

Thumb Land Conservancy

2022 Annual Report



Full Circle Sanctuary, 8.5 Acres, Kimball Township, Saint Clair County - Acquired 2022 August 11.



Thumb Land Conservancy

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The Thumb Land Conservancy increased protected land again in 2022 with acquisition of our 8.5-acre Full Circle Sanctuary in Kimball Township, and the 2.7-acre Charles Dodge Sanctuary in Clyde Township, both in Saint Clair County. Both properties were purchased through the annual State land auction in August and were previously part of the Port Huron State Game Area.

In the spring and summer, we expanded removal of invasive Japanese Barberry on the Deerfield Wind Energy Preserve west of Port Hope in Huron County. Our control efforts over the past 5 years, especially burning, has suppressed barberry to the point that most is not returning. This has allowed us to move further south to begin elimination of the last major barberry thicket on the preserve.

In May, we continued Garlic Mustard removal on the Dead End Woods Sanctuary in Fort Gratiot. The hard work of many volunteers over the past 13 years has really paid-off in maintaining the high quality native plant community of the Dead End Woods.

We continued working on our 42-acre Bidwell Sanctuary in Burtchville Township, Saint Clair County in the spring and summer. Work focused on clearing the new coastal trail and planning the future park entrance and trail head along Metcalf Road. The trail now extends nearly a half-mile north into the preserve. Plans are that the trail will eventually connect with a much larger trail as part of our Southern Lake Huron Coastal Park project.

Clean-up and restoration of the lakeplain prairie on our Loznak Sanctuary in Marysville was conducted throughout the summer and fall.

With the help of the Four County Community Foundation, we focused stewardship on our new Tranquil Ridge Sanctuary in Dryden Township, Lapeer County through late summer and fall. Activities included marking the property corners, invasive weed removal, clean-up, and a new preserve sign.

Installation of the metal roof on the historic North Street Station in North Street was finally finished in December. Earlier, we cut down the patch of highly invasive Japanese Knotweed once again.

Throughout the year, the TLC pursued or promoted various land acquisitions, including the CYO Camp near Forester, a possible addition to the northeast end of the Port Huron State Game Area, lakeplain prairie along the Kawkawlin River and Saginaw Bay, and potential additions to our Southern Lake Huron Coastal Park project.

In October, we honored our Senior TLC Board Member Dottie Craig with a visit to The Village Club in Bloomfield Hills with which her family has a fascinating historical connection.

The TLC continued our education and outreach efforts through distribution of the TLC brochure, Thumb Nature Guide, TLC land protection guide, our newsletter, and updates to the TLC web site.

We look forward to expanding our work with partners new and old.

William Collins
Executive Director

Thumb Land Conservancy 2022 Annual Report

2022 Year-In-Review

The Thumb Land Conservancy focused on land acquisition and preserve stewardship in 2022. Following is a summary of monthly activities.

March

- Continued clearing the coastal trail and cut invasive shrubs on the Bidwell Sanctuary in Burtchville.

April

- Received a grant from the Bioregion Reparation Fund of the Full Circle EcoHouse of Prayer and Community Foundation of Saint Clair County to construct an information kiosk on the Bidwell Sanctuary.
- Continued clearing the coastal trail and cut invasive shrubs on the Bidwell Sanctuary in Burtchville.
- Continued removal of invasive Japanese Barberry and Multiflora Rose on the Deerfield Preserve near Port Hope in Huron County.

May

- Continued removal of invasive Garlic Mustard on the Dead End Woods Sanctuary in Fort Gratiot.
- Received a grant from the Four County Community Foundation to conduct stewardship on the Tranquil Ridge Sanctuary in Dryden Township, Lapeer County.
- Coastal trail walk with the Full Circle EcoHouse of Prayer staff on the Bidwell Sanctuary in Fort Gratiot.
- Continued removal of invasive Japanese Barberry and Multiflora Rose on the Deerfield Preserve near Port Hope in Huron County.
- Continued clearing the coastal trail and cut invasive shrubs on the Bidwell Sanctuary in Burtchville.
- Organized advocacy group and submitted offer to purchase the Catholic Youth Organization Girls Camp on Lake Huron near Forester in Sanilac County.

June

- Continued removal of invasive Japanese Barberry and Multiflora Rose on the Deerfield Preserve near Port Hope in Huron County.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Continued clearing the coastal trail and cut invasive shrubs on the Bidwell Sanctuary in Burtchville.
- Coordinated with Sanilac County and the State of Michigan regarding purchase of the Catholic Youth Organization Girls Camp on Lake Huron near Forester in Sanilac County.

July

- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Continued clearing the coastal trail and preserve entrance on the Bidwell Sanctuary in Burtchville.
- Coordinated possible Oakland County land donation.
- Coordinated with Sanilac County and the State of Michigan regarding purchase of the Catholic Youth Organization Girls Camp on Lake Huron near Forester in Sanilac County.

August

- Purchased two new preserves in Saint Clair County through the August State land auction; the 8.5-acre Full Circle Sanctuary in Kimball Township, and the 2.7-acre Charles Dodge Sanctuary in Clyde Township.
- Continued intensive clearing of the coastal trail and clean-up on the Bidwell Sanctuary in Burtchville.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Coordinated with Sanilac County, the State of Michigan, and various organizations regarding purchase of the Catholic Youth Organization Girls Camp on Lake Huron near Forester in Sanilac County.

September

- Conducted a stewardship day with the Four County Community Foundation on the Tranquil Ridge Sanctuary in Dryden Township in Lapeer County.
- Continued removal of invasive Japanese Knotweed at our historic North Street Station in North Street.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Participated in the Port Huron State Game Area Day sponsored by the Michigan Department of Natural Resources, Wildlife Division.
- Continued advocating for public purchase of the Catholic Youth Organization Girls Camp on Lake Huron near Forester in Sanilac County.
- Registered for the CARS vehicle donation program.
- Coordinated possible Oakland County land donation.
- Investigated potential for wetland mitigation project in Huron County.
- Prepared nominations of three properties for State acquisition through the Michigan Natural Resources Trust Fund.

October

- Visited The Village Club in Bloomfield Hills with our Senior TLC Board Member Dottie Craig, whose family has a historic connection with The Village Club estate.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Continued stewardship of the Tranquil Ridge Sanctuary in Dryden Township in Lapeer County.
- Coordinated possible wetland mitigation in the Southern Lake Huron Coastal Park project area.
- Pursued possible land acquisitions in the Southern Lake Huron Coastal Park project area.
- Drafted design of an information kiosk for the Bidwell Sanctuary in Burtchville Township.
- Continued advocating for public purchase of the Catholic Youth Organization Girls Camp on Lake Huron near Forester in Sanilac County.

November

- Submitted tax-exempt status documents for the Full Circle Sanctuary and the Charles Dodge Sanctuary.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Drafted design of an information kiosk for the Bidwell Sanctuary in Burtchville Township.
- Pursued possible land acquisitions in the Southern Lake Huron Coastal Park project area.
- Coordinated possible Oakland County land donation.
- Prepared and submitted the 2021 TLC tax return.
- Prepared nominations of three properties for State acquisition through the Michigan Natural Resources Trust Fund, including the Catholic Youth Organization Camp near Forester, a possible addition to the northeast end of the Port Huron State Game Area, and over 100 acres of lakeplain prairie along the Kawkawlin River and Saginaw Bay.

December

- Designed new TLC membership promotion and gift items.
- Coordinated possible Oakland County land donation.
- Designed and ordered new TLC preserve boundary signs.
- Pursued possible land acquisitions in the Southern Lake Huron Coastal Park project area.
- Promoted the Southern Lake Huron Coastal Park and Trail to local trail groups.
- Notified TLC membership of a proposed military airspace expansion in the Thumb.

2022 TLC Supporters

Connie Bates, Clyde

Bioregion Reparation Fund of the Community Foundation of St. Clair County

Ian Brown, Fort Gratiot

Pete and Angelene Catlos, Fort Gratiot

William and Cheryl Collins, Marlette

Dorothy Craig, Fort Gratiot

Kay Cumbow, Lynn

Tom and Laurie Dennis, Fort Gratiot

Richard Duthler, R.A. Duthler Land Surveyor, Imlay City

Dr. Scott Ferguson, Clyde

John Fodi, Marysville

Four County Community Foundation, Almont

Fred Fuller, Yale

Cindy Holzer, Burton

Huron County Community Foundation, Bad Axe

Carol Kasprzak, Rochester

Kate Kenney, Port Huron

Dave Ladensack, Summit Realty, Lakeport

Dave Lewis, Ann Arbor

Timothy Lozen, Lozen Davidson and Kovar, P.C., Port Huron

Jack McLiver, Lake Huron Lawns, Lakeport

Connie Neese, Fort Gratiot

Christine Powell and Bern Smith, Washington, D.C.

Dan and Wendy Rhein, Port Huron

Jeff Ronan, LochanDe IT Services, Port Huron

Cathy Rovano, Sterling Heights

Levi Shetler and Family, Attica

Blake Short, Port Huron

Peggy Thorp and Jerry Orlowski, Lakeport

Elizabeth "Bess" Touma, Washington, D.C.

Tracy Wacker, Metamora

Chris Walker, Fargo, North Dakota

Karen Willard, Algonac

TLC Project Contributors

Southern Lake Huron Coastal Park and Bidwell Sanctuary Fort Gratiot and Burtchville Townships, Saint Clair County

The Carls Foundation
North American Wetlands Conservation Council
Ducks Unlimited
Community Foundation for Southeast Michigan
Community Foundation of St. Clair County
Moore Family Foundation
Consumers Energy Foundation
Cargill, Incorporated
Bioregion Reparation Fund of the Community Foundation of St. Clair County
SEMCO Energy Gas Company
Dave Ladensack, Summit Realty, Lakeport
Timothy Lozen, Lozen Davidson and Kovar, P.C., Port Huron
Christine Powell and Bern Smith, Washington, D.C.
Elizabeth "Bess" Touma, Washington, D.C.
William and Cheryl Collins, Marlette

Tranquil Ridge Sanctuary Dryden Township, Lapeer County

Four County Community Foundation, Almont
Timothy Lozen, Lozen Davidson and Kovar, P.C., Port Huron

Loznak Sanctuary City of Marysville, Saint Clair County

Richard C. Loznak, Loznak Real Estate Enterprises, LLC, Saint Clair
Timothy Lozen, Lozen Davidson and Kovar, P.C., Port Huron
Dan and Wendy Rhein, Port Huron

Dead End Woods Sanctuary Fort Gratiot Township, Saint Clair County

Pete and Angelene Catlos, Fort Gratiot
Dorothy Craig, Fort Gratiot
Dr. Scott Ferguson, Clyde
Timothy Lozen, Lozen Davidson and Kovar, P.C., Port Huron

Full Circle Sanctuary
Kimball Township, Saint Clair County

William and Cheryl Collins, Marlette

Charles Dodge Sanctuary
Kimball Township, Saint Clair County

William and Cheryl Collins, Marlette

North Street Station
Clyde Township, Saint Clair County

Clyde Historical Society
John Schomaker, North Street
Kay Cumbow, Lynn

Gerrits Sanctuary
Ira Township, Saint Clair County

Lois Gerrits, Saint Clair
Timothy Lozen, Lozen Davidson and Kovar, P.C., Port Huron
Susan Gerrits, Rochester
Randy and Kathleen Schein, Bloomfield Hills
Tom and Renae Gerrits, Saint Clair
Elizabeth Millwood, Raleigh, North Carolina

Peltier Sanctuary
Fort Gratiot Township, Saint Clair County

Ray Peltier, Burtchville
Tom and Laurie Dennis, Fort Gratiot

Bertha's Haven Sanctuary
Fort Gratiot Township, Saint Clair County

Michigan Nature Association

Deerfield Wind Energy Preserve Stewardship
Huron Township, Huron County

Algonquin Power and Utilities Corporation, Oakville, Ontario, Canada
Huron County Community Foundation, Bad Axe

Bidwell Sanctuary Development and Stewardship

Burtchville Township, Saint Clair County

Chëkhònèsink hìtkwike schind lèkuwake -

Place among hemlock trees on sandy ground with sound of waves breaking – Lenape

The TLC continued clearing the new trail on the Bidwell Sanctuary in Burtchville Township through the spring and summer of 2022. The trail now extends nearly the full half-mile length north of the property. We also removed invasive shrubs including Tartarian Honeysuckle, Common Privet, and Japanese Barberry. Thanks to all who have worked on the trail: TLC Members Tom and Laurie Dennis, TLC Member Connie Neese, TLC Member Ian Brown, TLC Board Member Dan Rhein, and Program Assistant Blake Short.



Wetland swale along the new trail. Photographs by TLC Executive Director Bill Collins.



Current trail route on the Bidwell Sanctuary. A return loop will be added.

Southern Lake Huron Coastal Park

The Thumb Land Conservancy is acquiring key parcels needed to complete a 4.5-mile coastal park trail along Lake Huron, connecting Port Huron to Lakeport State Park. The Southern Lake Huron Coastal Park will protect most of the remaining beach ridge and swale complex along the eastern Thumb shoreline; a unique landscape of parallel sand ridges and muck wetlands of very limited distribution along the Great Lakes. The TLC acquired the 42.1-acre Bidwell Sanctuary in 2020. The preserve is one of the few and best examples of the ridge and swale complex south of Saginaw Bay. A half-mile section of the coastal trail is completed, with plans for a half-mile loop back to the preserve entrance.

**SOUTHERN
LAKE HURON
COASTAL
PARK**



Southern Lake Huron Coastal Park Project

A line of several preserves and parks currently extends along Lake Huron through Fort Gratiot and Burtchville Townships. The preserves are generally inaccessible to the public and somewhat disconnected from each other, but not by much. With a little effort, we are within reach of creating a continuous 4.5-mile coastal park connecting the Port Huron area to Lakeport State Park. The proposed Southern Lake Huron Coastal Park would encompass most of the remaining beach ridge (or dune) and swale complex along the eastern shoreline of Michigan's Thumb region, a linear coastal forest connecting Port Huron with shoreline communities into Sanilac County; well-suited for a recreational trail with interpretive signage.

The proposed coastal trail would pass through at least two Thumb Land Conservancy (TLC) preserves. Currently, most of the preserves to be included in the larger park are difficult, if not impossible, for the public to access without trespassing on adjoining properties. The proposed Southern Lake Huron Coastal Park and trail would open most of these preserves to the public. Once connected, the Southern Lake Huron Coastal Park is likely to become a regional destination for birders, naturalists, and other visitors.

Since the TLC acquired the 42.1-acre Bidwell Preserve in Burtchville in 2020, we have been clearing a foot trail that now extends about two-thirds of the way north into the half-mile long preserve. This trail will include another half-mile loop back down to the preserve entrance, and we hope, eventually, will connect with a branch of the county Bay to Bridge Trail.

Beach Ridge and Swale Complex

The beach ridge and swale complex is a formation of parallel sand ridges and muck wetlands deposited from about 4,500 years ago. This unique Great Lakes landscape is very limited in Michigan and covers just a small part of Fort Gratiot and Burtchville Townships in Saint Clair County where it ranges from about a quarter-mile to a half-mile wide. It originally extended from the Blue Water Bridges into southern Sanilac County. The remaining formation north of Port Huron is the only significant occurrence from Ohio to the Saginaw Bay. The coastal forest habitat supports rare and uncommon species found in few other regions and is vital for migratory birds that move and nest along Lake Huron. Primary threats to the ridge and swale complex include residential and commercial development along the M-25 highway corridor, speculative land clearing and grading, forest fragmentation, sand mining, invasive weeds, overgrazing by deer, and loss of forest canopy due to pests and diseases.

The beach ridge and swale complex along Lake Huron is a big part of what makes the Blue Water Area unique and a desirable place to visit and live. Yet, few understand the character and significance of this land because there is very limited public access to it. Routing a trail through the interior of this coastal forest corridor will provide a great opportunity for recreation, providing a small wilderness experience within just a few miles of Port Huron. The proposed forest trail will increase safe pedestrian access to public parks, as opposed to being squeezed to road shoulders with traffic, noise, exhaust, and major safety risks. Based on a 2019 trail plan commissioned by Saint Clair County, 37% of the population is completely uncomfortable with biking along roadways and 51% are reserved in their comfort. A clear majority prefer biking away from traffic. The Bidwell Preserve and proposed Southern Lake Huron Coastal Park will get people out in nature and educate area residents about significant natural features where they live, not a long drive away in some other place.

Target Population

As part of the Southern Lake Huron Coastal Park, the Bidwell Preserve would primarily serve the Blue Water Area community, including the City of Port Huron, City of Marysville, Fort Gratiot and Burtchville Townships. The proposed coastal park and trail will support the health and well-being of the community by providing a wonderful recreational and educational experience focused on unique natural features of the Blue Water Area. About 32,000 people that live in Burtchville, Fort Gratiot, and Port Huron could directly benefit from the park. The population physically able to access the proposed park and walking trail totals about 11,000 people 16 to 70 years old in Burtchville and Fort Gratiot, about 20,000 in Port Huron, and about 150,000 total in Saint Clair and Sanilac Counties. As a coastal recreation area and very significant migratory bird corridor, the park is expected to draw visitors from across southeast Michigan and southwest Ontario. Of course, protection of natural areas and associated functions serves everyone.

As proposed, the Southern Lake Huron Coastal Park and trail will eventually connect to the Lakeport State Park Day-Use Area, the southern unit of the 565-acre State Park. No fee is required for pedestrian or bicycle entry and the Michigan Recreation Passport is also not required for non-vehicle entry. Lakeport State Park features over 2,250 feet of Lake Huron beach frontage, all accessible at no charge through the Day Use portion of the park. The Southern Lake Huron Coastal Park would directly connect to the Day Use Area and greatly enhance State Park and Great Lakes access for lower-income residents and visitors. Lakeport State Park is only a one-hour drive northeast of Detroit, described by some as having a very “Up North” feel with lots of forest, in-park trails, a pedestrian bridge crossing M-25, and just a short few-minute walk to Lake Huron where families and groups can picnic, hike, bike, swim, and skip stones on the beach.

Transportation in our region is dominated by automobiles. Required infrastructure, maintenance, and the sprawling development enabled by this system has taken a huge toll on the environment. It also excludes a large class of people that, given opportunity for pedestrian and bicycle transport, would benefit greatly in terms of opportunity, health, and access to natural areas. The Southern Lake Huron Coastal Park would help to alleviate this inequity in our region.

Planning Objectives

The proposed Southern Lake Huron Coastal Park project will fulfill several objectives of County and regional plans, including the following:

2016 Saint Clair County Master Plan

<https://www.stclaircounty.org/Offices/metro/CountyMasterPlan.aspx>

- Greater access to healthy communities.
- Connect people to parks and transportation options.
- Utilize inherent connectivity of coastal communities.
- Protect and preserve valuable natural resources and sensitive environments.
- Protect woodlots, wetlands, and other natural vegetation.
- Preserve natural character of shorelines.
- Preserve forest, wetlands, and other ecologically valuable landscapes.
- Develop wetlands mitigation bank to preserve important local wetlands.
- Discourage fragmentation of natural environment.
- Protect and preserve water resources.

2017-2021 Saint Clair County Master Recreation Plan

https://www.stclaircounty.org/Offices/metro/forms/StClairCounty_2017_2021_MasterRecreationPlan_FULL.pdf

- Preservation Of Resources - Support conservation and stewardship of land, water, and natural resources. Quality of life is improved by parks and open space.
- Quality User Experience - Develop and maintain recreational facilities that draw people to experience nature and to be active outdoors.
- Connected Greenways / Blueways - Connect land and water trails within the county to natural areas, recreation areas, and other trail systems.
- Explore potential locations for acquisition of significant property or properties, such as: Significant properties in conjunction with the Southeast Michigan Greenways Plan and the Michigan Natural Features Inventory.
- Encourage propagation of native and indigenous species.
- Programs to interpret natural, cultural and physical resources, and educate the public.

2013 Blue Water Trail Towns Master Plan

<http://www.bluewaysofstclair.org/downloads/bwttpart1.pdf>

- The focus of this Trail Town Plan is on seven communities that define the greater “Coastal Thumb Region” of Michigan, including Lexington and Port Huron. The Southern Lake Huron Coastal Park would establish a high quality connection between shoreline communities in Saint Clair and Sanilac Counties. Recommendations in the plan include:
- Promote the trail corridor as a tourist destination.
- Partnerships with community groups and stakeholders to develop local interest and buy-in.

2014 SEMCOG Green Infrastructure Vision for Southeast Michigan

<https://semcog.org/Reports/GIVision/index.html>

- Protect high quality wetlands.
- Connect green corridors to parks and other natural areas.
- Increase public access along Great Lakes.
- Fund trail improvements to fill gaps in Southeast Michigan trail network.
- Coordinate non-motorized trail planning with green infrastructure planning.

Project Supporters

To-date, project funding has been provided by The Carls Foundation, the North American Wetlands Conservation Council, Ducks Unlimited, Community Foundation for Southeast Michigan, Community Foundation of Saint Clair County, Moore Family Foundation, Consumers Energy Foundation, Cargill, Incorporated, Bioregion Reparation Fund, SEMCO Energy Gas Company, Saint Clair County Drain Commissioner, and individual donors.

Bioregion Reparation Fund Grant Bidwell Sanctuary Information Kiosk Southern Lake Huron Coastal Park

In April of this year, the TLC was awarded a grant for \$4,500 from the Bioregion Reparation Fund, a donor-advised fund established by the Full Circle EcoHouse of Prayer of Port Huron and administered by the Community Foundation of Saint Clair County. Sister Veronica Blake and Sister Concepción González, who are well-known members of the Blue Water area environmental community, initiated the Bioregion Reparation Fund in 2018 in order to carry on their legacy of ecological education, spirituality, and restoration in the bioregion defined by Lake Huron, the Saint Clair River and the Black River watersheds.

The Bioregion Reparation Fund grant will be used by the TLC to construct an informational kiosk at the entrance of our Bidwell Sanctuary in Burtchville Township as part of the Southern Lake Huron Coastal Park. The kiosk will provide information about the ancient beach ridge (or dune) and swale ecosystem along Lake Huron, the Southern Lake Huron Coastal Park, project supporters, and the TLC.

The Bioregion Reparation Fund is a “donor-advised fund” administered by the Community Foundation of Saint Clair County, with grants awarded based on recommendations from an advisory committee consisting of Sister Concepcion, Sister Veronica, and five other members from the Blue Water area. More information about the Bioregion Reparation Fund and the work of Full Circle EcoHouse of Prayer can be found at: <http://fullcirlcleretreteat.org/bioregion-reparation-fund/>. Donations to the fund can be made online at: <https://www.stclairfoundation.org/fund/bioregion-reparation-fund> or by sending a check to: Community Foundation of Saint Clair County (CFSCC), 500 Water Street, Port Huron, Michigan 48060. Write “Bioregion Reparation Fund” in the memo line. Add the word “spendable” if you wish your gift to be available immediately for current projects.

On May 17, the TLC board met with Sister Concepción González, Sister Veronica Blake, and Kate Kenney of the Full Circle EcoHouse of Prayer on the Bidwell Sanctuary to officially accept the grant and take a walk on the new coastal park trail. We all had a good time and the Sisters were impressed with the new trail.



Left to right: TLC board members Kay Cumbow, Fred Fuller, and Cheryl Collins, Sister Veronica Blake, Kate Kenney, and Sister Concepción González of Full Circle EcoHouse of Prayer. Also in attendance were TLC board member Dan Rhein and TLC Executive Director Bill Collins.

Deerfield Preserve Stewardship

Huron Township, Huron County

We worked on the Deerfield Wind Energy Preserve in April, May, and June and will continue cutting and burning invasive Japanese Barberry and Multiflora Rose through the summer. We started moving south into barberry thicket that has been largely uncut and unburned. We call the edge of this thicket "The Wall". After we tear down "The Wall", our control activities will shift to scattered occurrences across the preserve where barberry is limited by shade and wetter ground.

Invasive weed control, particularly of Japanese Barberry, has been the primary stewardship activity on the Deerfield Wind Energy Preserve since 2016 and will remain so for the foreseeable future. We try to complete most of our barberry removal in spring because the plants are more susceptible to destruction at that time, with minimal energy stored in their roots from the previous growing season. Repeated removal of the stems in spring prevents new leaves from recharging the roots, eventually resulting in death of the plants. Native plant cover already appears to be increasing, including Canada Mayflower, Red Trillium, Foamflower, Royal Fern, and Sensitive Fern. It does not appear that removal of barberry has resulted in increased grazing of forest herbs by White-tailed Deer as we feared, but we will continue to monitor this.

Our work is mostly limited to May and June. Weather in March and April is often not conducive to accessing the preserve. We avoid working on the preserve in summer when deer ticks, which have an affinity for barberry, are more abundant and active. In the fall, we are restricted by a deer hunting lease on the property. Despite this, we have eliminated about half of the Japanese Barberry in the main patch along the east side of the preserve. Where barberry once excluded most native forest plants, species like Red Trillium are now re-colonizing. Had the thick barberry cover remained, tree seedlings would not establish and the natural regeneration and succession of the forest would be jeopardized. Native tree seedlings are now free to grow and will gradually fill the canopy as old trees die. Based on what we've seen in Huron County, barberry cover is now a major issue for forest owners if they hope to sustain timber harvests in the future.



2022 April 30 - View northeast of TLC worker Ian Brown burning a control line. We took precautions on this day because of breezy and dry conditions. Photograph by TLC Executive Director Bill Collins.



2022 April 30 - View west showing spot-burned areas of newly emerged Japanese Barberry and Multiflora Rose. Photograph by TLC Executive Director Bill Collins.



2022 June 05 - View west of TLC worker Ian Brown burning Japanese Barberry and Multiflora Rose on the east edge of what we call "The Wall", a dense thicket of barberry at the south edge of our primary burn area that was largely uncontrolled until 2022. Photograph by TLC Executive Director Bill Collins.



2022 June 05 - View west along the north edge of "The Wall" (left) and previously burned area to the north (right). Photograph by TLC Executive Director Bill Collins.



2022 June 05 - View west of TLC worker Blake Short burning Japanese Barberry and Multiflora Rose along the east edge of "The Wall". The shrubs at his shoulder and head height are all Japanese Barberry. Photograph by TLC Executive Director Bill Collins.



2022 June 25 - View west of burned area along the east edge of "The Wall". The wilted shrubs in the background are all Japanese Barberry. Photograph by TLC Executive Director Bill Collins.

Dead End Woods Sanctuary Spring Stewardship

Fort Gratiot Township, Saint Clair County

The TLC conducted our annual spring stewardship of the Dead End Woods Sanctuary on three weekends in May. Our focus for the past 13 years has been removal of Garlic Mustard across the south side of the preserve while gradually shifting our work area to the east. Again this spring, we saw a significant reduction of invasive Garlic Mustard cover on the preserve. Even the most concentrated patches of Garlic Mustard to the east, possibly where the invasion started, were all but gone with mostly one-year seedlings established from the seed bank. This significant reduction in the eastern patches appears to be due largely to our burning of the area in 2020 using propane weed torches. This not only killed most of the seedlings, but apparently much of the seed bank.

By the third stewardship day this May, our workers moved to the north side of the preserve where we have done very little removal previously. As expected, there were very few Garlic Mustard plants on the north side of the woods because of less sunlight exposure than the south side. So, everyone shifted to removing minor occurrences of Multiflora Rose and Japanese Barberry, and removing old junk dumped by adjacent owners along the property lines.

On May 28 we had two special surprise volunteers - Cindy Holzer from Genesee County and Tracy Wacker from Lapeer County, both biology teachers at University of Michigan Flint, Tracy having just retired, and both friends of TLC Executive Director, Bill Collins. They drove a long way just to pull weeds in our little woods. For many years, Cindy worked as a wetland consultant across southeast Michigan and partnered on a few projects with Bill. Cindy was one of the few consultants that would not try to excessively under-delineate wetland boundaries in order to deregulate them "on paper". Tracy was co-leader of a hard-working, creative, and fun-loving enclave of graduate students that occupied a lab in the Plant Biology Building at Michigan State University in the mid-1980's when Bill attended. They helped him survive an often dreary undergraduate experience for which he is ever grateful. Tracy did ground-breaking work on mycorrhizal associations that improved asparagus crops. It was great to see Tracy and Cindy after so many years.

Four County Community Foundation Grant

Tranquil Ridge Sanctuary Stewardship

Dryden Township, Lapeer County

The TLC received notice in May that it was approved for a grant of \$2,000 from the Four County Community Foundation to conduct stewardship on our new Tranquil Ridge Sanctuary in Dryden Township, Lapeer County. This is the first grant we have received from the Four County Community Foundation, based in Almont, which serves portions of Saint Clair, Lapeer, Oakland, and Macomb Counties. The funds will pay for a preserve sign, marking of the property corners, clean-up, invasive weed removal, and other improvements. The TLC is planning on a few stewardship days in late summer and early fall on the Tranquil Ridge Sanctuary during which representatives of the Four County Community Foundation will be present. We coordinated with surveyor Rick Duthler on marking the parcel corners and we will have the preserve signs made.



Tranquil Ridge Sanctuary in Dryden Township, Lapeer County. Photograph by TLC Executive Director Bill Collins.

The Four County Community Foundation began in 1953 as the Community Hospital Foundation, an initiative of Almont Doctor Gilbert Clare Bishop and local businessman, James D. Ligon to build a local hospital for the residents of northeast Oakland, northwest Macomb, southwest St. Clair, and southeast Lapeer Counties. Burley Hospital of Almont closed in 1927 and Dr. Bishop used his house as a hospital. In 1957, the Community Hospital was constructed about 2 miles south of Almont along the east side of Van Dyke Road and officially opened in 1959. All but \$92,000 of the estimated \$715,000 facility cost was raised by the local community.

The hospital operated profitably for about 25 years. It was later purchased by Saint Joseph's Mercy Hospital for approximately \$2,500,000. The Community Hospital board agreed that proceeds of the sale should continue to benefit the community and so created the Four County Community Foundation. Since its beginning in 1987, the original endowment from the hospital sale has increased to more than \$20 million. In 35 years, the Foundation has invested \$10 million back into the community through grants and scholarships and over 145 funds have been created to support various charitable purposes. More information about the Four County Community Foundation is available on their web site at: <https://www.4ccf.org/>



The historic Currier Octagon House in Almont, home of the four County Community Foundation.

CYO Girls Camp

Forester Township, Sanilac County

In May, the pending sale of the Catholic Youth Organization (CYO) Girls Camp south of Forester came to our attention. The camp has been used for decades by the CYO of the Archdiocese of Detroit as a summer camp for girls. It is just over 24 acres with about 1,000 feet of shoreline on Lake Huron, mature forest, dune and swale landscape, and a stream that runs through the middle of the camp. There are several buildings including a central hall and cabins. The CYO plans to sell this camp and continue their program for girls and boys at the CYO Boys Camp south of Port Sanilac.

Saving a property like the Girls CYO Camp fits the TLC mission almost perfectly. Most of our leadership got our start at local camps and have very fond memories of our experiences as youth. The TLC believes that our region should and can offer the public the very best camps and opportunities for outdoor recreation. This is particularly important for children. The Thumb has a lot of great things going for it if people will just look around. With more development and a growing population in Southeast Michigan, we should be increasing public access to the Great Lakes, not decreasing it. Obviously, maintaining access to the Great Lakes is very important.



In June, local organizations working to promote youth, families, churches, outdoor recreation, and the environment signed a TLC support letter urging the CYO to seriously consider a sale that will keep the property as a camp. Sign-on supporters included: Camp Cavell of Lexington; Bridge Builders Counseling and Mentoring of Port Huron; the Blue Water District Commissioner of the Boy Scouts of America in Saint Clair, Sanilac, and Huron Counties; Thumb Outdoor Alliance of Croswell; Cass River Greenway of Frankenmuth; Presbyterian Villages of Michigan of Southfield and Fort Gratiot; Mooretown Brethren In Christ Church of Sandusky; Blue Water Audubon Society of Saint Clair County; Save Our Neighborhoods and Streets Outreach of Port Huron; and Operation Transformation of Port Huron.

We asked that the Catholic Youth Organization consider not only the monetary value of the camp, but its social and environmental values to our community according to the encyclical *Laudato si'* by Pope Francis, subtitled *On Care For Our Common Home*. The encyclical describes not only our responsibilities regarding environmental issues, but also to the poor. With ever increasing private development along the lakeshore, significant habitat is being destroyed and opportunity for Great Lakes access by the underprivileged is decreasing. Camps like the Girls CYO Camp have been sold at an alarming rate in recent years, many of them for private development benefiting only a very few people. Camps are places where we can really experience creation, a common home, and a common humanity that makes the world a better place.

Not knowing exactly how we would raise the necessary funds to purchase the CYO Camp, the TLC submitted a substantial offer in May. We had discussions with Sanilac County, various organizations, and individuals that could provide funding and support for this acquisition. Based on further discussion through our realtor with the CYO representative, the TLC nearly doubled our original offer but requested up to 5 years of fundraising time. Eventually, our offer was flatly rejected. It's very unfortunate that camps like this are being lost, that ultimately, organizations don't live up to their own principles. Acquisition of the CYO Camp would have been a great opportunity for the State of Michigan and Michigan outdoor recreation industry to invest in outdoor recreation and public access to the Great Lakes in our region.

Loznak Sanctuary Stewardship

Marysville, Saint Clair County

Yänhdawa' yeh de yenhta' iyaen' - *The Prairie is Near the River* - Huron - Wendat

Thanks to the consistent "slow haste" throughout 2022 of TLC Board Member Dan Rhein, the Loznak Sanctuary is shaping up and new things have been discovered. Dan essentially adopted the Sanctuary, removing invasive weeds, cleaning up debris along the railroad spur, digging up buried material and industrial artifacts, and restoring soil and native vegetation cover. Almost once a week, Dan reported his latest work and finds.



Dan Rhein's quarry. Photograph by TLC Board Member Dan Rhein.

The Loznak Sanctuary is located in a historically industrial area east of Busha Highway along Wills Street in Marysville. Although the property was partially used to store munitions from an adjacent production facility during World War II, there is an extensive remnant of lakeplain prairie, a rare natural community that once covered large areas near the Great Lakes. We have identified several plant species on the Sanctuary associated with lakeplain prairie and similar habitat, including: Riddell's Goldenrod - *Solidago riddellii*, Showy Goldenrod - *Solidago speciosa*, Stiff Goldenrod - *Solidago rigida*, Gray Goldenrod - *Solidago nemoralis*, Fringed Gentian - *Gentianopsis crinita*, Mountain Mint - *Pycnanthemum virginianum*, Rough Blazing-star - *Liatris aspera*, Tall Boneset - *Eupatorium altissimum*, Foxglove Beard-tongue - *Penstemon digitalis*, Nodding Ladies'-tresses - *Spiranthes cernua*, Switch Grass - *Panicum virgatum*, Three-awned Grass - *Aristida longespica*, Oatgrass - *Danthonia spicata*, Purple Love Grass - *Eragrostis spectabilis*, Sand Dropseed - *Sporobolus cryptandrus*, Yellow Lady-slipper orchid - *Cypripedium parviflorum*, Butterfly-weed -

Asclepias tuberosa, Showy Tick-trefoil - *Desmodium canadense*, and Shrubby Saint John's-wort - *Hypericum prolificum*. Tall Boneset is a relatively recent arrival from the east coast via railroads, but uncommon and not recorded any closer than Monroe County. It is possibly limited to only this small part of Marysville where its cover on the Sanctuary and nearby land is extensive. Most of these plants flower in late summer, providing vital nutrition for migrating insects like the Monarch butterfly, which appear particularly attracted to the Tall Boneset.

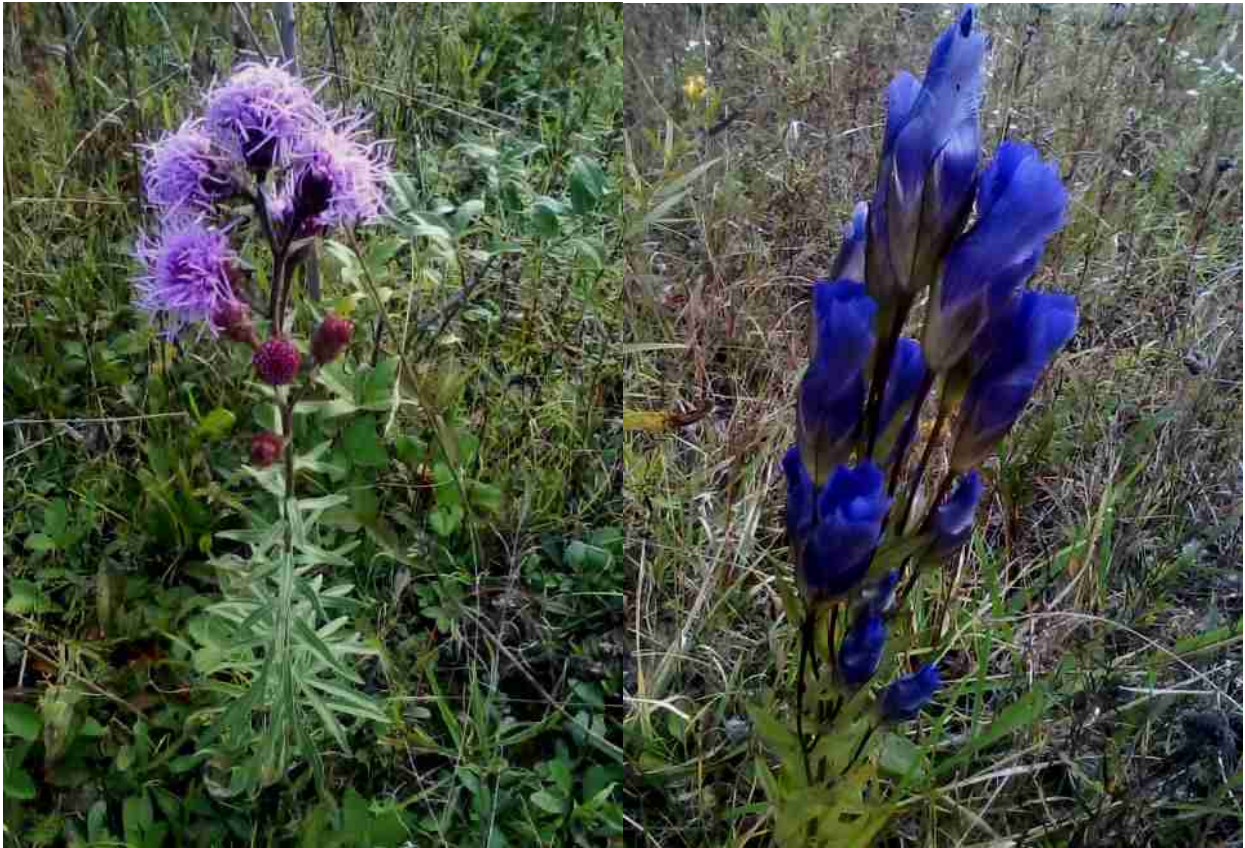
The western half of the Sanctuary is a nice recovering forest interspersed with wetland. It is also adjacent to approximately 26 acres of unusual forested ridge and swale landscape which appears to have an interesting alluvial origin along the Saint Clair River dating back about 5,000 years.

Invasive weed cover is relatively low on the Loznak Sanctuary, consisting largely of scattered Autumn-olive, unidentified ornamental pear trees, sparse patches of Phragmites Reed, and Spotted Knapweed in the remnant lakeplain prairie, and buckthorn in the adjoining forest to the west. Because of Dan Rhein's work, there is even less weed cover and more room for the impressive mix of lakeplain prairie species to expand.

Of equal interest are the many bricks, fragments, metal scraps, and pieces of things that Dan has uncovered, apparently dating back to the industrial use of the property during World War II to produce munitions. At some point, we will take inventory of all these items and see if we can determine their origins and purpose.



Monarch butterflies on Tall Boneset. Photograph by TLC Executive Director Bill Collins.



Rough Blazing-star (left) and one of the hundreds of Fringed Gentian on the preserve (right). Photographs by TLC Executive Director Bill Collins.



Fringed Gentian - *Gentianopsis crinita*. Photograph by TLC Executive Director Bill Collins.

Two New TLC Preserves

Full Circle Sanctuary and Charles Dodge Sanctuary Kimball and Clyde Townships, Saint Clair County

The TLC acquired two new preserves in the August State land auction, both formerly part of the Port Huron State Game Area. The State of Michigan determined that these were surplus parcels, but the TLC kept them in the public domain.

Full Circle Sanctuary

The Full Circle Sanctuary is 8.5 acres of forest at the southwest corner of Flinchbaugh Road and Barth Road in Kimball Township, Saint Clair County. The preserve is outlined in yellow on the following aerial photograph. The Full Circle Sanctuary is completely forested and located in an area of well-documented Painted Trillium occurrence, a Michigan Endangered wildflower that is now recorded only from Saint Clair County in all of Michigan.

The Full Circle Sanctuary is named in honor of the Full Circle EcoHouse of Prayer in Port Huron and the continuing work of Sisters Veronica Blake and Concepción González. Most of the TLC Executive Board have been friends of the Sisters for about 30 years, well-known members of the Blue Water area environmental community.



Full Circle Sanctuary at the southwest corner of Flinchbaugh Road and Barth Road in Kimball Township.



There are lots of mature oak trees on the Full Circle Sanctuary. Shown here, from front to back, appear to be Black Oak, Red Oak, and White Oak. Photograph by TLC Executive Director Bill Collins.



There is extensive wetland on the Full Circle Sanctuary. Shown here are small Tussock Sedge hummocks, the dark brown spore fronds of Sensitive Fern, and large Silver and Red Maple in the background. Photograph by TLC Executive Director Bill Collins.

Sister Veronica and Sister Concepción are members of the United States Region of the Sisters of Mary Reparatrix, an international religious congregation. Since its founding in France in 1857, the Sisters of Mary Reparatrix have been dedicated to repairing fractured relationships among humans and with God. In the

second half of the 20th century, global environmental crises caused them to also focus on the need for humans to repair their relationship to the Earth.



Sister Veronica Blake, left, and Sister Concepción González, right, of the Full Circle EcoHouse of Prayer.

Veronica and Concepción came to Port Huron in 1987. Veronica is from Manhattan, New York City. Concepción was originally from Camaguey, Cuba, and had served in Peru and Colombia previously. In 1990, they established the Full Circle House of Prayer in Port Huron's South Park, where they began offering spiritual retreats and workshops. Soon after, the Sisters started SWAMP, Savers of Wetlands and Marshy Places, for youngsters eight to twelve years old. Monthly gatherings, field trips and projects helped the children mature into adults who care about Earth and its ecosystems. Over the years since, they have focused more and more on the integrity of *all* Creation. They acquired a second house in Port Huron, naming it the Full Circle EcoHouse, and they have interacted with and supported many other local environmental groups. For more information about the Full Circle EcoHouse of Prayer and the Sisters of Mary Reparatrix, visit their web sites at:

Full Circle EcoHouse of Prayer

FullCircleRetreat.org

Sisters of Mary Reparatrix

<https://smr.org/en>

Sisters of Mary Reparatrix USA

<http://www.maryrep.org/>

The following is a personal history written by Sister Concepción González:

Sister Veronica Blake and I, Sister Concepción González, came to Port Huron in the summer of 1987. We had worked in parishes in central Texas for three years. The people were wonderful. At same time, we felt very far from our Religious Sisters so we began looking for a place closer to them where we could be of service. The diocese of Detroit was advertising an opening for an “Hispanic Outreach Minister” in Our Lady of Guadalupe Mission in Port Huron. I applied for the job and received an invitation to come for an interview. Neither of us had ever been to Port Huron but at that time we had a large community in Detroit.

After the interview in May with the priest and Parish Council, I was happy, and they appeared to be happy. A few days later I received a letter offering me the job. At the beginning of July, we arrived in Port Huron driving a small U-Haul, plus Raggles our cat with car in tow.

Both of us were very aware of the rapid deterioration of ecosystems. We had learned that chickens spent their short lives in minuscule holdings where they could not even turn around. We knew that if beef consumption was reduced more grain would be available to people facing malnutrition. When Veronica told her brother we were moving to Port Huron, his first words were: *“Be careful, the fish of the Great Lakes are covered in tumors and cannot be eaten!”* It was the famine in Ethiopia in the late 80’s that caused us to make the final decision to become vegetarians. It was our small way of responding to the damage humans were doing to earth and all its dwellers.

A couple of years later Veronica, who had been working at Catholic Social Services as an Older Adults Counselor, began her master’s degree in Social Ecology at Goddard University in Vermont. Both of us made multiple trips to Port Burwell, Ontario where the Redemptorists had a retreat house on the shore of Lake Erie with a wonderful library rich in books on ecology. There we met Thomas Berry, one of the first North American Catholic theologians who highlighted the connection between environment, faith, theology, and everyday Christian living. As a result of all this we realized that we were being called to a new ministry. A ministry focused on raising consciousness about and responsiveness to the environmental needs of our time.

We are members of the Congregation of the Sisters of Mary Reparatrix, founded in Strasbourg, France in 1857. Traditionally, our sisters have been engaged in ministries like spiritual accompaniment, guiding persons on retreats, and living and serving among the poor and marginalized in the Americas, Africa, and Europe. We seek to “Manifest the tender love of God everywhere and always.”

Given all we had learned about the crises Earth was facing, we realized that we sisters were being called to help repair the damage done to the planet. We took time to think, pray, and to draw up a proposal to present to our sisters in the U.S so that we could begin our new venture, one in which we hoped to help heal Earth’s suffering. After a bit of time, it was approved. Our US Region bought a simple house on South Boulevard in Port Huron which had room for gathering, and two extra bedrooms where people could stay overnight for up to seven days spent in reflection and conversation. We named it “Full Circle EcoHouse of Prayer.” It opened in 1991. In 2001 the Region bought the house next door to provide more space for classes, workshops, and extended retreats. We never kept count of how many people of all ages and diverse backgrounds participated in and offered programs. *We know that we met the best people ever!* Including some children 8-12 years of age who formed S.W.A.M.P, Savers of Wetlands and Marshy Places, which continued for many years. Like many young people today, they are the ones who will safeguard Earth for the coming years.

In 2018, our group of sisters in the United States began planning for our future. During that process we realized that we cannot cling to the past as much as we might love it. As a result, we moved to a small house where we and others continue to offer spiritual direction and workshops related to ecology. We study and learn from new theologians, scientists, poets, etc. to expand our horizons. We hope that the Bioregion Reparation Fund our Region began in 2018 through the Community Foundation of St. Clair County will continue our work and do much to help sustain the beautiful watersheds of our area.

Veronica Blake, S.M.R. was born and raised in New York City, Veronica worked as an RN for two years before becoming a religious sister. Since then, she has served in New York, Ohio, Texas and Michigan in a variety of ways. A master’s degree in Social Ecology and ministry at Full Circle have allowed her to

contribute to sustaining this beautiful spot of Earth.

Concepcion Gonzalez, S.M.R. was born in Camaguey, Cuba. In March 1961, she left Cuba to visit family, but because of the invasion of the Bay of Pigs, she was unable to return and so spent several months in Miami. In August she traveled to Colombia to join the novitiate of my congregation. She lived for several years in Colombia, Spain, Peru, France, and finally came back to the U.S. in 1987. Concepcion has a bachelor's degree in Pastoral Theology.

Charles Dodge Sanctuary

The Charles Dodge Sanctuary is named in honor of Port Huron botanist Charles K. Dodge. The 2.78-acre preserve is located north of Bryce Road in Clyde Township, Saint Clair County, part of the Port Huron State Game Area (PHSGA) that was auctioned-off in August. See the narrow strip outlined in yellow near the top of the following aerial photograph. The preserve is all forested and located in a known Painted Trillium area, only several hundred feet west of our Bob Putze conservation easement and about a half mile north of the Michigan Nature Association Mary Stallins Ray Memorial Plant Preserve. As shown, there is still a lot of State land in the area, all part of the PHSGA, but all at risk of expanding development and other land-use.



The Charles Dodge Sanctuary, 2.78 acres north of Bryce Road in Clyde Township, outlined in yellow.

Although this preserve is just a very small piece of the Black River valley, the TLC thought it appropriate to honor Charles Dodge, who over a century ago, advocated for it's protection as a nature reserve. Maybe this small preserve will lead to a bigger preserve but every piece of nature is now important. On our first visit to the preserve we met a very friendly neighbor who loves nature and already knew about Painted Trillium. It looks like we have a new friend.

Charles Keene Dodge was born on April 26, 1844 north of Jackson, Michigan and grew up on a nearby farm. Attending the University of Michigan, he had a botany course, required for both classical and scientific studies back when nature was still a foundation of basic higher education.



Botanist Charles Keene Dodge in 1917, the last year of his life.

After graduating in 1870, he taught for four years in the Upper Peninsula, then worked for the law firm of Hubbell and Chadbourne in Houghton, and admitted to the bar in 1875. Dodge moved back south to Port Huron to start his own law practice, impressed by the prosperity of the city. But the depression of 1876-77 gave him a tough time as an unestablished young lawyer of "average ability" as he humbly described himself. In his own words, he was "... lucky to get a five dollar case with a thief for a client".

About this time, his interest in botany blossomed. Dodge wrote, "*Without any apparent mental effort I took to botany and was never able to let it alone. Everything described within the limits of Gray's Manual [then the leading floral guide for our region] interested me. Woods, trees, fields, all formed an irresistible attraction.*" Dodge's own copy of Gray's Manual is kept at the University of Michigan Herbarium. He consecutively numbered every species in the manual, intent on collecting them all as herbarium specimens; pressed plants mounted on paper with labels indicating the species and location.

Dodge later told Cecil Billington, the curator of the Michigan State University Herbarium, "... how at first, he would go to the woods or fields, bringing in a few plants carefully hidden under his coat so that his friends and neighbors could not see them. They nicknamed him 'Posy' Dodge, which name he did not relish and tried to avoid occasion for its use as much as possible. However, this feeling gradually wore off, and Mr. Dodge, carrying his much-battered vasculum [specimen case], was a familiar figure on the streets of Port Huron, particularly those streets leading to the country."

He preferred to travel on bicycle, rather than horse and buggy. Apparently, this was somewhat unusual at the time, but allowed him to cover a large territory. Dodge wrote an article for the Asa Gray Bulletin in 1896 entitled, *The Bicycle and Botany*.

By 1880, Dodge was the City Attorney of Port Huron. He later served as a Circuit Court Commissioner for two terms, another year as the City Attorney, and one year as the City Controller.

In 1893, Dodge was appointed Deputy Collector of the United States Customs Office in Port Huron, and largely retired from legal practice, which afforded him much more time for botany. This same year, he tossed nearly his entire herbarium collection out the back window of his house, dissatisfied with his work. His ambition was then to collect the entire flora of North America. This was about two years after he returned from a two-year stay in the American west. He soon realized that the task was too huge and decided to concentrate on Michigan and adjacent areas. He eventually collected about 40,000 specimens, now held by the University of Michigan Herbarium.

In 1897, at the age of 53, Charles married Millie Burns. They lived at 2805 Gratiot Avenue in Port Huron, a few blocks north of the present Blue Water Bridges. The modest two-story wood-frame house is still there, and in their time was a "... *pretty, quiet home with ample grounds of about four and one-half acres, garden, fruit trees and opportunities for botanical experiments*".

In 1900 Dodge published *Flora of St. Clair County, Michigan and the Western Part of Lambton County, Ontario*. In the preface he wrote, "*For the last twenty-two years, as spare time would permit, I have been interested in studying and identifying the plants of this locality, including only flowering plants, ferns, and their allies. Outdoor recreation being with me a necessity as well as a great pleasure, and desiring to have an object in view in my various wanderings on the wheel, at the suggestion of a friend, about six years ago, I undertook to find and examine, during my leisure hours, all the plants referred to, growing wild in [the region].*" His primary interest became "... *finding out what grows wild in Michigan*", and he often expressed his wish to live long enough to survey the entire State.

Dodge was particularly drawn to native trees. From 1901 to 1909 he studied the complex hawthorn genus *Crataegus* throughout Michigan, especially around Port Huron and Sarnia. Partly due to his work, the type specimens, the basis for species descriptions, of 52 hawthorn species were collected from Michigan, several in Saint Clair County. Dodge even has a hawthorn species named for him, *Crataegus dodgei*.

Edward Voss, well known author of the three-volume *Michigan Flora* among other publications, mentions Dodge in his book, *Botanical Beachcombers and Explorers*, an excellent history of 19th Century botany in the Great Lakes region. Voss said Dodge was "... *a collector who was particularly obsessed with citing his home town almost every time he used his name. I have seen labels on which he did it three times, but usually it was printed neatly twice ...*".

Dodge was often at odds with "... *interests in Port Huron which sought to destroy in a measure the beauty of his home city*". In 1911, Dodge wrote the Flora of the County section of *History of St. Clair County* by William Jenks, and took this opportunity to lament the loss of native habitat in the area even then. Dodge wrote, "*It seems to the writer it has been established beyond cavil that a country cannot be stripped of its trees, shrubs, and herbaceous plants without the greatest danger to its welfare. It is a matter about which, in this country, there is widespread and almost universal popular ignorance and unpardonable apathy.*"

In the same publication, Dodge proposed the creation of a large "... *public reservation of 3,000 or 4,000 acres in one piece for St. Clair county*" to preserve native flora and fauna of the region. He wrote, "*The very best place for such a proposed reservation in this county is in the township of Clyde where Mill creek joins Black river*". This is the present location of the Port Huron State Game Area.

Starting in 1908, at 64, Dodge made many expeditions through the Upper Peninsula with the Michigan Geological and Biological Survey. He explored the western shoreline of Lake Huron from Bay City to Saint Ignace, and was very familiar with the Thumb. His observations of Tuscola County and other regions were published by the Geological Survey in 1920. In 1917, his final year of life, at 73, he began investigating the flora of Berrien County.

Cecil Billington accompanied Dodge on some of his later excursions, and wrote, "... *Mr. Dodge could hold his own on a tramp with most of the younger men of a party ... work far into the night putting up his specimens for drying, and seemingly be as fresh as ever for the next [day]*".

Dodge was a kind and generous man, often making long excursions with beginning botanists through territory he knew would provide no new plant species for himself. He left nearly a complete set of the roughly 3,000 species he knew to grow wild in the region to the Port Huron Academy of Science for "... *those who care to know anything about the plants of their vicinity.*"

Tranquil Ridge Sanctuary

Dryden Township, Lapeer County

On September 1, we conducted a stewardship day on the Tranquil Ridge Sanctuary with our special guest, Kathy Dickens, Executive Director of the Four County Community Foundation based in Almont. In May, the Foundation awarded the TLC a grant of \$2,000 to fund stewardship and improvements on the preserve. Also working this day were TLC Program Assistant Blake Short, TLC Board Member Kay Cumbow, TLC President Cheryl Collins, and TLC Executive Director Bill Collins.



Left to right: TLC Program Assistant Blake Short, TLC Board Member Kay Cumbow, TLC President Cheryl Collins, and Kathy Dickens, Executive Director of the Four County Community Foundation. Photograph by TLC Program Assistant Blake Short.

The Four County Community Foundation serves portions of Saint Clair, Lapeer, Oakland, and Macomb Counties. The Foundation has invested millions of dollars back into the community through grants and scholarships with and over 145 funds to support various charitable purposes. More information about the Four County Community Foundation is available on their web site at: <https://www.4ccf.org/>



A "girdled" Black Locust, to be cut down on another work day.



Blake putting his back into it, pulling Common Privet shrubs near Lake George Road.



Surveyor, Rick Duthler, marked the property corners for us with concrete monuments.

The preserve is already a beautiful place, providing an impressive view over a large forest valley and Brooks Lake below. However, there is always room for improvement. We are gradually removing some old junk from an adjacent cottage that was demolished years ago, removing some invasive shrubs, and cutting Black Locust trees which, although apparently native to south-central North America, are invasive in Michigan. Fortunately, Black Locust logs are very rot-resistant and make great posts for fences and signs that can last a century.

We returned to the Tranquil Ridge Sanctuary on October 7 to check on the preserve and remove bagged refuse and other junk we collected on our September 1 stewardship day. Work will continue on the preserve through the winter, including removal of a few invasive Black Locust trees and installation of a new preserve sign.

Thanks to an e-mail message forwarded to us by Kathy Dickens, Executive Director of the Four County Community Foundation, we learned a little more history about our preserve and the surrounding land. Many years ago, the property was used as a band camp. The property was then purchased by a group of Ford Motor Company employees and was known as the Brooks Lake Campground. An abandoned structure south of the preserve was known as the Stone Cabin, one of several cabins used by the campers. The campground was later sold and all of the structures fell into disrepair, which explains most of the refuse we cleaned-up on and around the preserve.

Regardless, the Tranquil Ridge Sanctuary sits atop an impressive landscape with a remarkable view over the adjacent forest valley and Brooks Lake below. Our sanctuary is a small part of a large, relatively untouched and sustainable mature forest ecosystem. With our continued work, it is only getting better.



Tranquil Ridge. There's a big valley and a lake out there when the leaves are off. Photograph by TLC Executive Director Bill Collins.

Thanks to the skilled craftsmanship of TLC Board Member Dan Rhein, a new preserve sign for the Tranquil Ridge Sanctuary has been in-the-works and will be ready for installation soon.



Beginnings of the new Tranquil Ridge Sanctuary sign on the table of Dan and Wendy Rhein back in November. Photograph by TLC Executive Director Bill Collins.

North Street Station

Clyde Township, Saint Clair County

On September 23, the TLC conducted our annual removal of invasive Japanese Knotweed at our historic North Street Station. Thank you to Clyde Historical Society President Connie Bates, TLC Member Connie Neese, TLC Board Member Kay Cumbow, and TLC Program Assistant Blake Short for their work.



Left to right: Clyde Historical Society President Connie Bates, TLC Board Member Kay Cumbow, TLC Member Connie Neese, and TLC Program Assistant Blake Short. Photograph by TLC Program Assistant Blake Short.

We have accumulated a large pile of Japanese Knotweed over the past few years. Plant ashes can be used to glaze pottery. The ashes of Japanese Knotweed produce a beautiful sea green glaze. If anyone out there is into pottery, let us know.

Japanese Knotweed is a highly invasive weed in North America and almost impossible to get rid of without years of diligent removal. Even then, it can come back years later from small root fragments several feet below ground. Japanese Knotweed is native to the slopes of active volcanoes and is one of the first plants to colonize after an eruption. That should give you an idea of what we are up against. Thankfully, the patch at the North Street Station is still small and manageable. Wherever you see Japanese Knotweed, please destroy it, and please, never never plant it!

Thanks to the hard work of TLC Member and friend, Levi Shetler and his son Matthew, the metal roof installation on the historic North Street Station was finally completed on December 09. For anyone needing metal roof work, Levi does great work. He can also provide locally salvaged or reclaimed barn wood.



TLC Member Levi Shetler busy on the roof while TLC Board Member Kay Cumbow stops in to say hello. Photograph by TLC Executive Director Bill Collins.

The North Street Station is still a diamond-in-the-rough, but completion of the metal roof was a major improvement. We have a little detail work remaining on the roof, like evening-out the south edge. In the summer of 2023, we plan to add a good coat of brown enamel paint to the sheet metal. Then, we can begin removing the outer siding on the main structure to expose the original plank siding. We need to identify where the original doors and windows were because the structure has been modified at least once. Hopefully we won't have too many spaces to fill. After the siding work, a coat of white paint, the North Street Station will resemble the historic structure it once was, dating back at least to the early 1900's.



The south side of the North Street Station. Photograph by TLC Executive Director Bill Collins.



The north side of the North Street Station. Photograph by TLC Executive Director Bill Collins.

Port Huron State Game Area Day

Kimball and Clyde Townships, Saint Clair County

September 24

Michigan Department of Natural Resources, Wildlife Division staff hosted a tour of the Port Huron State Game Area on September 24. The primary goals for the event were to:

- To increase awareness of State Game Areas and to make them more accessible to users, including hunters and non-hunters.
- Showcase the Port Huron State Game Area.
- Make DNR Wildlife Division staff and local partners more accessible.
- Celebrate and showcase MDNR partnerships with the public.

The TLC was encouraged by this well-deserved attention to one of the most significant natural areas in our region. Several of our members have promoted the Port Huron State Game Area over the years, including Bob Haas who worked for the MDNR Fisheries Division for many years, authored the "Black River Assessment", and passed away in early 2022. See the report at this link:

https://www2.dnr.state.mi.us/PUBLICATIONS/PDFS/ifr/ifrilibra/special/reports/sr51/sr51_text.pdf

TLC Member John Fodi did much of the field work to produce the 2012 Natural Features Inventory and Management Recommendations for Port Huron State Game Area by the Michigan Natural Features Inventory. See the report at this link: <https://mnfi.anr.msu.edu/reports/MNFI-Report-2012-05.pdf>. In addition, John has been removing invasive weeds in the Game Area and encouraged the TLC to adopt our own weed removal area. Before the TLC existed, Janice Littlefield made a tremendous effort to discourage the development of the 800-acre Wingford Estate property in the heart of the Port Huron State Game Area.

Port Huron State Game Area Day

By Blake Short, TLC Program Assistant

The Michigan Department of Natural Resources, Wildlife Division held the Port Huron State Game Area Day on September 24. Hosted by Kaitlyn Barnes, a new Wildlife Division Biologist covering our area, a guided tour showcased new habitat management sites and natural features across the Game Area.

For the better part of several decades, the Port Huron State Game Area (PHSGA) has been left largely unmanaged by the Wildlife Division, and partly for good reason. Much of the PHSGA is at an apex in forest succession as evidenced by expansive old growth mesic forest in the uplands and rich floodplain forest in the Black River basin. Kaitlyn Barnes explained to tour participants that much of the interior of the PHSGA is intact and the natural communities are healthy, but areas showing signs of deterioration, such as road corridors, canopy gaps created by the loss of mature ash trees, and old pine plantations, could provide management opportunities to create habitat that is generally lacking within the PHSGA public lands. In other words, mature forest dominates the landscape, and while that is ecologically valuable, it does not provide as much habitat diversity as it could. Kaitlyn sees an opportunity for the Wildlife Division and its partners, like Pheasants Forever, to restore or reset some of these degraded areas to provide critical habitat for local and migratory species.

Currently, Kaitlyn has three management projects in the M-136 and Kingsley Road area of the PHSGA which were scheduled stops on the tour. The first stop was roughly 40 acres of extremely dense shrub thicket that is now being managed for American Woodcock habitat. The Wildlife Division has a management prescription for woodcock that has proven to be very effective and easy to implement by simply providing openings within the thicket for woodcock to feed on earthworms and flaunt their dazzling aerial courtship display that some refer to as "sky dancing". The remaining thicket around the openings provides roosting areas for observant female spectators and also cover during the heat of the day.

The next management area, just down the road, was an old Red Pine plantation that was succumbing to aggressive invasion of Oriental Bittersweet, a non-native woody vine capable of strangulating and killing

mature trees. In an attempt to set back the advance of bittersweet, which had severely degraded the pine forest, roughly 5 acres was clear-cut. A few scattered hardwoods were left to provide additional open woodland habitat which is generally lacking on PHSGA lands. Kaitlyn noted that on-going management will be implemented for the site and that regular prescribed burns may be necessary to combat recurring growth of bittersweet in the cleared area.

Adjacent to the cleared forest is a third management area where the Wildlife Division is attempting to restore an old agriculture field back to grassland and wet meadow. Management activities will include prescribed burns, reseeding of native vegetation, monitoring, and removal of invasive vegetation as necessary.

The final stop of the tour was a visit to the Shoefelt Road area to observe the mesic northern forest community, which is relatively lacking in southern Michigan but is characteristic of the PHSGA. Old-growth White Oak, Red Oak, Sugar Maple, Eastern White Pine, and Eastern Hemlock decorate the upland ridges and deep ravines of the Shoefelt Road area and inspires the feeling of being "up north" as we like to say here in the southeast lower peninsula. The dense canopy of mature trees suppresses understory growth but provides habitat for rare species and welcomed shade for recreationists to freely explore this natural and scenic landscape unencumbered. Truly a great place to clear the mind in the practice of *Shinrin-yoku*, or "forest-bathing", by exposing your senses to the natural world and being present in the moment.



Forest of the Port Huron State Game Area. Photograph by TLC Program Assistant Blake Short.

For more information about the PHSGA or other public lands in Michigan please visit <https://www.michigan.gov/dnr/things-to-do/hunting/where>

TLC Nominated Three Properties for MNRTF Acquisition

In 2022, the TLC nominated three properties for State acquisition through the Michigan Natural Resources Trust Fund (MNRTF). The MNRTF was established by State law in 1976 specifically for the purpose of acquiring and developing land for natural resource protection and public outdoor recreation. The MNRTF is funded on by Michigan oil, gas, and mineral extraction revenue sharing and has provided over \$1 billion for projects in all 83 counties of Michigan. The first project funded by the MNRTF was the acquisition of Saint John's Marsh Wildlife Area in southern Saint Clair County. For more information about the MNRTF, is available at this link:

<https://www.michigan.gov/dnr/Buy-and-Apply/grants/rec/mnrtf>

The three nominated properties included: 1) The Girls Catholic Youth Organization Camp on Lake Huron near Forester; 2) 113 acres of remnant lakeplain prairie along Saginaw Bay and the Kawkawlin River near Bay City; and 3) 35 acres near the north end of the Port Huron State Game Area in Grant Township.

Girls Catholic Youth Organization Camp, Forester

The TLC attempted to acquire the Girls Catholic Youth Organization Camp near Forester, without success. As a back-up, we requested that State of Michigan consider acquisition of the property as a State park. We also nominated the property for State acquisition through the MNRTF.



The Girls Catholic Youth Organization Camp is 24 acres with about 1,000 feet of Lake Huron shoreline, about 1,300 feet of stream, forested dune and swale complex supporting uncommon species, important coastal migratory bird habitat, a great beach, boating access, and several cabins. The property is valuable for recreation and resource conservation primarily because it would provide a large area of public access to Lake Huron, of which there is currently too little, and for which there is increasing demand, especially for the growing population of the Port Huron area, metro Detroit, and southeast Michigan in general. Closer access to the Great Lakes will become increasingly important with high fuel prices and a warming climate.

Morley Trust Lakeplain Prairie, Bay City

The Morley Trust lakeplain prairie on the north side of Bay City is 113 acres of remnant and recovering lakeplain wet prairie with oak-dominated beach ridges, located along the south side of the Kawkawlin River, about 2,000 feet southwest of the Saginaw Bay. Nearly the entire property, about 100 acres, consists of State and federally-regulated wetland. TLC Executive Director Bill Collins worked on this site as a wetland consultant for the owner in 2015 through 2018. TLC President Cheryl Collins and TLC Board Member Dan Rhein also worked on this site collecting lakeplain prairie plant seed to restore part of the wetland. Although much of the site was cleared and farmed prior to 2015, patches of lakeplain prairie remained intact with uncommon plant species including Riddell's Goldenrod - *Solidago ridellii*, Marsh Blazing-star - *Liatris spicata*, Fringed Gentian - *Gentianopsis crinita*, Monkey-flower - *Mimulus ringens*, Indian Grass - *Sorghastrum nutans*, and Cord Grass - *Spartina pectinata* among other characteristic vegetation.



The property is extremely valuable for resource protection because it contains a large occurrence of lakeplain wet prairie, a State and globally imperiled natural community of which only about 1% of the original extent remains. Although the site has been impacted by farming, the potential for restoration of the original plant community is very high. The upland beach ridges on the site are also largely intact, covered by mature oak and characteristic of the original landscape.

The close proximity of the Kawkawlin River, Saginaw Bay, and a paved public trail along the west property line makes this site exceptional for potential recreation opportunities. A canal at the northwest corner of the property could provide small boat access to the Kawkawlin River and Saginaw Bay. Connecting trails with interpretive signs through the lakeplain prairie would be a great educational resource. The site is easily accessible to a large population in the Bay City area. The site is also adjacent to south side of Bangor Township park property along the Kawkawlin River, less than a mile southeast of Bay City State Park, and less than a half mile southeast of State trail that could connect the property with the State Park.

Port Huron State Game Area Parcel, Grant Township

This 35-acre property near the north end of the Port Huron State Game Area is a mix of wooded old-field, shrub thicket, pine plantation, and mature oak-hickory forest. The west end of the property abuts the east side of the Game Area and the Black River. Characteristic of the Black River valley, a steep bluff covered by Eastern Hemlock drops down to the river below.



The property is valuable for public recreation as it would provide access to about 80 acres of the Game Area that is very limited. Currently, the only way the public can access that part of the Game Area, which is nearly an island due to the broad meanders of the Black River, is to cross the river from adjacent public land on the west side. In addition, much of the adjacent public land also consists of steep bluffs which are difficult to traverse. Acquisition of the 35-acre property, combined with the approximately 80 acres of landlocked area, would effectively increase publicly accessible land in the Port Huron State Game Area by about 115 acres and open pedestrian access to approximately 8,500 feet of Black River frontage. Better access to this landlocked portion of the Game Area would increase hunting and fishing opportunities and also provide new access for stream and floodplain monitoring by the MDNR and other institutions.

The property is valuable for resource protection as it provides natural area buffer, particularly mature forest, for the Port Huron State Game Area and the Black River. Private development of the property would most likely degrade the natural buffer and completely eliminate the potential for public access.

The Morley Trust lakeplain prairie near Bay City and the Port Huron State Game Area property in Grant Township are both being considered for acquisition by the State. We were told that the Girls Catholic Youth Organization Camp near Forester was sold but we don't know who the new owner is yet. The TLC will continue to follow up on each of these properties.

The MNRTF provides the opportunity for anyone to nominate land for State acquisition. The chances of the State actually acquiring new land are small but it's worth trying sometimes. If you would like to nominate land, the nomination form is only two pages and available at the following link. :

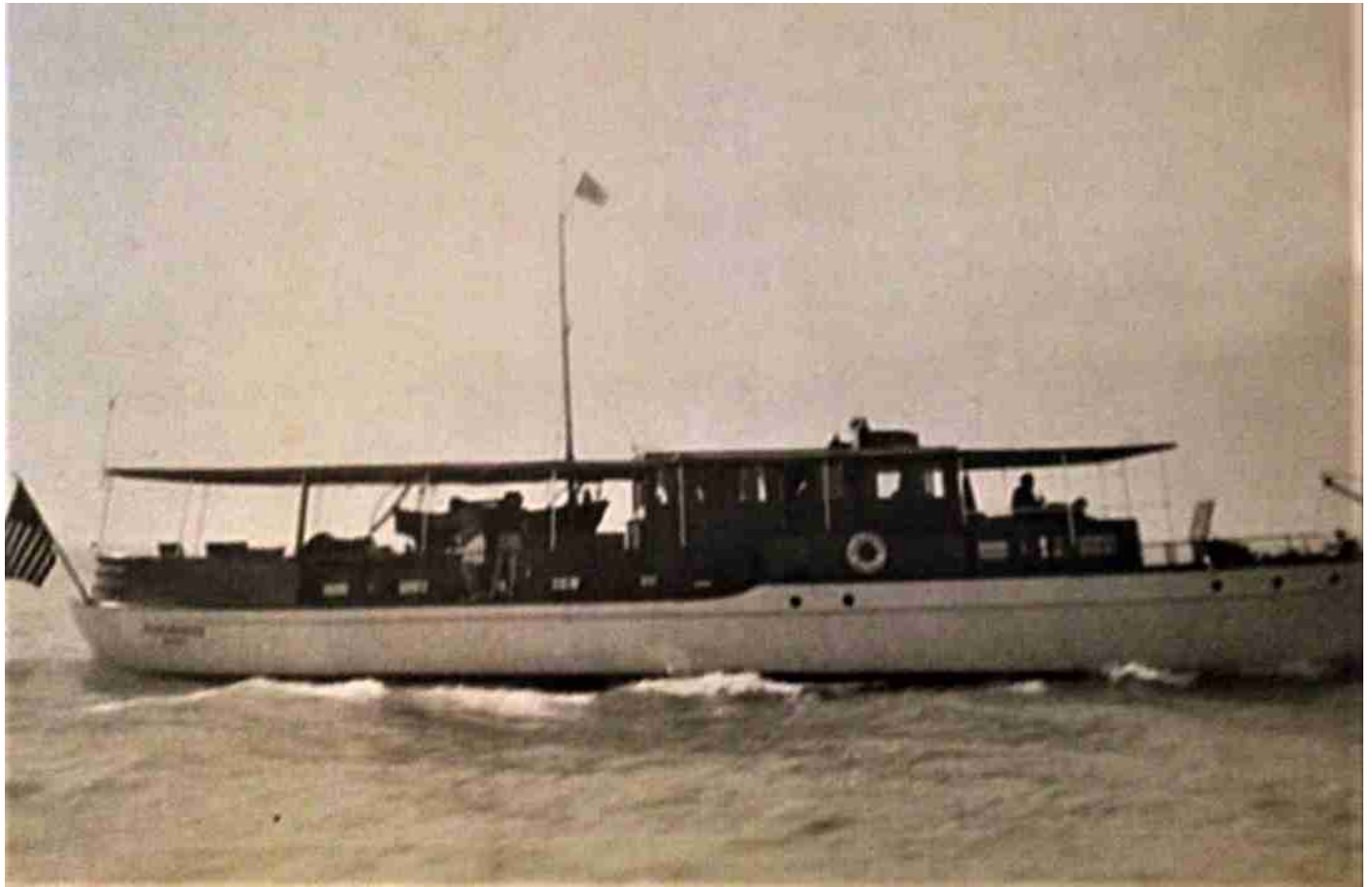
https://www.michigan.gov/dnr/-/media/Project/Websites/dnr/Documents/Forms/folder1/Nomination_form.pdf?rev=ed5e912121624d3cb4344e7b51be8d31&hash=D5F90238CBB2E9E61292568FDA21925

Dottie's Day

The Village Club, Bloomfield Hills

October 13 was a very special day for our Senior TLC Board Member, Dottie Craig, now in her 91st year. We took her to The Village Club in Bloomfield Hills, home of The Village Club Foundation and a historic residence with a fascinating connection to Dottie's family.

A few years ago, Dottie showed us old photographs of her childhood home on Grosse Isle and the yacht her family owned named the "Maid Marian". Dottie and her family loved cruising the yacht on the Detroit River, Lake Erie, Lake Saint Clair, and Lake Huron, at least once making a voyage up to the Georgian Bay. She even had a little toy boat they towed behind the Maid Marian, hand-made especially for Dottie by a ship captain. Her father later sold the Maid Marian and she often wondered what happened to it.



The Maid Marian, first owned by Charlie Winningham who lived at the Robin Hood's Barn estate, and later purchased by Dottie's father, Earl Austerberry.

After a lot of internet searching, we found that the Maid Marian was originally owned by Charlie Winningham, a wealthy automotive advertising executive in the Detroit area. His 1954 obituary states that Winningham was "... an ardent horseman and yachtsman, his Bloomfield Hills estate, Robinhood's Barn, still maintained, is as familiar as his yacht, the Maid Marian, was in former years on the Detroit River." His obituary also states, "An amateur playwright, he also was an authority on Robinhood lore." Wow.

So we did a little more searching and found that Winningham's estate is still intact and is home to The Village Club. Thanks to the Bloomfield Hills Historical Society and The Village Club, there is quite a detailed history of the Winningham estate available on their web pages. This was almost too good to be true.

In 1919, Winningham bought a home on Long Lake Road in Bloomfield Hills, constructed from a renovated barn and a brick school house moved to the property. He commissioned prominent Detroit artist, Paul Honore, to paint murals depicting the Robin Hood story which hung in the house for years. Hence, the Winningham home became known as "Robin Hood's Barn". Unfortunately, the murals disappeared sometime after Charlie Winningham's passing and provides another mystery for us. Apparently his interest in Robin Hood extended to the naming of his yacht, the Maid Marian, but we found no mention of it on-line other than his obituary.

In 1961, about 7 years after Winningham passed away, The Village Woman's Club of Bloomfield Hills acquired Robin Hood's Barn and land. The Winningham estate is now The Village Club and used for social gatherings, dining, classes, programs, and special events. The Village Club Foundation has a long history of supporting educational, cultural, civic, and human services in Oakland, Wayne, and Macomb Counties through events, projects, and philanthropy. Although renovations have been made to make the Winningham home more functional, the Club preserved most of the historic structure.

We have yet to determine the fate of the Maid Marian, but imagine not only finding that Dottie's yacht was connected with notable Detroit history and a quasi mythical estate, that the place is preserved, is home of a philanthropic club, within driving distance, and that we could go visit. After discovering all of this, we could hardly wait to take Dottie to The Village Club.

COVID and other issues delayed our plans for almost two years. Finally, this summer, it looked like it was time to plan our trip. Several months back, we contacted The Village Club and the Bloomfield Historical Society, not knowing what reception we would get. After all, Dottie's family merely owned Charlie Winningham's old boat. Thankfully, they were eager to have Dottie share her memories of the Maid Marian at The Village Club and we began coordinating our visit.

Our contingent included of course TLC Board Member Dottie Craig, TLC President Cheryl Collins, TLC Executive Director Bill Collins, and Bill's long-time friend and TLC Member Dave Lewis, who grew up in Bloomfield Hills. We arrived just before 11:00 am and were given a tour of the Club by the two Co-Historians, Linda Wilson and Linda Lang. It probably took a while for us to realize we were finally at Robin Hood's Barn and that it was happening.



The Living Room where the Robin Hood murals once hung. The wood beams are part of the original barn. Photograph by Dave Lewis.

We then had lunch at the best table in the Club, next to the patio windows with a very nice view of the grounds outside. The TLC even had our own name sign on the table with an autumn harvest centerpiece of colorful flowers and squash. Joining us at our table were The Village Club President Susan Sweeney, The Village Club Foundation President Laura Lee Kelsey, and the two Co-Historians, Linda Wilson and Linda Lang. The officers and managers of The Village Club were great hosts with attention to detail that made us feel very welcome. It was nice to get to know everyone and share our experiences in running our organizations.



This table with our own sign and the fall harvest display was very nice. Photograph by Dave Lewis.



Idyllic view out back. The TLC had the best table and view in the house. Photograph by Dave Lewis.



Left to right: TLC President Cheryl Collins, TLC Board Member Dottie Craig, The Village Club President Susan Sweeney, The Village Club Foundation President Laura Lee Kelsey, and TLC Member Dave Lewis. Photograph by Bill Collins.



Left to right: The Village Club Foundation President Laura Lee Kelsey, The Village Club Co-Historian Linda Wilson, The Village Club Co-Historian Linda Lang, and TLC Member Dave Lewis. Photograph by Bill Collins.

After lunch we continued our tour of The Village Club and then returned to the cozy living area next to the lit fireplace, the same room where the long lost Robin Hood murals once hung. Around us were the exposed wooden beams of the original barn that was converted into the Winningham home. Dottie shared her memories of the Maid Marian, the crew, and her family. We presented The Village Club with color copies and enlargements of Dottie's many photos. All of this was video recorded by the Club management.



Left to right: TLC Member Dave Lewis, The Village Club Manager Stan Pena, The Village Club Co-Historian Linda Lang, and TLC Board Member Dottie Craig in front of the bar in the President's Lounge. Linda explained that during prohibition, the bar was concealed behind panels. Photograph by Bill Collins.



The Village Club Co-Historian Linda Lang and TLC Board Member Dottie Craig in the Winningham Room. Photograph by Bill Collins.



Group photo in Living Room. Back row left to right: TVC President Susan Sweeney, TLC President Cheryl Collins, TVC Co-Historian Linda Wilson, TVCF President Laura Lee Kelsey, and TVC Co-Historian Linda Lang. Front row left to right: TLC Executive Director Bill Collins, TLC Board Member Dottie Craig, and Dave Lewis, TLC Member and friend of Bill. Photograph by TVC Membership and Communications Administrator Kim Soncrainte.

Afterwards, we toured other parts of the Club, including the foyer and library, which appear much as they did when the Winningham's lived there. Co-Historian Linda Lang drew our attention to the tile in the foyer, which was made by the Moravian Tile Company in Doylestown, Pennsylvania. In the library, the plaster ceiling and sconces were created during the Arts and Crafts Movement in Detroit and research is ongoing regarding specific artisans.

Upon our departure, we were each given a gift bag including a hardcover cookbook entitled, *Popovers to Panache: Food With A Flair From The Village Club*. Thank you once again to The Village Club for being such great hosts. Co-Historian Linda Wilson did a great job of coordinating this event. As an interesting side note, Linda Wilson's family once owned WPHM radio station in Port Huron and lived in Fort Gratiot, so we have a Thumb connection.

After we left The Village Club about 3:00 pm. Dave Lewis guided us on a driving tour of the nearby Cranbrook complex including the Cranbrook Schools, Institute of Science, Museum, Academy of Arts, and grounds; a fitting compliment to our day at The Village Club. We left the area about 4:30 pm to return home.

One of the surprising conclusions of our visit is that Linda Wilson and Linda Lang, The Village Club Co-Historians, determined that photographs of Dottie's Maid Marian do not match those of the Maid Marian they recently received from Charlie Winningham's daughter. Although we already knew there is a Maid Marian II out there, we didn't think the two yachts were related. It turns out that The Village Club had photographs of the Maid Marian II which was also owned by Charlie Winningham. After he sold the first Maid Marian to Dottie's father, he had the larger Maid Marian II built. That yacht is still in use. Hopefully, with more searching, we will determine the fate of the Maid Marian, and maybe even the lost Robin Hood murals.

For more information on The Village Club, The Village Club Foundation, Robin Hood's Barn, and the Bloomfield Historical Society, see the following links:

The Village Club: <https://www.thevillageclub.org/web/pages/about>

Bloomfield Historical Society: <https://www.bloomfieldhistoricalsociety.org/robin-hoods-barn-1900/>

New TLC Preserve Signs

Several TLC preserves were well overdue for new boundary signs in 2022. In 2020, Pete Catlos posted our Dead End Woods Sanctuary in Fort Gratiot with new signs. In 2019, Will and Fred Fuller, along with a crew of Scout volunteers, posted our Gerrits Sanctuary near New Baltimore. Aside from these two, property boundaries of our other preserves have not been posted for over 10 years, if at all.

Thorpe Printing of Marysville (<https://www.thorpeprinting.com/>) did a nice job on our coroplast signs in 2019, so we went with them again. The corrugated plastic signs are relatively cheap yet sturdy enough to last several years under normal conditions. We plan to start posting our other 8 properties in 2023.



Proposed Expansion of the Michigan Air National Guard Combat Training Airspace in the Thumb

A huge expansion of the Michigan Air National Guard Alpena Special Use Airspace Complex would significantly increase and intensify military combat training across the northern Lower Peninsula and Thumb. The Michigan Air National Guard accepted public comment on their draft environmental assessment from November 15 through January 14.

The Michigan Air National Guard proposes to expand its airspace and intensify its activities over the northern Lower Peninsula, Thumb, and Lake Huron, allowing military aircraft to fly further, more frequently, and lower overhead. If approved, military pilots will train across an additional 1,633 nautical square miles, including Huron, Tuscola, and Sanilac Counties, extending as far south as the Port Sanilac area. In a portion of the proposed flight zones in the Thumb, military aircraft would be allowed to train as low as 500 feet above the ground.

The proposed military training airspace expansion will result in increased and extended high levels of noise, well beyond those currently allowed by local ordinances. Other impacts will include increased air pollution in the form of fine particulate from jet fuel exhaust, increased potential for spills of fuel and other toxins, release of thousands more of decoy chaff and flares by aircraft each year resulting in the discharge of various combustion byproducts over water and land, greatly increased potential for accidents involving civilians, more catastrophic bird strikes, particularly of large migratory waterfowl, and increased military presence, potentially even foreign military personnel.

At the same time, the Michigan Army National Guard, is proposing a huge expansion of its use State land and to double the size of the Camp Grayling military installation in the northern Lower Peninsula. The Alpena Special Use Airspace is already considered the largest overland training airspace east of the Mississippi River.

While military defense is very important, especially these days, it is equally important to balance defense with peaceful living, outdoor recreation, wild lands and wildlife, your health, and the general quality of our environment. Most of us understand that military preparedness is critical, but at this rate, we run the risk of the eastern Lower Peninsula of Michigan becoming militarized well beyond our control. A reasonable person should ask whether all of this is absolutely necessary.

TLC Member Cliff Stuehmer of Huron County is very informed on this proposal, has made extensive public comment, and has provided us with the following summary of the Michigan Air National Guard Environmental Assessment.

Can You Hear Me Now by Clifford Stuehmer, Port Hope, Michigan

- Air combat training includes climbing, diving, turning, and multiple passes over the same area.
- Day-Night Average Sound Levels (DNL), a measurement spreading sound impact over a 24-hour period, is inadequate, if not deceptive, in considering the impact of high-level short-duration noise.
- F-16s at 500 feet generate 115 dBA noise levels. That is eight times louder than an A-10 ("Warthog"), louder than the maximum level in the audience at a rock concert, at the threshold of "uncomfortable" for people and eight times louder than your typical County/Township noise ordinance (85 dBA). This comparison can be found in the Environmental Assessment (EA) on page 39, Figure 3.1. This is also the level at which the Secretary of the Air Force requires hearing protection for all Air Force personnel ON or OFF base (Air Force Instruction AFI 48-127).
- Even at the 5999-foot flight ceiling, every overflight by F-16 jets will violate local ordinances that limit

noise to 85 dBA

- When an F-16 passes overhead at 500 feet, you will be unable to communicate with someone standing three feet away from you without shouting for approximately 20 seconds. This “Shout Zone” extends about 2.5 miles to either side of the flight path (decreasing shouting time period as you approach 2.5 miles to either side of the aircraft).
- The EA touts a “seasonal” flight restriction concession to help reduce the significant negative impact the noise of low altitude jet combat training will have on tourism along the shoreline. This is an admission of significant impacts from the high noise levels. However, it is an empty concession that does nothing for the full time residents along the shoreline or boaters/kayakers more than 1 mile offshore.
- The prior Foreign Military Sales pilot training Environmental Impact Statement quotes a 0.65% average decrease in property value for each dB increase in Day-Night Average Sound Level (DNL). This translates to about a 4% property value decrease for those areas showing a 6 dB DNL increase in noise in this EA.
- The Aircraft Owners and Pilots Association (AOPA) opposed the proposed changes as early as 2018 and more recently requested the more thorough Environmental Impact Statement (EIS) in July of 2019. These professional and amateur pilots and aircraft owners indicate the Special Use Airspace (SUA) changes will significantly affect the safety and economy of civilian air use.
- Particulates emissions from low altitude training (below the 3000’ mixing level) will settle on our farms, yards, Lake Huron, and into the deepest parts of our lungs.
- Potential bird strikes are downplayed by mention of the Air National Guard’s use of the BASH computer program yet there is no mention in the EA of the Sandhill Crane, one of the largest birds in North America, which routinely migrates in formations in the Military Operations Airspaces (MOAs) well above 500 feet and outside and above the “seasonal” flight restrictions. Nor is there any mention of Canada geese.
- This EA mentions that bringing jet air combat training down to 500 feet in the proposed MOA airspace would be a cost save to an organization with an annual budget of \$234 BILLION.

The points noted above are why a Finding Of No Significant Impact (FONSI) for this proposal is not only wrong, but an insult and an injustice to the people that live, work and play within the Alpena SUA.

Selfridge Air National Guard Base is wholly owned by the Air National Guard and does not share facilities or airspace with a civilian airport such as Burlington, Vermont or Madison, Wisconsin. The speculative next step, once the SUA is permanently changed, will be to base the Foreign Military Sales program Singaporean F-16s and F-35s at Selfridge ANGB. These won’t be our US pilots learning valuable combat skills, but rather foreign “customers” using our environment for field testing their new equipment. The proposed SUA changes look to be a perfect set-up for this.

I urge you all to review and discuss the Draft EA and comment to your governing entities, including County Board of Commissioners, your local and state elected representatives and Governor Whitmer.

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

It is also very important that an environmental assessment for a proposed air space use of this scale more fully account for the cumulative impact of so many activities happening now and proposed for our region. The population of the Thumb is already exposed to a lot of noise, pollution, and other impacts from increasingly industrialized large-scale farming, trash burning, and wind turbine complexes, among other activities, with more big projects coming our way.

Yes, even trash burning must once again be factored-in to our environmental exposure out here in the country. We thought this was largely relegated to less enlightened times, but a lot of trash is still burned in piles, in barrels, in Amish woodstoves, and increasingly in recently popular outdoor wood burners which

provide the indifferent operator with a personal incinerator for everything from treated lumber to plastic to tires to who knows what. Such burning spews all kinds of nasty toxins across our land and waters. Most of these toxins are carcinogenic and disruptive to basic functions within our bodies. They include benzene, styrene, formaldehyde and other aldehydes, dioxin, PCB, furans, heavy metals, chromated copper arsenate, pentachlorophenol, creosote, acids, and other substances. Who is responding to these releases of toxins from burning on private land? No one as far as we can tell. Even fire departments are part of the problem when they burn structures containing treated lumber, vinyl siding, plywood, OSB, PVC pipes, and other materials.

We also need to factor in emerging impacts like the expanding realization of PFAS contamination everywhere, micro-plastics, and the emerging issue of nanoparticle pollution. Ironically, some of the most contaminated areas include farm fields where sewage sludge has been applied.

This military airspace expansion proposal comes just as the Thumb region has been increasingly promoting itself as a destination for tourism and culture. More retirees are moving into the area, wanting to escape the commotion of suburban areas. Peaceful surroundings and natural beauty of the Thumb's shores and countryside are increasingly in demand.

The Draft Environmental Assessment For Modification and Addition of Airspace at the Alpena Special Use Airspace Complex can be accessed at this link, located at the upper right of the public notice page:

<https://www.alpenacrtc.af.mil/Resources/Air-Space-Proposal/>

Links to other applicable documents, such as the Draft Environmental Assessment Appendices and Draft Finding of No Significant Impact, are also located at the upper right of the public notice page.

For more information, see the following articles:

Huron Daily Tribune, 2023 January 04
Concern Over Air National Guard Plan

<https://digital.olivesoftware.com/olive/odn/hurondailytribune/shared/ShowArticle.aspx?doc=HHDT%2F2023%2F01%2F04&entity=Ar00102&sk=32B01921&mode=text#>

Bridge Michigan, 2022 December 07
Anger Over National Guard Air Training Plan Over Grayling And The Thumb

<https://www.bridgemi.com/michigan-environment-watch/anger-over-national-guard-air-training-plan-over-grayling-and-thumb>

TLC Board of Directors

Cheryl Collins, President

Cheryl Collins of Brown City - Marlette formed the Thumb Land Conservancy in 2008. She worked at the forefront of natural area protection efforts in the region for many years. Cheryl served on the board of directors of the Michigan Nature Association from 2003 through 2008, and co-founded the Macomb Land Conservancy in 2000 which merged with Oakland Land Conservancy to become Six Rivers Land Conservancy. In 2001 and 2002, she conducted a fundraising campaign as a volunteer on behalf of the Michigan Nature Association to purchase the Sharon Rose Leonatti Memorial Nature Sanctuary in Kimball Township, Saint Clair County; with one of Michigan's largest remaining populations of State Endangered Painted Trillium. She fundraised nearly \$60,000 in less than two years in her spare time. With the Michigan Nature Association, she developed funding sources resulting in grants of nearly \$500,000 for a statewide land acquisition campaign. Cheryl and husband, Bill Collins, worked together on many projects for Huron Ecologic, LLC since 1998. Cheryl served as Project Coordinator, assisting community groups in protecting local natural areas across Michigan. She prepared, organized, and presented exhibits and testimony for three Michigan Department of Environmental Quality Contested Case Hearings and two Michigan Environmental Protection Act suits involving State and federally regulated wetland and other natural features. She provided information regarding the Michigan wetland regulatory program and wetland violation files to the Michigan Environmental Council and U.S. Environmental Protection Agency. From 1996 through 1998, Cheryl was Assistant Drain Commissioner for Saint Clair County, working with Drain Commissioner Fred Fuller who promoted natural watershed management and river restoration. In 2006, she was a Project Assistant for the Sanilac County Economic Development Corporation. She obtained a grant to construct a rain garden in Lexington and worked with the Huron County Economic Development Corporation on a Michigan Department of Transportation plan to identify significant heritage highway features along M-25. From 2006 through 2009, she was the Chairperson of the Sanilac County Brownfield Redevelopment Authority. She ran for Sanilac County Drain Commissioner in 2008, receiving 38% of the vote as a Democrat in a solidly Republican county. Cheryl continued working as a drain inspector until 2020, assisting with drain maintenance projects for the Saint Clair County Drain Commissioner.

Kay Cumbow - Director

Kay Cumbow of the Brown City area is a long-time environmental advocate, active on local issues and also nuclear issues in the Great Lakes region. She is an active member of Citizens for Alternatives to Chemical Contamination, a statewide organization working to protect the health of our communities and the Great Lakes. Kay has an Associate of Arts degree from Kalamazoo Valley Community College and an Associate of Science degree from Mott Community College. She is a retired respiratory technician. Kay holds an Extra License for amateur radio through the Federal Communications Commission, is a Volunteer Examiner accredited through the American Radio Relay League, and is a member of the Thumb Amateur Radio Club in Michigan.

Dorothy Craig - Director

Dorothy Craig lives near the TLC Dead End Woods Sanctuary in Fort Gratiot Township and joined the TLC board in 2013. Dorothy has cared for animals her whole life and loves nature. Dorothy has encouraged and supported the work of the TLC since its formation in 2008.

Dr. Scott Ferguson - Director

Doctor Scott Ferguson grew up near the TLC Dead End Woods Sanctuary in Fort Gratiot Township and joined the TLC board in 2010. Doctor Ferguson has been in full-time dental practice since 1988, the year he earned his Doctorate of Dental Surgery from the University of Detroit. He is a member of the Thumb District Dental Society, the Michigan Dental Association, the American Dental Association, and the Port Huron Study Club, part of a nationwide network of affiliates under the Seattle Study Club. Doctor Ferguson has completed advanced training through the Misch Institute for Implant Training and is a Fellow in the International Congress of Oral Implantology. A Port Huron native and active supporter of many local associations, Scott lives in North Street with his son, Gabriel and daughter, Maya.

Daniel Rhein - Director

Dan Rhein of Port Huron grew up in China Township in Saint Clair County. He is a naturalist, wildlife expert, and a self-taught botanist possessing thorough knowledge of many obscure plant species, especially grasses and shrubs. Dan graduated from Michigan State University with a Bachelor of Science degree in Fisheries and Wildlife. For years, Dan has volunteered his time to provide nature education programs for the Blue Water Council Boy Scouts of America and local school children. Dan has long worked to promote natural areas in the Thumb, especially lakeplain prairie, wetlands, and aquatic habitats. He was a member of the Thumb Bioregional Alliance in the early 1990's, which advocated for the protection of land along the Black River near the Port Huron State Game Area, and the Minden Bog in Sanilac County. He has led several tours through the Minden Bog, being quite familiar with the unique bog vegetation. Dan taught an edible plants course for Willow Winds school of traditional skills and crafts near Mikado, Michigan. Dan is a very talented painter and has exhibited his work at Studio 1219 in Port Huron. He worked for many years as a drain inspector and project supervisor for the Saint Clair County Drain Commissioner. While employed by the Drain Commissioner, Dan specialized in natural stream restoration, location of illicit pollution discharges to county drains, rain garden maintenance, and invasive weed control along county drains and wetland mitigation preserves.

Chris Walker - Director

Chris Walker grew up on a small farm near Croswell, where his parents instilled in him a near-reverent appreciation for the land and its natural inhabitants. Chris is currently an Assistant Professor in the Communication Department at North Dakota State University. He earned a Master of Fine Arts in Cinema and Photography from Southern Illinois University and a Bachelor of Applied Arts in Journalism from Central Michigan University. As a photography professor, he has fulfilled full-time teaching and research appointments at Auburn University, Auburn, Alabama; Southern Indiana University, Evansville; and Loyola University Maryland in Baltimore. He has worked for several newspapers, including the Toledo Blade, where he and two coworkers earned a finalist spot in the Pulitzers, and has been published worldwide in numerous magazines, books, and journals. For 7 years, he was the Photography Columnist for Camping Life magazine. Chris is a naturalist and has a life-long interest in ecology, particularly through bird biology and stock nature photography. He was a Neotropical Migratory Research Technician for 2 years at Black Swamp Bird Observatory in Oak Harbor, Ohio. Chris is an artist and journalist with deep concerns for social anthropology and our ever-changing environment.

Fred Fuller - Director, Secretary and Treasurer

Fred Fuller grew up in Yale, Michigan and has lived most of his life there, serving as Mayor of the City of Yale in 1990, 1991, and 1996. He earned a Bachelor of Arts from Albion College in English Literature and spent a semester in New York City working as an editorial assistant at The Paris Review literary magazine edited by George Plimpton. He has also traveled extensively throughout the United States and Canada. Having held a life-long interest in the cultural history of the Irish and British Isles, he wrote several magazine articles on that subject. He was employed as a Field Director with the Michigan Nature Association in 1992 and 1993, exploring potential new preserve lands and helping edit the MNA's sanctuary guidebook. Fred co-founded the Thumb Bioregional Alliance in 1993, an association of environmentalists and others concerned about ecology and the quality of life in the Thumb region. He also co-founded the Mill Creek Coalition, the Black River Watershed Group and the Friends of Beards Hills, to help preserve important ecosystems in the Thumb. Fred was elected as the Saint Clair County Drain Commissioner from 1997 through 2008. As Drain Commissioner, he opposed the proposed full-scale dredging of Mill Creek, a major tributary of the Black River, and he helped negotiate a compromise restoration of the creek. He enacted innovative storm water rules for Saint Clair County, initiated an illicit discharge elimination program on county drains, required wetland inspections of new development sites, and helped pioneer preservation of high-quality wetlands as mitigation for Michigan Department of Environmental Quality permits in Saint Clair County. From 2009 through 2020, Fred was employed as Water Resources Manager with Huron Consultants LLC of Port Huron and Lapeer, Michigan. In 2021, after obtaining a Certificate in Genealogical Research from Boston University, he started a company, Huron Genealogy Services LLC, to assist people searching for ancestors and creating family histories.

TLC Staff

William Collins - Executive Director

Bill Collins of Brown City - Marlette is a naturalist and botanist who grew up in the Port Huron area. He was a nature instructor at Silver Trails Scout Reservation summer camps from 1978 through 1986. He has an Associate of Science degree from Saint Clair County Community College and graduated from Michigan State University in 1987 with a dual Bachelors of Science degree in Botany and Natural Resources Development while also following the engineering program. From 1984 through 1986 he was a Program Assistant with the Michigan Chapter of The Nature Conservancy in East Lansing, and later worked on various contract projects for the Michigan Department of Natural Resources Wildlife Division. He is a Life Member of the Michigan Nature Association and explored natural areas for MNA in 1988 through 1990. Bill has worked as a professional wetland consultant and ecologist since 1990, employed 8 years as a botanist and project manager with SSOE, Inc., a large architectural and engineering firm in Troy, Michigan, and since 1998 with his own consulting firm, Huron Ecologic, LLC. In his capacity as a private consultant, he has encouraged and helped local governments and individuals preserve high quality natural areas. Bill and his wife, Cheryl, have been very active in promoting the protection of natural areas and rare species throughout the region, including Michigan Endangered Painted Trillium, a rare woodland wildflower that is now known only from Saint Clair County in all of Michigan.

Blake Short - Program Assistant

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

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 20's, 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, but now working for Huron Ecologic as a wetland consultant. 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.

TLC Service Providers

TLC Legal Counsel

Attorney Timothy J. Lozen
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Port Huron, Michigan 48060
810-987-3970
LozenLaw.com

TLC Financial Institution

Tri-County Bank
4190 Main Street
Brown City, Michigan 48416
810-346-2745
Tri-CountyBank.com

TLC Liability Insurance

Conserv-A-Nation Insurance Program
Underwritten by Chubb Group of Insurance Companies
Alliant Insurance Services, Inc.
Franey Muha Commercial Group
4530 Walney Road, Suite 200
Chantilly, Virginia 20151
703-397-0977
AlliantInsurance.com

TLC Accountant

Cathy Rovano
5626 Ortman Drive
Sterling Heights, Michigan 48314

TLC Web Site Host - ThumbLand.org

Jeff Ronan
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Port Huron, Michigan 48060
810-334-4119
jeff@lochandeit.com
LochanDeIT.com

TLC Corporation

TLC Web Site

ThumbLand.org

TLC Contacts

mailing address:

Thumb Land Conservancy
4975 Maple Valley Road
Marlette, Michigan 48453 USA

phone: 810-346-2584

e-mail: mail@ThumbLand.org

TLC Incorporation Documents

IRS Employer Identification Number: 41-2247569

IRS Employer Identification Number Assigned: 2007 August 13

Michigan Corporation Identification Number: 70398K

Michigan Articles Of Incorporation Filed: 2008 October 29

Michigan Articles Of Incorporation Effective Date Of Approval: 2008 October 29

IRS Effective Date Of Tax Exemption: 2008 October 29

IRS 501(c)(3) Tax Exempt Status Confirmed: 2009 February 26

Michigan Corporate Entity Documents:

[https://cofs.lara.state.mi.us/CorpWeb/CorpSearch/CorpSummary.aspx?
ID=800918673&SEARCH_TYPE=1](https://cofs.lara.state.mi.us/CorpWeb/CorpSearch/CorpSummary.aspx?ID=800918673&SEARCH_TYPE=1)

IRS Search for Charities, Online Version of Publication 78:

[https://apps.irs.gov/app/eos/pub78Search.do?ein1=41-
2247569&names=&city=&state=All...&country=US&deductibility=all&dispatchMethod=searchCharities&
submitName=Search](https://apps.irs.gov/app/eos/pub78Search.do?ein1=41-2247569&names=&city=&state=All...&country=US&deductibility=all&dispatchMethod=searchCharities&submitName=Search)

TLC Memberships and Affiliations

Clyde Historical Society

7293 Beard Road

Clyde, Michigan 48049

810-824-0726

<https://www.facebook.com/groups/1481890455361159/about/>

Blue Water Indigenous Alliance

8749 Lakeshore Road

Burtchville, Michigan 48059

248-506-7172

TLC Balance Sheet

Thumb Land Conservancy Balance Sheet 2022 December 31

Current Assets	
Checking/Savings	
Tri-County Bank	41,697.42
Total Checking/Savings	41,697.42
Total Current Assets	41,697.42
Fixed Assets	
Land (10 Properties)	
Dead End Woods Sanctuary	0
Gerrits Sanctuary	48,972.00
Peltier Sanctuary	0
North Street Station	9,500.00
Bertha's Haven Sanctuary	0
Loznak Sanctuary	0
Bidwell Sanctuary	278,000.00
Tranquil Ridge Sanctuary	10,000.00
Full Circle Sanctuary	31,250.00
Charles Dodge Sanctuary	5,800.00
Total Fixed Assets	383,522.00
Total Assets	425,219.42
Liabilities and Equity	
Equity	
Opening Balance Equity	425,219.42
Total Equity	425,219.42
Total Liabilities & Equity	425,219.42

TLC Tax Statements

Annual tax statements of the Thumb Land Conservancy are available upon request and at the following IRS web site: <https://apps.irs.gov/app/eos/>

2021 IRS Tax Statement Summary	
Total Revenue	17,250
Total Expenses	-17,434
Net Income	-184
Revenue	
General Contributions	2,650
Huron County Community Foundation Stewardship Grant	900
Tranquil Ridge Sanctuary Purchase Loan	10,000
Grant For Blue Water Indigenous Alliance	3,700
Total Revenue	17,250
Expenses	
Tranquil Ridge Sanctuary Purchase	-10,304
Grant For Blue Water Indigenous Alliance	-3,700
Preserve Stewardship	-795
Local Tax Assessments	-1,150
Liability Insurance	-1,085
Web Hosting and IT	-400
Total Expenses	-17,434
Net Income	-184
<p>No staff were paid in 2021. 60% of TLC revenue was used for preserve acquisition. 11% of TLC revenue was used for preserve stewardship and payment of local tax assessments. 20% of TLC revenue was grant money administered on behalf of the Blue Water Indigenous Alliance. 9% of TLC revenue was used for administrative cost, including liability insurance, web hosting, and web site improvement.</p>	

2022 Projected IRS Tax Statement Summary	
Total Revenue	71,975
Total Expenses	-57,861
Net Income	14,114
Revenue	
General Contributions	23,575
State Land Auction Purchase Donation	41,000
Huron County Community Foundation Stewardship Grant	900
Four County Community Foundation Grant	2,000
Bioregion Reparation Fund Grant	4,500
Total Revenue	71,975
Expenses	
Tranquil Ridge Sanctuary Purchase Loan	-11,000
State Land Auction Purchase	-40,815
Preserve Stewardship	-4,394
Local Tax Assessments	-319
Liability Insurance	-1,033
Web Hosting and IT	-300
Total Expenses	-57,861
Net Income	14,114
<p>In 2022, 72% of TLC revenue was used for preserve acquisition. 7% of TLC revenue was used for preserve stewardship and payment of local tax assessments. Two staff members were paid only for preserve stewardship work in 2022. 2% of TLC revenue was used for administrative costs, including liability insurance, web hosting, and web site improvement. 7% of TLC revenue was retained as part of a preserve stewardship endowment fund. 12% of TLC revenue was applied to the general fund, which is used primarily to pay local tax assessments and general administrative costs.</p>	

TLC Properties

Dead End Woods Sanctuary or Makadewagmitiggweyainniwak, meaning *Black River Tribal People* in Annishinaabemowin

17.6 Acres, Fort Gratiot Township, Saint Clair County

Acquisition Date: 2008 December 30

North Parcel 74-20-030-2009-000: Beginning North 660.34 Feet From The East Quarter Corner, Thence N89°37'00"W 229.00 Feet; Thence S00°00'00"E 130.17 Feet; Thence N89°37'00"W 189.00 Feet; Thence S00°00'00"E 200.00 Feet; Thence N89°37'00"W 920.79 Feet; Thence N00°00'00"E 330.18 Feet; Thence S89°37'00"E 691.79 Feet; Thence N00°00'00"E 70.00 Feet; Thence S89°37'00"E 647.00 Feet; Thence S00°00'00"E 70.00 Feet To Beginning. Section 30, Town 7 North, Range 17 East, 8.59 Acres.

South Parcel 74-20-030-2012-000: Part Of The Northeast Quarter Of Section 30, Town 7 North, Range 17 East, Fort Gratiot Township, St. Clair County, Michigan; Described As Commencing At The East Quarter Corner Of Said Section; Thence N00°00'00"E 97.00 Feet Along The East Section Line To The Point Of Beginning; Thence N89°44'42"W 225.00 Feet; Thence S00°00'00"E 97.00 Feet; Thence N89°44'42"W 537.54 Feet Along The North Line Of Spruce Village; Thence N89°47'58"W 575.76 Feet Along The North Line Of Ferguson Heights; Thence N00°02'55"E 320.95 Feet Along The East Line Of Angus Campbell Number One; Thence N00°07'02"E 12.77 Feet Along The East Line Of Plat Number 5 Of The Old Farm Subdivision; Thence S89°37'00"E 1113.04 Feet; Thence S00°00'00"W 130.78 Feet; Thence S89°17'00"E 225.00 Feet; Thence S00°00'00"W 101.08 Feet To The Point Of Beginning. Containing 9.01 Acres.

The Dead End Woods Sanctuary was the first preserve acquired by the TLC, in December 2008. The woods is known locally as the "dead end woods" because it is located and accessed at the dead end of Wilson Drive in Fort Gratiot Township. The preserve is located between Wilson Drive and Blueberry lane to the south, State Road to the east, and Old Farm subdivision to the north.



The 17.6-acre Dead End Woods Sanctuary contains about 11.6 acres of swamp forest wetland, part of the headwaters of the Gossman Drain which flows east and south to the Black River. Both the wetland and the upland on the sanctuary were preserved as partial mitigation for wetland impacts permitted by the Michigan Department of Environmental Quality for the 2008 Bunce Creek and Huffman Drain project of Saint Clair County Drain Commissioner, Fred Fuller. The Dead End Woods Sanctuary is protected by a conservation easement held by the State of Michigan. As mitigation options for the drain project were being considered, the owner of one of the Dead End Woods parcels offered to sell the land to the Drain Commissioner at a reasonable price. The MDEQ confirmed the presence of a large amount of wetland on the property and

determined that it is part of a high quality plant community. The adjacent parcel was then purchased to provide the necessary wetland mitigation for the drain project. To satisfy MDEQ requirements for long-term monitoring and stewardship of the wetland, ownership of the two Dead End Woods parcels was transferred to the TLC, relieving the Drain Commissioner from further responsibility for this land. In accepting ownership of the property, the TLC agreed to be responsible for submittal of an approved management plan to the MDEQ, annual monitoring of the conservation easement, long-term stewardship, and submittal of annual monitoring reports to the MDEQ.



Forest of the Dead End Woods Sanctuary.



Swamp wetland in the Dead End Woods Sanctuary.

The Dead End Woods is a highly diverse forest community of southern swamp and mesic upland on Wainola-Deford fine sands deposited on the glacial lakeplain. The swamp is dominated by Silver Maple and Red Maple hybrids, Green Ash (large trees now dead due to the Emerald Ash Borer), American Hornbeam, Spicebush, Sensitive Fern, Royal Fern, Jack-in-the-pulpit, and Marsh-marigold. The upland is dominated by Red Maple, Red Oak, Sassafras, Black Cherry, Witch-hazel, Mayapple, Wild Geranium, and Yellow Trout-lily. At 44.5, the Floristic Quality Index of the Dead End Woods is very high, indicating a natural area of statewide significance. Higher quality or interesting species include Maidenhair Fern, Spikenard, Richweed, American Hazelnut, Black Ash, Butternut, Spicebush, Tuliptree, Cardinal Flower, Indian Pipe, Black Gum, Sycamore, Christmas Fern, Broad-leaved Goldenrod, Foamflower, and Eastern Hemlock.



Tuliptree sapling in the Dead End Woods Sanctuary.



Spikenard in the Dead End Woods Sanctuary.

A 1937 aerial photograph shows most of the Dead End Woods forest cover was intact, probably because the land was simply too wet to farm. As a result, many species are relict from before European settlement. In 1997 and 1998, the previous owners selectively cut large trees throughout the forest, which drew protests from neighbors who thought the site was being prepared for residential development. Despite this cutting and heavy soil disturbance, the forest vegetation remained intact. While the opened canopy supported the invasion of Garlic Mustard, it also favored uncommon species like Tuliptree, American Hazelnut, and Spikenard.

Uncommon animal species observed on the Dead End Woods Sanctuary include Flying Squirrels, Barred Owls, Pileated Woodpeckers, Wood Ducks, Spring Peeper frogs, Wood Frogs, and Red-backed Salamanders. Aquatic macroinvertebrates observed in the wetter portions of the swamp include caddisfly larvae, fairy shrimp, crayfish, pond snails, clam shrimp, water striders, and various protozoa, all generally indicating high water quality.

Entrance to the Dead End Woods Sanctuary is from at the dead end of Wilson Drive and also a shared driveway at 3745 State Road, between the 4th and 5th houses north of Blueberry Lane. Visitors must be careful not to block driveways or the fire hydrant at the end of Wilson Drive.

Gerrits Sanctuary or Wabisiwisibiwinniwak, meaning *Swan Creek Tribal People* in Annishinaabemowin

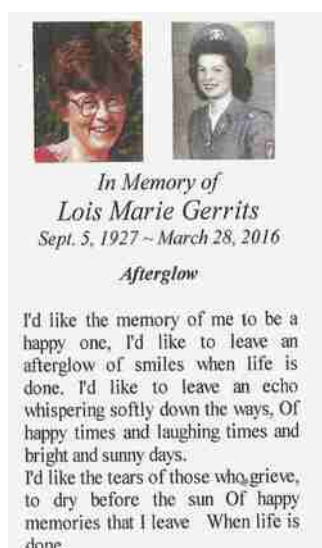
38.5 Acres, Ira Township, Saint Clair County

Acquisition Date: 2009 July 16

Parcel 74-23-007-1003-000: The Northwesternly 38.5 Acres Of The Southwesterly ½ Of The Northeasterly ½ Of Private Claim 627. Section 7, Town 3 North, Range 15 East. 38.5 Acres.

On July 16, 2009, the TLC acquired its second nature preserve, the Gerrits Sanctuary, a generous donation from Lois Gerrits, wife of the late Dr. James F. Gerrits. The closing was held at the Law Offices of Timothy J. Lozen, with attorney Anna Kovar <http://www.lozenlaw.com/> and TLC executive board members William Collins and Terry Gill present. Ullenbruch Flowers and Gifts of Port Huron <http://www.ullenbruchflower.com/> kindly donated a bouquet of flowers to express our appreciation to Mrs. Gerrits.

Dr. James Gerrits was well known in Saint Clair County. He was co-pilot of a bomber in World War II, and later a fighter and test pilot. Because of his war experiences, he became an outspoken critic of war. He and Lois twice voluntarily went to Vietnam in the 1960's, sponsored by the U.S. Department of State and Catholic Church, to provide civilian medical care to the people of both South and North Vietnam. Lois shared several stories about those times after our closing.



Gerrits siblings at the 2011 November 26 sanctuary dedication.



The Gerrits Sanctuary is 38.5 acres located along the east boundary of the City of New Baltimore, only about $\frac{3}{4}$ mile north of Anchor Bay and Lake Saint Clair. The southern half of the sanctuary is a complex of mature mesic and swamp forest. The north half is old-field and the Crapaud Creek Drain runs through the north end of the preserve. Years ago, the property was part of the Gerrits family farm.



Upland and swamp forest on the Gerrits Sanctuary.

The forest on the Gerrits Sanctuary is an impressive mix of southern swamp and mesic upland containing plant populations relict from centuries ago. Dominant vegetation in the extensive wetlands includes Silver Maple, Green Ash (all large trees dead due to the Emerald Ash Borer), Eastern Cottonwood, American Elm, Cinnamon Fern, and various sedges. The upland forest is a mature and species-rich southern forest community of American Beech, Sugar Maple, Red Oak, White Oak, Black Cherry, American Basswood, Tuliptree, Yellow Birch, Mayapple, White Trillium, Wild Geranium, Canada Mayflower, Spinulose Woodfern, Jack-in-the-pulpit, Solomon's-seal, Yellow Trout-lily, and Spring Beauty among many other forest herbs. Along the southwestern boundary of the sanctuary, the vegetation on moist sand tip-up mounds is distinctly northern with clubmosses, Wild Sarsaparilla, Starflower, and Goldthread. Some areas look surprisingly like habitat for Michigan Endangered Painted Trillium – *Trillium undulatum*, currently known only from the Port Huron area.



Upland forest with large Black Cherry, American Beech, and Sugar Maple on the Gerrits Sanctuary.

The Gerrits Sanctuary is part of one of the largest and least fragmented forest tracts remaining along the Great Lakes coastline from Ohio north through the Algonac area. The larger forest is nearly 300 acres, of which the Gerrits Sanctuary includes only about 20 acres of that forest, or about 7% of it. At the southern limit of the forest along M-29, it is within 1,000 feet of Anchor Bay. Near-shore natural areas are critical for migratory birds and insects that move along the Great Lakes. The Gerrits Sanctuary provides habitat both for migratory woodland birds and for migratory insects, like butterflies, in the old-field on the north half of the preserve.

Official entrance to the Gerrits Sanctuary is from near the end of Sienna Oaks Drive to the north. With permission from park management, the sanctuary may also be accessed through The Shores at Anchor Bay modular park along the east and south boundaries:

<https://www.facebook.com/TheShoresAtAnchorBay/>

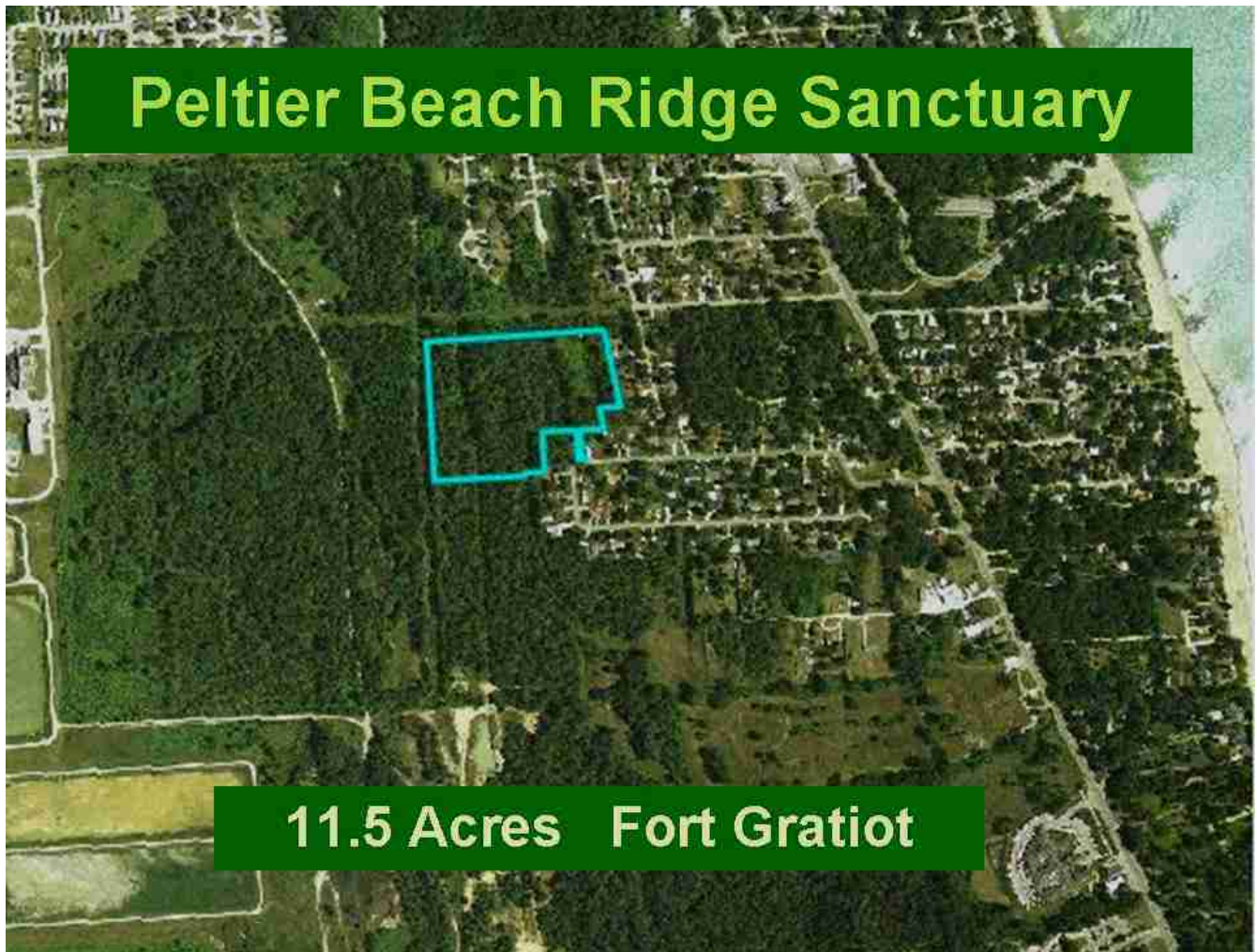


Birthday nature walk for Lois and James Gerrits' granddaughter, Rose, on 2014 May 18.

Peltier Sanctuary or Ke'Ya Makece, **meaning *Turtle Land* in Lakota** **11.5 Acres, Fort Gratiot Township, Saint Clair County** **Acquisition Date: 2010 June 28**

Parcel 74-20-004-1058-000: A parcel of land being a part of the Northwest ¼ of Fractional Section 4 and the Northeast ¼ of Fractional Section 5, T7N, R17E, Fort Gratiot Township, St. Clair County, Michigan and described as: Commencing at the East ¼ corner of said Fractional Section 5; thence N. 89° 38' 30" W. 656.67 feet along the East and West ¼ line of said Fractional Section 5; thence N. 00° 12' 07" E. 1145.13 feet to the point of beginning of this description; thence continuing N. 00° 12' 07" E. 648.12 feet; thence N. 89° 59' 07" E. 853.62 feet; thence S. 09° 03' 53" E. 363.81 feet; thence N. 89° 15' 00" W. 101.00 feet; thence S. 09° 03' 53" E. 101.00 feet; thence N. 89° 15' 00" W. 299.26 feet; thence S. 00° 07' 00" E. 200.50 feet; thence N. 89° 15' 00" W. 82.00 feet; thence S. 00° 07' 00" E. 1.00 feet; thence N. 89° 15' 00" W. 447.36 feet to the point of beginning of this description. Said parcel contains 11.47 acres, more or less.

On June 28, 2010, the TLC received its third nature preserve, the 11.5-acre Peltier Beach Ridge Sanctuary in Fort Gratiot Township, Saint Clair County. The parcel was given to the TLC by Ray and Nancy Peltier to satisfy State of Michigan requirements, then briefly administered through the Michigan Department of Natural Resources and Environment, for the long-term protection of 6.3 acres of wetland on the property, preserved as mitigation for 0.63 acre of wetland to be impacted by an expansion of the Hamzavi Dermatology office in Fort Gratiot: <https://www.hamzaviderm.com/>. The Peltier's worked out a deal with Dr. Syed Hamzavi to preserve the wetland and adjoining upland on their property as mitigation for the Hamzavi Dermatology project. As with our first preserve, the Dead End Woods Sanctuary in Fort Gratiot, the Peltier Beach Ridge Sanctuary is protected by a State of Michigan conservation easement. In accepting ownership of the mitigation property, the TLC agreed to be responsible for submittal of an approved management plan, annual monitoring of the conservation easement, long-term stewardship, and submittal of annual monitoring reports to the MDNRE, now the Michigan Department of Environmental Quality again.



The Peltier Beach Ridge Sanctuary is located a few hundred feet south of the end of West Montevista Drive, south of Metcalf Road, and along the east side of the Detroit Water Board property. The intake pipes from Lake Huron for the Detroit Water facility are very near the north property line. Also just north is the Galbraith Plant Preserve owned by the Michigan Nature Association, and four small lots north of the MNA preserve, owned by the Saint Clair County Drain Commissioner to be preserved as wetland mitigation for a future project. Although some people use the Detroit Water line property to enter the sanctuary from East Montevista Drive, the actual entrance is from North Shoreview Drive, just east of the intersection with San Juan Drive.

The Peltier Beach Ridge Sanctuary is a small part of a much larger and ecologically unique beach ridge and swale landscape formed thousands of years ago along portions of the early Great Lakes shoreline as water levels dropped, rose again, and then dropped to modern levels after the last glacial period. The beach ridge and swale landscape in this part of the Thumb is a long, narrow formation within about 1 mile of the Lake Huron shoreline, extending from Port Huron into Sanilac County. The landscape began forming about 11,500 years ago as the last stages of the Wisconsin glacier melted back and early Lake Huron was about 30 feet higher than today. About 1,500 years later, the melting glacier uncovered a new outlet from the Georgian Bay and the water dropped over 400 feet. The massive weight of glacial ice depressed the earth's crust for thousands of years, but as it melted, the crust slowly rose and continues today. By 4,500 years ago, the drainage outlet from Georgian Bay raised such that early Lake Huron filled to the Lake Nipissing stage and back to the old shoreline of 7,000 years previous. Great Lakes drainage was gradually limited to the Mississippi River through the old Chicago outlet, and then to the current Saint Clair River outlet, which rapidly down-cut and lowered the Great Lakes to modern levels, leaving a series of beach ridges as the water dropped.



Beach ridge and swale landscape in Fort Gratiot and Burtchville Townships.

In the southern Thumb, the beach ridge and swale landscape is restricted to a narrow strip along Lake Huron in Saint Clair County, in Fort Gratiot and Burtchville Townships, and some small patchy occurrences in Sanilac County. The landscape is much more extensive in Huron and Tuscola Counties along the Saginaw Bay, especially near Port Crescent State Park. In Saint Clair County, it originally covered less than 1% of the total land area, and has since been significantly reduced by commercial and residential development. The landscape consists of a series of upland sand ridges and mucky wetland troughs or swales between. In Saint Clair County, the sand ridges average about 40 to 50 feet wide and 3 to 4 feet above the adjoining swales. The swales are usually about as wide as the ridges, but some are a few hundred feet wide. The largest and oldest beach ridge runs continuously along the western limit of the landscape, furthest inland from Lake Huron. This ridge was over 500 feet wide across most of its extent and may have been over 30 feet high in some areas. Although much of it has been mined out, this big sand ridge is still largely intact through Lakeside Cemetery and into Port Huron near the Blue Water Bridges where it is about 15 feet higher than adjoining land. Centuries ago, this ridge served as a burial ground for Native American inhabitants whose burial mounds have been found near Port Huron. The beach ridge and swale landscape provides not only unique habitat, but also a unique record of Michigan's post-glacial past.

Most of the Peltier Beach Ridge Sanctuary is forested, except a large trail that runs through the western part of the preserve, and portions of the sand ridges to the east. Like most of the landscape, the wetland swales are covered by Silver Maple, Green Ash and Black Ash, the larger ash trees now all dead due to the Emerald Ash Borer, Eastern Cottonwood, and American Elm. The upland beach ridges are covered largely by Black Cherry, Big-tooth Aspen, and American Basswood, with scattered Black Oak and a few Arbor Vitae. The lower ridge bases are lined with Paper Birch and covered by an unusual concentration of Alternate-leaved Dogwood.

Much of the beach ridge and swale landscape in Saint Clair County was impacted years ago by logging, clearing, draining, livestock grazing, and sand mining. Because the surrounding forest as a whole has either been degraded or eliminated, subsequent forest species recruitment has been severely diminished, which has limited the return of many forest plants and therefore, the recovery of a mature forest community. The dominance of invasive species like Tartarian Honeysuckle, Common Privet, and Garlic Mustard has further displaced mature forest species.

Despite so many impacts, the landscape still contains high quality habitat with several unique species. Like other parts of the landscape, a few sand ridges on the Peltier Beach Ridge Sanctuary contain small patches of Purple-flowering Raspberry, the Lower Peninsula's equivalent of the Upper Peninsula's Thimbleberry, with large flowers and large raspberry fruits that actually fit over a finger like a thimble. Purple-flowering Raspberry is thought to be native to only seven shoreline counties in Michigan. The species is so restricted to this habitat in Saint Clair County that it's symbolic of it.



Purple-flowering Raspberry and Yellow Lady's-slipper orchid near the Peltier Beach Ridge Sanctuary.

Yellow Lady's-slipper orchid grows in a variety of habitats, but in Saint Clair County is largely restricted to the moist ridge bases and mucky swales of this landscape. Several Yellow Lady's-slipper orchids have been found on the Peltier Beach Ridge Sanctuary.

The Eastern Hog-nosed Snake is a special reptilian inhabitant that has been found just a few hundred feet south of the Peltier Beach Ridge Sanctuary. They prefer the more open sand of dunes and disturbed ground such as along the south end of the sanctuary. When aggravated, the snakes flatten their necks like a cobra, and then sometimes roll over and play dead with their mouths hanging open. They can look imposing, but are harmless. The Eastern Hog-nosed Snake is more common in the southern plains and southeastern US, but is considered to be at some risk of extirpation in the Great Lakes region, Ontario, and New England.



Eastern Hog-nosed Snake captured and photographed by Ray Peltier, just south of the Peltier Beach Ridge Sanctuary.

One of the most critical functions of this coastal forest habitat is the support it provides to an abundance of migratory birds as they move north and south along the Lake Huron shoreline. The spring and summer breeding bird population is very abundant and diverse in this area, especially the forest warblers. Several species of warblers have been identified on the Peltier Beach Ridge Sanctuary.



American Redstart warbler just south of the Peltier Beach Ridge Sanctuary.

The Peltier Beach Ridge Sanctuary is a high quality wetland and upland complex with a unique geologic history, unique plant and animal community, significant Great Lakes coastal habitat, good restoration potential, and a great addition to the TLC preserve lands. The beach ridge and swale landscape is a high priority for the TLC and we continue working to promote preservation of this area.

North Street Station

5220 North Road, North Street, Michigan
0.5 Acre, Clyde Township, Saint Clair County
Acquisition Date: 2016 August 02

Parcel 74-15-012-3006-000: All that part of the North ½ of the Northwest ¼ of the Southeast ¼ lying south of the Pere Marquette Railroad right-of-way and containing 0.5 acre in Section 12, T7N R16E

On August 2, 2016, the TLC purchased the old general store, post office, and rail station in North Street through the Saint Clair County tax auction. This historic structure would have been demolished if not acquired by a preservation group. The North Street station is one of only two remaining stations between Port Huron and Croswell along the old Port Huron and Northwestern Railway which opened in 1879. The main line ran from Port Huron to Saginaw, with branches to Sandusky, Port Hope, and Port Austin. The line became part of the Pere Marquette Railroad in 1889. The main structure on the North Street site probably dates back to at least 1889, but was later partially modified in the mid 1940's to serve as a residence.

The TLC is partnering with the Clyde Historical Society to protect the structure and fundraise for restoration. We are currently restoring the exterior and plan to install signs describing the history of the site. Eventually, we would like to restore the interior, display related historical artifacts, and open it for meetings and public events.



South side of the North Street Station during roof repair in the spring of 2017. The large window was installed and other modifications were made in the mid 1940's to upgrade the structure as a residence.



The North Street Station circa 1930 showing the north side, facing the railroad tracks. A proprietor of the general store and post office stands in front, with a dog on the porch behind.



The North Street Station circa mid 1930's showing the south side from North Road. The lower room to the east was added to the original structure.



A drawing of the North Street Station as it appeared circa 1900 showing the north side and adjacent railroad. A mail pouch is hanging at the lower left. A horse is shown to the far right on North Road.



Left: A portion of an 1899 map showing the Pere Marquette Railroad line from Port Huron through North Street and beyond.

Bertha's Haven Sanctuary or Mindimooyenh, meaning *An Elder Woman of Great Respect* in Annishinaabemowin

0.62 Acre, Fort Gratiot Township, Saint Clair County

Acquisition Date: 2019 September 27

Parcel 74-20-004-1057-000: West 175 feet of South 154 feet of that part of the East $\frac{1}{2}$ of the Northeast $\frac{1}{4}$ of the Northeast $\frac{1}{4}$ lying North of the extended North line of Roosevelt Avenue in Section 5, T7N, R17E, 0.62 acre

On September 27, 2019, the TLC accepted ownership of the Galbraith Plant Preserve from the Michigan Nature Association (MNA). The preserve is located only about 150 feet north of our Peltier Beach Ridge Sanctuary, in the same beach ridge and swale landscape along Lake Huron in Fort Gratiot and we have been watching over it when we go out to the Peltier Sanctuary. MNA founder and director, Bertha Daubendiek, established this preserve back in 1972 as a place to transplant native wildflowers from the adjacent Detroit Water Board property before the Lake Huron water intake facility was constructed. The TLC renamed the preserve in honor of Bertha Daubendiek, to "Bertha's Haven", borrowing part of an older name for the preserve.



Bertha's Haven Sanctuary in yellow boundaries just north of the Peltier Beach Ridge Sanctuary.



Left: Bertha Daubendiek (center) on the shore of Lake Superior in 1969. Right: Bertha Daubendiek (bottom center) exploring the western Upper Peninsula in 1970 with MNA board members Thelma Sonnenberg and Rita Juckett, and biology student guides from Michigan Technological University.

For more information about Bertha Daubendiek and the Michigan Nature Association, see these articles written by TLC Executive Director, William Collins:

http://www.huronecologic.com/thumb_habitats022004.htm

http://www.huronecologic.com/thumb_habitats032004.htm

Loznak Sanctuary or Yānhdawa' yeh de yenhta' iyaen', meaning *The Prairie is Near the River* in Huron-Wendat

Honoring Charles and Elizabeth Loznak

11.5 Acres, City of Marysville, Saint Clair County

Acquisition Date: 2019 December 18

9.3 acres of Parcel 74-03-092-0025-000: Lots 19 and 20 and Lot 21, except the South 200 feet of "ASSESSOR'S PLAT OF DOW ADDITION TO THE CITY OF MARYSVILLE, MICHIGAN", according to the plat thereof as recorded in Liber 55 of Plats, page 7, St. Clair County Register of Deeds Office.

2.2 acres of Parcel 74-03-092-0023-000: Westerly 350 feet of Lot 18, "ASSESSOR'S PLAT OF DOW ADDITION TO THE CITY OF MARYSVILLE, MICHIGAN", according to the plat thereof as recorded in Liber 55 of Plats, page 7, St. Clair County Register of Deeds Office.

On December 18, 2019, under the guidance of TLC attorney Timothy Lozen, the TLC accepted donation of the 11.5-acre Loznak Sanctuary, along with a small endowment fund, from Loznak Real Estate Enterprises, LLC. The Loznak Sanctuary honors the memory of Charles and Elizabeth Loznak. The sanctuary is located adjacent to an industrial area along Wills Street in Marysville, east of Busha Highway in Marysville.



Oblique view of the Loznak property donation in yellow boundaries.

The Loznak Sanctuary is adjacent to the old Port Huron and Detroit Railroad line with an old rail spur running through the middle of the sanctuary. It is also adjacent to approximately 26 acres of unusual ridge and swale forest with an interesting alluvial origin along the Saint Clair River dating back almost 5,000 years ago. Despite the impact of previous industrial use connected with a World War II munitions factory, the Loznak Sanctuary is a nice recovering natural area with patches of young forest interspersed with the remains of concrete foundations reminiscent of monuments. The east half of the sanctuary contains lakeplain prairie vegetation with uncommon species such as Riddell's Goldenrod - *Solidago riddellii*, Fringed Gentian - *Gentianopsis crinita*, and Mountain Mint - *Pycnanthemum virginianum*. Historic aerial photographs and mapping show that, other than limited use of the property appearing to begin and end with World War II, the land appears to have been generally undisturbed. A 1937 aerial photograph shows the Loznak Sanctuary and vicinity was completely vacant and part of a large swath of mostly open land along the Saint Clair River which may have been farmed. Similar lakeplain prairie habitat in the Marysville area, where land use was not so intensive, serves as refugia for plants remnant of original populations that existed prior to European settlement. Michigan Threatened Sullivant's Milkweed – *Asclepias sullivantii*, a rare lakeplain prairie plant found in only 8 southeast counties in Michigan, is known from several locations in the Marysville area.



Left: Old-field with lakeplain prairie vegetation and railroad spur. Right: Part of a concrete foundation.



Remnants of a concrete foundation amongst Paper Birch trees on the Loznak Sanctuary.

We are still discussing options and plans for this new sanctuary with potential partners, including the Port Huron and Detroit Railroad Historical Society (<http://phdrailroad.com/>). We envision the Loznak Sanctuary as a small park highlighting the interesting combination of natural area, World War II industrial history, and railroad history relating to the old Port Huron and Detroit Railroad, now owned by CSX Transportation, running along the west side of the sanctuary and the rail spur connecting to it. Our thanks to Loznak Real Estate Enterprises, attorney Tim Lozen (<http://LozenLaw.com>), and Jim Hollenbeck of EH&S Services for completing the phase 1 environmental assessment (<https://www.facebook.com/EHS-Services-246483582068278/>).

Bidwell Sanctuary or Chëkhònèsink hìtkwike schind lèkuwake, meaning *Place Among Hemlock Trees on Sandy Ground Where There is Sound of Waves Breaking* in Lenape

42.1 Acres, Burtchville Township, Saint Clair County

Acquisition Date: 2020 July 17

Parcel 74-11-032-3003-000: East 810.2 feet of the Southeast ¼ excepting the East 275 feet of the North 683.3 feet and excepting the South 200 feet of the East 200 feet of the West 744.2 feet and excepting Plat Number 1 of Lakeshore Woods. Section 32, T8N R17E. 41.45 acres.

Parcel 74-11-480-0001-000: Lot 1 of Plat Number 1 of Lakeshore Woods. 0.65 acre.

On July 17, 2020, the TLC purchased the 42.1-acre Bidwell Sanctuary located in the beach ridge and swale complex of Burtchville Township. Acquisition of the Bidwell Sanctuary was a major preservation accomplishment for the TLC on behalf of the Blue Water Area. Major project funders included The Carls Foundation of Bloomfield Hills, the Community Foundation for Southeast Michigan, the Consumers Energy Foundation, Cargill, Inc. and Cargill Salt of Saint Clair, the Community Foundation of St. Clair County, the Franklin H. and Nancy S. Moore Donor Advised Fund of the Community Foundation of St. Clair County, and SEMCO Energy Gas Company of Port Huron.



Eastern Hemlock tree and beach ridge on the Bidwell Sanctuary. Wetland swale in background.



Wetland swale on the Bidwell Sanctuary.



Wetland swale on the Bidwell Sanctuary.



Along the new coastal trail on the Bidwell Sanctuary.

The new Bidwell Sanctuary in Burtchville Township is a very important part of the proposed Southern Lake Huron Coastal Park, a band of several preserves and parks extending along Lake Huron through Fort Gratiot and Burtchville Townships. The preserves are generally inaccessible to the public and somewhat disconnected from each other, but not by much. With a little effort, we are within reach of creating a continuous 4.5-mile coastal park connecting the Port Huron area to Lakeport State Park. The Southern Lake Huron Coastal Park would encompass most of the remaining beach ridge (or dune) and swale complex along the eastern shoreline of Michigan's Thumb region, a linear forested greenway connecting Port Huron with shoreline communities into Sanilac County. This coastal forest zone is well-suited for a recreational walking and biking trail with interpretive signage. The beach ridge and swale complex along Lake Huron is a big part of what makes the Blue Water Area unique and a desirable place to visit and live. Yet, few understand the character and significance of this land because there is very limited public access to it. Routing a trail through the interior of this coastal forest corridor will provide a great opportunity for recreation, providing a small wilderness experience within just a few miles of Port Huron.

As proposed, the coastal trail would pass through at least two TLC preserves, the Peltier Beach Ridge Sanctuary and future Bidwell Preserve. Currently, most of the preserves to be included in the larger park are difficult, if not impossible, for the public to access without trespassing on adjoining properties. The proposed Southern Lake Huron Coastal Park and trail would open most of these preserves to the public. Once connected, the Southern Lake Huron Coastal Park is likely to become a regional destination for bicyclists, birders, naturalists, and other visitors.

In early 2018, the TLC began renewed efforts to acquire key parcels needed to complete a 4.5-mile coastal park along Lake Huron, connecting Port Huron to Lakeport State Park. The proposed Southern Lake Huron Coastal Park will eventually protect most of the remaining beach ridge and swale complex along the eastern shoreline of Michigan's Thumb region. This important coastal forest habitat supports rare species found in few other regions and is vital for migratory birds that move and nest along Lake Huron.



The effort to protect large tracts of beach ridge and swale forest in Fort Gratiot and Burtchville Townships dates back to the late 1980's with the vision of Bertha Daubendiek, founder of the Michigan Nature Association. Before the TLC existed, the Bidwell property on the north side of Metcalf Road in Burtchville Township was targeted for preservation and some of us worked on that effort for the MNA through the early 2000's. The Bidwell property contains some of the best beach ridge and

swale forest of what little remains from Ohio to the Saginaw Bay. Things didn't work out and the effort was mostly dropped until 2018.

The beach ridge and swale landscape complex is a very unique formation of parallel sand ridges and muck wetlands. The series of sand ridges were deposited from about 4,500 years ago as high post-glacial lake levels receded as the Great Lakes outlet shifted from the Des Plaines River outlet to the Mississippi River at what would be Chicago, to the new Saint Clair River outlet at what would be Port Huron. The Saint Clair River down-cut rapidly which caused the post-glacial lake water to drop about 30 feet. At the same time, the earth's crust rose, having been depressed by the weight of glacial ice during the last stages of the Wisconsin glacial advance. The earth's crust is still rising slightly from the ancient depression of ice. The continued rise of the land and lowering of the Great Lakes has left a series of dry upland sand ridges and mucky wetland troughs or swales between. This beach ridge and swale landscape provides not only a unique natural community, but a record of Michigan's post-glacial past.

The beach ridge and swale complex is very limited in Michigan and covers just a small part of Fort Gratiot and Burtchville Townships in Saint Clair County where it ranges from about a quarter-mile to a half-mile wide. It originally extended from the Blue Water Bridges into southern Sanilac County. The remaining formation north of Port Huron is the only significant occurrence from Ohio to the Saginaw Bay. The coastal forest habitat supports rare and uncommon species found in few other regions and is vital for migratory birds that move and nest along Lake Huron. Ongoing threats to the beach ridge and swale complex include residential and commercial development along the M-25 highway corridor, speculative land clearing and grading, forest fragmentation, sand mining, invasive weeds, overgrazing by deer, loss of forest canopy due to tree pests or diseases, and incursions by off-road vehicles.

The community is usually referred to as "wooded dune and swale complex". However, "beach ridge and swale complex" is a more descriptive phrase for the landscape of the eastern Thumb of Michigan where the ridges were shaped primarily by water. As with all of the ridges around the Great Lakes, the sand was first deposited as beaches that gradually rose above the lake influence. Wind was a secondary influence, the non-forested shoreward ridges becoming dunes. The ridges along the southwestern shore of Lake Huron were probably less dune-like because prevailing winds are from the west and would have been buffered by adjoining forest to the west.

The beach ridge and swale complex provides critical shoreline habitat for uncommon and rare plant and animal species found in few other parts of Michigan, such as Purple-flowering Raspberry, Yellow Lady-slipper orchid, Pink Lady-slipper orchid, Eastern Hog-nosed Snake, and Blue-spotted Salamander, as well as a great abundance of migratory birds. Based on records maintained by the Michigan Natural Features Inventory, there are approximately 30 Endangered, Threatened, or Special Concern species that could occur in the beach ridge and swale community of Saint Clair County.



Of all species, Purple-flowering Raspberry - *Rubus odoratus* is the most emblematic of the beach ridge and swale community in Saint Clair County where it is known only from ancient beach ridges along Lake Huron and one location along the Saint Clair River. Purple-flowering Raspberry is essentially the Lower Peninsula's equivalent of the Upper Peninsula's well known Thimbleberry - *Rubus parviflorus*, being so closely related that they hybridize where their ranges overlap in the northern Lower Peninsula. Like Thimbleberry, Purple-flowering Raspberry has no thorns and produces large flowers and big tasty red fruits. But unlike the white flowers of Thimbleberry, as the common name suggests, Purple-flowering Raspberry produces vivid purple to magenta flowers with subtly contrasting pale yellow centers. While the prolific Thimbleberry is thought to have moved into Michigan from western North America as the last glacial ice melted back thousands of years ago, Purple-flowering Raspberry moved into Michigan from the east and is at the western edge of its range here, where native populations are relatively sparse and probably limited to only seven coastal counties, primarily along Lake Huron.



Yellow Lady-slipper - *Cypripedium parviflorum* and Pink Lady-slipper - *Cypripedium acaule* have been described as common orchids in Michigan, but both species are actually rare, limited to very specific habitats, and increasingly imperiled. Yellow Lady-slipper orchids are found primarily in the beach ridge and swale complex of Saint Clair County. Pink Lady-slipper orchids are more common in the dune and swale complex along Saginaw Bay. Despite how common or not these orchids may be, it is always a wonder to encounter these unusual plants in full bloom, usually in mid May. Yellow Lady-slipper is typically located in moist mucky sand along beach ridge bases. Pink Lady-slipper occurs on higher and drier sand.



The Eastern Hog-nosed Snake - *Heterodon platyrhinos* is a very uncommon snake in Michigan, found almost exclusively in semi-open sand ridges of the complex in Saint Clair County. More common in the southeast and southern plains of the United States, the Eastern Hog-nosed Snake is at moderate risk of extirpation in the Great Lakes region, Ontario, and much of New England. The Eastern Hog-nosed Snake is non-venomous, but well known for flattening its upper neck and head like a cobra. When disturbed by a potential predator, they often roll over and play dead with their mouths open.



Blue-spotted Salamander

The Blue-spotted Salamander - *Ambystoma laterale* ranges across the northeastern United States and adjacent Canada to the James Bay. The salamander is found primarily in moist deciduous forests and swamp woodlands, especially with vernal pools. The Blue-spotted Salamander has been described as fairly common statewide, but seems to be particularly associated with the beach ridge and swale complex in Saint Clair County.

Northern White-cedar or Arbor Vitae – *Thuja occidentalis* is not rare, but it is characteristic of the beach ridge and swale complex in Saint Clair County, and occurs in few other areas of southeast Michigan, limited primarily to relatively undisturbed muck swamps, lake and stream margins, and deep shaded ravines. The few Arbor Vitae remaining in the beach ridge and swale complex are remnant of the original that covered much of this landscape a few hundred years ago prior to European-American settlement and important to retain for restoration of the plant community and value to wildlife. The regeneration of Arbor Vitae is now severely limited due to over-grazing by Eastern White-tailed Deer.



Arbor Vitae
Fort Gratiot County Park

The coastal forest is vital for migratory birds that move and nest along Lake Huron. Recent species observations provided by the local Blue Water Audubon Society for the beach ridge and swale habitat of Saint Clair County include American Redstart, Bald Eagle (Michigan Special Concern), Barred Owl, Bay-breasted Warbler, Black-and-white Warbler, Blackburnian Warbler, Blackpoll Warbler, Black-throated Blue Warbler, Black-throated Green Warbler, Blue-gray Gnatcatcher, Blue-headed Vireo, Blue-winged Warbler, Boreal Owl, Canada Warbler, Cape May Warbler, Cerulean Warbler (Michigan Threatened), Chestnut-sided Warbler, Common Nighthawk (Michigan Special Concern), Common Yellowthroat, Connecticut Warbler, Cooper's Hawk, Eastern Towhee, Eastern Wood-Pewee, Golden-crowned Kinglet, Golden-winged Warbler, Gray-cheeked Thrush, Hairy Woodpecker, Hermit Thrush, Hooded Warbler (Michigan Special Concern), Indigo Bunting, Kentucky Warbler, Least Flycatcher, Louisiana Waterthrush (Michigan Threatened), Magnolia Warbler, Merlin (Michigan Threatened), Mourning Warbler, Nashville Warbler, Northern Goshawk (Michigan Special Concern), Northern Parula, Northern Saw-Whet Owl, Olive-sided Flycatcher, Ovenbird, Palm Warbler, Philadelphia Vireo, Pileated Woodpecker, Pine

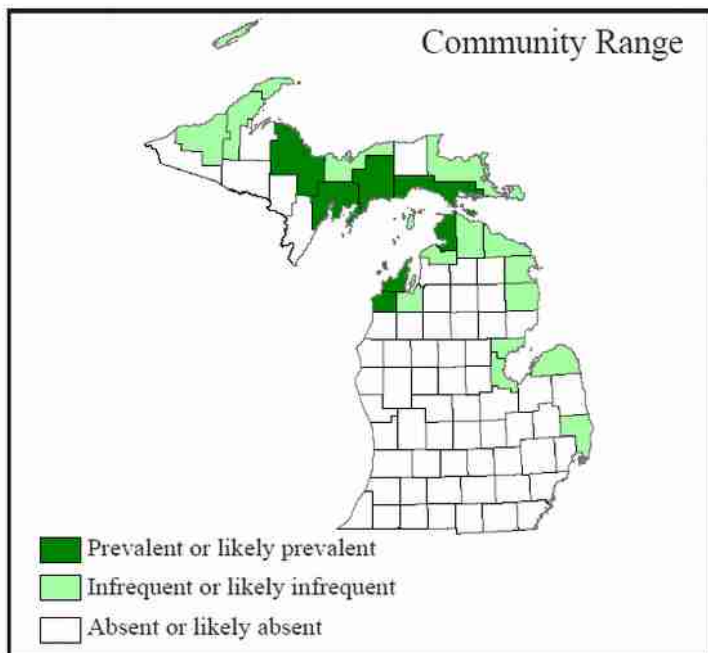


Magnolia Warbler
Shorewood Forrest Preserve, Fort Gratiot

Grosbeak, Pine Siskin, Pine Warbler, Red-bellied Woodpecker, Red-breasted Nuthatch, Red-eyed Vireo, Red-shouldered Hawk (Michigan Threatened), Rose-breasted Grosbeak, Ruby-crowned Kinglet, Scarlet Tanager, Sharp-shinned Hawk, Swainson's Thrush, Tennessee Warbler, Tufted Titmouse, Veery, Whip-poor-will (Michigan Special Concern), White-breasted Nuthatch, White-winged Crossbill, Wilson's Warbler, Wood Thrush, Yellow Warbler, Yellow-bellied Sapsucker, Yellow-billed Cuckoo, Yellow-rumped Warbler, and Yellow-throated Vireo.

The beach ridge and swale landscape complex is very limited geographically, occurring only along the Great Lakes and originally covering only about 1% of Saint Clair County, and even less of the Thumb region as a whole. The landscape complex in Saint Clair County is the only significant occurrence remaining from Ohio to Saginaw Bay. Very little of this unique shoreline community remains intact, due largely to construction of State Highway M-25 and subsequent development along this corridor.

The Michigan Natural Features Inventory (MNFI) considers Great Lakes wooded dune (or beach



ridge) and swale complex as a distinct natural community in Michigan because of the unique assemblage of physiographic, soil, and vegetative components that provide high quality habitat for numerous shoreline species. The MNFI ranks the Great Lakes complex as a rare to uncommon community both statewide and globally. There are landscapes of similar geologic origin along oceans and seas, but plant and animal communities of the Great Lakes complex are unique, and much of the Great Lakes landscape has been destroyed by development and hydrology alterations.

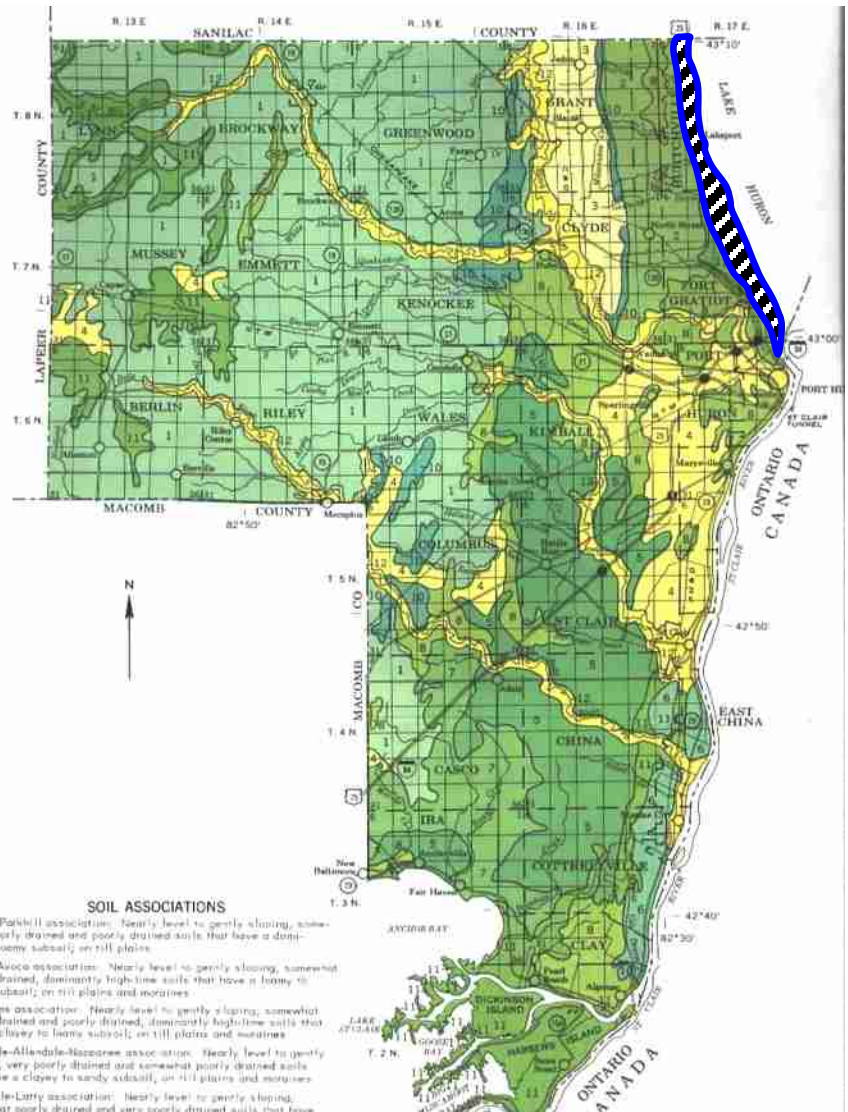
The primary soil type of the beach ridge and swale landscape in Saint Clair County is Wainola-Tobico complex. About half of this soil complex is somewhat poorly drained Wainola fine sand forming the upland beach ridges. The other half is very

poorly drained Tobico mucky fine sand and pure muck in the wetland swales between the ridges. The Tobico mucky fine sand portion of the complex is a hydric soil. This soil complex is restricted in Saint Clair County to a narrow strip along Lake Huron in Fort Gratiot and Burtchville Townships, covering only about 0.7% of the county in 1970 when soil survey data was compiled.

Today, significantly less of this unique shoreline community remains intact. What remains of the landscape in Fort Gratiot and Burtchville is the only significant occurrence from Ohio up to the tip of the Thumb where there is a similar formation at Port Crescent State Park and Sleeper State Park, and along other parts of Saginaw Bay. In Saint Clair County, the sand ridges average about 3 to 4 feet above the adjoining swales. The largest and oldest beach ridge runs continuously along the western limit of the landscape, furthest inland from Lake Huron. Although much of it has been mined out, this big sand ridge is still intact through Lakeside Cemetery and into Port Huron near the Blue Water Bridges where it is over 500 feet wide and up to 15 feet high. The largest relatively intact portion of the complex in Saint Clair County is now limited to an approximately 4-mile long strip of forest tracts averaging about one-quarter mile wide. It is critical to protect and restore what remains before it becomes less of a coastal ecosystem and more a patchwork of unsustainable remnants.

The most imminent and devastating threat to the beach ridge and swale complex in Saint Clair County is development, or land clearing and grading as speculative preparation for development. Some landowners have cleared large areas of forest with the misguided intent of drying-up wetlands. Others have graded upland sand ridges into the adjacent wetland swales. Forest clearing and wetland filling not only destroys the immediate impact area, but degrades the beach ridge and swale complex as a whole by fragmenting the forest, altering the hydrology, and disrupting ecological functions of the community inherent in its natural linear connectivity, such as a migratory bird corridor. An increasing threat to the entire beach ridge and swale complex is sand mining. Trucking costs will always make local sand sources more desirable to contractors. Other significant ongoing threats to the beach ridge and swale complex include invasive plant species expansion, overgrazing by Eastern White-tailed Deer, loss of forest canopy due to the Emerald Ash Borer, continued degradation of the plant and animal community due to decreased forest cover, and incursions by off-road vehicles.

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



Tranquil Ridge Sanctuary

0.446 Acre, Dryden Township, Lapeer County

Acquisition Date: 2021 April 09

Parcel 44-007-032-036-00, 0.255 acre, and Parcel 44-007-033-013-00, 0.191 acre: Part of the Southeast ¼ of Section 32 and part of the Southwest ¼ of Section 33, Town 6 North, Range 11 East, Dryden Township, Lapeer County, State of Michigan, described as: Commencing at the Southeast Corner of said Section 32 (Southwest of Section 33); thence N.03°47'11"E., 492.86 feet (500.0 feet record) along the East line of said Section 32 (West line of Section 33) to the Point of Beginning (said point is marked with a ½" iron rod cap #47200); thence N.89°59'00"W., 76.88 feet (47.0 feet record) to set iron bar cap #47200; thence N.41°02'15"W., 81.04 feet (N.41°45'00"W., 80.5 feet) to a found 2" dia. rod; thence N.00°12'00"E., 34.00 feet (Due North record) to found square bar; thence N.89°43'30"E., 136.31 feet (N.89°43'00"E. record) to the East line of said Section 32 (said point is marked with a ½" iron rod cap #47200); thence continuing N.89°43'30"E., 97.89 feet (N.89°43'00"E. record) to the approximate centerline of Lake George Road; thence along said approximate centerline, S16°37'20"W., 100.50 feet (S15°30'00"W., 100.0 feet record); thence S89°59'00"W., 75.48 feet (87.5 feet record) to the Point of Beginning and containing 0.446 acres.

On April 09, 2021, the TLC purchased the 0.446-acre Tranquil Ridge Sanctuary located along Lake George Road near the Oakland County border in Dryden Township, Lapeer County. The Sanctuary is located on top of a narrow ridge along the east edge of a huge forested valley, nearly 1 mile across and 2 miles long, with a series of lakes and wetlands at the bottom. This impressive ice-contact landscape formed as retreating glaciers left massive ice fragments across the interlobate region. These large ice blocks, surrounded by outwash deposits, melted away, leaving steep embankments around a depressions full of meltwater known as a kettle lakes.

The plant community on the Tranquil Ridge Sanctuary is basically dry-mesic forest of Black Oak, White Oak, Black Cherry, Big-tooth Aspen, Black Locust, and Sassafras. Black Locust trees are apparently native to south-central North America but invasive in Michigan. Although the Sanctuary is located in a relatively untouched natural area, there was an old cottage on the adjacent property years ago. Limited soil disturbance allowed invasive plants like Black Locust, honeysuckle, and privet to spread onto what would become the Sanctuary.

The new preserve came with some old junk from an adjacent cottage that was demolished years ago. The TLC removed most of this on a few work days in 2021. We were told that the Sanctuary was once part of an old music camp, but this interesting history is yet to be confirmed.

Although the Tranquil Ridge Sanctuary is a very small property, it is part of a much larger natural area, largely covered by mature oak forest. Not only is it an interesting and uncommon glacial landscape in Michigan, but it is very scenic and largely undeveloped and forested due to the extreme slopes. Future development of the area is most likely to be limited to very disperse single-family residences. For now, you can sit on one of the boulders on top of the ridge and look out over the valley with Brooks Lake shining below and feel the solitude.



View southwest from Tranquil Ridge Sanctuary of Brooks Lake.



View south from Tranquil Ridge Sanctuary of Lake George Road.

Full Circle Sanctuary

8.5 Acres, Kimball Township, Saint Clair County

Acquisition Date: 2022 August 11

Parcel 74-25-008-1006-000: East 35 rods of that part of the Northwest ¼ Lying North of the Grand Trunk Railroad right-of-way and containing 8.50 acres in Section 8, T6N R16E

The Full Circle Sanctuary is 8.5 acres of forest at the southwest corner of Flinchbaugh Road and Barth Road in Kimball Township, Saint Clair County. The sanctuary is completely forested and located in an area of well-documented Painted Trillium occurrence, a Michigan Endangered wildflower that is now recorded only from Saint Clair County in all of Michigan.

The Full Circle Sanctuary is named in honor of the Full Circle EcoHouse of Prayer in Port Huron and the continuing work of Sisters Veronica Blake and Concepción González, well-known members of the Blue Water area environmental community.



Full Circle Sanctuary at the southwest corner of Flinchbaugh Road and Barth Road in Kimball Township.



There are lots of mature oak trees on the Full Circle Sanctuary. Shown here, from front to back, appear to be Black Oak, Red Oak, and White Oak. Photograph by TLC Executive Director Bill Collins.



There is extensive wetland on the Full Circle Sanctuary. Shown here are small Tussock Sedge hummocks, the dark brown spore fronds of Sensitive Fern, and large Silver and Red Maple in the background. Photograph by TLC Executive Director Bill Collins.

Sister Veronica and Sister Concepción are members of the United States Region of the Sisters of Mary Reparatrix, an international religious congregation. Since its founding in France in 1857, the Sisters of Mary Reparatrix have been dedicated to repairing fractured relationships among humans

and with God. In the second half of the 20th century, global environmental crises caused them to also focus on the need for humans to repair their relationship to the Earth.



The Sisters, left to right, Sister Veronica Blake and Sister Concepción González of Full Circle EcoHouse of Prayer.

Veronica and Concepción came to Port Huron in 1987. Veronica is from Manhattan, New York City. Concepción was originally from Camaguey, Cuba, and had served in Peru and Colombia previously. In 1990, they established the Full Circle House of Prayer in Port Huron's South Park, where they began offering spiritual retreats and workshops. Soon after, the Sisters started SWAMP, Savers of Wetlands and Marshy Places, for youngsters eight to twelve years old. Monthly gatherings, field trips and projects helped the children mature into adults who care about Earth and its ecosystems. Over the years since, they have focused more and more on the integrity of *all* Creation. They acquired a second house in Port Huron, naming it the Full Circle EcoHouse, and they have interacted with and supported many other local environmental groups. For more information about the Full Circle EcoHouse of Prayer and the Sisters of Mary Reparatrix, visit their web sites at:

Full Circle EcoHouse of Prayer: FullCircleRetreat.org

Sisters of Mary Reparatrix: <https://smr.org/en>

Sisters of Mary Reparatrix USA: <http://www.maryrep.org/>

The following is a personal history written by Sister Concepción González:

Sister Veronica Blake and I, Sister Concepción González, came to Port Huron in the summer of 1987. We had worked in parishes in central Texas for three years. The people were wonderful. At same time, we felt very far from our Religious Sisters so we began looking for a place closer to them where we could be of service. The diocese of Detroit was advertising an opening for an "Hispanic Outreach

Minister” in Our Lady of Guadalupe Mission in Port Huron. I applied for the job and received an invitation to come for an interview. Neither of us had ever been to Port Huron but at that time we had a large community in Detroit.

After the interview in May with the priest and Parish Council, I was happy, and they appeared to be happy. A few days later I received a letter offering me the job. At the beginning of July, we arrived in Port Huron driving a small U-Haul, plus Raggles our cat with car in tow.

Both of us were very aware of the rapid deterioration of ecosystems. We had learned that chickens spent their short lives in minuscule holdings where they could not even turn around. We knew that if beef consumption was reduced more grain would be available to people facing malnutrition. When Veronica told her brother we were moving to Port Huron, his first words were: *“Be careful, the fish of the Great Lakes are covered in tumors and cannot be eaten!”* It was the famine in Ethiopia in the late 80’s that caused us to make the final decision to become vegetarians. It was our small way of responding to the damage humans were doing to earth and all its dwellers.

A couple of years later Veronica, who had been working at Catholic Social Services as an Older Adults Counselor, began her master’s degree in Social Ecology at Goddard University in Vermont. Both of us made multiple trips to Port Burwell, Ontario where the Redemptorists had a retreat house on the shore of Lake Erie with a wonderful library rich in books on ecology. There we met Thomas Berry, one of the first North American Catholic theologians who highlighted the connection between environment, faith, theology, and everyday Christian living. As a result of all this we realized that we were being called to a new ministry. A ministry focused on raising consciousness about and responsiveness to the environmental needs of our time.

We are members of the Congregation of the Sisters of Mary Reparatrix, founded in Strasbourg, France in 1857. Traditionally, our sisters have been engaged in ministries like spiritual accompaniment, guiding persons on retreats, and living and serving among the poor and marginalized in the Americas, Africa, and Europe. We seek to “Manifest the tender love of God everywhere and always.”

Given all we had learned about the crises Earth was facing, we realized that we sisters were being called to help repair the damage done to the planet. We took time to think, pray, and to draw up a proposal to present to our sisters in the U.S so that we could begin our new venture, one in which we hoped to help heal Earth’s suffering. After a bit of time, it was approved. Our US Region bought a simple house on South Boulevard in Port Huron which had room for gathering, and two extra bedrooms where people could stay overnight for up to seven days spent in reflection and conversation. We named it “Full Circle EcoHouse of Prayer.” It opened in 1991. In 2001 the Region bought the house next door to provide more space for classes, workshops, and extended retreats. We never kept count of how many people of all ages and diverse backgrounds participated in and offered programs. *We know that we met the best people ever!* Including some children 8-12 years of age who formed S.W.A.M.P, Savers of Wetlands and Marshy Places, which continued for many years. Like many young people today, they are the ones who will safeguard Earth for the coming years.

In 2018, our group of sisters in the United States began planning for our future. During that process we realized that we cannot cling to the past as much as we might love it. As a result, we moved to a small house where we and others continue to offer spiritual direction and workshops related to ecology. We study and learn from new theologians, scientists, poets, etc. to expand our horizons. We hope that the Bioregion Reparation Fund our Region began in 2018 through the Community Foundation of St. Clair County will continue our work and do much to help sustain the beautiful watersheds of our area.

Veronica Blake, S.M.R. was born and raised in New York City, Veronica worked as an RN for two years before becoming a religious sister. Since then, she has served in New York, Ohio, Texas and Michigan in a variety of ways. A master’s degree in Social Ecology and ministry at Full Circle have allowed her to contribute to sustaining this beautiful spot of Earth.

Concepcion Gonzalez, S.M.R. was born in Camaguey, Cuba. In March 1961, she left Cuba to visit family, but because of the invasion of the Bay of Pigs, she was unable to return and so spent several months in Miami. In August she traveled to Colombia to join the novitiate of my congregation. She lived for several years in Colombia, Spain, Peru, France, and finally came back to the U.S. in 1987. Concepcion has a bachelor's degree in Pastoral Theology.

Charles Dodge Sanctuary

2.78 Acres, Clyde Township, Saint Clair County

Acquisition Date: 2022 August 11

Parcel 74-15-021-4016-000: North 3 acres of the East 1/2 of the East 1/2 of the West 1/2 of the Southwest 1/4 of the Southwest 1/4, excepting the east 12 feet thereof. 2.78 acres in Section 21, T7N R16E

The 2.78-acre preserve is located north of Bryce Road in Clyde Township, Saint Clair County, formerly part of the Port Huron State Game Area. The preserve is all forested and located in a known Painted Trillium area, only several hundred feet west of our Bob Putze conservation easement and about a half mile north of the Michigan Nature Association Mary Stallins Ray Memorial Plant Preserve. There is still a lot of State land in the vicinity, all part of the PHSGA, but all at risk of expanding development and other land-use.



The Charles Dodge Sanctuary, 2.78 acres north of Bryce Road in Clyde Township, outlined in yellow.

Although this preserve is just a very small piece of the Black River valley, the TLC thought it appropriate to honor Port Huron botanist Charles K. Dodge, who over a century ago, advocated for protection of the valley as a nature reserve. Maybe this small preserve will lead to a bigger preserve but every piece of nature is now important.

Charles Keene Dodge was born on April 26, 1844 north of Jackson, Michigan and grew up on a nearby farm. Attending the University of Michigan, he had a botany course, required for both classical and scientific studies back when nature was still a foundation of basic higher education.



Botanist Charles Keene Dodge in 1917, the last year of his life.

After graduating in 1870, he taught for four years in the Upper Peninsula, then worked for the law firm of Hubbell and Chadbourne in Houghton, and admitted to the bar in 1875. Dodge moved back south to Port Huron to start his own law practice, impressed by the prosperity of the city. But the depression of 1876-77 gave him a tough time as an unestablished young lawyer of "*average ability*" as he humbly described himself. In his own words, he was "... *lucky to get a five dollar case with a thief for a client*".

About this time, his interest in botany blossomed. Dodge wrote, "*Without any apparent mental effort I took to botany and was never able to let it alone. Everything described within the limits of Gray's Manual [then the leading floral guide for our region] interested me. Woods, trees, fields, all formed an irresistible attraction.*" Dodge's own copy of Gray's Manual is kept at the University of Michigan Herbarium. He consecutively numbered every species in the manual, intent on collecting them all as herbarium specimens; pressed plants mounted on paper with labels indicating the species and location.

Dodge later told Cecil Billington, the curator of the Michigan State University Herbarium, "... *how at first, he would go to the woods or fields, bringing in a few plants carefully hidden under his coat so that his friends and neighbors could not see them. They nicknamed him 'Posy' Dodge, which name he did not relish and tried to avoid occasion for its use as much as possible. However, this feeling gradually wore off, and Mr. Dodge, carrying his much-battered vasculum [specimen case], was a familiar figure on the streets of Port Huron, particularly those streets leading to the country.*"

He preferred to travel on bicycle, rather than horse and buggy. Apparently, this was somewhat unusual at the time, but allowed him to cover a large territory. Dodge wrote an article for the Asa Gray Bulletin in 1896 entitled, *The Bicycle and Botany*.

By 1880, Dodge was the City Attorney of Port Huron. He later served as a Circuit Court Commissioner for two terms, another year as the City Attorney, and one year as the City Controller.

In 1893, Dodge was appointed Deputy Collector of the United States Customs Office in Port Huron, and largely retired from legal practice, which afforded him much more time for botany. This same year, he tossed nearly his entire herbarium collection out the back window of his house, dissatisfied with his work. His ambition was then to collect the entire flora of North America. This was about two years after he returned from a two-year stay in the American west. He soon realized that the task was too huge and decided to concentrate on Michigan and adjacent areas. He eventually collected about 40,000 specimens, now held by the University of Michigan Herbarium.

In 1897, at the age of 53, Charles married Millie Burns. They lived at 2805 Gratiot Avenue in Port Huron, a few blocks north of the present Blue Water Bridges. The modest two-story wood-frame house is still there, and in their time was a "... *pretty, quiet home with ample grounds of about four and one-half acres, garden, fruit trees and opportunities for botanical experiments*".

In 1900 Dodge published *Flora of St. Clair County, Michigan and the Western Part of Lambton County, Ontario*. In the preface he wrote, "*For the last twenty-two years, as spare time would permit, I have been interested in studying and identifying the plants of this locality, including only flowering plants, ferns, and their allies. Outdoor recreation being with me a necessity as well as a great pleasure, and desiring to have an object in view in my various wanderings on the wheel, at the suggestion of a friend, about six years ago, I undertook to find and examine, during my leisure hours, all the plants referred to, growing wild in [the region].*" His primary interest became "... *finding out what grows wild in Michigan*", and he often expressed his wish to live long enough to survey the entire State.

Dodge was particularly drawn to native trees. From 1901 to 1909 he studied the complex hawthorn genus *Crataegus* throughout Michigan, especially around Port Huron and Sarnia. Partly due to his work, the type specimens, the basis for species descriptions, of 52 hawthorn species were collected from Michigan, several in Saint Clair County. Dodge even has a hawthorn species named for him, *Crataegus dodgei*.

Edward Voss, well known author of the three-volume *Michigan Flora* among other publications, mentions Dodge in his book, *Botanical Beachcombers and Explorers*, an excellent history of 19th Century botany in the Great Lakes region. Voss said Dodge was "... *a collector who was particularly obsessed with citing his home town almost every time he used his name. I have seen labels on which he did it three times, but usually it was printed neatly twice ...*".

Dodge was often at odds with "... *interests in Port Huron which sought to destroy in a measure the beauty of his home city*". In 1911, Dodge wrote the Flora of the County section of *History of St. Clair County* by William Jenks, and took this opportunity to lament the loss of native habitat in the area even then. Dodge wrote, "*It seems to the writer it has been established beyond cavil that a country cannot be stripped of its trees, shrubs, and herbaceous plants without the greatest danger to its welfare. It is a matter about which, in this country, there is widespread and almost universal popular ignorance and unpardonable apathy.*"

In the same publication, Dodge proposed the creation of a large "... *public reservation of 3,000 or 4,000 acres in one piece for St. Clair county*" to preserve native flora and fauna of the region. He wrote, "*The very best place for such a proposed reservation in this county is in the township of Clyde where Mill creek joins Black river*". This is the present location of the Port Huron State Game Area.

Starting in 1908, at 64, Dodge made many expeditions through the Upper Peninsula with the Michigan Geological and Biological Survey. He explored the western shoreline of Lake Huron from Bay City to Saint Ignace, and was very familiar with the Thumb. His observations of Tuscola County and other regions were published by the Geological Survey in 1920. In 1917, his final year of life, at 73, he began investigating the flora of Berrien County.

Cecil Billington accompanied Dodge on some of his later excursions, and wrote, "... *Mr. Dodge could hold his own on a tramp with most of the younger men of a party ... work far into the night putting up his specimens for drying, and seemingly be as fresh as ever for the next [day]*".

Dodge was a kind and generous man, often making long excursions with beginning botanists through territory he knew would provide no new plant species for himself. He left nearly a complete set of the roughly 3,000 species he knew to grow wild in the region to the Port Huron Academy of Science for "... *those who care to know anything about the plants of their vicinity.*"

TLC Conservation Easements

Bob Putze Preserve

The Bob Putze Preserve is the first residential landowner conservation easement agreement for the TLC. The conservation easement adjoins the Port Huron State Game Area along the west side of Abbottsford Road; a very nice northern forest community with lots of Eastern White Pine, and tall Red Pines that Bob Putze planted in 1964. Edge species like Big-tooth Aspen and planted spruce are gradually dying off in the increasing shade, while shade-tolerant American Beech and Sugar Maple are colonizing the understory, a natural process known as forest succession which leads to a mature native forest community. The ground-level vegetation is diverse and of good native quality with the usual species of cool sandy soils in the Port Huron area including at least three species of clubmoss, a distant cousin of ferns, along with Canada Mayflower, Wintergreen, and Low Sweet Blueberry. A small area of wetland is covered by Royal Fern with Michigan Holly shrubs. Bob Putze's forest is potential habitat for Michigan Endangered Painted Trillium, a rare species now known only from Saint Clair in all of Michigan, and occurring within a mile of Bob's land.

Bob Putze is a very conscientious and reverent man who loves God's creation and cares for every animal that ventures onto his land. Bob feeds them all, including deer, turkeys, rabbits, raccoons, opossums, and stray cats. Even Pileated Woodpeckers come to his suet feeder, and Flying Squirrels live in a nest box by his driveway. Bob has always felt a spiritual connection to his land. For years, he wanted to ensure that the woods would remain natural and undeveloped after he is gone. The conservation easement signed with the Thumb Land Conservancy in March of 2017 provides the legal basis for that protection in perpetuity.



The Bob Putze Preserve conservation easement site.



Canada Mayflower, Ground-cedar (clubmoss), and Red Maple seedling.



Typical forest understory.



Typical forest understory.



Overstory of planted Red Pine.



Typical forest understory.



One of Bob's signs.

The Bob Putze Preserve is characteristic of the drier and more northerly forest remaining in the region. In the Port Huron area, northern forest complex is a second-growth woodland complex of mesic to dry-mesic northern forest, dry-mesic southern forest, hardwood-conifer swamp, and southern hardwood swamp on sandy soils extending across large parts of Kimball, Clyde, and Port Huron Townships. The vegetation of this complex is a unique blend of northern and southern flora, skewed largely toward northern species. This generally northern community complex covers a broad and flat landscape of coarse to fine sands deposited across the glacial lakeplain, the dominant cover being swamp forest. Smaller upland sand ridges are typically scattered throughout the complex, deposited in glacial drainageways or as glacial lake beaches and inland dunes.

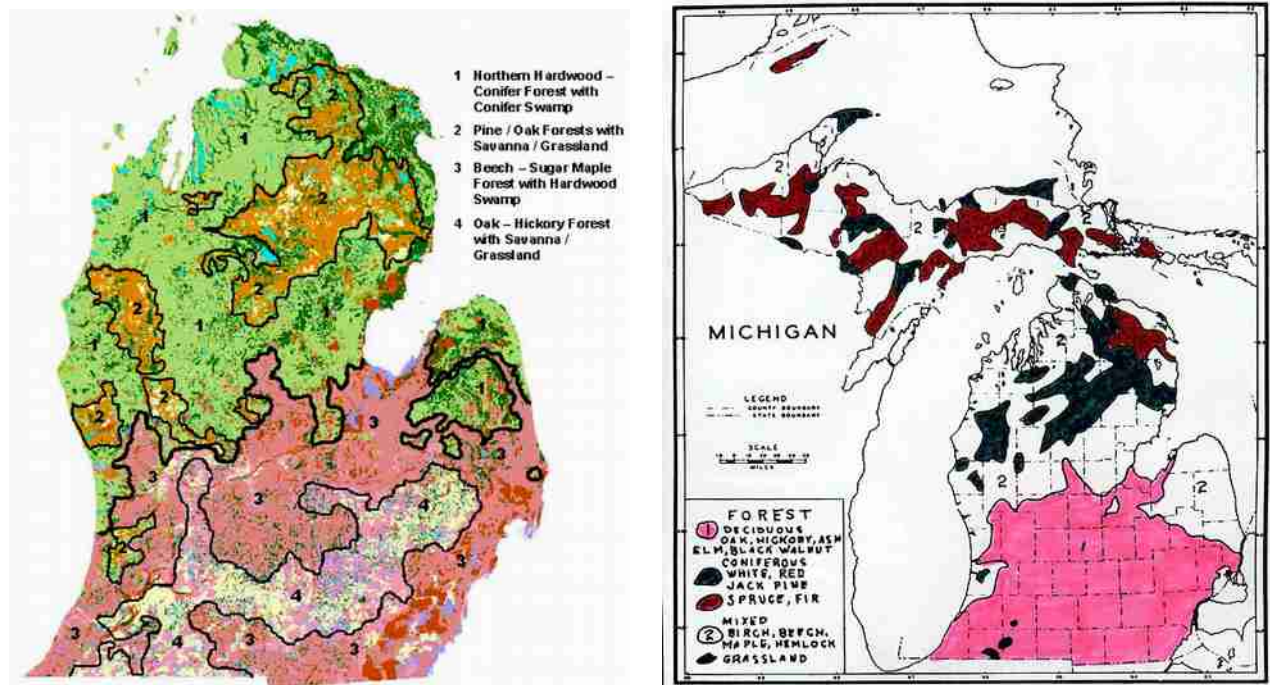


Bob Putze standing by one of the Red Pines he planted in 1964.



Bob Putze and Michigan Holly he transplanted to his yard.

Northern forest communities occur almost exclusively north of the “tension zone” or “transition zone”, a rough division of northern and southern flora in the northeastern United States, extending from Maine through Minnesota and dividing the lower peninsula of Michigan roughly in half. North of the transition zone, conifer trees are a major component of the forest along with broad-leaved hardwood trees. South of the transition zone, conifers are largely absent. The combination of climate and soils north of the transition zone favors northern vegetation, and south of the zone favors southern vegetation. In Michigan, the transition zone is broad, roughly 100 miles wide in some areas, running from near Muskegon on Lake Michigan, to the Saginaw Bay and across the northern tip of the Thumb. Some consider the transition zone to extend down through the lower part of the Thumb, but most restrict it to northern Huron County. Although there is some disagreement as to the precise location and extent of the transition zone, it is certain that many northern plant species reach their southern range limit there, and conversely, many southern plant species reach their northern limits. Regardless, the occurrence of large northern plant communities south of Saginaw Bay is unusual. The primary factor in the southern extension of northern flora in the Thumb is the cooler growing season near Lake Huron. Northern vegetation extends down from Huron County in a narrow coastal zone through Sanilac County, spreading out to the south and west over the low, flat, wet sands of Saint Clair County on the glacial lakeplain.. Other factors include extensive sand soils, a generally high water table perched above a shallow layer of lakeplain clay, and the historic influence of fire.



Northern and southern floristic zones in Michigan.

Several rare or uncommon plant species occur almost exclusively in this northern forest complex in Saint Clair County. The complex contains all of the currently known and extant populations of Michigan Endangered Painted Trillium – *Trillium undulatum* in Michigan. Michigan Threatened Northern Prostrate Clubmoss - *Lycopodiella margueritae* was recorded from the area in 2002 but now its occurrence is apparently questionable due to a recent change in the taxonomic status of the species. Other uncommon plants that may be found in the complex include Creeping Rattlesnake Plantain - *Goodyera repens*, Downy Rattlesnake Plantain - *Goodyera pubescens*, Tesselated Rattlesnake Plantain - *Goodyera tessellata*, Trailing-arbutus - *Epigaea repens*, Pink Lady-slipper orchid - *Cypripedium acaule*, and Showy Orchis - *Galearis spectabilis*.

Koester Preserve

The 79.4-acre Koester Conservation Easement in Fort Gratiot Township, Saint Clair County, was established on April 4, 2020 and protects one of the larger forest tracts remaining in the township. The property is located along the south side of Keewahdin Road and Pine Grove Avenue, extending south one-half mile. The land owners, Darrin and Kim Koester, constructed their residence on 5 acres in the north end of the parcel. The conservation easement allowed the Koester's to afford the property taxes on this large parcel, which had not been sold for many years. Upon sale, the property taxes would have increased significantly and made the land unaffordable for the Koester's as a residence.



The Koester Preserve includes a large area of relatively mature, non-fragmented southern swamp and hardwood-conifer swamp forest complex on seasonally inundated to moist sands with scattered upland knolls. Wetland vegetation includes Silver Maple, Green Ash, American Elm, Eastern Cottonwood, Bur Oak, Swamp White Oak, American Hornbeam, Spicebush, Dwarf Raspberry, Spotted Touch-me-not, False Nettle, Clearweed, Marsh-marigold, Sensitive Fern, Royal Fern, Spinulose Woodfern, Fowl Manna Grass, Lake Sedge, and Tussock Sedge. Upland vegetation includes Red Oak, Black Oak, White Oak, American Beech, Basswood, Sugar Maple, Red Maple, Tulip Tree, Sassafras, Serviceberry, Witch-hazel, Jack-in-the-pulpit, White Avens, Solomon-seal, Wild Geranium, and Yellow trout-lily. Many of the native forest plant species are typically of a more northern distribution in Michigan, including Paper Birch, Eastern White Pine, Eastern Hemlock, Speckled Alder, Black Chokeberry, Meadowsweet, Low Sweet Blueberry, Dwarf Raspberry, Wintergreen, Goldthread, Canada Mayflower, Wild Sarsaparilla, Foamflower, Wood Anemone, Bracken Fern, Royal Fern, Northern Lady Fern, Ground-pine, and Ground-cedar. Likewise, there are species that are typically more southern, including Black Oak, Sassafras, Tulip Tree, and Spicebush. This sort of southern-meets-northern forest is characteristic of the Blue Water Area, a transitional vegetative region where nearby Lake Huron maintains cooler summers and warmer winters.



View across the south end of the Koester Conservation Easement.

The south end of the parcel was partially logged in recent years but tree removal appears to have been limited largely to dead ash. The logging left a lot of deep tire ruts in the south end, but the forest plant community is still intact.

The Koester's developed their residence on land that was cleared decades ago and covered by planted pines along with very common or weedy species such as Apple, Black Cherry, hawthorn, Gray Dogwood, Autumn-olive, Common Buckthorn, Tartarian Honeysuckle, Common Blackberry, Late Goldenrod, Panicked Aster, and grasses. Portions of this area have so many apple trees, it appears

there may have once been a small orchard here. The TLC assisted the Koester's in avoiding regulated wetland impacts, optimize the conservation easement boundaries, identify invasive shrubs such as buckthorn and honeysuckle, plan and control methods. The TLC will also assist them with management of the conservation easement in the future to improve the native forest community.

TLC Stewardship Sites

12.35-Acre Deerfield Wind Energy Preserve Huron Township, Huron County, Michigan 2016 to present

In late 2016, the TLC contracted with Algonquin Power Company of Oakville, Ontario, Canada to provide stewardship of their 12.35-acre Deerfield Wind Energy Preserve, about 4 miles west of Port Hope. The Deerfield Wind Energy Preserve was placed under a State conservation easement as mitigation for wetland impacts resulting from the nearby Deerfield Wind Energy turbine project. 1.235 acre of State-regulated forested wetland was permanently converted to open wetland for the purpose of clearing a 60-foot wide right-of-way for an electrical transmission line. The Michigan Department of Environmental Quality allows preservation of existing wetland, at a 10 to 1 ratio, as mitigation for permitted wetland impacts. As with the TLC Dead End Woods and Peltier Beach Ridge Sanctuaries in Fort Gratiot Township in Saint Clair County, the Deerfield Wind Energy preserve was placed under a State conservation easement as mitigation for permitted wetland impacts. The MDEQ now requires long-term stewardship on all mitigation sites, usually provided by land conservancies like the TLC.



Deerfield Wind Energy Preserve, shown in yellow boundaries.

Most of the Deerfield Wind Energy Preserve is southern swamp forest with species trending somewhat toward a northern community. Dominant vegetation includes Silver Maple, Black Ash saplings and seedlings, Sensitive Fern, Spinulose Woodfern, Wood Nettle, Clearweed, Lake Sedge, and other sedges. Small upland areas are dominated by Red Maple, Wild Black Cherry, American Basswood, and, unfortunately, Japanese Barberry. Uncommon native plant species include Foamflower, Swamp White Oak, Turtlehead, Woodreed Grass, Spicebush, Cardinal Flower, Round-leaved Pyrola, and Red Trillium. The preserve is part of one of the larger forest fragments remaining in the Thumb, almost continuous along tributaries of Willow Creek to Lake Huron. As such, it is not only important for the watershed, but as habitat for migratory birds. Those observed on the preserve include Wood Thrush, Veery, Eastern Wood-pewee, Evening Grosbeak, many American Redstart warblers, Common Yellowthroat warbler, Yellow Warbler, Black-capped Chickadee, Downy Woodpecker, and Catbird.



Swamp forest on the Deerfield Wind Energy Preserve, showing Pileated Woodpecker excavations on the dead tree at the right.

The most immediate stewardship issue on the Deerfield Wind Energy Preserve was determined to be a dense growth of invasive Japanese Barberry along roughly 600 feet of the east preserve boundary, extending about 100 feet west into the forest before decreasing to a few scattered shrubs. The barberry growth apparently exploded in the past few years as a result of forest clearing on the adjacent parcel east to expand a hay field. The clearing greatly increased the amount of light exposure in the remaining forest, shifting edge forest conditions at least another 100 feet west into the preserve.

The TLC proceeded with extensive manual clearing of the barberry in the fall of 2017, as opposed to herbicide application, after determining that native forest plants under and around the barberry would likely be eliminated by herbicide. These species include Foamflower, Turtlehead, Red Trillium, Round-leaved Pyrola, and Canada Mayflower. Deer ticks are known to concentrate in barberry, much of it head-high on the preserve, which could present a risk of Lyme Disease to stewards cutting or digging barberry in the summer. To minimize Lyme Disease risk and destruction of native woodland herbs, the TLC has limited most of our work to the fall, winter, and early spring. Starting in early September of

2016, the TLC began cutting barberry shrubs with hand loppers and a gas-powered weed whacker fitted with a 4-point steel brush blade. Over one acre of barberry has been cut along the east side of the preserve. In the early spring of 2018, the TLC will start burning the cut barberry stems with a large propane torch. Repeated for a few years, most of the barberry should eventually be killed. Others will be manually pulled or dug from the ground.



View south of Japanese Barberry along the east preserve boundary.

As with other stewardship sites, the TLC conducts species inventories, detailed measurements of vegetation in sampling plots across the preserve, general observation, and extensive photographic documentation as part of the annual monitoring required by the MDEQ. The TLC inspects all preserves annually to monitor conditions and identify potential stewardship issues. A detailed monitoring report is submitted to the MDEQ by the end of January each year.

18.5-Acre Super Kmart / Sam's Club Preserve Port Huron Township, Saint Clair County 2016 to present

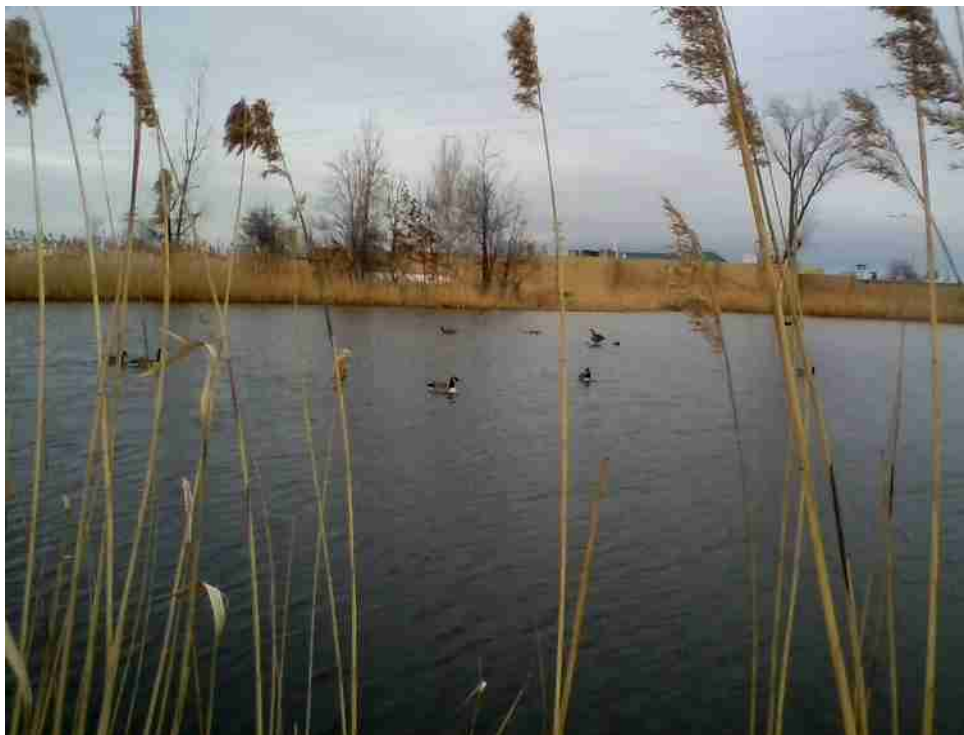
Starting in early 2016, the TLC has been assisting Port Huron Township in Saint Clair County with management of wetland and forest around the vacant Super Kmart and Sam's Club at the northeast corner of I-69 and 32nd Street. Wetland was constructed north and east of the stores, and natural swamp forest preserved, as mitigation for a wetland permit issued by the Michigan Department of Environmental quality back in 1992. In total, about 18.5 acres of wetland and forested upland is protected by a State of Michigan conservation easement. Management of the area has been lacking for years and became even more critical when the Super Kmart closed a few years ago.

TLC member and friend, Port Huron Township Fire Chief Craig Miller, has been a continued advocate for the preserve while working for a compromise allowing the Township better management of the area for public safety. In late 2016, County Sheriff deputies moved an encampment of about 15 young men living in tents and other shelters on the preserve to adequate housing elsewhere. They not only caused a lot of destruction on the preserve for years, but produced drugs and engaged in theft of local stores and customers. Relocating these men was key to gaining control of the preserve.



Super Kmart and Sam's Club preserves (areas 1, 2, and 3) in Port Huron Township.

The constructed wetland on the Super Kmart and Sam's Club preserve leaves a lot to be desired, being almost completely dominated by invasive Reed – *Phragmites australis*. The most striking part of the constructed wetland is a large pond east of the stores that is utilized by an abundance of waterfowl. In contrast, a large part of the preserve consists of the original native forest community with uncommon species like Blue-bead Lily, Fringed Polygala, Michigan Holly, Black Chokeberry, and a Scarlet Oak x Pin Oak hybrid particular to the Port Huron area. The TLC produced a detailed management plan for the preserve which has helped gain approval for management actions from the MDEQ while taking the sensitive natural features into consideration.



Canada Geese in the pond east of the stores, showing also the dominance of invasive Reed.



Left: Invasive Reed along north drive. Right: Litter north of stores before March 2016 clean-up.



Native forested wetland north of the stores. Despite surrounding impact, still a nice natural area.

In March and December of 2016, the TLC assisted a County community service crew with clean-ups, removing litter and materials left on the site by the young men that lived on the preserve. During unseasonably warm weather on February 26, the TLC assisted the Port Huron Township Fire Department in an attempt to burn the invasive Reed in the wetland east of the stores. Unfortunately, the air temperature was too low to sustain a good burn. However, based on a recent discussion with the Township Supervisor, another controlled burn should be attempted in the early spring of 2018 and the TLC will continue to assist the Township as we are able.

51-Acre Michigan Road Preserve Port Huron Township, Saint Clair County, Michigan 2011 to 2015

From 2011 through 2015, the TLC contracted with the Saint Clair County Drain Commissioner, Saint Clair County Road Commission and Pro-Tel Development to provide five years of annual monitoring and stewardship required by the Michigan Department of Environmental Quality as a condition of two wetland permits issued to the SCCRC and Pro-Tel Development. The SCCRC permit authorized impact of 0.57 acre of emergent marsh and 0.14 acre of shrub swamp wetland for the removal of the old Michigan Road crossing of the North Branch of Bunce Creek, and replacement of the crossing structure with a new bridge over the Canadian National Railway in Port Huron Township. The Pro-Tel Development permit authorized impact of 2.85 acres of wetland and relocation of 950 linear feet of the Read Drain for the purpose of commercial development at the southeast corner of Wadhams Road and Griswold Road in Kimball Township. In total, the MDEQ required preservation of 31.08 acres of existing natural wetland as mitigation for the permitted impacts. The SCCRC and Pro-Tel Development provided the required preservation on two adjacent parcels totaling just over 51 acres and the SCCDC subsequently accepted ownership of the land.



The TLC inspected the conservation easement site annually for five years, documented site conditions, identified management concerns, and performed stewardship activities according to the requirements of the MDEQ permits and management plans produced by the TLC. Annual monitoring and stewardship reports included detailed vegetation data from sampling plots, descriptions of ecological conditions, vegetative development, human and natural disturbance, litter and refuse dumping, invasive species control results, controlled burn effects, native plantings, ecological enhancement, easement sign conditions, potential safety hazards, adjoining land use, a summary of annual management and maintenance activities, and extensive on-site photographs. Monitoring reports also included comparisons of current site conditions to those of previous years, descriptions of changes observed, and evaluation of the effectiveness of long-term management actions.

The Michigan Road Preserve is just 51 acres of a much larger northern woodland complex on upland sand ridges and lower wetland east of Michigan Road, north of Dove Road and along the south side of the Canadian National Railroad. Sand ridges are relatively broad, a few hundred feet in width, appearing to be Rousseau fine sands. Adjacent lower and wetter soils are Wainola-Deford fine sands. Most of the preserve is typical of relatively young woodland in the Port Huron area, recovering over the past 70 to 90 years after much of the area was cleared for timber. The forest community is composed of northern species like Red Maple, Paper Birch, Wintergreen, Bracken Fern, Wild Sarsaparilla, and Canada Mayflower mixed with southern species like Black Oak and Smooth Highbush Blueberry. The central and eastern portions of the Michigan Road Preserve are covered by disturbed northern shrub swamp dominated by Tag Alder, Black Chokeberry, and Glossy Buckthorn, with Narrow-leaved Cat-tail and Reed in the lowest and more open areas.



Typical wetland and upland complex on the Michigan Road Preserve, showing tip-up mounds.

Despite clearing decades ago, the Michigan Road Preserve has retained many species characteristic of the vegetation that existed before European settlement. The composition of the forest community on the preserve, like much of the forest in the Port Huron area, is a diverse blend of northern and southern flora, being located at a southern extension of Michigan's Transition or Tension Zone along the Lake Huron coast, with a moderated climate.

The habitat across much of the Michigan Road Preserve appears well suited for Michigan Endangered Painted Trillium - *Trillium undulatum*, known from other sites nearby. Painted Trillium is one of nearly 40 species of trillium native to North America, about 10 of which are found in Michigan. Saint Clair County is an isolated outpost for Painted Trillium on the western edge of its range in North America, reflecting the Blue Water Area's unique natural history. Its primary range is the Appalachian Mountains at higher elevations on organic soils, in rhododendron and Mountain Laurel thickets or Red Spruce groves, but nowhere is it considered common. In Saint Clair County, Painted Trillium is recorded only from mesic northern forest, on moist sands. Its occurrence strongly coincides with the interface of Rousseau fine sand or Chelsea-Croswell sand ridges and the lower and wetter Wainola-Deford fine sands, such as on the Michigan Road Preserve. Plants are often found along the base of sand ridges, near wetland. Painted Trillium also shows a strong affinity for distinct and dense tip-up mounds like those on the Michigan Road Preserve. Painted Trillium was first documented in Saint Clair County around 1900 by botanist, attorney, and city controller of Port Huron, Charles K. Dodge.



Atop a large sand ridge in northeast of the Michigan Road Preserve.



Royal Fern and Tag Alder (stem left) on the west edge of the shrub swamp.

A few small patches of Marsh Saint John's-wort - *Triadenum fraseri* occur in the shrub swamp in the central part of the preserve. This is a northern species not often encountered in Saint Clair County, but more common in northern Michigan. Marsh Saint John's-wort is indicative of wet sandy soils, occurring in alder thickets, such as the Michigan Road Preserve, but also bogs and sedge meadows, suggesting it may be remnant of a more open, fire-maintained community.

Three invasive weeds are a management concern on the preserve, including Reed - *Phragmites australis*, Glossy Buckthorn – *Frangula alnus*, and Narrow-leaved Cat-tail - *Typha angustifolia*. Reed is limited to the open shrub swamp areas in the central and eastern parts of the preserve where it is mingled with Glossy Buckthorn, Black Chokeberry, and Tag Alder. Narrow-leaved Cat-tail covers far less area and is very limited, in only the few open patches in the north-central part of the preserve. Neither Reed nor Narrow-leaved cat-tail are spreading as they already occupy the full extent of open habitat on the preserve. Glossy Buckthorn, however, while fairly widespread across the open shrub swamp, is still spreading in the swamp forest. It is a co-dominant species of the forest understory across about a third of the preserve and is, by far, the greatest management concern.



Tangle of Black Chokeberry, Glossy Buckthorn, and Reed that dominates much of the shrub swamp on the preserve.

There appear to be few direct, recent human impacts on the Michigan Road Preserve. There are no trails on the preserve, being fairly well isolated by the North Branch of the Bunce Creek to the southwest, the Canadian National Railway to the north, and extensive forest to the east and south. Because wetland is so extensive in this area, there are few nearby residences, which is probably another factor in the lack of disturbance. Apparently for the same reasons, there is little refuse.

In the fall of 2011, land adjoining the west side of the preserve was completely cleared for the railroad crossing construction authorized by the same MDEQ permit that the Michigan Road Preserve provides wetland mitigation for. In response to the increased light, Glossy Buckthorn density and growth exploded along the west boundary of the preserve.

The adjacent forest clearing caused further degradation through yet more deforestation and by extending edge effects at least another 100 feet into the preserve. Forest quality is very dependent on maintaining large, unfragmented tracts that are less susceptible to invasion of edge and weed species. Large unfragmented forests are better able to maintain interior forest species, remnants of prehistoric populations that thrived prior to European settlement 150 to 200 years ago. The loss of adjacent forest made the preserve that much more unsustainable in the long term. With less forest, full sunlight extends further into the remaining forest, favoring weedy edge species over the remnant native flora. Wind-throw of mature trees from prevailing west winds will extend further into the preserve. Interior forest birds such as Wood Thrush are particularly vulnerable to nest invasion and territorial displacement by Cowbirds and other birds of open habitat and edge woodlands.

The TLC conducted several management activities on the Michigan Road Preserve to control invasive Glossy Buckthorn and to improve the native flora by reintroduction of a natural fire regime that characterized this type of forest community prior to European settlement. With the assistance of the Port Huron Township Fire Department, the TLC conducted two small controlled burns on 2014 April 12. Subsequent inspections of the preserve indicated that the burning was moderately effective in eliminating Glossy Buckthorn seedlings. Based on this, the TLC conducted a much larger burn on the preserve the following spring, on 2015 May 01. The burn was conducted without the PHTFD, but with new TLC intern, Alex Roland, from Saint Clair County Community College, her friend, Brook, and a few TLC board members. The natural fuel load (leaves and twigs) was greater and weather conditions were much more favorable that day to sustaining a good burn. The results of the burn were evaluated later in August, with the assistance of TLC interns Alex Roland, Jeff Hansen, and Nicole Barth, all students at SC4. An additional decrease in Glossy Buckthorn was observed, but with a significant increase in Black Cherry seedlings. Whether most of these seedlings would survive and eventually dominate the forest understory was uncertain. This could be a negative effect of burning, as well as our inability to burn Glossy Buckthorn in the lower and wetter portions of the wetland. A positive effect however, appeared to be increased density of fire-tolerant northern plant species, such as Bunchberry and Gay-wings, which would originally have likely been a larger component of the forest community before European settlement.



Port Huron Township Fire Department assisting with controlled burn on 2014 April 12.



Left to right, TLC President Cheryl Collins, TLC Stewardship Intern Alex Roland and her friend Brook at our 2015 May 01 burn.



Weather conditions and fuel load were very good for our 2015 May 01 burn.



TLC Intern Jeff Hansen collecting vegetation data during 2015 August 12 monitoring.



Bunchberry and Gay-wings in burned area.

TLC Mission

TLC Territory

The Thumb Land Conservancy is working to preserve natural areas in the Thumb of Michigan, a post-glacial landscape where northern forest blends with central hardwoods, bordered by Lake Huron, the Saginaw Bay, the Saint Clair River, and Lake Saint Clair. The mission territory of the TLC is Saint Clair, Sanilac, Huron, Tuscola, Lapeer, and Macomb Counties, but we can also work in adjacent areas as opportunities arise. The TLC will seek to work with local partners where our service territory overlaps that of other conservancies and similar organizations.



TLC Purpose and History

The Thumb Land Conservancy was formed in 2008 to provide an organization dedicated to filling the gap of nature preservation in Michigan's Thumb. Although much attention has been given to a few areas near Lake Saint Clair, the Thumb has been largely ignored. In recent years, we are happy to see that some new lands have been preserved, but so much remains unprotected.

There is a popular misconception that little is worth saving north of Detroit because of urban development and agriculture. While much of the landscape has been drastically altered, many high quality natural areas remain. A few places are nearly pristine, resembling conditions that existed before European settlement about 200 years ago.

The extensive destruction of natural areas in the Thumb makes preservation even more critical. Small, degraded fragments can be restored and expanded, and often serve as isolated havens for rare plant species. We believe all natural landscapes are important locally because they reflect a unique combination of history and features particular to that location. Many benefits of nature are obtained and enjoyed only locally. We believe it is especially important for children to have natural areas nearby where they can play, grow, and learn.

We have not forgotten what it's like to see a treasured woods in a neighborhood cut down, or wetlands carved up for more development. The TLC wants to work with any concerned individual before these places are lost.

The TLC is carrying on a legacy in the Thumb. In 1952, Macomb and Saint Clair Counties were the birthplace of what became the Michigan Nature Association, the first statewide land preservation group in Michigan. The MNA was led for many years by the late Bertha Daubendiek of Kenockee Township in Saint Clair County, and is one of a very few organizations that has protected land in the interior of the Thumb, with 18 sanctuaries here. Most of our board members personally knew MNA cofounder Bertha Daubendiek. Some are MNA members and did volunteer work for MNA. TLC President, Cheryl Collins, served on the MNA board from 2003 through 2008.



1970 - The MNA board goes statewide at the office of attorney Frank Giambrone in Mount Clemens. Not exactly a radical looking bunch, but dedicated visionaries. Left to right, front: Bertha Daubendiek, Thelma Sonnenberg, Marie Moran Peter, Julius C. Peter, back: Frank Giambrone, Rita Juckett, and Richard W. Holzman. Photo by Ralph Polovich.

TLC board members have been involved with environmental issues and natural area protection in the Thumb for many years. From 1989 through 2006, as members of the Mill Creek Coalition, we helped protect the Mill Creek, a major tributary of the Black River, from an 18-mile dredging and channelization project. In the 1990's, as members of the Thumb Bioregional Alliance, we opposed development of the roughly 800-acre Wingford Estate along the Black River in the middle of the Port Huron State Game Area, and supported the State of Michigan in protecting the Minden Bog, the upper headwaters of the Black River in Sanilac County, from an expansion of peat mining. Most of the TLC board members were involved in the Painted Trillium Tours in Saint Clair County from 2001 through 2004 and worked to acquire the MNA Sharon Rose Leonatti Memorial Nature Sanctuary in Kimball Township. Bill and Cheryl Collins co-founded the Macomb Land Conservancy in 2000, which merged with the Oakland Land Conservancy to become Six Rivers Land Conservancy. They monitored Michigan Threatened Pitcher's Thistle in Huron County in the late 1990's. As Huron Ecologic since 1998, Bill and Cheryl have defended natural areas across the Thumb on behalf of several citizen groups through the enforcement of State and federal environmental regulations.

In most cases, land that we fought to protect never became available for acquisition. However, we sometimes got to a point where we needed the help of a land conservancy. Lack of a conservancy dedicated to the Thumb proved to be a problem. While a few conservancies based outside the region could acquire land in our area, we have found a general lack of interest as they pursue acquisitions elsewhere. For some time, a local conservancy claimed to exist but never materialized. Finally in late 2007, with the potential of a land donation approaching, we decided it was time to form the TLC. Articles of Incorporation were filed with Michigan in October 2008 and the IRS confirmed the tax exempt status of the TLC in February 2009. Since late December 2008, the TLC has acquired three sanctuaries in Saint Clair County through donation.

Thumb Land Conservancy IRS Tax Exempt Confirmation

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date **FEB 26 2009**

THUMB LAND CONSERVANCY
4975 MAPLE VALLEY RD
MARLETTE, MI 48453-8348

Employer Identification Number:
41-2247569
DLN:
17053358350038
Contact Person:
DEL TRIMBLE ID# 31309
Contact Telephone Number:
(877) 829-5500
Accounting Period Ending:
December 31
Public Charity Status:
170(b)(1)(A)(vi)
Form 990 Required:
Yes
Effective Date of Exemption:
October 29, 2008
Contribution Deductibility:
Yes
Addendum Applies:
No

Dear Applicant:

We are pleased to inform you that upon review of your application for tax exempt status we have determined that you are exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code. Contributions to you are deductible under section 170 of the Code. You are also qualified to receive tax deductible bequests, devises, transfers or gifts under section 2055, 2106 or 2522 of the Code. Because this letter could help resolve any questions regarding your exempt status, you should keep it in your permanent records.

Organizations exempt under section 501(c)(3) of the Code are further classified as either public charities or private foundations. We determined that you are a public charity under the Code section(s) listed in the heading of this letter.

Please see enclosed Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, for some helpful information about your responsibilities as an exempt organization.

Letter 947 (DO/CG)

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THUMB LAND CONSERVANCY

Sincerely,

A handwritten signature in black ink that reads "Robert Choi". The signature is fluid and cursive, with the first and last names clearly legible.

Robert Choi
Director, Exempt Organizations
Rulings and Agreements

Enclosures: Publication 4221-PC

Letter 947 (DO/CG)

Thumb Land Conservancy Articles of Incorporation

BGS/CD-502 (Rev. 12/05)

MICHIGAN DEPARTMENT OF LABOR & ECONOMIC GROWTH BUREAU OF COMMERCIAL SERVICES															
Date Received	(FOR BUREAU USE ONLY)														
	<p style="text-align: center;">FILED</p> <p style="text-align: center;">OCT 29 2008</p> <p>Tran Info: 14361429-1 10/24/08 Chk#: 0199 Amt: \$20.00 ID: CHERYL COLLINS</p> <p style="text-align: center;">Administrator BUREAU OF COMMERCIAL SERVICES</p>														
This document is effective on the date filed, unless a subsequent effective date within 90 days after received date is stated in the document.															
<table border="1"> <tr> <td colspan="4">Name Cheryl Collins</td> </tr> <tr> <td colspan="4">Address 4975 Maple Valley road</td> </tr> <tr> <td>City Marlette</td> <td>State Michigan</td> <td colspan="2">Zip Code 48453</td> </tr> </table>				Name Cheryl Collins				Address 4975 Maple Valley road				City Marlette	State Michigan	Zip Code 48453	
Name Cheryl Collins															
Address 4975 Maple Valley road															
City Marlette	State Michigan	Zip Code 48453													
EFFECTIVE DATE:															

Document will be returned to the name and address you enter above.
If left blank document will be mailed to the registered office.

70398K**ARTICLES OF INCORPORATION****For use by Domestic Nonprofit Corporations**

(Please read information and instructions on the last page)

Pursuant to the provisions of Act 162, Public Acts of 1982, the undersigned corporation executes the following Articles:

ARTICLE I

The name of the corporation is:
Thumb Land Conservancy

ARTICLE II

The purpose or purposes for which the corporation is organized are:

To implement educational programs of natural history and conservation; Acquire, protect, and maintain natural areas and examples of flora and fauna in the Thumb region of Michigan and adjacent areas; and conduct activities as permitted by the Michigan Nonprofit Corporation Act

ARTICLE III

- The corporation is organized upon a Nonstock basis.
(Stock or Nonstock)
- If organized on a stock basis, the total number of shares which the corporation has authority to issue is _____ . If the shares are, or are to be, divided into classes, the designation of each class, the number of shares in each class, and the relative rights, preferences and limitations of the shares of each class are as follows:

PK

page 1

ARTICLE III (cont.)

3. a. If organized on a nonstock basis, the description and value of its real property assets are: (if none, insert "none")
none
- b. The description and value of its personal property assets are: (if none, insert "none")
none
- c. The corporation is to be financed under the following general plan:
grants, fundraising, donations, contributions, and gifts from the general public
- d. The corporation is organized on a Directorship basis.
 (Membership or Directorship)

ARTICLE IV

1. The address of the registered office is:
4975 Maple Valley Road Marlette, Michigan 48453
 (StreetAddress) (City) (ZIP Code)
2. The mailing address of the registered office, if different than above:
 _____, Michigan _____
 (Street Address or P.O. Box) (City) (ZIP Code)
3. The name of the resident agent at the registered office is:
Cheryl Collins

ARTICLE V

The name(s) and address(es) of the incorporator(s) is (are) as follows:

Name	Residence or Business Address
William Collins	4975 Maple Valley Road, Marlette, MI 48453
Terry Gill	8168 N. Bricker Road, Greenwood, MI 48006
Traci Brown	1707 Whipple Street, Port Huron, MI 48060
Dan Rhein	1327 20th Street, Port Huron, MI 48060

Use space below for additional Articles or for continuation of previous Articles. Please identify any Article being continued or added. Attach additional pages if needed.

ARTICLE VI - EXEMPTION REQUIREMENTS

At all times the following shall operate as conditions restricting the operations and activities of the corporation:

1. No part of the net earnings of the organization shall inure to the benefit of, or be distributable to its members, trustees, officers, or other private persons, except that organization shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purpose set forth in the purpose clause hereof.

2. No substantial part of the activities of the corporation shall constitute the carrying on of propaganda or otherwise attempting to influence legislation, or any initiative or referendum before the public, and the corporation shall not participate in, or intervene in (including by publication or distribution of statements), any political campaign on behalf of, or in opposition to, any candidate for public office.

3. Notwithstanding any other provisions of this document, the organization shall not carry on any other activities not permitted to be carried on by an organization exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code or corresponding section of any future tax code, or by an organization, contributions to which are deductible under section 170(c)(2) of the Internal Revenue code, or corresponding section of any future tax code.

ARTICLE VII - BOARD OF DIRECTORS

The management of the affairs of the corporation shall be vested in a board of directors, as defined by the corporation's bylaws. No director shall have any right, title, or interest in or to any property of the corporation. the number of directors constituting the initial board of directors is four (4); their names and addresses are as follow:

William Collins, 4975 Maple Valley Road, Marlette, MI 48453

Terry Gill, 8168 N. Bricker road, Greenwood, MI 48006

Traci Brown, 1707 Whipple Street, Port Huron, MI 48060

Daniel Rhein, 1327 20th Street, Port Huron, MI 48060

I, (We), the incorporator(s) sign my (our) name(s) this 18th day of September, 2008.

Traci Brown

Terry A. Gill

William C. Collins

Daniel G Rhein

CONTINUATION SHEET

ARTICLE VII — BOARD OF DIRECTORS, continued

Members of the initial board of directors shall serve until the first annual meeting, at which their successors will be duly elected and qualified, or removed as provided in the bylaws.

ARTICLE VIII — PERSONAL LIABILITY

No member, officer, or director of this corporation shall be personally liable for the debts or obligations of this corporation of any nature whatsoever, nor shall any of the property of the members, officers, or directors be subject to the payment of the debts or obligations of this corporation.

ARTICLE IX - DURATION/DISSOLUTION

The duration of the corporate existence shall be perpetual until dissolution. Upon the dissolution of the organization, assets of the corporation shall be distributed for one or more exempt purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code, or corresponding section of any future federal tax code, or shall be distributed to the federal government, or to a state or local government, for a public purpose.

ARTICLE X - INCORPORATORS In witness whereof, we, the undersigned, have hereunto subscribed our names for the purpose of forming the corporation under the laws of the State of Michigan and certify we executed these Articles of Incorporation this September 18 of 2008.

Trace Brown
Signature (Incorporator 1)
1707 Whipple Port Huron, MI 48060
Address, City, State, Zipcode

Terry A. Dill
Signature (Incorporator 2)
8168 Bricker Rd. Greenwood, MI 48006
Address, City, State, Zipcode

William C. Collins
Signature (Incorporator 3)
4975 Maple Valley Road, Marlette, Michigan 48453
Address, City, State, Zipcode

Daniel & Rhein 1327 20th St Port Huron, MI 48060
Signature (Incorporator 4)
Address, City, State, Zipcode

Thumb Land Conservancy Bylaws

BYLAWS OF THUMB LAND CONSERVANCY

ARTICLE 1 - NAME

Section 1: The name of the organization shall be Thumb Land Conservancy. It shall be a nonprofit organization incorporated under the laws of the State of Michigan.

ARTICLE 2 - PURPOSE

Section 1: Thumb Land Conservancy is organized exclusively for charitable, scientific and education purposes that will benefit the citizens of the State of Michigan. These purposes include:
To preserve natural areas through negotiation, acquisition, obtaining conservation easements and/or securing development rights;
To educate the public on the importance of maintaining natural areas for environmental protection, wildlife habitat, and for enhancing the quality of life of area residents;
And, overall, to promote, preserve, and maintain our resources for the benefit of present and future generations.

ARTICLE 3 - MEMBERSHIP

Section 1: Membership shall consist of the Board of Directors

Section 2: The Board shall have the authority to establish and define nonvoting categories of membership.

ARTICLE 4 - BOARD OF DIRECTORS

Section 1: The Board is responsible for the overall policy, direction of the association property and business of this non-profit charitable corporation shall be managed by the Board of Directors. The Board may have up to seven members but not fewer than four. The Board receives no compensation other than reasonable expenses.

Section 2: Two founding members shall serve a one-year term and two founding members shall serve two-year terms. Thereafter, terms of office shall be for two-years.

Section 3: If for any reason the position of any Director becomes vacant, nominations for new members may be received from present Board members by the Secretary two weeks in advance of a Board meeting. These nominations shall be sent out to Board members with the regular Board meeting announcement, to be voted upon at the next Board meeting. These vacancies will be filled only to the end of the particular Board member's term.

Section 4: During the last quarter of each fiscal year of the corporation, the Board of Directors shall elect Directors to replace those whose terms will expire at the end of the fiscal year. This election shall take place during an annual meeting of the Board of Directors, called in accordance with the provisions of these bylaws.

Section 5: **Election Procedures**

New directors shall be elected by a majority of directors present at such meeting, provided there is a quorum. Directors so elected shall serve a term beginning on the first day of the next fiscal year.

Section 6: **Quorum**

For the purpose of doing business, a quorum shall constitute a majority of Board members.

Section 7: **Meetings, Special Meetings and Notice**

The Board shall meet at least quarterly, at an agreed upon time and place. An official Board meeting requires that each Board member have either written notice at least 10 days in advance unless it is a Special Meeting. Directors may participate in an official meeting by conference call if they are not able to attend in person.

Special Meetings may be called by either the President or three Board members.

Any action by the Directors may be taken without a meeting if all directors thereto give consent and filed by the Secretary in the permanent record of the Board. Verbal consent or electronic mail shall be considered a valid form of written consent for this purpose. Such consent must be reaffirmed at the next meeting of the Board.

The Annual meeting shall be held in the second quarter of the fiscal year at a time and place determined by the Board.

Section 8: **Resignation, Termination, and Absences of Director**

Resignation from the Board must be in writing and received by the secretary. A Director may be dismissed from office by the Board of Directors if three consecutive Board meetings are missed without due cause. The removal of a Director requires a three-fourths vote of the remaining Directors.

ARTICLE 5 - DUTIES OF DIRECTORS

Section 1: **Officers and Duties**

Officers shall be elected annually by the Board of Directors and shall include President, Vice-President, Secretary and Treasurer. All officers shall have a vote on the Board of Directors.

Section 2: **President**

The President shall preside at meetings, work with committees, coordinate strategies of action for the Board to consider, set the agenda for the next board meeting, and represent the Conservancy at public functions, land negotiations, etcetera unless otherwise delegated.

Section 3: **Vice President**

The Vice-President shall assist in the duties of the President and preside in his/her absence.

Section 4: **Secretary**

The Secretary shall be responsible for keeping of records of Board actions, including overseeing the taking of minutes at all Board meetings, sending out meeting announcements, distributing copies of minutes and the agenda to each Board member, and assuring that corporate records are maintained. The Secretary may sign in the name of the corporation for those instances required by law or by position.

Section 5: **Treasurer**

The Treasurer shall make a report at each Board meeting. The Treasurer shall chair the finance committee, assist in the preparation of the budget, help develop fundraising plans, keep track of all assets of the Conservancy, keep a record of all receipts and expenditures and make financial information available to Board members and the public.

Section 6: **Other Positions**

The Board of Directors may establish other officer positions as deemed necessary.

ARTICLE 6 - FISCAL YEAR

Section 1: **Fiscal Year**

The fiscal year shall be the calendar year.

ARTICLE 7 - COMMITTEES

Section 1: **Committee Formation**

The Board may establish committees as needed. Volunteers for committees shall be sought from the general public. Committees shall elect Chairpersons and make recommendations to the Board of Directors.

Section 2: **Executive Committee**

The four officers serve as the members of the Executive Committee. The Executive Committee may meet periodically and discuss recommendations that will be presented to the full Board at either the next regular meeting or special meeting.

Section 3: **Finance Committee**

The treasurer is the chair of the Finance Committee which includes three other Board members. The Finance Committee is responsible for developing and reviewing fiscal procedures, fundraising plan, and annual budget with other Board members. The Board must approve the budget and all expenditures must be within budget. Any major change in the budget must be approved by the Board. Annual reports are required to be submitted to the Board showing income, expenditures, and pending income. The financial records of the organization are public information and shall be made available to Board members and the public.

ARTICLE 8 – BENEFIT

Section 1: **Benefit**

No part of the earnings of the corporation shall inure to the benefit of, or be distributable to its members, directors, officers, or other private persons, except that the corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in Article 2 hereof. No substantial part of the activities of the corporation shall be carrying on propaganda, or otherwise attempting to influence legislation, and the corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provisions of these articles, this corporation shall not, except to an insubstantial degree, engage in any activities or exercise any powers that are not in furtherance of the purposes of this corporation.

ARTICLE 9 - AMENDMENTS

Section 1: **Amendments**

These bylaws may be amended when necessary by two-thirds of the board of directors.

ARTICLE 10 - PROPERTY HOLDINGS

Section 1: **Holdings**

It will be the policy of the Thumb Land Conservancy not to sell their land once it has been acquired.

ARTICLE 11 - DISSOLUTION

Section 1: **Dissolution**

In the event of dissolution, all debts and liabilities shall first be paid according to their respective priorities. Any remaining assets shall be contributed to a similar non-profit charitable organization which is exempt from income taxes under Section 501(c) 3 of the Internal Revenue Code.

CERTIFICATION

These bylaws were approved at a meeting of the board of directors by a two-thirds majority vote on

Secretary: 

Date: 11-15-08