let us know or just stop in.

Building The New Lake Huron Coastal Trail Bidwell Sanctuary, Burtchville

We have made good progress on clearing the new coastal park trail on the Bidwell Sanctuary. The route largely makes use of an old trail on the main beach ridge cleared by the former landowners decades ago, but a lot of trees have fallen and shrubs grown since. The trail is now cleared to about 500 feet north of Metcalf Road, which means we are at about 20% of the half mile distance to the north property line. We have some junk to clean up north of the old residence, artifacts of habitation, but otherwise the route is very nice, over-looking the adjacent swamp down in the big swale about 5 or 6 feet below, and passing by several old Eastern Hemlock trees. A few days while working out there, waves could be heard crashing on the Lake Huron shore in the northeast wind. In the afternoon and evening, cool air is drawn off the lake through the swale like a big air conditioning system. On the warmest days, it appeared that a slight mist formed down in the swales. This is part of what makes the coastal beach ridge and swale complex such a unique environment.

Please excuse the quality of these photographs. They were taken near dark after a day of working on the trail.



View north of the trail entrance north of Metcalf Road.



View east of the big wetland swale from the adjoining beach ridge.



View south of the trail passing by large Eastern Hemlock trees to the left.

Thank you to our volunteers, including TLC members Tom and Laurie Dennis, new TLC members Roy and Peggy Churchill, and TLC board member Dan Rhein. Thank you to new donors and TLC members Margaret Thorp, Christine Powell, and to Bern Powell particularly for his helpful advice and resources on trail development. If you would like to help, please contact us. We have a lot of clearing to go yet, and eventually will need building materials and labor for the park entrance.

Lakeplain Prairie Even Better Than We Thought Loznak Sanctuary, City of Marysville

The lakeplain prairie on the Loznak Sanctuary is even better than we thought. This preserve has offered one surprise after another. Until recently, we had not looked at the vegetation during the growing season, let alone while in full bloom. During our winter surveys, we identified prairie species such as Riddell's Goldenrod, Mountain-mint, and Fringed Gentian. In the past few weeks we found patches of Rough Blazing-star, an uncommon species in our region. As we explored to the south, we found that cover by Riddell's Goldenrod and Fringed Gentian is far more extensive, on the scale of hundreds of plants. We were also surprised to find that much of the sanctuary is covered by Tall Boneset, a relatively recent arrival from the east coast via railroads, but uncommon and not recorded any closer than Monroe County. Based on our latest visits, the Monarch butterflies love it. Other plant species somewhat associated with prairie found on the sanctuary include Showy Goldenrod, Foxglove Beard-tongue, Nodding Ladies'-tresses, Switch Grass, Three-awned Grass, and Oatgrass.



Monarch butterflies on Tall Boneset. There were a large number of Monarchs on the sanctuary this day, indicating how important this habitat is for butterflies.



Rough Blazing-star.



Showy Goldenrod.



Dan Rhein and Bill Collins made a quick visit a few evenings ago and apparently invented night botany. Here we see Rough Blazing-star and Riddell's Goldenrod by the light of Dan's flashlight.

We feel like we stumbled into a natural treasure that was completely unexpected in this old industrial area, dating back to at least 1942 when the US entered World War II. Based on historic aerial photography and the present soil conditions, we suspect that much of the Loznak Sanctuary was not intensively used, but that impacts were mostly limited to a few areas such as the railroad bed and concrete structures that have since been

demolished. The use of the land was largely compatible with the dry sandy soils that naturally supported an open plant community of lakeplain prairie with likely limited cover by oaks and other trees. Of course, the compatibility of industrial land use and native plant communities does not hold true across the board by any means. However, in the case of the Loznak Sanctuary, the former clearing and several decades of setting mostly undisturbed appears to have provided near perfect conditions to harbor a remnant of the lakeplain prairie that almost certainly covered a vast swath of land along the Saint Clair River from Marysville down through Algonac and beyond.

We again thank donor Richard Loznak and TLC attorney, Tim Lozen, for adding this remarkable sanctuary to our preserve holdings.

Wild-rice On Harsens Island Expanding

On September 13, TLC Director Bill Collins, joined Blue Water Indigenous Alliance Director Joshua Whiting, to look at wild-rice on Harsens Island. We met up with BWIA member Sue Wrobel, who guided us to her neighbors, Tony and Leslie Skudurna, to look at a big patch of what appears to be several acres of wild-rice along the Middle Channel. Sue showed us the plants in detail and described how to harvest the seed grains. The lower male flowers on the stalks had already flowered and released their pollen. The upper female flowers were mostly pollinated and seeds ripening. A few seeds were at full ripeness as indicated by the purplish color on the upper stalk.



Just a small part of a thick patch of wild-rice along the Middle Channel. Dickinson Island is in the background.



A wild-rice plant showing seeds tight against the stalk above and pendant male flowers below. In the background is a patch of wild-rice in varied stages of seed development.



Left to right: Joshua Whiting, Leslie Skudurna, and Sue Wrobel standing in front of a huge patch of wild-rice.

This wild-rice patch is impressive, considering that there seems to have been relatively little on the island in recent years. Where it grows, there is little or no invasive Reed or *Phragmites australis* subspecies *australis*. At the Middle Channel site, Tony Skudurna carefully spot-sprayed the Phragmites with herbicide, but it also appears that wild-rice may be helping to keep Phragmites out. One of the benefits of the rising water of the Great Lakes the past few years, is that Phragmites has been drowned out in the deeper areas. Wild-rice tolerates the deeper water and is apparently replacing the Phragmites in some areas. Unfortunately, this is not happening enough and there is still an enormous amount of Phragmites across the whole Saint Clair River delta. And while some Phragmites has been eliminated in the deeper water, it just moves up-slope and will quickly recolonize most areas when the waters recede. For now, there are some good things happening ecologically along the shores of the Saint Clair River delta and this may be part of a long-term pattern for survival of native marsh vegetation like wild-rice.

After looking at the first patch of wild-rice, Bill continued to a wetland monitoring site off of South Channel Drive that was covered extensively by Phragmites until 2016

when the landowner had it mowed and the water level started to rise. The landowner has also spot-sprayed Phragmites with herbicide provided by Clay Township. In four years, all but a small patch of Phragmites is gone, replaced largely by open water. A few wild-rice plants were first noticed around the edge of the open water two years ago. Now, there are a few hundred colonizing the open water where it doesn't exceed about three feet in depth.



Four years ago, most of this area along South Channel Drive, south of Little Muscamoot Bay, was covered by Phragmites. The owner had it mowed about 3 years ago and has spot-sprayed with herbicide. Rising water all around Harsens Island has nearly eliminated all of the Phragmites on this site, now reduced to a small patch in the background of this photo. All of the stems above the water through the middle of this photo are wild-rice that colonized in just 2 years.

North of this site, across South Channel Drive in Little Muscamoot Bay, a vast wild-rice bed of many acres appears to be expanding. All across the island, bigger patches of wild-rice are developing. Some good news in a time when it seems hard to come by.



Part of a vast expanse of wild-rice along the south side of Little Muscamoot Bay.



Wild-rice appears to be increasing all over Harsens Island, like this patch only about 15 feet north of South Channel Drive.

For anyone with marsh land or connections on Harsens Island and other shoreline areas, we encourage you to gather wild-rice seed and scatter it along the waters edge. The best places to sow are where there is a sandy bottom and some amount of water flow, but you could try it in any marsh. It would be best to eliminate invasive Phragmites first. Cat-tail may not be such a problem based on what we saw on Harsens Island.

Probably most of the wild-rice we see in our region is Northern Wild-rice or *Zizania palustris* and there is a lot of debate about which subspecies is endemic as it has been widely planted for wildlife. Also in our region is Southern Wild-rice or *Zizania aquatica*, a Michigan Threatened species. which has more and larger side branches but is otherwise difficult to distinguish from Northern Wild-rice. For more information, see Michigan Flora at this link: <https://michiganflora.net/genus.aspx?id=Zizania>. Because such an important food source is likely so widely distributed waterfowl, it seems a distraction to worry too much about whether the wild-rice is one subspecies or another.

For a very thorough review of wild-rice from an indigenous perspective, or Manoomin, as it is known by its Anishanaabemowin name, see this link: [https://data.glifwc.org/manoomin/pdf/Manoomin.Stewardship.Plan.draft.\[2019-08-15\].pdf](https://data.glifwc.org/manoomin/pdf/Manoomin.Stewardship.Plan.draft.[2019-08-15].pdf)

For more information, see these links:

<https://theways.org/story/manoomin.html>

<http://www.environmentandsociety.org/arcadia/manoomin-taming-wild-rice-great-lakes-region>

Warden Of The Woods

Dead End Woods Sanctuary, Fort Gratiot, Saint Clair County

The TLC benefits from helpful neighbors who keep an eye on our sanctuaries. This is particularly important for those that adjoin residential properties like the Dead End Woods Sanctuary in Fort Gratiot, surrounded on three sides by residences. Recurring issues have included falling trees, unauthorized trails, tree cutting, ORV incursions, and dumping of yard waste and building debris. So, when Pete Catlos, a TLC member and Old Farms subdivision resident, approached us a few months ago proposing to serve as “Warden” of the Dead End Woods, we welcomed his offer.

Pete Catlos has supported the TLC for several years and has helped us remove invasive Garlic Mustard in the Dead End Woods and the Port Huron State Game Area near Ruby. Pete and his wife, Angelene, have lived in Old Farms subdivision since 1999. Pete is self-employed as a general business consultant since 1996. He is very interested in nature conservation and preservation.

Pete says, *“For over twenty years, looking out our dining room windows to the Dead End Woods has given me and my wife great pleasure. I am grateful for the opportunity to give back to the Thumb Land Conservancy by supporting their efforts to maintain and expand the preservation of natural spaces in our area, to give others the same chance to enjoy nature. I believe that the work of the conservancy has a major impact on the quality of life in our community”*.



Dead End Woods Sanctuary, May 2018.

STATE-PROTECTED WETLAND CONSERVATION EASEMENT

Property of Thumb Land Conservancy

Public is welcome to enjoy

ANY DISTURBANCE OR ALTERATION OF THIS NATURAL AREA IS FORBIDDEN, INCLUDING BUT NOT LIMITED TO: • DESTRUCTION, REMOVAL, OR INTRODUCTION OF PLANTS, ANIMALS, OR ANY NATURAL MATERIALS • CUTTING, FELLING, OR REMOVAL OF LIVE OR DEAD TREES • MOWING OR TRIMMING OF VEGETATION • FILLING, DIGGING, GRADING, TILLING, OR ANY GROUND DISTURBANCE • SURFACE OR GROUND WATER DRAINAGE • MAKING OR EXPANDING TRAILS • CONSTRUCTION OR PLACEMENT OF STRUCTURES, MATERIALS, OR EQUIPMENT • DISPOSAL OR PLACEMENT OF ANY TRASH, SCRAP, OBJECTS, OR ANY DEBRIS INCLUDING GRASS CLIPPINGS, LEAVES, OR BRANCHES • APPLICATION OF ANY CHEMICALS, HERBICIDES, PESTICIDES, BIOLOGICAL AGENTS, OR ANY SUBSTANCE • USE OF ANY ORV, 4-WHEELER, MOTORCYCLE, SNOWMOBILE, OR ANY MOTORIZED VEHICLE; • HORSE RIDING; • BICYCLING; • PAINTBALL SHOOTING • HUNTING • TRAPPING • CAMPING • FIRES • LIVESTOCK GRAZING • DEFACING OR VANDALISM OF ANYTHING • AND ANY OTHER ACTIVITY THAT COULD ALTER THIS AREA.



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Michigan Department of
Environmental Quality
www.Michigan.Gov/DEQ

Water Resources Division
Southeast Michigan District
27700 Donald Court
Warren, Michigan 48092-2793
(586) 753-3700

Lansing Headquarters
Constitution Hall, 525 West Allegan Street
Post Office Box 30458
Lansing, Michigan 48909-7958
(517) 284-5567

Our latest conservation easement sign. Unfortunately, the Michigan Department of Environmental Quality was changed to the Michigan Department of Environment, Great Lakes, and Energy shortly after we had a bunch of new signs made last year. The agency name has changed three times in just over ten years.

As part of his duties as Warden of the Dead End Woods, Pete is installing new boundary signs for us which notify the public of use restrictions according to the State wetland conservation easement agreement. Pete is helping the TLC by communicating with neighbors around the entire sanctuary, in-person, by mail, and on the Old Farms subdivision Facebook page. He is monitoring use of the Dead End Woods and reporting back to us any concerns. In the spring, he'll help us recruit volunteers for our annual Garlic Mustard removal and other stewardship activities. He hopes to encourage contributions

and sustaining memberships by fostering a sense of neighborhood buy-in and appreciation of the sanctuary. All of what Pete is trying to accomplish is just the type of help that the TLC needs for our preserves. We are very thankful for his help.

Reasons to Vote NO on Trust Fund Proposal 1

Several groups have joined under the name of “Campaign for a Sustainable Michigan” to support passage of Proposal 1 on November 3. Proposal 1 would remove constitutional protection for the Michigan Natural Resources Trust Fund, established in the 1970’s using State oil, gas, and mineral royalties to acquire and protect land throughout Michigan. The Trust Fund is the principal funding source used to acquire parks and environmentally significant land in Michigan.

The Campaign for a Sustainable Michigan uses the slogan, “Vote Yes for MI Water, Wildlife & Parks”. As usual, slogans gloss over the facts and the devil is in the details. What would the proposed Constitutional amendment actually do?

Proposal 1 would allow money now constitutionally earmarked for land acquisition to instead be used for recreational development. Nothing against good recreational development, but there are other sources of funding for that, while there are extremely few sources for land acquisition and protection. And while land acquisition is very straightforward, recreational development could mean just about anything from trails, roads, golf courses, marinas, athletic fields, resorts, and who knows - theme parks?

The original intent of the Michigan Natural Resources Trust Fund was to mitigate for natural area destruction, not so much to develop recreation. The Trust Fund was established in the 1970’s as a result of the controversy around drilling for oil and gas in the Pigeon River Country State Forest in northern Michigan. As a compromise to allow for the drilling to go forward, the late Tom Washington, former Executive Director of the Michigan United Conservation Clubs, championed the idea of using the revenue generated from extracting these non-renewable resources into purchasing land for permanent public benefit. Legislation was then passed to create the Trust Fund which directed that oil, gas and mineral royalties were to be used to acquire and protect land.

For years, the Michigan legislature had a habit of raiding the Trust Fund for other purposes, so citizens voted to put the Michigan Natural Resources Trust Fund into the Constitution to protect it from diversions and to guarantee that its primary purpose remained to protect land. The Constitution states that "not more" than 25% of the annual Trust Fund expenditures shall be used for recreational development, and that at least 75% shall be used for land acquisition and directly related land protection administration, assuring that land protection remains the top priority.

Proposal 1 would amend the Michigan constitution to state that "not less" than 25% of the Trust Fund shall be spent on development, and only 25% shall be spent on land conservation. This specific change is the crux of Proposal 1 which will greatly reduce land

protection opportunities in Michigan at a time when they should be increasing. What it amounts to is that a few interests want that Trust Fund money for their development projects and they are hoping that you, the voter, will go along with it, at the expense of defunding land protection across Michigan. Proponents claim that Proposal 1 would add “flexibility” to the Trust Fund, as if that were good. The reason why the Michigan Natural Resources Trust Fund was put in the Constitution in the first place was because it was too flexible and the fund was being abused. What Proposal 1 would really do is assure that millions upon millions of dollars will not go into protecting important parks and environmental lands throughout Michigan.

Digging into the financial details of the proposed constitutional amendment reveals how disingenuous the proponents of Proposal 1 really are. Campaign for a Sustainable Michigan literature states that Proposal 1 would remove the current \$500 million cap on the Michigan Natural Resources Trust Fund and, once the State Parks Endowment Fund reaches its cap, direct all State oil, gas and mineral royalties to the Trust Fund. This is one of the main arguments being used to support Proposal 1. In reality, very little, if any, money would ever be added to the Trust Fund. Perhaps it would happen 30 to 50 years from now, but if so, the additional funding would be short-lived. The Constitution currently states that no money from oil, gas and mineral royalties will go to the Michigan Natural Resources Trust Fund until the Michigan State Parks Endowment Fund reaches \$800 million. As of 2019, the principal balance of the State Parks Endowment Fund was \$282.7 million. Based on a recent State projection, the \$800 million level will not be reached for another 33 years. The oil and gas market has been so volatile in recent years that, who really knows. If anything, there should be a proposal to increase funding of the Michigan Natural Resources Trust Fund independent of the State Parks Endowment Fund.

The funding projection for the State Parks Endowment Fund was made assuming that annual revenues would remain at \$33.4 million. That was the average received from 2012 to 2017, which is down significantly from 1997 through 2011 when revenues averaged \$54.2 million per year. The oil and gas markets have changed drastically in the past few years and it’s hard to say what the future holds, especially with declining demand and increased competition from renewable energy. Some say we may have even already hit peak oil. But certainly, as non-renewable resources are extracted, there is less to draw upon in future years, so it’s reasonable to expect that yearly revenues will continue to decline. It could very well be another 50 years or more before the Michigan Natural Resources Trust Fund is scheduled to receive any additional money.

Whether it is 33 or 50 years, there is another provision which will subvert contributions to the Michigan Natural Resources Trust Fund. After the State Parks Endowment Fund reaches \$800 million, it is to be increased annually by the rate of inflation, whereas the Michigan Natural Resources Trust Fund will receive no inflationary increase. This means, for example, if the rate of inflation is 3%, the first \$24 million in revenues will go to the State Parks Endowment Fund, not to the Michigan Natural Resources Trust Fund as claimed. If revenues decline, as is likely, there could be absolutely no money available to add to the Michigan Natural Resources Trust Fund. Keep in mind, this is 30 to 50 years

in the future, far enough out that only a few people will remember what happened in 2020 and most current politicians will be long gone.

Even if there is annual revenue in excess of \$24 million, with compounded interest it is guaranteed that all of the State royalties will go to the State Parks Endowment Fund, with none being available for the Michigan Natural Resources Trust Fund. This will happen regardless of whether this proposal passes, so claiming that this will permanently benefit the Trust Fund is simply not the case. This also means that little or no money will go to the General Fund, as proponents of this Constitutional change seem to fear if Proposal 1 is not passed.

Campaign literature states that the Constitutional amendment will “add ‘renovation and redevelopment’ alongside ‘development’” as an allowed use of funds. However, the Trust Fund already funds re-development projects so this is a non-issue.

Campaign literature also states that Proposal 1 would “change the percentage of funds made available for these (recreation development) projects from a maximum of 25% to a minimum of 25% to match the percentage available for land acquisition projects.” This is deceptively misleading as the change would make this match by cutting the amount of land protection funding in half. The original and primary purpose of the Michigan Natural Resources Trust Fund Constitution is to fund land acquisition and protection, not development. Passage of Proposal 1 will remove that priority.

How many groups and individuals have signed-on in support of Proposal 1 thinking that it will benefit the Michigan Natural Resources Trust Fund? How many know that it will result in millions of dollars being diverted from important habitat and land protection efforts?

Proposal 1 will forever reduce the amount of money spent each and every year on important land and habitat protection projects. This is being done because of a disingenuous claim that a small amount of money might go to the General Fund in 30 to 50 years, by which time the Constitution could be amended again. Due to declining royalty revenues, that is unlikely to happen. All money from oil, gas and mineral royalties will eventually go to the State Parks Endowment Fund anyway, so the Michigan Natural Resources Trust Fund has virtually nothing to gain from Proposal 1. It's all about reducing land acquisition funding, increasing development funding, and grabbing more money for contractors. Not only is land protection boring, it just doesn't pay connected firms very well.

Ecology News

There's so much environmental news these days, most of it bad. Having skipped this section since our March 9 TLC News, we are making up for it here. Inspired by a certain Spaghetti Western film, the news is categorized below. The Bad and The Ugly news first.

The Bad and The Ugly

- Local control seems to matter to politicians, except when it doesn't ... and money and politics matter more. A bill to eliminate oversight by local governments over sand, gravel, and other mining operations in their communities was reported by the Michigan Senate Transportation and Infrastructure Committee this week. Senate Bill 431, sponsored by Senator Adam Hollier (Democrat - Detroit), strips away local governments' already-limited authority over sand and gravel mining operations and location, creating a one-size-fits-all statewide process without addressing concerns around groundwater contamination, noise pollution, or whether the remediation plan is sufficient to restore the site after the mining company is done with it. The Michigan Township Association testified again in opposition to the elimination of fair and sensible oversight by local governments over major mining operations that could have significant and lasting impacts for decades to come in their communities. Senate Bill 431 does not provide sufficient safeguards for residents to ensure adequate protections, especially when proposed operations are situated in a residential area, and it precludes a municipality from negotiating important issues regarding haul routes, hours of operation, or the ability to mitigate other negative impacts to the environment that could create health hazards. The bill will next be considered by the full Senate. The Michigan Township Association encourages everyone to contact their State senator to vote no on this unnecessary bill and help keep local communities' voices present on issues impacting Michigan residents. Read Michigan Township Association Executive Director Neil Sheridan's statement on the bill passage at this link.
https://www.michigantownships.org/press_release.asp?tpt=nv&nid=2862
[https://legislature.mi.gov/\(S\(e5p0rr3w2txreexruvdhlog5\)\)/mileg.aspx?page=getObject&objectName=2019-SB-0431](https://legislature.mi.gov/(S(e5p0rr3w2txreexruvdhlog5))/mileg.aspx?page=getObject&objectName=2019-SB-0431)
- Birds need more protection now, not less. It's that simple. Ridiculously over-paid corporate execs can well afford it. Oblivious shareholders will maintain very healthy margins without wringing a few more cents out of the natural heritage of future generations. A prosperous nation like ours should act like one and protect its environment.
<https://www.nature.org/en-us/newsroom/weakened-migratory-bird-treaty-act/>
<https://www.popsci.com/story/environment/migratory-bird-treaty-trump-gutted/>
<https://apnews.com/bbb1899316eda23606486c13f1e64e62>
<https://www.allaboutbirds.org/news/cornell-labs-public-comment-on-proposed-weakening-of-migratory-bird-treaty-act-summary/>
- Cell phone radiation and wi-fi may be harming bird and insect navigation. 5G will probably make it worse. The original Newsweek article looks like it's been hacked.
<http://themillenniumreport.com/2018/05/radiation-from-cell-phones-wifi-are-hurting-the-birds-and-the-bees-5g-may-make-it-worse/>
<https://www.newsweek.com/migratory-birds-bee-navigation-5g-technology-electromagnetic-radiation-934830>

- “The world is failing to save species and ecosystems”. No kidding. There are bright spots, but if you let everything go to Threatened or Endangered status before taking action (and even then, protection leaves much to be desired) we are doomed to repeated failure. We need much more forward and comprehensive action.
<https://www.msn.com/en-us/news/world/the-world-is-failing-to-save-species-and-ecosystems-un-warns/ar-BB1956uv>
- Again, we shouldn't be too surprised at losing two-thirds of the global wildlife given the scale of population growth and increasing demand for resources the past 50 years. But how can we just accept this?
<https://www.npr.org/2020/09/10/911500907/the-world-lost-two-thirds-of-its-wildlife-in-50-years-we-are-to-blame>
- While there is often room for reasonable compromise in regulation of natural features, the possibility of reducing or eliminating protection in certain areas is almost sure to be abused. Deferring to local authorities and producing greater economic benefit than environmental cost may seem reasonable on the surface. But local deference is certain to mean no protection in many cases. And economic benefit to who and at what cost to everyone?
<https://apnews.com/article/643be5ec34895c008809a9ab4cfd518>
- Ever sit there and wonder where your toilet paper really comes from?
<https://www.bloomberg.com/news/articles/2020-09-17/how-green-is-your-toilet-paper-brand>
- The future of our native trees looks very bleak at this point.
<https://www.theatlantic.com/science/archive/2020/09/worlds-trees-got-so-sick/616506/>
- Climate change and deforestation are favoring younger and shorter trees, which is not good.
<https://www.npr.org/2020/05/29/864151879/climate-change-and-deforestation-mean-earths-trees-are-younger-and-shorter>
- We don't have a handle on microparticles yet, and in the past few years, researchers are finding that nanoparticles may have bigger impact on the environment than previously thought. This article focuses on bacteria, but other studies have focused on direct human exposure to vehicle exhaust along roads, and not just diesel particulate, but much smaller particles from many sources. Anyone with a chemistry background might have guessed that such small particles were a problem long ago.
<https://www.sciencedaily.com/releases/2019/10/191009162439.htm>

The Critical

- Most people seem to have forgotten that they live in nature. We will experience one reckoning after another until the world learns.

<http://nautil.us/issue/84/outbreak/the-ecological-vision-that-will-save-us>

- International agencies are using pathetically weak definitions of what constitutes forest which is leading to severely misguided carbon off-set policy. Why is this not surprising. Forest is far more than a few trees in a field.
<https://www.scientificamerican.com/article/to-combat-climate-change-see-the-forest-for-the-trees/>
- Why is the world not protecting the amazing mangrove swamps? It should be a no-brainer.
<https://www.weforum.org/agenda/2020/01/threat-to-biodiversity-risks-a-flood-of-economic-ruin-1e1591540c/>
- Wetland protection has created many well-paying jobs. Wetland mitigation has been particularly lucrative for landowners, mitigation firms, and consultants. The wetland mitigation business in the US directly employs more people than the coal, steel or logging industries (although the longevity and benefit details of such jobs might be debated). Workers include consultants, engineers, landscapers, heavy equipment operators, and land managers. The Trump administration doesn't seem to be aware of that side of the equation. Wetland protection costs a little, but provides huge benefits.
<https://www.npr.org/2020/02/01/801000605/as-regulations-roll-back-could-clean-water-protection-business-dry-up>
- It's just common sense to factor in the costs of environmental destruction and benefits of environmental protection when making economic calculations. Sooner or later, someone pays for the destruction. Ignoring that just passes it off to the next generations. Accounting for it now is responsible and promotes long-term economic strength.
<https://www.theguardian.com/environment/blog/2013/jan/09/economy-nature>
- Settler culture - We can drain that, dam that, clear that, plant that, fill that, flatten that, ... whatever we want and better yet if it pays. Essentially the same mindset applies to lawns, but the crazy thing is that so many people devote so much time, effort, and money to them for so little benefit. How often do you actually see people out on their lawns, except to mow? Big lawns are a waste of our planet, to the point of being offensive.
<https://www.theglobeandmail.com/canada/article-is-it-time-to-decolonize-your-lawn/>

The Good

- Give credit where credit is due. President Trump signed The Great American Outdoors Act on August 4, 2020. It seems this should have been signed a long time ago. Among other things, the act fully and permanently funds the Land and Water Conservation Fund at \$900 million dollars per year, and provides \$9.5 billion dollars over five years for a maintenance backlog at our national parks. This is good, but of course, it's all in the details. The Land and Water Conservation Fund is dedicated to land acquisition

and protection. \$900 million dollars is not much money these days on a relative scale, especially when buying land. In contrast, \$9.5 billion dollars is allocated over 5 years for work on national parks. While a lot of work is needed, in some cases this has the potential to fund more harm than good. And big money pots make contractors with the right connections very happy.

https://en.wikipedia.org/wiki/Great_American_Outdoors_Act

https://en.wikipedia.org/wiki/Land_and_Water_Conservation_Fund

- One hand gives, but a few hundred hands take away. Thankfully, there are a few organizations on the front line of defense against the Trump administration's efforts to neutralize and dismantle environmental protections across our nation. The Center for Biological Diversity is currently at 224 lawsuits against the administration.
https://www.biologicaldiversity.org/campaigns/trump_lawsuits/index.html
- In response to the Trump administration's attempt to exempt the incidental killing of migratory birds from regulation by the Migratory Bird Act, the US House of Representatives introduced a new bill to restore federal protection. As of September 1 it's still moving forward.
<https://www.congress.gov/bill/116th-congress/house-bill/5552#:~:text=Migratory%20Bird%20Protection%20Act%20of%202020%20This%20bill,as%20posing%20de%20minimis%20risk%20to%20migratory%20birds.>
- Bird watching soars as more people head outdoors because of COVID-19..
<https://www.seattletimes.com/nation-world/bird-watching-soars-amid-covid-19-as-americans-head-outdoors/>
- Grasslands in the southeast US are not something you run into much in ecological literature. Described as perhaps the richest terrestrial community in North America, the southern grasslands are a great example of what we lost in not adopting sensible fire management. Maybe Dolly Parton will get behind this.
<https://apnews.com/article/plants-wildlife-animals-pine-trees-nashville-000f3dcfd0c255bb516437b9cffb485d>
- The redwood forests of California survived the wildfires in part because they are fire-adapted and actually benefit from intense fire. Also, redwood trees and old-growth forests retain a lot of moisture under deep shade and tend not to burn nearly as much as open and drier plant communities. Look at the photos from the fires out West. In almost all cases the trees are fine. It's not the trees that are burning but the undergrowth and open lands.
<https://abcnews.go.com/US/wireStory/redwoods-survive-wildfire-californias-oldest-state-park-72580906>
- This is filed under "The Good" because it far outweighs the bad. More kids getting outdoor education is good. Exposing problems is understandable, but the negative twist of this article may not be fair, and actually, it doesn't seem to make a strong case. The author might have considered writing a little about solutions to learning inequality.

<https://www.npr.org/2020/09/15/912648094/growing-demand-for-wilderness-education-may-widen-learning-inequality>

- Closely related to the previous article. Let kids be kids and you might be surprised. Natural-born scientists. A school is encouraging them in Blissfield, Michigan, located about halfway between Adrian and Toledo. My curiosity and fascination was boundless as a kid. I'm so grateful for the opportunities I was given to pursue my interests.
<https://www.theatlantic.com/education/archive/2020/09/what-makes-blissfield-elementarys-science-lab-unique/616285/>
- Even before getting children outdoors became researched, popular, and well-funded, it seemed intuitive to many of us that a natural environment fosters better physical and mental health, supports inquisitive and developing minds, reduces crime, and provides so many benefits.
<https://www.theguardian.com/environment/2020/aug/24/children-raised-greener-areas-higher-iq-study>
- Plant sunflowers. Bees love them. Birds love them. You can eat the seed. They look beautiful. They are easy to plant. They often reseed and grow the next year. They're not invasive in our region. They look beautiful.
<https://www.cnn.com/2020/09/06/us/sunflower-fields-in-wisconsin-trnd/index.html>
- Tourist income from a one-day boating excursion can pay an Indonesian shark fisherman more than he earns risking his life for two weeks at sea slaughtering sharks to sell their fins. There are usually alternatives if we just try.
<https://www.abc.net.au/news/2020-08-16/sharks-fin-overfishing-lombok-tourism/12434698?nw=0>

The Helpful

- Some surprisingly beneficial flowering plants for bees and other pollinators in cities.
<https://phys.org/news/2020-04-reveals-important-city-dwelling-honey-bees.html>
- Maybe this should be filed under "The Bad and The Ugly" but it is also helpful information about microplastics in our waterways. Recent research has revealed that it's far worse than presented here. Microplastics are everywhere – water, land, and even air. Increased attention is being given to nanoparticulate, and no doubt, plastic is a part of that. Not only should you try to use less disposable plastic, but please, please don't burn it.
<https://labs.waterdata.usgs.gov/visualizations/microplastics/index.html>
- Almost everywhere in North America burned periodically before European-American settlers arrived, especially southern California with chaparral shrubland vegetation that covers about 10% of the state. This vegetation developed in such fire-prone regions with hot dry summers and cool wet winters. Controlled burning and a return to sensible

fire management as the Native Americans of the area once practiced would go a long way toward helping to limit the wildfires that are happening now.

<https://www.npr.org/2020/08/24/899422710/to-manage-wildfire-california-looks-to-what-tribes-have-known-all-along>

The Interesting

- By presidential memorandum, President Trump just expanded a ban on offshore oil development along the Atlantic coast to include North Carolina and Virginia. A presidential memorandum is considered weaker than an executive order, there is no absolute requirement to publish it like an executive order, and it can easily be changed by another memorandum. As stated, the memorandum prevents consideration of the coastal area for any leasing for purposes of exploration, development, or production until June 30, 2032. Is it real and if so, will anyone be held accountable if it doesn't extend to 2032? The ban is inconsistent with the Trump administration's push to open the Arctic National Wildlife Refuge to oil and gas extraction. Is any petroleum company even pushing to develop off the coasts of North Carolina and Virginia anyway? The Atlantic coast ban seems like election season smoke. As President Trump announced the ban, he told a crowd of supporters, *"If you want to have oil rigs out there, just let me know — we'll take it off. I can understand that, too."*
<https://www.npr.org/2020/09/26/917309717/as-election-nears-trump-expands-moratorium-on-exploratory-drilling-in-atlantic>
- About a month ago, the Trump administration apparently rejected the proposed Pebble Mine in the headwaters of Bristol Bay in Alaska. The odd thing is that the rejection is contrary to President Trump's stated support for more mining everywhere, and the decision appeared to be a reaction to his son's (Donald Trump, Jr.) sudden conversion to an environmentalist, and the urging of a few political donors, one of which, understandably, is the CEO of Bass Pro Shops and Cabela's. It's good that these people are speaking-up for wilderness, but rather strange that such a big decision is based on the request of a family member rather than on the specific merits and a sound national environmental policy. Again, one has to wonder if this is real or election season smoke. Pebble Limited Partnership knows that gaining approvals is a long process and there's likely no harm in waiting. That's how these big projects go. Besides, they have little to lose and they only need to win once to get what they want. A wilderness like the Bristol Bay headwaters only needs to lose once and it's essentially gone forever.
<https://www.latimes.com/world-nation/story/2020-08-24/pebble-mine-trump-army-corps>
- When the Bronx was a forest: A virtual tour of part of New York City when it was still a wilderness.
<https://www.nytimes.com/2020/08/05/arts/design/bronx-virtual-tour.html>

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With your membership, the TLC is better enabled to protect important natural areas in our region. We offer three membership levels as shown below: Individual \$25, Family \$30, and Business \$100. Members will receive our e-mail news. Some of you are members based on your previous donations, volunteer efforts, or other 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. You may print and complete the form below. Make checks payable to "Thumb Land Conservancy". Mail checks and forms to: Thumb Land Conservancy, 4975 Maple Valley Road, Marlette, Michigan 48453

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