

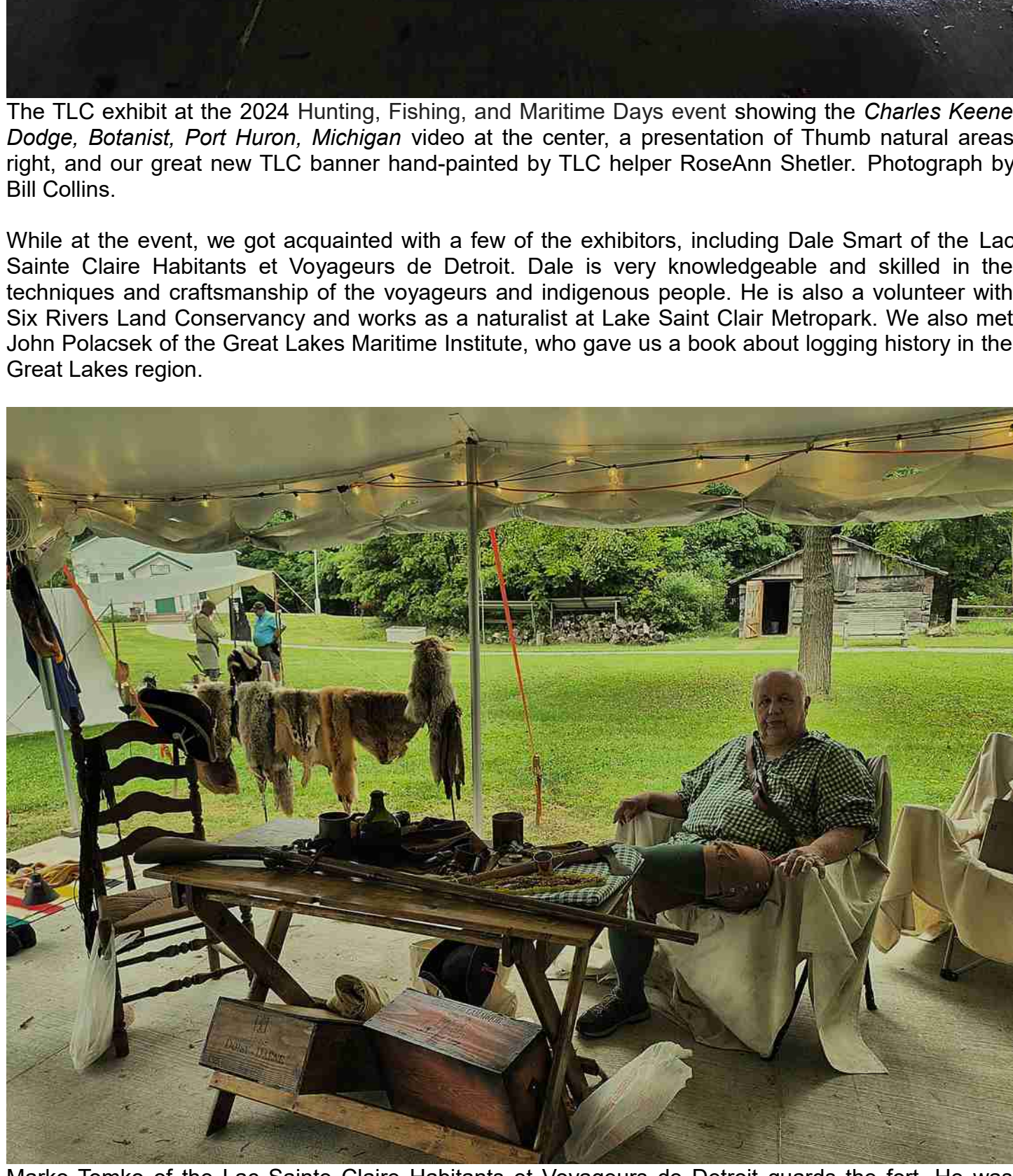
Thumb Land Conservancy News 2024 November 02

It's been a busy summer and fall with new events, new land acquisition projects, new funding, new helpers, and new progress on stewardship. But as much as we push, the general theme in "Conservancy World" is one that my old Scoutmaster, Reginald "Jerry" Nuss, taught us in Troop 169 - "Hurry up and wait baby!" Somehow, I think he got that from the military. With that in mind, I wait, but was determined to get at least one land acquisition project done before we put out the next TLC News. We keep learning new things about "Conservancy World" and one thing is for sure; it needs a whole lot of help. Even with the best planning and preparation, most accomplishments are bogged down in bureaucratic procedure, petty distraction, indifference, complacency, and even lack of common courtesy. Given these obstacles, even if conservancies or land trusts had unlimited funding, I'm not so sure enough land could be protected soon enough to turn this world from its path of destruction. But, we keep trying. - Bill Collins, Executive Director, TLC

Sanilac County Historic Village and Museum 2024 Hunting, Fishing, and Maritime Days Port Sanilac

On August 16 and 17, the TLC attended the 2024 Hunting, Fishing, and Maritime Days event at the Sanilac County Historic Village and Museum in Port Sanilac. The event featured exhibitions of our regional history with exhibitors including the Lac Sainte Claire Habitants et Voyageurs de Detroit, the Great Lakes Maritime Institute, Ourselves, an Irish and Americana music band of Port Sanilac, and the Thumb Land Conservancy, among others.

The TLC featured three of our videos: 1) *Charles Keene Dodge, Botanist, Port Huron, Michigan*; 2) *A Fortnight In The Wilderness - The 1831 Journey of Alexis de Toqueville and Gustave de Beaumont Across the West Edge of the Thumb of Michigan*; and 3) Our latest video, *Hunting Expeditions of Oliver Hazard Perry in the Thumb of Michigan*.

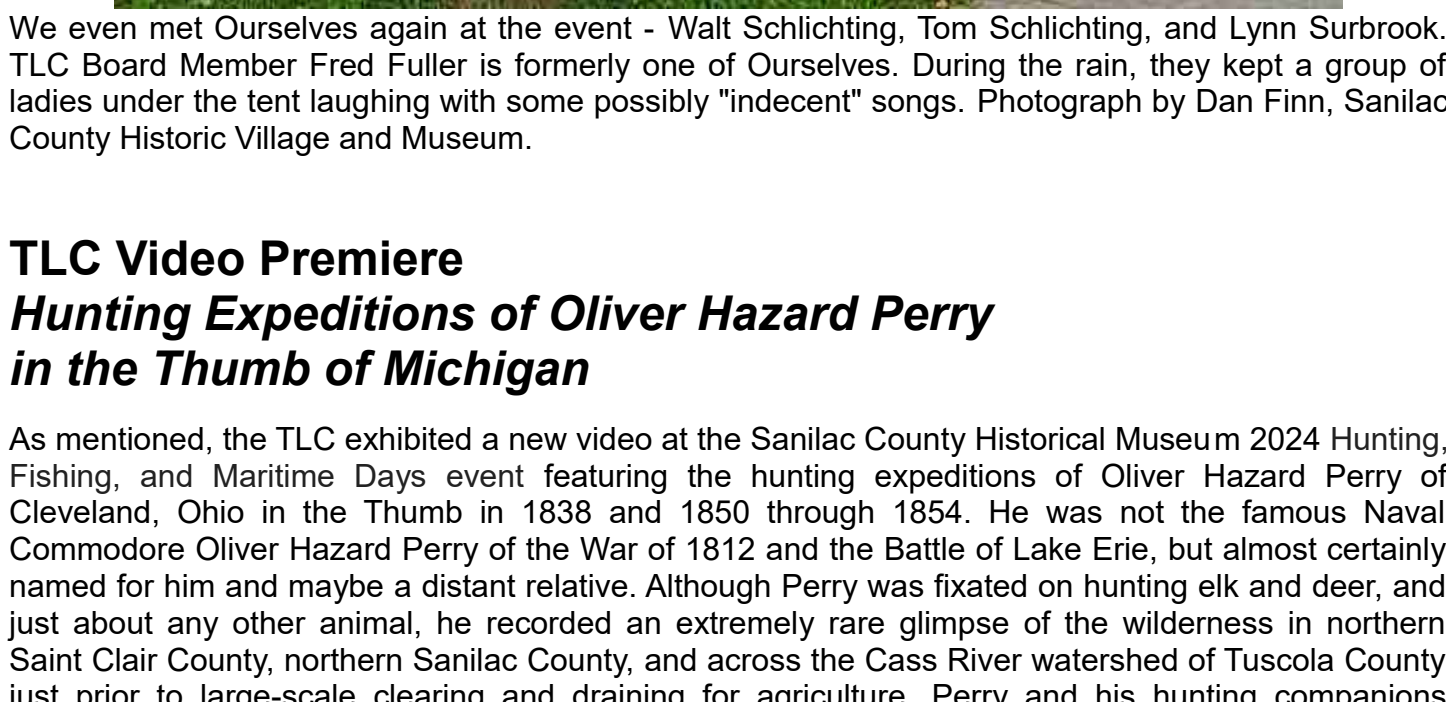


The TLC exhibit at the 2024 Hunting, Fishing, and Maritime Days event showing the *Charles Keene Dodge, Botanist, Port Huron, Michigan* video at the center, a presentation of Thumb natural areas right, and our great new TLC banner hand-painted by TLC helper RoseAnn Shetler. Photograph by Bill Collins.

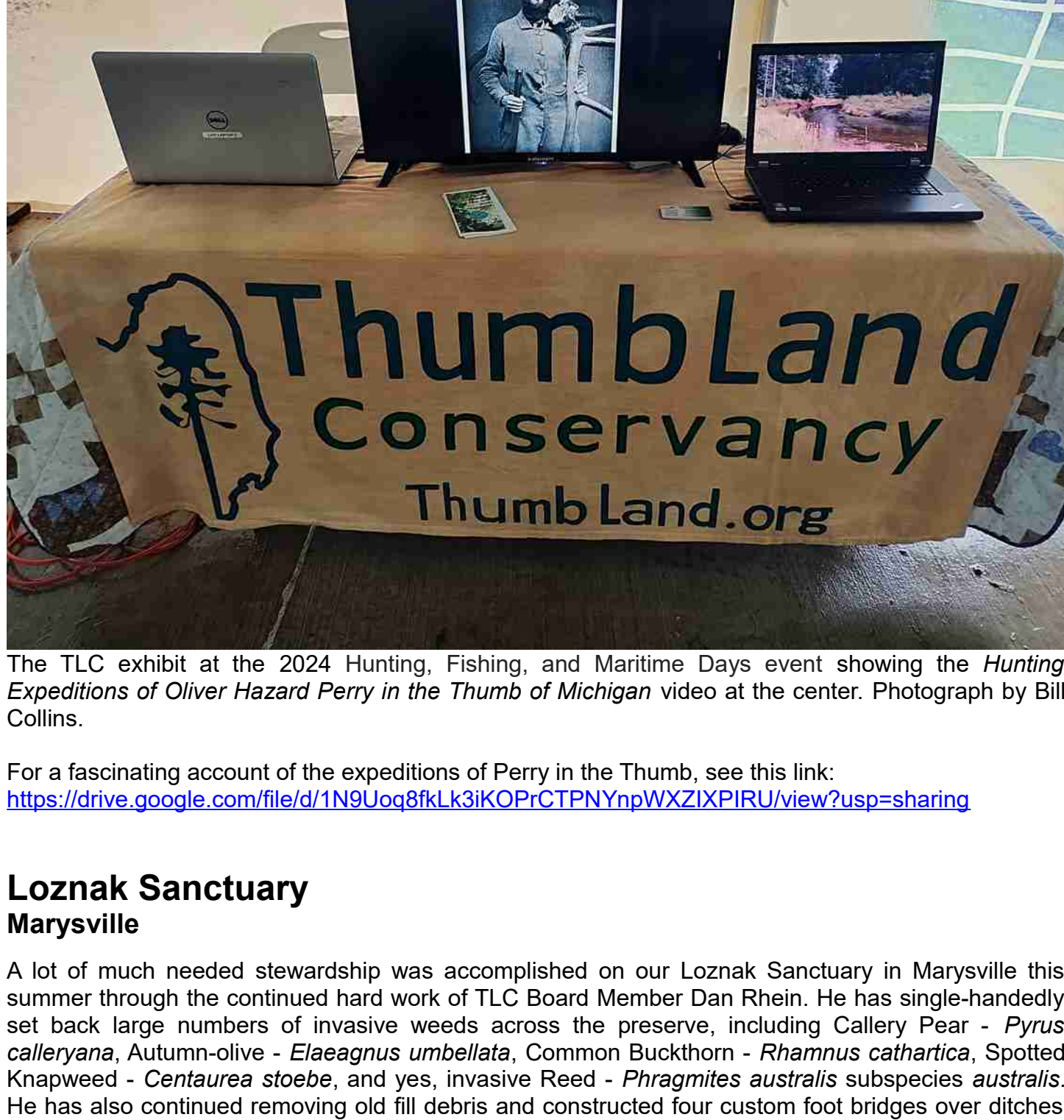
While at the event, we got acquainted with a few of the exhibitors, including Dale Smart of the Lac Sainte Claire Habitants et Voyageurs de Detroit. Dale is very knowledgeable and skilled in the techniques and craftsmanship of the voyageurs and indigenous people. He is also a volunteer with Six Rivers Land Conservancy and works as a naturalist at Lake Saint Clair Metropark. We also met John Polacek of the Great Lakes Maritime Institute, who gave us a book about logging history in the Great Lakes region.



Marko Tomko of the Lac Sainte Claire Habitants et Voyageurs de Detroit guards the fort. He was particularly fascinated by the word "mesic". Dale Smart is in the background demonstrating his voyageur skills by his tent. Photograph by Dan Finn, Sanilac County Historic Village and Museum.



Lac Sainte Claire Habitants et Voyageurs de Detroit. This woman made several of the items on the table, including some very nice beeswax candles. Photograph by Dan Finn, Sanilac County Historic Village and Museum.



We even met Ourselves again at the event - Walt Schlichting, Tom Schlichting, and Lynn Surbrook. TLC Board Member Fred Fuller is formerly one of Ourselves. During the rain, they kept a group of ladies under the tent laughing with some possibly "indecent" songs. Photograph by Dan Finn, Sanilac County Historic Village and Museum.

TLC Video Premiere *Hunting Expeditions of Oliver Hazard Perry in the Thumb of Michigan*

As mentioned, the TLC exhibited a new video at the Sanilac County Historical Museum 2024 Hunting, Fishing, and Maritime Days event featuring the hunting expeditions of Oliver Hazard Perry of Cleveland, Ohio in the Thumb in 1838 and 1850 through 1854. He was not the famous Naval Commodore Oliver Hazard Perry of the War of 1812 and the Battle of Lake Erie, but almost certainly named for him and maybe a distant relative. Although Perry was fixated on hunting elk and deer, and just about any other animal, he recorded an extremely rare glimpse of the wilderness in northern Saint Clair County, northern Sanilac County, and across the Cass River watershed of Tuscola County just prior to large-scale clearing and draining for agriculture. Perry and his hunting companions probably interacted as much or more with the indigenous people of region than settlers during his Tuscola County trips. Also interesting is the range of transportation that was available to them over the years. The video is short and a work-in-progress. For now, it focuses on his routes and probable locations. A future version will include excerpts from his accounts of the landscape, vegetation, animals, people, and interesting events.



The TLC exhibit at the 2024 Hunting, Fishing, and Maritime Days event showing the *Hunting Expeditions of Oliver Hazard Perry in the Thumb of Michigan* video at the center. Photograph by Bill Collins.

For a fascinating account of the expeditions of Perry in the Thumb, see this link:
<https://drive.google.com/file/d/1N9Uoq8tkk3iKQPrCTPNYpWxZiXPIRU/view?usp=sharing>

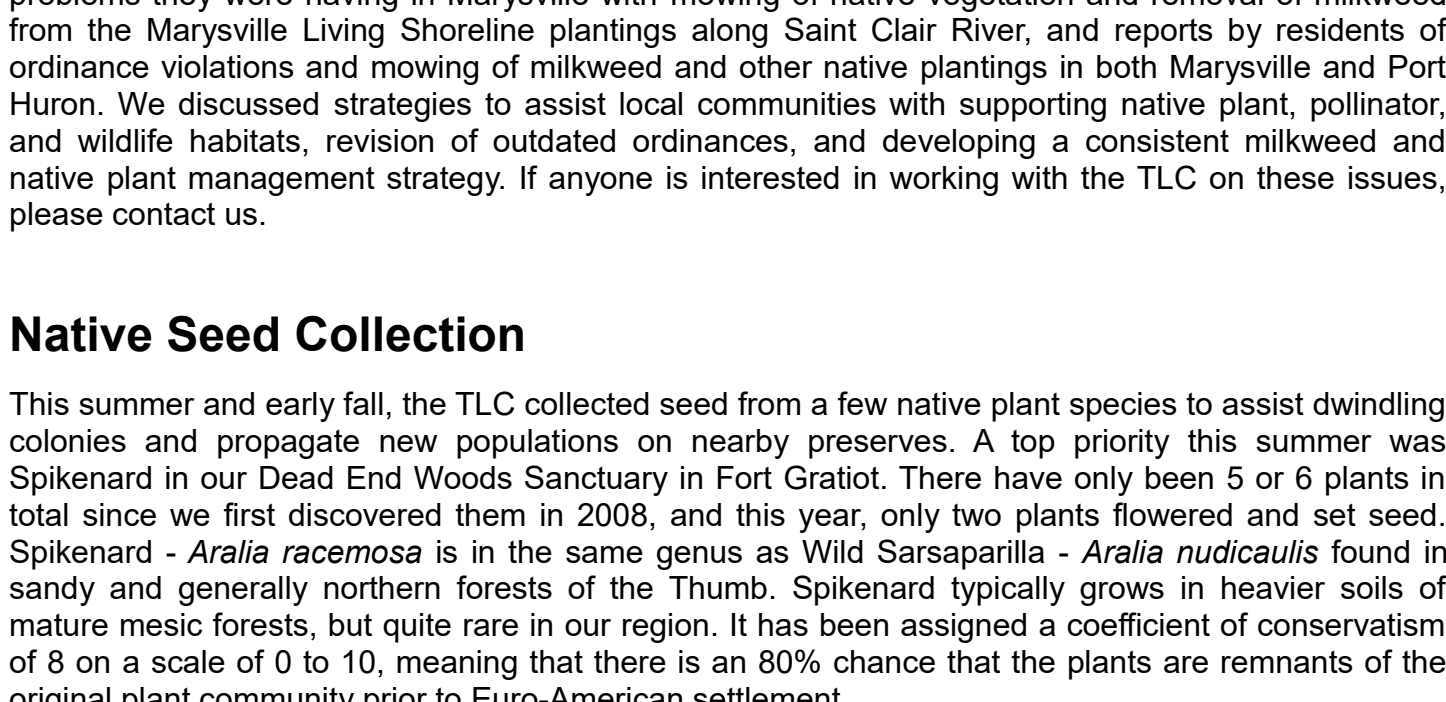
Loznak Sanctuary Marysville

A lot of much needed stewardship was accomplished on our Loznak Sanctuary in Marysville this summer through the continued hard work of TLC Board Member Dan Rhein. He has single-handedly set back large numbers of invasive weeds across the preserve, including Callery Pear - *Pyrus calleryana*, Autumn-olive - *Elaeagnus umbellata*, Common Buckthorn - *Rhamnus cathartica*, Spotted Knapweed - *Centaurea stoebe*, and yes, invasive Reed - *Phragmites australis* subspecies *australis*. He has also continued removing old fill debris and constructed four custom foot bridges over ditches made from found materials. He even made a preserve sign and installed it at the front of the sanctuary near Wills Street. Dan's work has allowed the native lakeplain prairie vegetation to expand across the Loznak Sanctuary and brought more public attention to the preserve.



Showy Goldenrod, Rough Blazing-star, and Common Mountain-mint in full bloom around our sanctuary sign, constructed and installed by TLC Board Member Dan Rhein. Photograph on 2024 September 10 by Bill Collins.

In "Conservancy World", along with positive accomplishments often come troubles. This summer, after five years of no problems, the City of Marysville suddenly claimed the road 50 feet of the preserve along Wills Street was in violation of their grass and weed ordinance and had to be mowed. That 50 feet is some of the best prairie habitat on the preserve, containing an abundance of Rough Blazing-star - *Liatris aspera*, Small Yellow Flax - *Linum medium* recorded from only 12 counties in Michigan, Tall Boneset - *Eupatorium altissimum* recorded from only 12 counties in Michigan, Riddell's Goldenrod - *Solidago riddellii*, Black-eyed Susan - *Rudbeckia hirta*, Foxglove Beard-tongue - *Penstemon digitalis*, Common Mountain-mint - *Pycnanthemum virginianum*, Oatgrass - *Danthonia spicata*, and even Michigan Special Concern Three-awned Grass - *Aristida longespica* recorded from only 9 counties in Michigan.



Rough Blazing-star on the Loznak Sanctuary on 2024 September 10. Photograph by Bill Collins.



Riddell's Goldenrod being pollinated by an American Bumble Bee - *Bombus pensylvanicus* on the Loznak Sanctuary on 2024 September 10. Photograph by Bill Collins.

We were given only a few weeks to mow. We initially asked Marysville for a compromise on the mowing. Since they have not allowed us to burn the prairie as it should, we will need to mow the preserve this late fall or winter to mimic the natural fire regime that limits tree and shrub growth and favors lakeplain prairie plants. They did not respond favorably to this. Long story short, after having thoroughly read their ordinance and some communication with our attorney, we determined that we needed to simply mow the road ditch and remove so-called "noxious weeds" from the 50-foot strip along Wills Street. The only "noxious weed" listed in the ordinance that occurred on the preserve was Wild Carrot - *Daucus carota*. So, we weed whipped all of the Phragmites and other vegetation in 600 feet of road ditch along Wills Street and Dan Rhein pulled almost all of the Wild Carrot from the front 50 feet. A little over a month later, on September 11, we had Tri-County Aquatics of Washington in Macomb County spray most of the Phragmites on the preserve, the beginning of what we hope will be the long-term exclusion of Phragmites from the preserve.



Fringed Gentian - *Gentianopsis crinita* on the Loznak Sanctuary on 2024 September 10. Photograph by Bill Collins.



Tall Boneset on the Loznak Sanctuary on 2024 September 10. Photograph by Bill Collins.

On August 26, the TLC joined a meeting of the Friends of the Saint Clair River to discuss similar problems they were having in Marysville with mowing of native vegetation and removal of milkweed from the Marysville Living Shoreline plantings along Saint Clair River, and reports by residents of ordinance violations and mowing of milkweed and other native plantings in both Marysville and Port Huron. We discussed strategies to assist local communities with supporting native plant, pollinator, and wildlife habitats, revision of outdated ordinances, and developing a consistent milkweed and native plant management strategy. If anyone is interested in working with the TLC on these issues, please contact us.

Native Seed Collection

This summer and early fall, the TLC collected seed from a few native plant species to assist dwindling colonies and propagate new populations on nearby preserves. A top priority this summer was Spikenard in our Dead End Woods Sanctuary in Fort Gratiot. There have only been 5 or 6 plants in total since we first discovered them in 2008, and this year, only two plants flowered and set seed. Spikenard - *Aralia racemosa* is in the same genus as Wild Sarsaparilla - *Aralia nudicaulis* found in sandy and generally northern forests of the Thumb. Spikenard typically grows in heavier soils of mature oak forests, but quite rare in our region. It has been assigned a coefficient of conservatism of 8 on a scale of 0 to 10, meaning that there is an 80% chance that the plants are remnants of the original plant community prior to Euro-American settlement.



This Spikenard plant in the Dead End Woods Sanctuary was about 3 feet tall earlier, but was apparently knocked over as the berries matured. Photograph by Bill Collins on 2024 September 09.

Those of you in Saint Clair County at least, may have noticed the huge amount of acorns dropping from the oak trees this fall. Apparently, growing conditions in 2023-24 led to a "mast year" for oaks in the region. Red Oak trees were especially laden, which began dropping immature acorns in mid-August, with continuous dropping of mature acorns through early October, peaking in the last weeks of September. We took advantage of this abundance to collect Red Oak - *Quercus rubra* acorns in Fort Gratiot, and Black Oak - *Quercus velutina* still covering much of the dune ridges of Lakeside Cemetery and Mount Hope Cemetery in Port Huron. All of these acorns are remnant of the original woodland that covered this part of the dune and swale landscape in Port Huron and Fort Gratiot prior to development of the cemetery. Some of the Black Oak appear to be hybridized to varying extents with Hill's Oak - *Quercus ellipsoidalis*, a complex of Black Oak, Northern Pin Oak, and Scarlet Oak with a unique character particular to the coastal area of Saint Clair County and adjacent Ontario. These acorns are stored in a refrigerator for now and will be planted later this fall on nearby TLC dune and swale preserves in Fort Gratiot and Burtville such as the Bidwell, Peltier, and Shorewood Forest Sanctuaries to bolster the depleted oak populations on the sand ridges.

Red Oak acorns collected from two nearby trees of similar age in Fort Gratiot. Photograph by Bill Collins.

Other seeds collected from our Dead End Woods Sanctuary included Tulip Tree - *Liriodendron tulipifera* of mesic and wet-mesic forest with a coefficient of conservatism of 9, and Spicebush - *Lindera benzoin* of swamp forest, coefficient of conservatism of 7. Bladdernut - *Staphylea trifolia*, a native shrub of floodplain forest and swamps with a coefficient of conservatism of 9, was collected from a long-ago rescued colony in Oakland County to be planted on our Croissant Sanctuary south of Orionville. All of these species generally reach the north edge of their range in our region.

Spicebush with mature fruits in the Dead End Woods Sanctuary. Photograph by Bill Collins on 2024 September 09.

Bladdernut fruits; thin, papery, mostly empty bladder-like husks containing a few seeds in each of the three chambers of each bladder. This kind of fruit is adapted to distribution by floating on water. Collected by new TLC Stewardship Assistant Jason Sawyer and TLC Executive Director Bill Collins on 2024 October 09. Photograph by Bill Collins.

Worthy of mention is an interesting plant known as Wild-cucumber - *Echinocystus lobata*, an annual vine of all kinds of open habitats, but especially along streams and edges of wetlands. While the coefficient of conservatism is only 2, it provides an interesting visual appeal in every way. The sweet-scented flowers support various insect pollinators and the seeds are eaten by large birds and small mammals. The seed pods below were collected from a flower bed at our TLC Marlette office, originally from plants brought here likely by birds a few years ago. This is one of those plants that looks invasive as its vines grow quickly and can cover small trees. But, it is easily controlled by removing the vines early in the growing season as it is an annual. By September, there will likely be some seeds on the ground that will germinate the next year.



Wild-cucumber fruits with fully ripe, nearly black seeds, which are expelled by pressure from the surrounding luffa sponge-like chambers. You know these closed, basically round fruits are nearly ready to spit their seeds within a day or less when they form "lips". The prickly structures are a bit of a mystery, but appear to keep, or to have kept, something from eating them. This is another kind of fruit that appears to be adapted to distribution by floating on water. Photograph by Bill Collins.

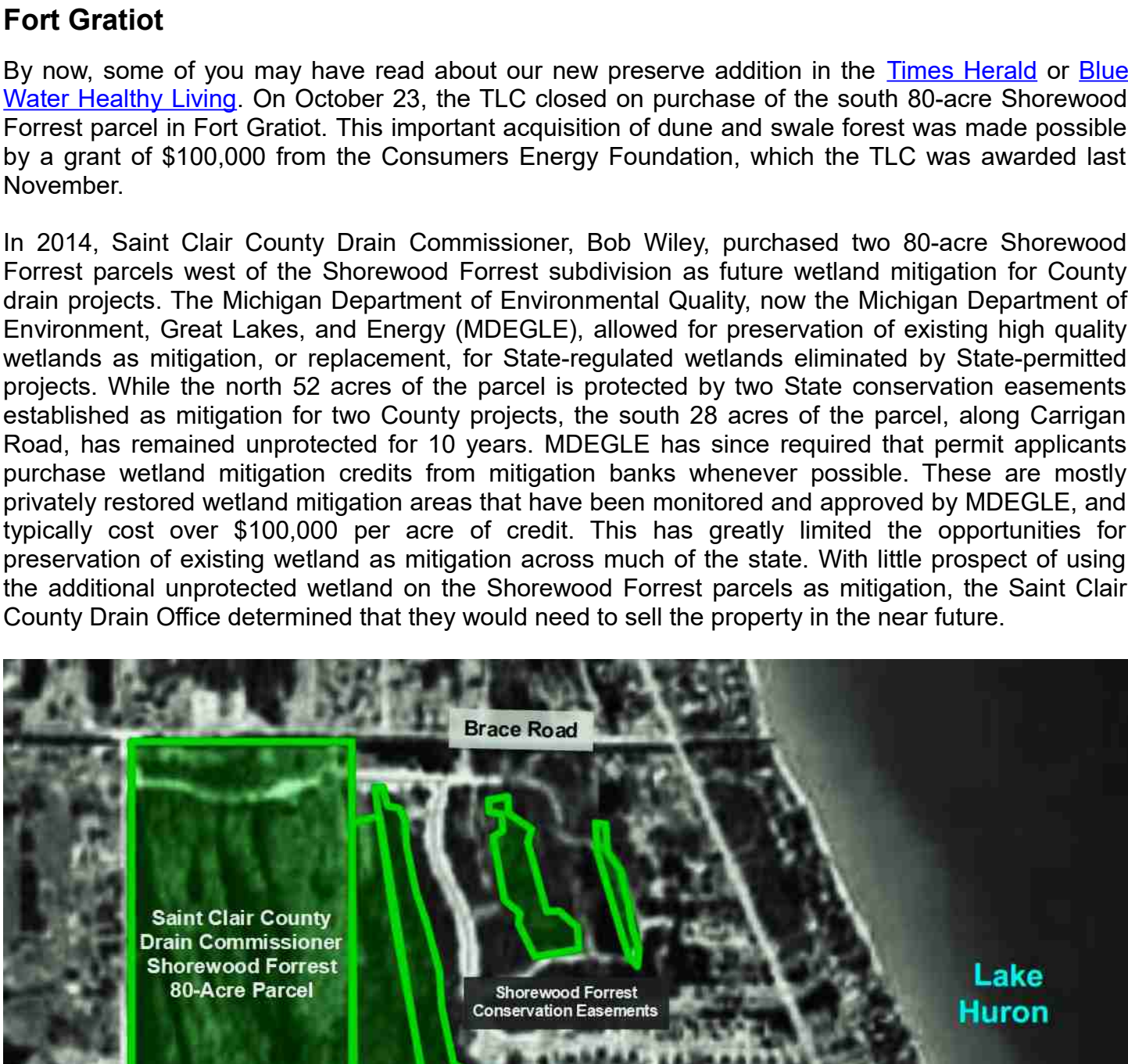
Collecting, storing, and planting seed of native plants is one way to help bolster the diversity and resilience of natural areas. If nothing else, it is can be a relaxing way to get your mind off the troubles of the world and take a little satisfaction in doing something simple and good.

Dottie Craig Donation

By TLC Executive Director Bill Collins

Our senior TLC Board Member, Dottie Craig, passed away last October 16 at the age of 92. She was a special member of the TLC Board. She loved having all of us together and generously made her home available for many of our board meetings, lunch cookouts during our spring stewardship in the Dead End Woods Sanctuary, and our first TLC annual meeting. Dottie was a joy to all of us in the TLC. She had a great sense of humor and we laughed about all kinds of things.

I first met Dottie in 2008 while flagging wetland boundaries and conducting a botanical survey with TLC Board Member Dan Rhein, on our soon-to-be established Dead End Woods Sanctuary in Fort Gratiot. Dottie lived at the dead end of Wilson Drive next to the preserve and took quite an interest in the woods and our work. She especially loved all of the wild animals that visited her backyard, or that she could watch out her window in the adjacent woods. In 2009, she asked to host our cookouts in her yard during our spring stewardship of the Dead End Woods Sanctuary. She then invited us to use her house for board meetings. Soon after, we invited her to join the TLC Board. Dottie had health issues and couldn't easily travel to most of our board meetings which we held near Yale at the time, but she finally joined the board in 2013 at the age of 82.



Dottie Craig at The Village Club in Bloomfield Hills during our visit on October 13, 2022. Photograph by Bill Collins.

We were fortunate to be able to take Dottie to The Village Club of Bloomfield Hills on October 13 of 2022 to visit the former residence of Charlie Winningham, from whom Dottie's father purchased a yacht, the "Maid Marian", in the late 1930s. As a girl, Dottie and her family spent many days aboard the Maid Marian cruising the Detroit River, Lake Erie, Lake Saint Clair, and Lake Huron.

Dottie has continued to support the TLC by leaving us part of her trust, which has now given the TLC a little more funding to support our stewardship of the Dead End Woods Sanctuary and pursue more land preservation. Thank you Dottie. You are truly missed.

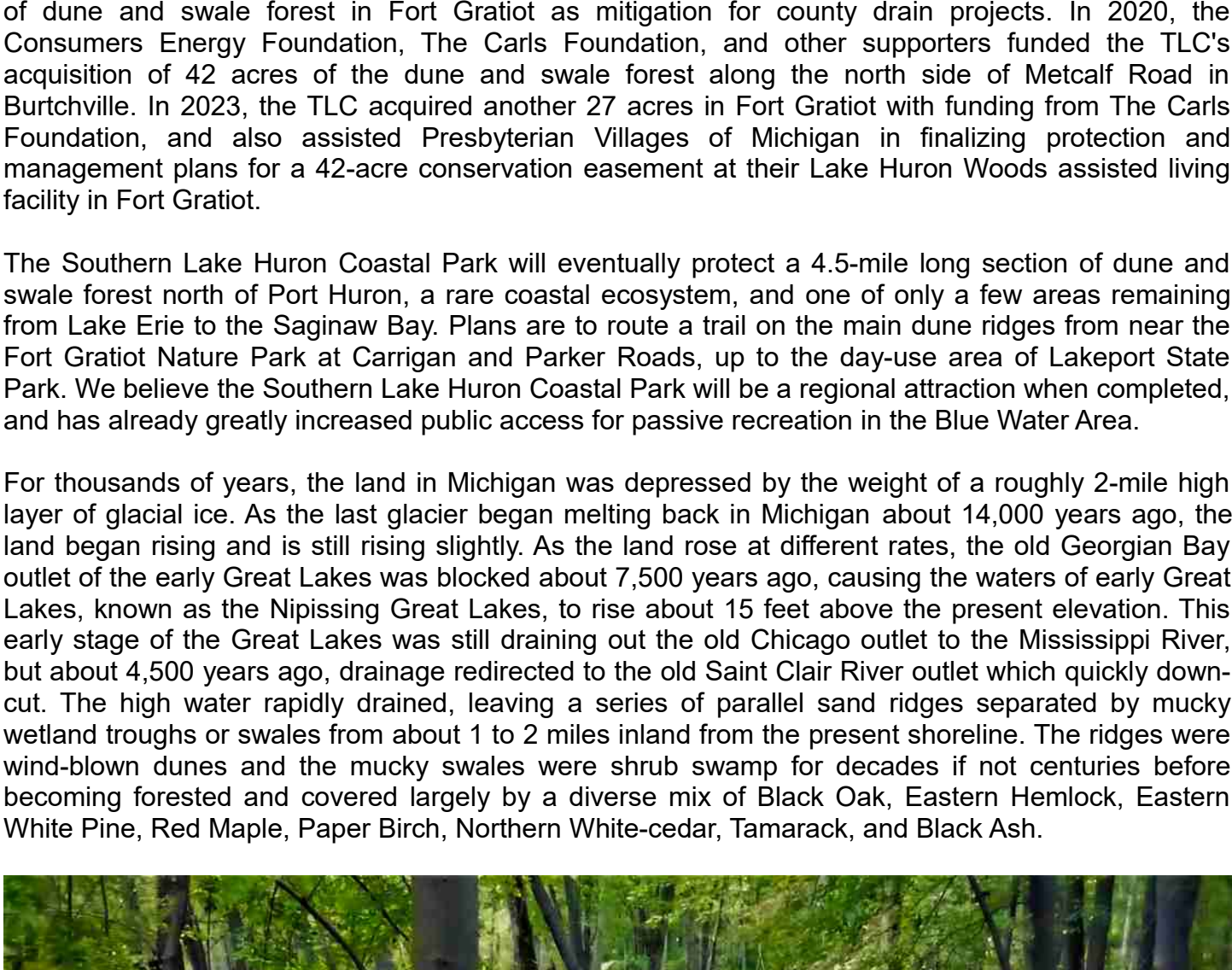
80-Acre Shorewood Forrest Parcel Addition

To The Southern Lake Huron Coastal Park

Fort Gratiot

By now, some of you may have read about our new preserve addition in the [Times Herald](#) or [Blue Water Healthy Living](#). On October 23, the TLC closed on purchase of the south 80-acre Shorewood Forrest parcel in Fort Gratiot. This important acquisition of dune and swale forest was made possible by a grant of \$100,000 from the Consumers Energy Foundation, which the TLC was awarded last November.

In 2014, Saint Clair County Drain Commissioner, Bob Wiley, purchased two 80-acre Shorewood Forrest parcels west of the Shorewood Forrest subdivision as future wetland mitigation for County drain projects. The Michigan Department of Environmental Quality, now the Michigan Department of Environment, Great Lakes, and Energy (MDEGLE), allowed for preservation of existing high quality wetlands as mitigation, or replacement, for State-regulated wetlands eliminated by State-permitted projects. While the north 52 acres of the parcel is protected by two State conservation easements established as mitigation for two County projects, the south 28 acres of the parcel, along Carrigan Road, has remained unprotected for 10 years. MDEGLE has since required that permit applicants purchase wetland mitigation credits from mitigation banks whenever possible. These are mostly privately restored wetland mitigation areas that have been monitored and approved by MDEGLE, and typically cost over \$100,000 per acre of credit. This has greatly limited the opportunities for preservation of existing wetland as mitigation across much of the state. With little prospect of using the additional unprotected wetland on the Shorewood Forrest parcels as mitigation, the Saint Clair County Drain Office determined that they would need to sell the property in the near future.

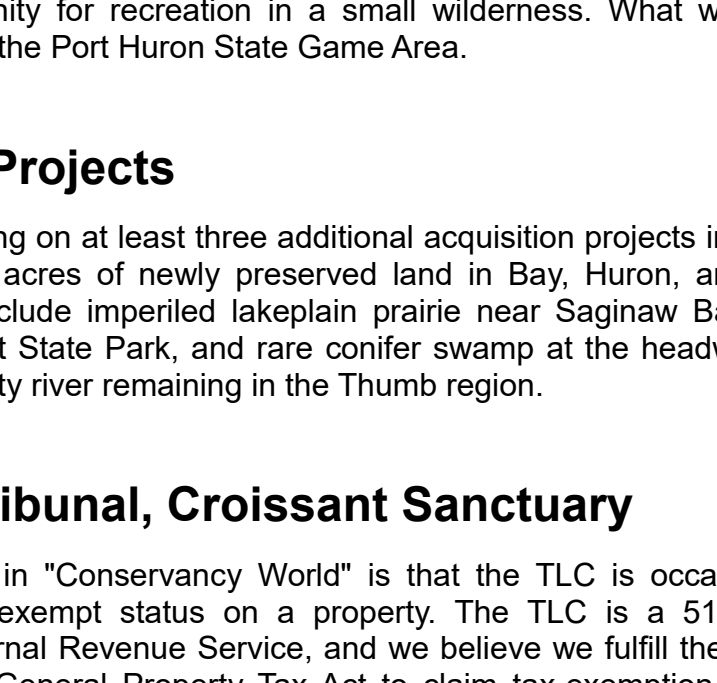


The new TLC 80-acre Shorewood Forrest preserve is shown in green on a 1995 aerial photograph showing parallel dune ridges and conested dark swales. The TLC also acquired 27 acres to the north in 2023. Adjacent preserves owned by the Saint Clair County Drain Commissioner, Presbyterian Villages of Michigan, and Shorewood Forrest are also shown in green.

Because the Shorewood Forrest parcels contain some of the last and best remaining dune and swale forest in southeast Michigan, and because these parcels are critical pieces of the Southern Lake Huron Coastal Park, the TLC was determined to see that these parcels were protected and prepared to purchase them if necessary. TLC Executive Director Bill Collins, began talking with the Drain Office about purchasing this property at least 4 years ago. Thankfully, the Southern Lake Huron Coastal Park has attracted substantial funding from several major donors, including The Carls Foundation, the Consumers Energy Foundation, Community Foundation for Southeast Michigan, Community Foundation of St. Clair County, Cargill Incorporated, and Ducks Unlimited.

Last November, the TLC acquired a 27-acre parcel of the dune and swale forest on the west side of Shorewood Forrest subdivision with major funding from The Carls Foundation of Bloomfield Hills. Two days later, the TLC was notified of another major grant award of \$100,000 from the Consumers Energy Foundation. We are very grateful for the support from The Carls Foundation and Consumers Energy Foundation in funding land acquisition and sharing our vision for the Southern Lake Huron Coastal Park. We could not have done this without their help.

Cathy Wilson, Secretary/Treasurer of the Consumers Energy Foundation says, "The protection of Michigan's natural resources has an important impact on the future and quality of life of Michiganders. We are proud to support the Thumb Land Conservancy's Shorewood Forrest Preservation project to conserve and sustain sensitive natural resources along the Great Lakes shoreline while assuring public access benefiting residents of St. Clair County and across the region."



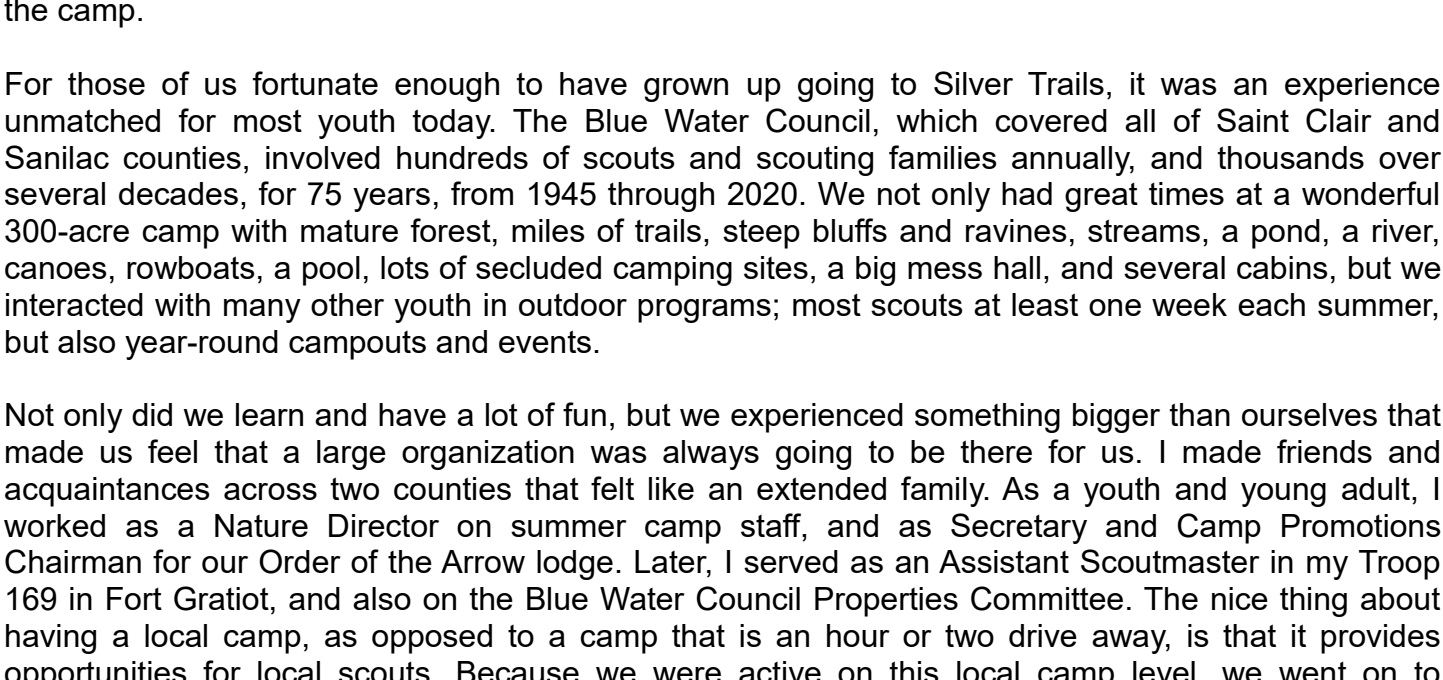
The Consumers Energy Foundation is the charitable arm of Consumers Energy, Michigan's largest energy provider. The Consumers Energy Foundation enables communities to thrive and grow by investing in what's most important to Michigan – its people, our planet and Michigan's prosperity. In 2023, the Consumers Energy Foundation, Consumers Energy, its employees and retirees contributed more than \$11 million to Michigan nonprofits. For more information about the Consumers Energy Foundation, visit: www.ConsumersEnergy.com/foundation.

Saint Clair County Drain Commissioner Bob Wiley, says, "The Drain Office plays an important role in protecting wetlands in the country. I've worked with MDEQ, MDEGLE, and the EPA, to preserve existing high quality wetlands as mitigation for permitted projects, rather than buying mitigation credits or trying to build new wetlands. This provided a substantial cost-savings to taxpayers in the drain districts. The County has a lot of wetland and this is one way that everyone can benefit."

The TLC has worked for 16 years to protect the dune and swale forest in Saint Clair County and now owns over 160 acres of it in Fort Gratiot and Burtchville. In 2010, the TLC acquired 11.5 acres of the dune and swale forest in Port Huron as a donation from Dr. Syed Hamzavi and the Peltier family. In 2014, the TLC assisted the Saint Clair County Drain Commissioner in acquisition of about 180 acres of dune and swale forest in Fort Gratiot as mitigation for county drain projects. In 2020, the Consumers Energy Foundation, The Carls Foundation, and other supporters funded the TLC's acquisition of 42 acres of the dune and swale forest along the north side of Metcalf Road in Burtchville. In 2023, the TLC acquired another 27 acres in Fort Gratiot with funding from The Carls Foundation, and also assisted Presbyterian Villages of Michigan in finalizing protection and management plans for a 42-acre conservation easement at their Lake Huron Woods assisted living facility in Fort Gratiot.

The Southern Lake Huron Coastal Park will eventually protect a 4.5-mile long section of dune and swale forest north of Port Huron, a rare coastal ecosystem, and one of only a few areas remaining from Lake Erie to the Saginaw Bay. Plans are to route a trail on the main dune ridges from near the Fort Gratiot Nature Park at Carrigan and Parker Roads, up to the day-use area of Lakeport State Park. We believe the Southern Lake Huron Coastal Park will be a regional attraction when completed, and has already greatly increased public access for passive recreation in the Blue Water Area.

For thousands of years, the land in Michigan was depressed by the weight of a roughly 2-mile high layer of glacial ice. As the last glacier began melting back in Michigan about 14,000 years ago, the land began rising and is still rising slightly. As the land rose at different rates, the old Georgian Bay outlet of the early Great Lakes was blocked about 7,500 years ago, causing the waters of early Great Lakes, known as the Nipissing Great Lakes, to rise about 15 feet above the present elevation. This early stage of the Great Lakes was still draining out the old Chicago outlet to the Mississippi River, but about 4,500 years ago, drainage was redirected to the old Saint Clair River outlet which quickly dived out. The high water rapidly drained, leaving a series of parallel sand ridges separated by mucky wetland troughs or swales from about 1 to 2 miles inland from the present shoreline. The ridges were wind-blown dunes and the mucky swales were shrub swamp for decades if not centuries before becoming forested and covered largely by a diverse mix of Black Oak, Eastern Hemlock, Eastern White Pine, Red Maple, Paper Birch, Northern White-cedar, Tamarack, and Black Ash.



Wetland swale west of Shorewood Forrest subdivision. Photograph by Bill Collins.

Despite many impacts over the past 200 years, the dune and swale forest is still an amazing place and supports many unique and uncommon species like Purple-flowering Raspberry, nearly identical to Thimbleberry of the Upper Peninsula, Yellow Lady-slipper orchids, Blue-spotted Salamanders, Eastern Hognose Snakes, and a great variety of migratory birds that move and nest along Lake Huron.



Yellow Lady-slipper orchid west of Shorewood Forrest subdivision. Photograph by Bill Collins.

The dune and swale forest is a big part of what makes the Blue Water Area unique, yet few understand its character and significance because there is so little public access. Routing a trail through this coastal forest, some of the largest forest tracts remaining in the Blue Water Area, will provide a great opportunity for recreation in a small wilderness. What we are protecting here is approaching the scale of the Port Huron State Game Area.

New TLC Land Projects

The TLC has been working on at least three additional acquisition projects in 2024 that, if successful, will result in nearly 240 acres of newly preserved land in Bay, Huron and Lapeer counties. The proposed acquisitions include imperiled lakeplain prairie near Saginaw Bay, rare dune and swale forest near Port Crescent State Park, and rare conifer swamp at the headwaters of the Belle River, perhaps the highest quality river remaining in the Thumb region.

Michigan Tax Tribunal, Croissant Sanctuary

Another example of life in "Conservancy World" is that the TLC is occasionally challenged by a municipality on our tax-exempt status on a property. The TLC is a 510(c)(3) non-profit charity approved by the US Internal Revenue Service, and we believe we fulfill the requirements of Section 211.7o of the Michigan General Property Tax Act to claim tax-exemption on all of our preserves. Obviously, municipalities don't want to lose tax base and we understand that. However, we feel that the value added by nature preserves to the community far outweighs what little property tax is lost. In most cases, the addition of a preserve actually results in a net increase in tax revenue as the value of nearby homes increase. There are many arguments in favor of land preservation versus lost tax base that could be presented here, but we'll save that for another time.

Regarding our Croissant Sanctuary in Brandon Township, Oakland County, no doubt an exceptional case for us, the TLC significantly increased the local tax base when we sold the approximately 2.7 acres of commercial frontage along M-15 to a commercial developer. Not only did the sale price result in an increased valuation, but there will soon be at least one business developed on the property that will generate even more income for the Township. The sale left with about 7.1 acres of nearly 100% wetland that we intend to protect as a nature preserve, as promised to the donor, Dr. Paul Croissant of Clarkston. This is what we planned upon evaluating the property and what we told Dr. Croissant and Brandon Township we intended to do. In fact, we did not claim tax-exemption on the 2.7-acres that we sold. By the way, there was no great plan before receiving the donation of this property. Everything just happened to fall into place about 6 months after we acquired it, in large part because of the association TLC Executive Director Bill Collins had as a wetland consultant with RBF Construction, a small commercial developer in the area. There were no guarantees that anything would happen with the property, other than we promised to preserve most of it.

In March, we submitted a Board of Review appeal package to Brandon Township because of the Assessor's refusal to recognize the TLC's tax-exempt status for the property. The Board of Review did not decide in our favor so we appealed to the Michigan Tax Tribunal; not the first time we have had to do this. We have previous experience with the process regarding our Gerrits Sanctuary in Ira Township in Saint Clair County. Thanks to our TLC Attorney, Tim Lozen, we prevailed. On September 23, we had a hearing by conference call with the Michigan Tax Tribunal representative and the Brandon Township Assessor. Having learned from our previous experience, we feel like we did well in defending our tax-exempt status on the Croissant Sanctuary, but we won't know the result for about a month.

John Hardie Memorial Service

By TLC Executive Director Bill Collins

On Sunday, September 29, I attended the memorial service for Camp Ranger John Hardie at the Jeddio Methodist Church and later that day at Silver Trails Scout Reservation near Jeddio. John passed away back in his home state of Minnesota on July 21. Here's a link to John's obituary: <https://www.wennefuneralhome.com/obituaries/John-Hardie-4/#1/Obituary>.

Ranger John Hardie's memorial service was the big event of the fall for those of us who participated in the old Blue Water Council and was weeks in the making. The day was all about remembering and honoring Ranger John, seeing old friends, and getting back to Silver Trails for only a few short hours. Thanks to so many people for making this happen, including John's daughter, Carla Hardie Tuttle-Petross, scouter Bob Wiley for getting us permission to visit the camp, and scouter Don McLane and his crew for preparing the camp for our arrival and service, among many others for attending.

John Hardie was the Camp Ranger of Silver Trails for 30 years, from 1966 through 1996. As I said at the memorial service, Ranger John was our camp caretaker, our ever jolly camp host, our spirited entertainer, and our reverent master of ceremonies. I knew him well, as did TLC Board Members Chris Walker and Dan Rhein, having worked on summer camp staff from 1978 through the mid 1980s, first as an assistant to Chris Walker, and later with Dan Rhein. TLC Board Members Fred Fuller and Scott Ferguson were also scouts in the Blue Water Council. It must say something about scouting and Silver Trails that five of our Executive Board Members are former scouts and scouters.

It would be very hard to run a camp like we had in Silver Trails without a camp ranger. From his humble beginnings in Saint Paul, Minnesota, Ranger John Hardie fit the part perfectly and was one of the greatest. Former scout, camp staffer, and Order of the Arrow Lodge Chief John Hardman came all the way from Chicago for the memorial service. As Jon said in his presentation, Silver Trails is Ranger John Hardie, and Ranger John Hardie is Silver Trails. He made it what it was in our day. His spirit fills the camp.

For those of us fortunate enough to have grown up going to Silver Trails, it was an experience unmatched for most youth today. The Blue Water Council, which covered all of Saint Clair and Sanilac counties, involved hundreds of scouts and scouting families annually, and thousands over several decades, for 75 years, from 1945 through 2020. We not only had great times at a wonderful 300-acre camp with mature forest, miles of trails, steep bluffs and ravines, streams, a pond, a river, canoes, rowboats, a pool, lots of secluded camping sites, a big mess hall, and several cabins, but we interacted with many other youth in outdoor programs; most scouts at least one week each summer, but also year-round campouts and events.

Not only did we learn and have a lot of fun, but we experienced something bigger than ourselves that made us feel that a large organization was always going to be there for us. I made friends and acquaintances across two counties that felt like an extended family. As a youth and young adult, I worked as a Nature Director on summer camp staff, and as Secretary and Camp Promotions Chairman for our Order of the Arrow lodge. Later, I served as an Assistant Scoutmaster in my Troop 169 in Fort Gratiot, and also on the Blue Water Council Properties Committee. The nice thing about having a local camp, as opposed to a camp that is an hour or two drive away, is that it provides opportunities for local scouts. Because we were active on their local camp level, we went on to participate more in the council, and some of us even on regional and national levels. This broader experience strengthened my connection with my Troop 169 because I saw how far our guys could go if they were to. I don't know that the benefits of opportunities like those we had can be measured. But these were all but lost for local youth when the Michigan councils were consolidated in 2012 and Silver Trails was sold in 2019.

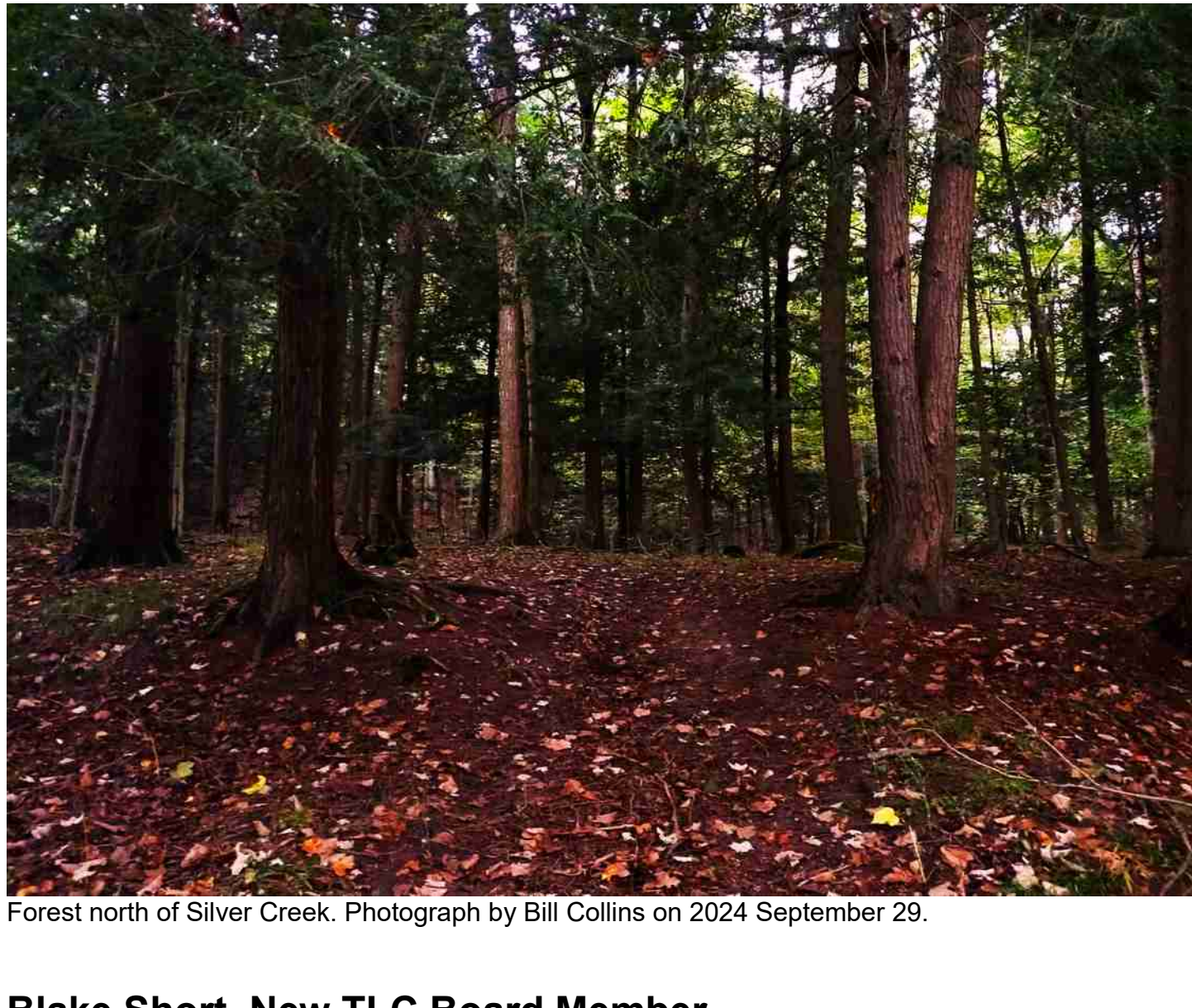
Silver Trails is one of the greatest natural areas in our region; a nearly 300-acre camp located along the lower Silver Creek valley and the Black River valley. It is a continuation of the same landscape and forest as the north end Port Huron State Game Area only a mile to the south, covered by mature Sugar Maple, American Beech, Eastern Hemlock, and Yellow Birch, with an abundant community of native plants and animals. Since the 2019 sale, the camp has remained largely untouched. Here are just a few photographs taken the day of the John Hardie memorial service:

The road down from the James West cabin to the Council Ring. Photograph by Bill Collins on 2024 September 29.

The Council Ring fire as participants arrive. Back in our day, 100 to 200 scouts, scouters, and family members would fill these seats on summer camp Family Nights. Photograph by Jon Hardman on 2024 September 29.

The Council Ring fire as participants arrive. Photograph by Bill Collins on 2024 September 29.

Forest between the Chippewa campsites and the Council Ring. Photograph by Bill Collins on 2024 September 29.



Forest north of Silver Creek. Photograph by Bill Collins on 2024 September 29.

Blake Short, New TLC Board Member

In our third quarter TLC Executive Board meeting, TLC Stewardship Assistant Blake Short of Port Huron, was chosen as our newest board member. Blake is a naturalist who began working with the TLC in May of 2022. Among other projects, Blake led our annual stewardship on the Bidwell Sanctuary, clearing much of the new coastal park trail. He led our annual Garlic Mustard removal on our Dead End Woods Sanctuary, and assisted in stewardship of the Deerfield Preserve in Huron County, our North Street Station, and our Tranquil Ridge Sanctuary. He also represented the TLC at the Port Huron State Game Area Day in September of 2022 and assisted us in nomination of properties for State acquisition through the Michigan Natural Resources Trust Fund.



Right to left: New TLC Board Member Blake Short, TLC Member Connie Neese, TLC Board Member Kay Cumbow, and Clyde Historical Society President Connie Bates at the North Street Station in September of 2022. Photograph by Blake Short.

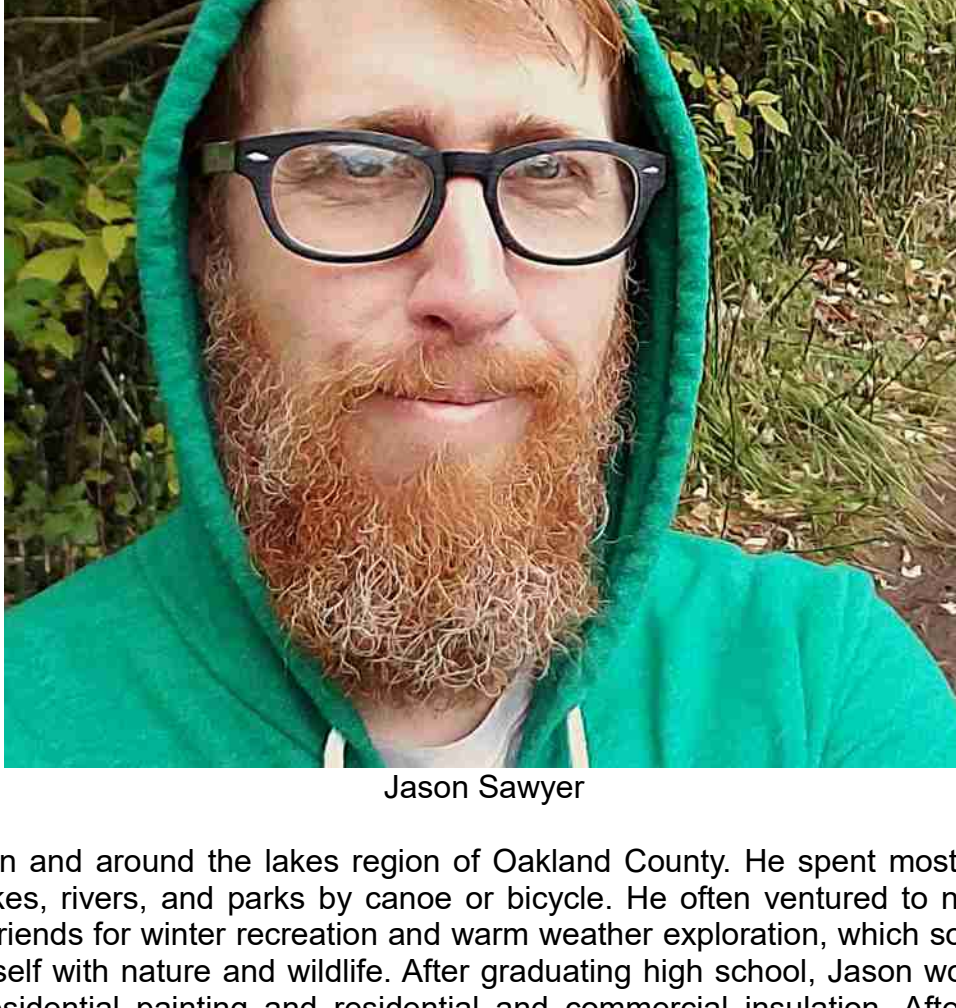
Blake grew up in the Lakeport area, actually right across from our Bidwell Sanctuary where he wandered as a kid. With family roots in West Virginia, he returned there in his early 20s, which got him very connected with the natural world. He returned to Michigan and attended Ferris State University where he earned a BS degree in Environmental Biology. While at Ferris State, he was Vice President and Project Manager of the Mycology Club, culturing various fungi, leading field trips, and collecting mushrooms in the nearby Manistee National Forest. Returning to Port Huron, he was a summer intern with the Friends of the Saint Clair River, working on science communications and stewardship. He was also employed full-time growing gourmet mushrooms for Give and Grow Mushrooms in Chesterfield Township in Macomb County. He was then employed by TLC Executive Director Bill Collins with Huron Ecologic for over a year as a private wetland consultant. He is now employed by GEI Incorporated as an ecological consultant, working on invasive species control, habitat restoration, wetland services, botanical surveys, and rare species surveys across Michigan.

In his spare time, Blake does a lot of mushroom collecting, especially in the Port Huron State Game Area. He grew up sailing and still takes a small boat out on Lake Huron. He is also a musician, playing guitar and mandolin, particularly Americana and Blue Grass.

New TLC Helpers

Jason Sawyer, Stewardship Assistant

The TLC has a new part-time Stewardship Assistant, Jason Sawyer, 49, of Capac. Jason and his wife, Jen, run Mystery's Haven cat shelter in Capac: Mysterys-Haven.org, a non-profit cat shelter. They also volunteer to coordinate and deliver food and supplies to similar organizations from a distribution center in Detroit. He has been doing nice work on clearing the final segments and maintaining the coastal trail on our 42-acre Bidwell Sanctuary in Burtchville. With little previous background, Jason picked-up quickly on identifying invasive weeds like Common Privet, Japanese Barberry, and Oriental Bittersweet, and also on important native plants on the Bidwell Sanctuary like Purple-flowering Raspberry. Soon we will start work on the new information kiosk and other structures at the entrance.



Jason Sawyer

Jason grew up in and around the lakes region of Oakland County. He spent most of his childhood exploring the lakes, rivers, and parks by canoe or bicycle. He often ventured to northern Michigan with family and friends for winter recreation and warm weather exploration, which solidified his desire to surround himself with nature and wildlife. After graduating high school, Jason worked as a skilled laborer doing residential painting and residential and commercial insulation. After many years of honest work, including becoming a proud member of the Carpenters Local Union 1234, his desire to be closer to wilderness took him north to Cheboygan, Michigan where his ancestors emigrated from Sweden. There, he became a pinsetter machine mechanic at the local bowling alley and enjoyed the new experience, which afforded him time to explore the wilderness, especially the extensive trail networks by mountain bike, snowmobile, and other off-road vehicles. He also became a skilled kayak enthusiast. Among the many areas he enjoyed exploring were Cheboygan State Park, the Au Sable River, the Sturgeon River, and Duncan Bay.

In the early 2000s, he moved back south to Oakland County where he resumed his residential laborer career. In 2006, Jason met and married his wife, Jenny, and their daughter Abby was born. Together, he and Jenny created an on-line retail business, Guinea Pig Market, selling hand-made products for pet guinea pigs and other small animal bedding products: GuineaPigMarket.com. In 2010, they purchased a home in rural Mussey Township. Noticing the amount of stray cats in the area and being life-long animal lovers, they coordinated a volunteer effort to help stray and feral cats. They also help those overrun with colonies of cats by providing transport and funding for sterilization. This led them to forming the non-profit cat rescue and outreach group, Mysterys-Haven.org, they became members of the Rescue Bank program through Greater Goods Charities, which provides palletized food and supplies for approved rescue organizations for only the cost of transportation. They became integral core volunteers for the Detroit affiliate, unloading freight and distributing goods to over one hundred approved groups in Michigan and Ohio. Being part of this program allows them to provide food and supplies at no cost to those in need caring for cats and dogs in their vicinity. Since the beginning Mystery's Haven, Jason and Jenny have aided in sterilizing over 500 cats in the area and strive to continue these efforts with much appreciation to their supporters. Their program is strictly run based on the donations of compassionate people and organizations.

Jason relishes the opportunity to become part of the TLC. He says that the principles and efforts of the TLC align perfectly with his love of our precious natural land and his desire to preserve our wilderness for further generations. Likewise, the TLC has enjoyed working with Jason and is impressed with his enthusiasm and his ability to take charge with little guidance. We are fortunate that our TLC President occasionally seeks out local animal groups and connected with Jen.

Teddy Wiley, Program and Stewardship Assistant

Teddy Wiley, 21, of Marysville contacted us in mid-September out of concern about the forest adjacent to the 51-acre Michigan Road preserve in Port Huron Township that the TLC monitored and stewarded for Saint Clair County in 2011 through 2015. The land east of the preserve has been for sale for several years and he would like to see it protected. As we tell anyone interested in protecting natural areas, if you take the lead on the project, the TLC will most likely assist as we are able. Teddy is impressively self-educated in ecology, regional natural communities, native species, and learning more by the week. The TLC is happy to provide new opportunities for local naturalists and help cultivate their interest and enthusiasm. It was almost immediately clear that Teddy is the type of person we've been hoping would join our effort for several years.



Left to right: TLC Member John Fody, TLC Program and Stewardship Assistant Teddy Wiley, and TLC Board Member Dan Rhein at the Loznak Sanctuary in Marysville on 2024 September 24. Photograph by Bill Collins.

Harsens is also heading-up an effort to nominate the Saint Clair River Delta - Saint John's Marsh, Hards Island, Dickinson Island, Squirrel Island, Seaway Island, Bassett Island, Saint Anne's Marsh, Walpole Island, and adjacent lands, as a Ramsar Wetland of International Importance: Ramsar.org/about/our-mission/wetlands-international-importance. This designation should help provide new funding opportunities to control invasive weed - *Phragmites australis* subspecies *australis*, among other invasive weeds, which has eliminated native vegetation and degraded wildlife habitat across vast areas of the Saint Clair River Delta and the Great Lakes region. More complete control of invasive Phragmites would eventually lead to restoration of the Saint Clair River Delta ecosystem as a whole. There are currently only four Ramsar wetlands in our general region, including the Saint Clair National Wildlife Area on the eastern shore of Lake Saint Clair, Humbug Marsh in the Detroit River International Wildlife Refuge along the west shore of the Detroit River, Point Pelee National Park on the north shore of Lake Erie, and Long Point National Wildlife Area also on the north shore of Lake Erie. As for Ramsar designated wetlands in general, the US has relatively very few compared to other parts of the world.

Teddy says that since he was a child, he has always been fascinated with the natural world and all it had to offer. From the age of 5, he sought out wetland areas to catch and release snapping turtles and other small reptiles and amphibians. For some reason, he has always been attracted to catching snapping turtles and wetlands. He says it kind of came natural to him. It was snapping turtles that introduced him to wetlands and the many issues they currently face. He gradually realized that the majority of the wetlands in the Saint Clair River Delta and Saint John's Marsh were under siege from invasive Reed or Phragmites. Any homes that once had were destroyed by Phragmites, which even kills some turtles when they get caught in it.

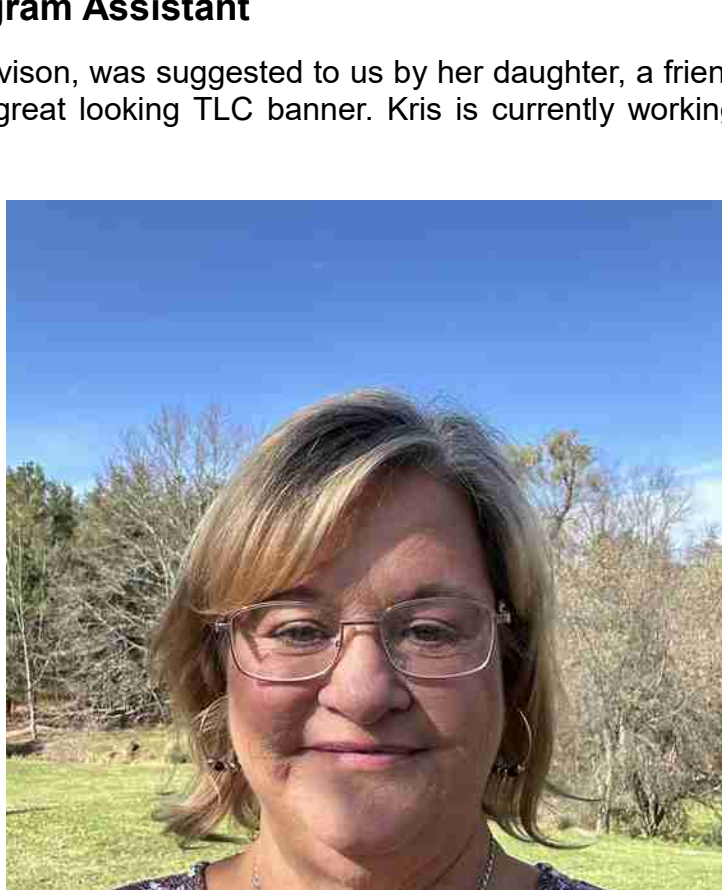
From the age of just 13, Teddy worked for the Michigan Nature Association on their Alice W. Moore Woods Sanctuary in Saint Clair, helping to control invasive weeds, most notably Glossy Buckthorn and Common Buckthorn. He didn't have experience controlling Phragmites, nor, he says, did he have the time or power to control it on such a large scale. So he started to reach out to the Michigan Department of Natural Resources to understand why it seemed nothing was being done to control it on the Saint Clair River Delta. After much conversation with several MDNR biologists, he realized our delta was missing out on many opportunities to be restored and properly managed. So, he created a movement called *Make Our Delta Great Again* which aims to designate the Saint Clair River Delta as a Wetland of International Importance through the Ramsar Convention. Having our delta internationally recognized would bring much attention to our wetland issues and bring greater urgency to the need to restore and protect its ecological character. Teddy says that with the help of TLC Executive Director Bill Collins, we are working together to make this movement come to life and hopefully deliver renewed prosperity to the Saint Clair River Delta.

Among his many activities, Teddy is also an avid deer hunter, helping to control another invasive species that has grazed out much of the native vegetation from our forests. He also loves to collect shed deer antlers and has had a collection.

Since our introduction in September, Teddy has already assisted the TLC with invasive weed control on our Loznak Sanctuary in Marysville and Bidwell Sanctuary in Burtchville. He's gotten a good introduction to native lakeplain prairie plants on our Loznak Sanctuary. Together, we have honed his *Make Our Delta Great Again* presentation and drafted a support letter. Teddy even wrote much of the baseline report for what we hope will soon be a new conservation easement. We look forward to working with Teddy for many years to come and hope he has found his place in the TLC.

Kris Heyworth, Program Assistant

Kris Heyworth, 62, of Davison, was suggested to us by her daughter, a friend of our helper, RoseAnn Shetler, who made our great looking TLC banner. Kris is currently working to identify new funding sources for the TLC.



Kris Heyworth

Kris has always loved nature and considers herself a country girl. She grew up in the Thumb, actually not far from our office in Marlette. After meeting her husband, they moved to Davison Township in Genesee County where she has lived for the past forty years. It is a little more suburban there, but owning five acres with wooded hills, with farmland and country just down the road, she feels right at home. Kris and her late husband raised eight children there. Five of her children are married now and she has 13 grandchildren. She says she is a Christ follower and that He has blessed her so much.

We hope that working with the TLC to protect creation can be part of that blessing for years to come.

Ramsar Designation For The Saint Clair River Delta

By Teddy Wiley, TLC Program and Stewardship Assistant

New TLC Program and Stewardship Assistant, Teddy Wiley, is heading an effort to nominate the Saint Clair River Delta for designation as a Ramsar Wetland of International Importance. The Ramsar Convention on Wetlands is one of the oldest modern global intergovernmental environmental agreements. It was negotiated in the 1960s by countries and non-governmental organizations concerned about the increasing loss and degradation of wetland habitat for migratory waterbirds. The treaty was adopted in the Iranian city of Ramsar in 1971 and became effective in 1975. A key provision of the treaty is to identify and place significant wetlands on a list of Wetlands of International Importance, also known as the Ramsar List. Criteria for listing include representative, rare or unique wetland types, and various aspects emphasizing the importance of biodiversity. The list includes an international network of wetlands which are important for the conservation of global biological diversity and for sustaining human life through the maintenance of their ecosystem components, processes and benefits or services. There are now 2,400 Ramsar wetland sites across the world.

Designation of the Saint Clair River Delta as a Ramsar Wetland of International Importance should provide additional funding opportunities and help motivate all stakeholders to better protect the delta's ecological character. More funding is desperately needed to control invasive Reed - *Phragmites australis* subspecies *australis*, among other invasive weeds, which has eliminated nearly all of the native vegetation and severely degraded wildlife habitat of vast areas of wetland along the Great Lakes. More complete control of invasive Phragmites would eventually lead to restoration of the Saint Clair River Delta ecosystem as a whole. There are currently only four Ramsar wetlands in our general region, including the Saint Clair National Wildlife Area on the eastern shore of Lake Saint Clair, Humbug Marsh in the Detroit River International Wildlife Refuge along the west shore of the Detroit River, Point Pelee National Park on the north shore of Lake Erie, and Long Point National Wildlife Area also on the north shore of Lake Erie. As for designated Ramsar wetlands in general, the US has relatively very few compared to other parts of the world.



Map showing Ramsar Wetlands of International Importance in our region, minus Humbug Marsh along the Detroit River, and also the proposed Saint Clair River Delta Ramsar wetland. Map by Teddy Wiley, Google Maps.

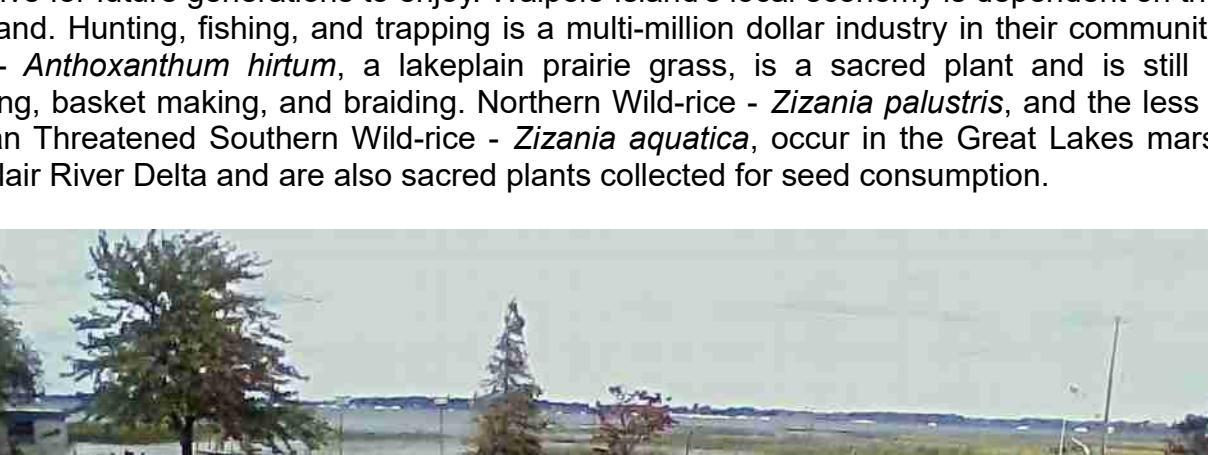


Phragmites control before and after photographs. Point Pelee National Park, Ontario, Canada. Parks Canada.

The Saint Clair River Delta is located at the northeast corner of Lake Saint Clair at the confluence of the Saint Clair River and consists of Saint John's Marsh, Dickinson Island, Harsens Island, Seaway Island, Bassett Island, Squirrel Island, Walpole Island, and Saint Anne's Island. The Delta is fed by the waters of Lake Huron where it eventually empties out into the shallow Lake Saint Clair. The delta's overall size of approximately 32,000 acres and location between two freshwater lakes makes it one of the largest freshwater deltas in North America and the only major river delta in the Great Lakes basin.

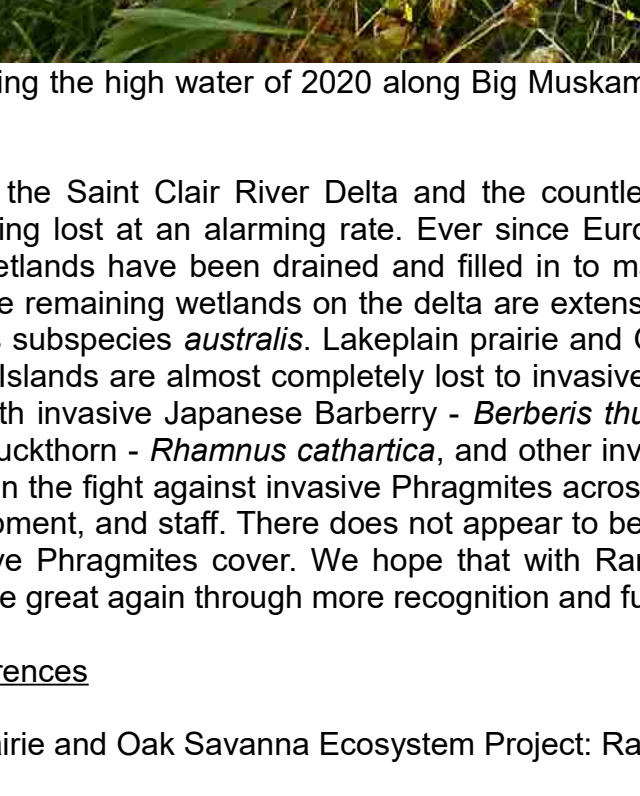
Saint John's Marsh and adjacent islands are important ecologically because they provide critical habitat for a myriad of game and non-game species that depend on coastal wetlands such as ducks, geese, swans, reptiles, amphibians, mammals, and the many species of invertebrates and plants that support them. The delta is home to rare plant communities including Great Lakes marsh, lakeplain wet prairie, lakeplain wet-mesic prairie, and lakeplain oak openings. Lakeplain prairie historically covered most of the delta, a species-rich plant community that occurs on seasonally wet ground of glacial lake plains and similar formations. Lakeplain prairie once covered 80% of southeast Michigan prior to Euro-American settlement before it was cleared, ditched, and drained for agriculture. Any remaining patches were fire suppressed, becoming severely degraded and fragmented. Today, less than 1% of the original lakeplain prairie and oak opening communities remain and are ranked as imperiled globally and critically imperiled on a statewide basis by the Michigan Natural Features Inventory. Despite all this, the Saint Clair River Delta still contains high quality remnants of lakeplain prairie and oak openings. These communities are extremely diverse, with sometimes over 200 plant species occurring in a single remnant. Numerous rare species that depend on lakeplain ecosystems have been documented within the lakeplain prairie within Saint John's Marsh and adjacent islands.

Rare animal species associated with the Saint Clair River Delta include: Michigan Endangered King Rail - *Rallus elegans*; Michigan Threatened Black Tern - *Chlidonias niger*; Spotted Turtle - *Clemmys guttata*; Leafhopper - *Flexamia reflexa*; Common Gallinule - *Gallinula galeata*; Least Bittern - *Ixobrychus exilis*; Eastern Fox Snake - *Pantherophis vulpinus*; Forster's Tern - *Sterna forsteri*; and Common Tern - *Sterna hirundo*; and Michigan Special Concern American Bittern - *Botaurus lentiginosus*; Marsh Wren - *Cistothorus palustris*; Blanding's Turtle - *Emydoidea blandingii*; and Blazing Star Borer - *Papaipema beeriana*.



Michigan Endangered King Rail. American Bird Conservancy, <https://abcbirds.org/bird/king-rail/>

Rare plant species associated with the Saint Clair River Delta include: US Threatened and Michigan Endangered Eastern Prairie-Fringed Orchid - *Platanthera leucophaea*; Michigan Endangered Gattinger's Gerardia - *Agalinis gattingeri*, and Skinner's Gerardia - *Agalinis skinneriana*; Michigan Threatened Sullivant's Milkweed - *Asclepias sullivantii*; Small White Lady Slipper Orchid - *Cypripedium candidum*; Leiberg's Panic Grass - *Dichanthellum leibergii*; and Short Fruited Rush - *Juncus brachycarpus*; and Michigan Special Concern Three-Awned Grass - *Aristida longespica*; Gentian Leaved Saint John's Wort - *Hypericum gentianoides*; Cross-Leaved Milkwort - *Polygala cruciata*; and Tall Nut Rush - *Scleria triglomerata*.



US Threatened and Michigan Endangered Eastern Prairie-Fringed Orchid, US Forest Service, https://www.fs.usda.gov/wildflowers/plant-of-the-week/platanthera_leucophaea.shtml

The wetlands that make up the Saint Clair River Delta act like a giant sponge for the Great Lakes basin. Sediment deposition from the Saint Clair River is collected along the banks of the channels, which is then utilized by native vegetation and ultimately creates highly productive wildlife habitats. Excessive nutrients and other pollution discharged upstream of the delta are absorbed, assimilated, and remediated to some extent, improving the water quality of Lake Saint Clair and Lake Erie. Without the Saint Clair River Delta, flooding would become more damaging, water quality would diminish, and increased algal blooms would occur due to excessive nutrient loading.

The Saint Clair River Delta is renowned for its recreational Southmouth Bass fishing and waterfowl hunting, attracting hunters and fishermen from all over the state. The delta is also a popular birding destination for photographers and naturalists wanting to witness the thousands of migrating waterfowl. The shallow bays that surround Dickinson and Harsens Island, known as the Saint Clair Flats, are one of the biggest boating designations in the world. Raft-Off, an annual event in the Saint Clair Flats, almost broke the Guinness World Record for world's largest boat tie-up ever in 2018, with about 3,000 boats tied up.

The Walpole Island First Nation, known as *Bkejwanong*, "where the waters divide", includes Seaway, Bassett, Squirrel, Walpole, and Saint Anne's Islands. It is home of the Ojibwa, Potawatomi, and Ottawa tribes. These three tribes, along with the Mississauga, and Algonquin, are known as the *Anishinaabe*, or "the people". The Anishinaabe are all culturally related, speaking one language called *Anishinaabemowin*. The Anishinaabe people have always had a close connection to the land, animals, and water. In their culture, it is important to walk in harmony with the world, connected to all parts of the land, with no separation between sacred and secular. It's this reason why the people of Walpole Island have taken such good care of their land; making sure it is kept undamaged and productive for future generations to enjoy. Walpole Island's local economy is dependent on the bounty of the land. Hunting, fishing, and trapping is a multi-million dollar industry in their community. Sweet Grass - *Anthoxanthum hirtum*, a lakeplain prairie grass, is a sacred plant and is still used for smudging, basket making, and braiding. Northern Wild-rice - *Zizania palustris*, and the less common Michigan Threatened Southern Wild-rice - *Zizania aquatica*, occur in the Great Lakes marsh of the Saint Clair River Delta and are also sacred plants collected for seed consumption.



Northern Wild-rice beds during the high water of 2020 along Big Muskegon Bay on Harsens Island. Photograph by Bill Collins.

Despite the significance of the Saint Clair River Delta and the countless benefits it provides, the delta's wetlands are still being lost at an alarming rate. Ever since Europeans began settling here, much of the surrounding wetlands have been drained and filled in to make way for agriculture and residential development. The remaining wetlands on the delta are extensively dominated by invasive Reed - *Phragmites australis* subspecies *australis*. Lakeplain prairie and Great Lakes marsh on Saint John's Marsh and adjacent islands are almost completely lost to invasive Phragmites. Lakeplain oak openings are being filled with invasive Japanese Barberry - *Berberis thunbergii*, Glossy Buckthorn - *Frangula alnus*, Common Buckthorn - *Rhamnus cathartica*, and other invasive weeds. The State has made little lasting progress in the fight against invasive Phragmites across the Saint Clair River Delta due to lack of funding, equipment, and staff. There does not appear to be a recent management plan that addresses the extensive Phragmites cover. We hope that with Ramsar designation, the Saint Clair River Delta can become great again through more recognition and funding opportunities.

Saint Clair River Delta References

- St. Clair Delta Lakeplain Prairie and Oak Savanna Ecosystem Project: Rare Plant and Insect Surveys 2000 <https://mnfi.anr.msu.edu/reports/MNFI-Report-2000-04.pdf>
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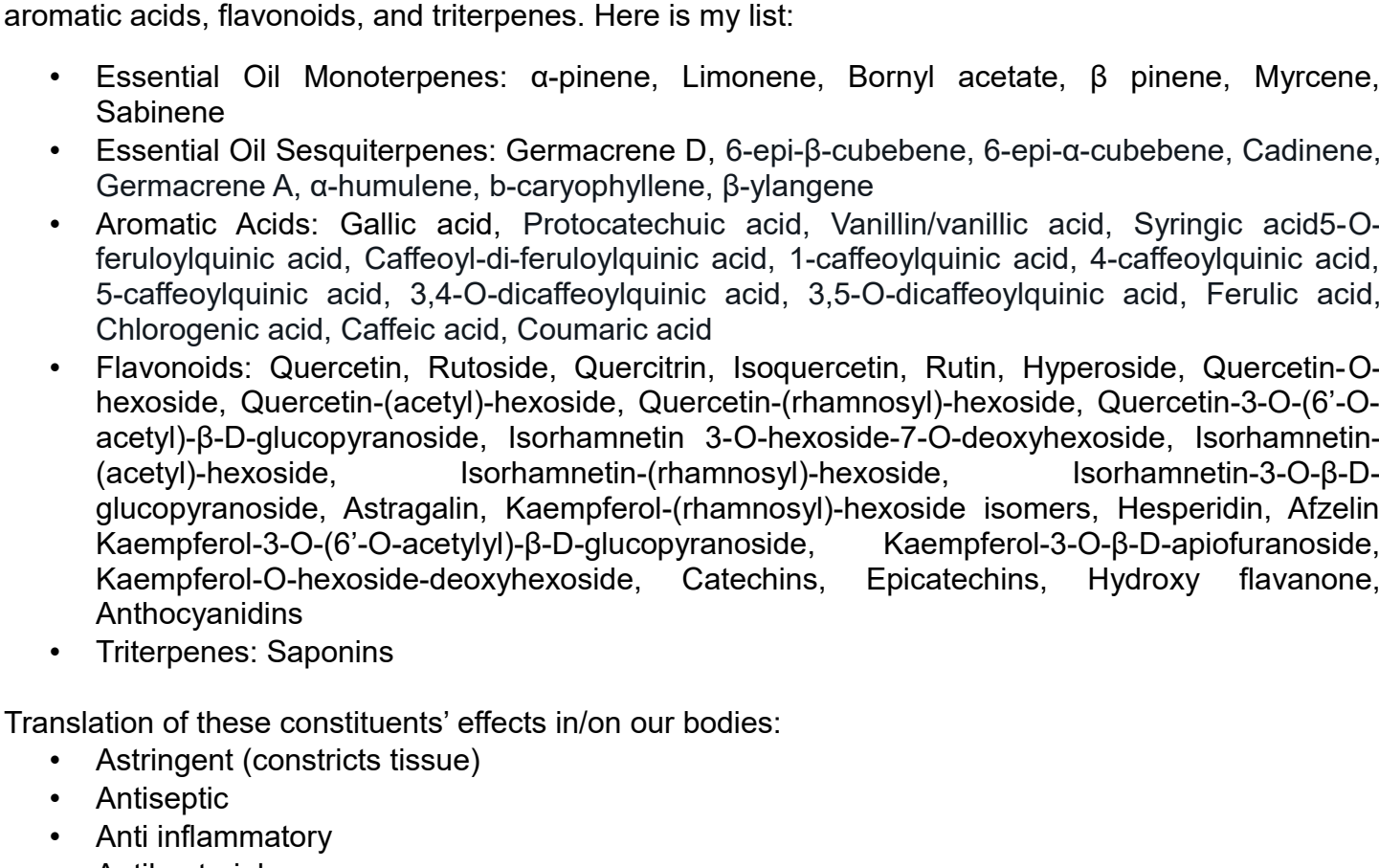
U.S. Fish & Wildlife Service, The Convention on Wetlands and Wetlands of International Importance <https://www.fws.gov/program/international-affairs/ramsar-convention-wetlands>

LTA Membership

At the recommendation of Executive Director Bill Collins, the TLC Board has decided to join the Land Trust Alliance. As we have advanced as an organization and in our land protection efforts, the TLC has found it increasingly necessary to seek the knowledge and advice of the LTA and similar sources. The TLC board also completed an organizational risk assessment this summer with the LTA that emphasized our basic direction. We are not pursuing LTA accreditation at this time, but are attempting to generally follow LTA standards and practices.

By Canada Goldenrod - *Solidago canadensis*

Amy Martinez, RN, BSN
Amy's Relation To Creation and Botanicals, Marine City



A field full of goldenrod north of Marlette in 2022, since lost to development. Photograph by Bill Collins.

Harvest healthy leaves and flowers that are free of powdery mildew or other disease and bug homes (goldenrods are especially loved by the Goldenrod Crab Spider and the Goldenrod Gail Fly) after the dew has dried and before the sun is hottest. Leaves can be harvested through spring and summer before the flowers open and flowers can be collected in late summer or early autumn just as the flowers open. If the flowers have already "puffed" they are still ok to use. Roots can be harvested in early spring or autumn after the first heavy frost. Wash and cut them into small thin pieces and be sure to dehydrate thoroughly. Collect seeds after the flowers have turned brown and dry. If you are not reviewing your goldenrod fresh, be sure to thoroughly dry for long-term storage.

My review of the literature found that Canada Goldenrod has a host of chemical compounds that are beneficial for us. It contains essential oil, which is laden with monoterpenes and sesquiterpenes, aromatic acids, flavonoids, and triterpenes. Here is my list:

- Essential Oil Monoterpenes: α-pinene, Limonene, Bornyl acetate, β pinene, Myrcene, Sabinene
- Essential Oil Sesquiterpenes: Germacrene D, 6-epi-β-cubebene, 6-epi-α-cubebene, Cadinene, Germacrene A, α-humulene, β-caryophyllene, β-ylangene
- Aromatic Acids: Gallic acid, Protocatechuic acid, Vanillin/vanillic acid, Syringic acid-3-O-feruloylquinic acid, Caffeoyl-di-feruloylquinic acid, 1-caffeoylquinic acid, 4-caffeoylquinic acid, 5-caffeoylquinic acid, 3,4-O-dicaffeoylquinic acid, 3,5-O-dicaffeoylquinic acid, Ferulic acid, Chlorogenic acid, Caffeic acid, Coumaric acid
- Flavonoids: Quercetin, Rutin, Quercitrin, Isoquercitrin, Rutin, Hyperoside, Quercetin-O-hexoside, Quercetin-(acetyl)-hexoside, Quercetin-(rhamnosyl)-hexoside, Quercetin-3-O-(6-O-acetyl)-β-D-glucopyranoside, Isohamnetin 3-O-hexoside-7-O-deoxyhexoside, Isohamnetin-(acetyl)-hexoside, Isohamnetin-(rhamnosyl)-hexoside, Isohamnetin-3-O-β-D-glucopyranoside, Astragalol, Kaempferol-(rhamnosyl)-hexoside, Isomers, Hesperidin, Afzeelin, Kaempferol-3-O-(6-O-acetyl)-β-D-glucopyranoside, Kaempferol-3-O-β-D-apiofuranoside, Kaempferol-O-hexoside-deoxyhexoside, Catechins, Epicatechins, Hydroxy flavanone, Anthocyanidins
- Triterpenes: Saponins

Translation of these constituents' effects in/on our bodies:

- Astringent (constricts tissue)
- Antiseptic
- Anti-inflammatory
- Antibacterial
- Antifungal
- Styptic (stops bleeding)
- Antihistamine
- Antiallergenic
- Antioxidant
- Antipruritic (against inflammation and fever)
- Antiasmatic
- Antimutagenic (preventing mutation of genes)
- Anticancer/Bitter that stimulates digestive secretions
- Carmine (relieves digestive gas)
- Diuretic
- Diaphoretic (promotes sweating)
- Expectorant

This predominantly warming and stimulating plant may be of assistance when a body is battling congestion caused by allergies (especially ragweed), sinus infections, colds, flu, asthma or other diseases that cause inflammation to the respiratory tract. One might consider Canada Goldenrod for general cardiovascular support, poor circulation and weak capillaries (drinking tea daily), sore throats such as laryngitis and pharyngitis (drink a tea or let the tea cool and use as a gargle), diarrhea, upset stomach, poor digestion, or other issues that cause an inflamed digestive tract.

The word "solidago" means to make whole, which makes sense when we see how Canada Goldenrod can help to mend the skin. It may be useful for minor wounds, minor burns (especially the roots of the goldenrod), open sores, minor cuts, boils, skin irritations and inflamed wounds (use crushed leaves as a styptic). The flowers and leaves can be used as a poultice or infused into oil and then used as an oil or made into salves. The infused oil used as a rub may also be beneficial for joint pain and swelling and muscle fatigue. The flowers, taken internally as a tea, infused honey, extract, syrup, or eaten can assist with pain and swelling associated with gout and rheumatism. The flowers can also be applied as a poultice or made into a wash and applied to those affected areas as well.

One of the areas where Canada Goldenrod shines is the urinary system. It is even an approved herbal medicine in Germany for treating kidney stones. Leaf extract can aid with spasming and inflammation of the urinary tract. Also, it works as a diuretic helping the kidneys to remove excess fluid. The leaves and/or flowers aid in recovery from urinary tract infections, stones and gravel and as a general kidney tonic after long bouts of illness. To me, one of the best uses of Canada Goldenrod is for combating cat and seasonal allergies, especially ragweed allergies which goldenrods are so often blamed for. Extracts are very useful when it comes to allergies, colds (especially with a fever) and pink eye with a general dose of 2 to 4ml, three times daily. For *Candida* yeast infections, a tea or decoction taken daily or a powder can be applied externally. Make a gargle for oral thrush. Canada Goldenrod has shown antibacterial activity against *Listeria monocytogenes*, *Escherichia coli*, *Staphylococcus aureus*, *Salmonella* species, *Staphylococcus faecalis*, *Bacillus subtilis*, *Klebsiella pneumoniae*, and *Pseudomonas aeruginosa*. It has also shown promising activity against *Salmonella typhi* perhaps even surpassing ciprofloxacin.

Canada Goldenrod is being studied for cytotoxic activity against lung cancer, colon cancer, and normal fibroblasts.

As always, just because something is natural does not mean it is without safety concerns. With Canada Goldenrod, please be aware that it may cause an allergic reaction, it is ok for long term use for chronic conditions but you should monitor for dehydration due to the diuretic effects. Please do not use while pregnant or nursing unless first consulting a qualified practitioner. Speak with your primary care provider before routine use of Canada Goldenrod if you have chronic kidney disorders. And lastly, for a small percentage of people, it can raise blood pressure so caution should be used with extra blood pressure monitoring for those with hypertension.

If you are using Canada Goldenrod as a supplement to your health, you should consult with your primary care provider because nothing in this article has been approved by the US Food and Drug Administration. The above information is not intended to diagnose, treat, or cure any diseases, it is for informational purposes only.

To make a lovely cup of tea, add 1 tablespoon of fresh flowers and/or leaves (2 teaspoons if dried) to 2 cups of boiling water. Steep for 15 minutes then strain. You can add an equal amount of mint to change the flavor if desired. Drink up to 3 cups per day.

Just a reminder if you do choose to harvest this plant, make sure to correctly identify it and that it is from a healthy stand. Only harvest a portion. While it is so tempting to harvest from roadsides or near farm fields, it is really not a good idea due to possible contaminants from vehicles and potentially having been sprayed with chemicals, and your physical safety being close to traffic.

I hope you enjoyed reading this article and will now look at Canada Goldenrod and other goldenrods as heroes when it comes to allergies as opposed to culprits. We have available for purchase at Amy's Relation to Creation and Botanicals, LLC dried Canada Goldenrod Leaves and Flowers. Stop in and try some today! Happy harvesting!

To see an extensive bibliography of references for Canada Goldenrod, see Amy's blog at: <https://amysrelationcreation.com/2024/09/10/canada-goldenrod/>

Amy's Relation To Creation & Botanicals, LLC is a family-owned and operated botanical store located at 256 South Water Street in Marine City. A variety of natural products are available including teas, coffees, utensils, dried herbs, live plants, herbal tinctures, essential oils, salves, and other medicinal, wellness, personal care, and cleaning products. Owner, Amy Martinez, is focused on offering locally-sourced, natural, unprocessed, and eco-friendly products. The store is open from 9 am to 6 pm Tuesday through Saturday, but open until 8 pm on Thursdays from April 4 through December. In addition to the store, Amy offers a meeting room available for rent for small groups, for health presentations, wellness consultations, tutoring for nursing students, and Bible studies. For more information or to reserve the meeting room, see: AmysRelationCreation.com or call 810-335-4622.

Amy's Relation To Creation and Botanicals store front in Marine City. Photograph by Amy Martinez.

For a schedule of events see: <https://amysrelationcreation.com/upcoming-events/>. Upcoming events include:

- Every Sunday, 9 am - Bible Study
- April 4 through December 31 - open late on Thursdays until 8 pm
- Third Thursday of every month - Sidewalk Sale
- November 14, 5-8 pm - Just Doe It! Fun shopping event for the "Does"!
- November 28 - Closed for Thanksgiving Day

Bless a Coot... Don't pollute!

By Tom Dennis

American Coot, *Fulica Americana*



American Coot in Prospect Park, New York City, New York. [https://commons.wikimedia.org/wiki/File:American_coot_in_Prospect_Park_\(06152\).jpg](https://commons.wikimedia.org/wiki/File:American_coot_in_Prospect_Park_(06152).jpg). Photograph by <https://commons.wikimedia.org/wiki/User:Rhododendrites>.

What looks like a duck, floats like a duck and swims like a duck, isn't always a duck! My wife Laurie and I were reminded of this while watching American Coots during our winter vacation in Southern California. We didn't need to travel all that way to see these "old coot" friends but it's warmer here than in Southern Michigan and Northern Ohio where they also winter!

Let's take a closer look at the American Coot and find out when and where they can be found closer to home and what makes them "not a duck", amongst other things.

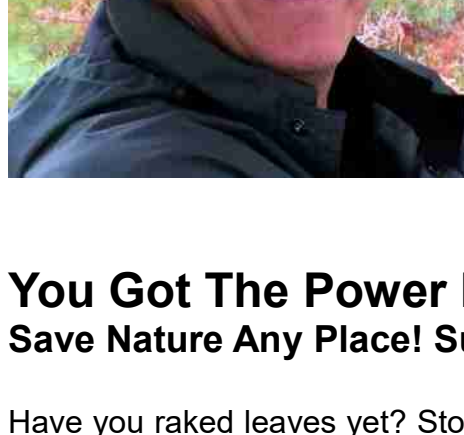
The American Coot is in the family Rallidae which also includes gallinules and the highly secretive rails. They are more closely related to Sandhill Cranes than they are to ducks. It's true that these birds closely resemble ducks while on the water but when on land they walk more like a chicken than a waddling duck. Unlike chickens and ducks, they are considered inedible and therefore are not hunted for food and should not be hunted at all. They are migrating birds and can be found during the summer breeding season from Alaska and much of Canada and throughout the lower 48 states. During the winter some American Coots travel as far south as Central America but they can be found wherever there is open freshwater; typically just south of Michigan but farther south in the plains states. They can be found locally from spring through fall on any open water but they prefer marshy areas.

They are described as a medium-sized, chicken-like bird with dark gray to black coloration throughout with the exception of their chalky white bill and white trailing edge on the wings and under the tail. Sexes are similar in color and juvenile birds are olive-brown with a yellowish bill. The legs and feet are yellow-green and their long toes are lobed, not webbed and, during flight the legs trail behind. The lobed feet enable them to swim like ducks but are also designed for walking on vegetation and soft ground and the broad lobes fold back when the legs are lifted while walking.

These birds are at home in wetlands where abundant plant-life supports their mainly vegetarian diet however, they are strong swimmers and divers and are also found regularly in mixed flocks with ducks, in ponds, rivers, and large bodies of fresh or brackish water. They will also feed on small animals such as insects and crustaceans.

Coots are kleptoparasitic, meaning that when they don't feel like hunting for their own food, they will steal their meal from other birds. I've noticed some friends doing this; most of whom are either gulls or a couple of my brothers when dessert was on the dinner table! Did I already allude to "old coots"? Their typical age ranges from 6 years to a recorded age of just over 22 years and that is quite old in the bird world. Coots are nicknamed "marsh hen" or for you Toledo Tiger fans, "mud hens" because of the way their heads bob when they walk or swim.

These and many other birds depend on clean water with abundant plant life and it's very important for their survival, and ours, to respect the natural environment through habitat protection and restoration. So, bless a Coot...don't pollute!



You can learn more about birds and nature by attending Blue Water Audubon meetings. Check the Blue Water Audubon Society Facebook page for the latest meeting details, local bird sightings, discussions, and events. Be sure to "friend" us!

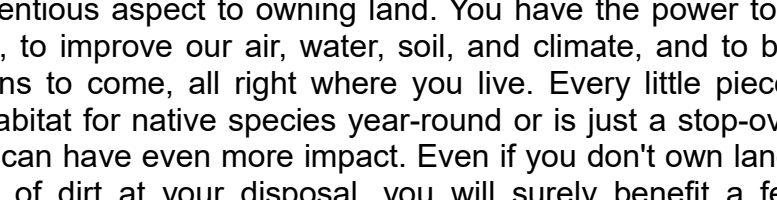
Tom Dennis is a resident of Fort Gratiot where he and his wife Laurie Melms Dennis, tend to their bird and butterfly friendly gardens. He is a speaker and free-lance writer, passionate birder, advanced master gardener, creation scientist, and naturalist, with degrees from Michigan State University in 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.

You Got The Power In 2024 Save Nature Any Place! Sustain Native Animals & Plants!

Have you raked leaves yet? Stop! Read this National Wildlife Federation blog article and then decide if you want to keep raking:
<https://blog.nwf.org/2024/09/how-fallen-leaves-support-moths-and-butterflies/>

All kinds of wonderful creatures depend on your leaves, including Mourning Cloak butterflies, Red-banded Hairstreak butterfly caterpillars, Io or Peacock Moths, Luna Moths, and many others. As the article states, these creatures are very important as pollinators, prey, indicators of environmental health, and who knows what else yet to be discovered. They are also beautiful. Ground-dwelling invertebrates living under the leaves are the base of the food chain for many animals, particularly birds, and are important in breaking-down organic matter for soil nutrients and carbon storage.

In 2024, we are continuing to highlight restoration of natural habitat on private land, neighborhood efforts, and programs like Homegrown National Park, National Wildlife Federation Certified Wildlife Habitat, and the TLC Naturehood registry.



Restoration doesn't need to be complicated. In one way, it represents the truest expression of private land ownership and democratic ideals. As a landowner, you are vested with a great deal of power and responsibility. While the world is distracted by monetary value and appearance, there can be a benevolent and unpretentious aspect to 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 now matters, 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 have a few flower pots or a small patch of dirt at your disposal, you will surely benefit a few of our beleaguered pollinators. Regardless, there is a lot to be said for adding a little beauty to our world. For a basic guide on restoring or creating natural habitat on your property, see our 2023 March 19 TLC News: <http://www.thumbland.org/News031923-DrPaulCroissantLandDonation.pdf>

TLC Fall Stewardship

If you want to work on any of these projects, let us know.

Date	Activity	Location
October - December	park entrance and trail work	Bidwell Sanctuary
October - December	Black Locust removal	Croissant Sanctuary
October - December	entrance and trail work, prairie restoration	Loznak Sanctuary
October - December	invasive weed removal	Dead End Woods Sanctuary

Clyde Historical Society

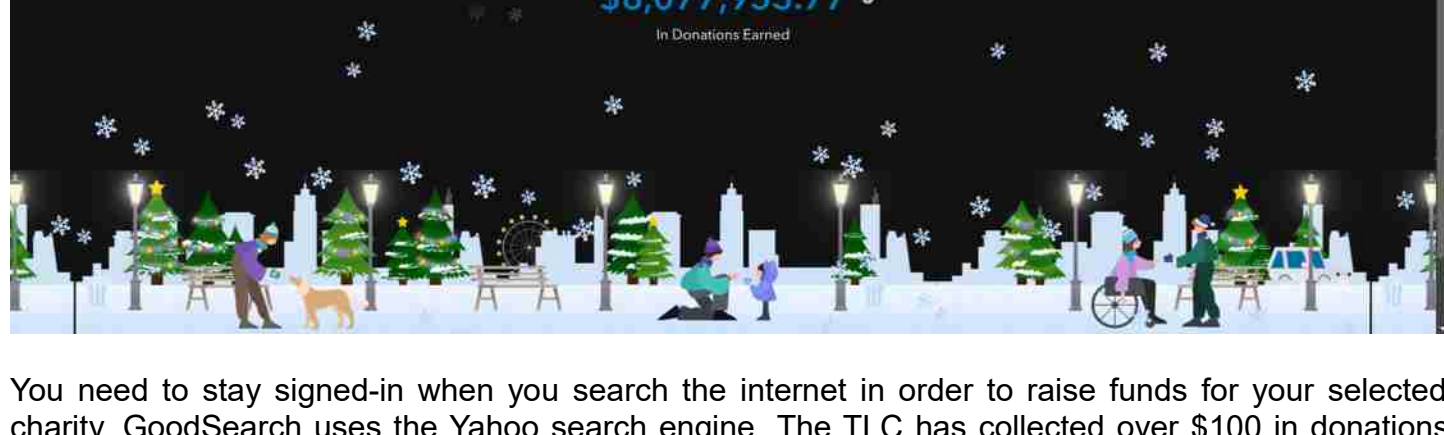
The Clyde Historical Society meets on the third Thursday of each month. Their next meeting is November 21 at 6:30 pm at the historic Clyde Township Hall and Museum located at 5080 Wildcat Road and M-136, next to Bill Bearss Memorial Park. The Clyde Historical Society brings together people interested in the history of the area and local genealogy. They promote an appreciation for the local history and its people; and collection, protection, and preservation of significant historical items.

For more information, see the Clyde Historical Society Facebook page at:
<https://www.facebook.com/groups/1481890455361159/>

GoodSearch.com

You can support the TLC or another charity every time you search the internet by using GoodSearch.com. When you create an account and sign-in, GoodSearch donates about one cent per search to a charitable cause of your choice. The web site is a little confusing because it is part of GoodShop.com, which is another way to raise donations for a charity. To sign up for GoodSearch, do the following:

- Go to GoodSearch.com
- At the upper right, click on "Sign Up".
- After signing-up, you should be directed to select a charity for donations.
- If you are not directed to charities, go to GoodSearch.com/Causes to search for and select a charity by alphabetical order.
- The TLC is listed at GoodShop.com/Nonprofit/Thumb-Land-Conservancy.
-



You need to stay signed-in when you search the internet in order to raise funds for your selected charity. GoodSearch uses the Yahoo search engine. The TLC has collected over \$100 in donations from searches by our members. At about one cent per search, it's a slow way to raise funds, but it adds up and the TLC can use all the help we can get to protect land.

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.

