

Thumb Land Conservancy

2023 Annual Report



The Thumb Land Conservancy Southern Lake Huron Coastal Park project area in the dune and swale forest of Fort Gratiot and Burtchville townships in Saint Clair County.



Thumb Land Conservancy

4975 Maple Valley Road, Marlette, Michigan 48453
810-346-2584 ❖ mail@ThumbLand.org ❖ ThumbLand.org



Thumb Land Conservancy

4975 Maple Valley Road, Marlette, Michigan 48453
810-346-2584 ❖ mail@ThumbLand.org ❖ ThumbLand.org

Thumb Land Conservancy 2023 Annual Report

The Thumb Land Conservancy again increased protected land in 2023; first in February with donation of 10 acres on the south side of Ortonville by Dr. Paul Croissant; then in November with acquisition of a 27-acre Shorewood Forrest parcel in Fort Gratiot Township, Saint Clair County, part of our Southern Lake Huron Coastal Park project; and finally, in December with two new conservation easements, west of Port Hope in Huron County, protecting about 60 acres of mid-successional upland and wetland forest and part of an excavated lake.

In May, we continued our annual Garlic Mustard removal in the Dead End Woods Sanctuary in Fort Gratiot. It was even more obvious that the hard work of many volunteers over the past 14 years has really paid-off in maintaining the high quality native plant community of the Dead End Woods. Although some patches of Garlic Mustard remain, we have largely shifted our work to removal of other sporadic invasive weeds.

We continued clearing the new coastal trail on our 42-acre Bidwell Sanctuary in Burtchville Township, Saint Clair County. Plans are that the trail will eventually connect with a much larger trail as part of our Southern Lake Huron Coastal Park project.

In June, the TLC attended a meeting with seven other land conservancies of southern Michigan. We shared our experiences and discussed issues common to our organizations.

Clean-up and restoration of the lakeplain prairie on our Loznak Sanctuary in Marysville continued throughout 2023.

In 2023, the TLC promoted native habitat restoration in our newsletters, web site, and Facebook page. We promoted national programs like Homegrown National Park and National Wildlife Federation Certified Wildlife Habitat, as well as the TLC Naturehoods registry. An extensive guide for habitat restoration and creation was presented in our March newsletter.

In October, we the TLC lost our Senior Board Member Dottie Craig at the age of 92. Dottie lived next to our Dead End Woods Sanctuary. She happily made her home available for TLC events, supported TLC projects, and served on the TLC board for 10 years.

The TLC continued our education and outreach efforts through our newsletter, and updates to the TLC web site.

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

A handwritten signature in cursive script that reads "William Collins".

William Collins
Executive Director

Thumb Land Conservancy 2023 Annual Report

2023 Year-In-Review

As usual, the Thumb Land Conservancy focused on land acquisition and preserve stewardship in 2023. In addition, the TLC established two new conservation easements and promoted habitat restoration for native plants and animals. Following is a summary of monthly activities.

January

- Prepared grant applications to fund more land acquisition for the Southern Lake Huron Coastal Park.

February

- Accepted donation from Dr. Paul Croissant of 10 acres of woodland and wetland south of Ortonville, Brandon Township, Oakland County.
- Prepared grant applications to fund more land acquisition for the Southern Lake Huron Coastal Park.

March

- Began promotion of habitat restoration for native plants and animals on residential land through Homegrown National Park, National Wildlife Federation Certified Wildlife Habitat, and the TLC Naturehoods registry. Produced and extensive habitat restoration and creation guide published in the TLC newsletter and web site.
- Prepared grant applications to fund more land acquisition for the Southern Lake Huron Coastal Park.

April

- Finalized and submitted grant applications to fund more land acquisition for the Southern Lake Huron Coastal Park.
- Continued clearing the coastal trail and cut invasive shrubs on the Bidwell Sanctuary in Burtchville. The trail now extends nearly a half-mile north into the preserve.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.

May

- Continued annual Garlic Mustard removal in the Dead End Woods Sanctuary in Fort Gratiot. After 14 years of hard work by many volunteers, the high quality native plant community is in very good shape, few Garlic Mustard patches remain, and removal shifted largely to removal of other invasive weeds.
- Continued clearing the coastal trail and cut invasive shrubs on the Bidwell Sanctuary in Burtchville.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Coordinated with TLC accountant to prepare and submit the 2022 TLC tax return.

June

- The TLC attended a meeting in Okemos with seven other land conservancies of southern Michigan to share our experiences and discuss various issues common to our organizations.
- The TLC gave a presentation about botanist Charles Keene Dodge at the Clyde Historical Society Pioneer Day at the historic City of Troy. Charles Keene Dodge made extensive botanical explorations and specimen collections in the Fort Huron area and other parts of Michigan from 1876 through 1918. A detailed video of the life and work of Dodge was produced.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Began mailing new TLC membership gifts.

July

- Received notice of significant grant award from The Carls Foundation to fund more land acquisition for the Southern Lake Huron Coastal Park project.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Continued clearing the coastal trail and preserve entrance on the Bidwell Sanctuary in Burtchville.

August

- Inspected two proposed conservation easement sites, totaling about 60 acres on two adjacent parcels, covered largely by mid-successional upland and swamp forest near Port Hope in Huron County.
- The TLC gave a presentation to the Imlay City Rotary Club about the work of the TLC.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.

September

- Prepared easement and baseline documentation for two proposed conservation easement sites, totaling about 60 acres on two adjacent parcels, covered largely by mid-successional upland and swamp forest near Port Hope in Huron County.
- Coordinated with appraisers and Ducks Unlimited for release of grant funding through the North American Wetlands Conservation Act for land acquisition in the Southern Lake Huron Coastal Park project.

October

- The TLC lost Senior Board Member Dottie Craig at age 92. Dottie lived next to the Dead End Woods Sanctuary, happily made her home available for TLC events, supported various projects, and served on the TLC board for 10 years.
- The TLC sold 2.7 acres of commercial frontage of the Croissant property along M-15 to help fund purchase the Shorewood Forrest parcel.
- Coordinated with appraisers and Ducks Unlimited for release of grant funding through the North American Wetlands Conservation Act for land acquisition in the Southern Lake Huron Coastal Park project.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Prepared easement and baseline documentation for two proposed conservation easement sites, totaling about 60 acres on two adjacent parcels, covered largely by mid-successional upland and swamp forest near Port Hope in Huron County. Coordinated with appraisers on behalf of landowners to determine federal income tax deductions for conservation easements.

November

- Acquired a critical 27-acre Shorewood Forrest parcel, consisting of dune and swale forest, in Fort Gratiot Township, Saint Clair County, part of our Southern Lake Huron Coastal Park project.
- Received notice of a significant grant award from Consumers Energy Foundation to fund more land acquisition for the Southern Lake Huron Coastal Park project.
- Continued lakeplain prairie restoration on the Loznak Sanctuary in Marysville.
- Finalized easement and baseline documentation for two proposed conservation easement sites, totaling about 60 acres on two adjacent parcels, covered largely by mid-successional upland and swamp forest near Port Hope in Huron County. Coordinated with appraisers on behalf of landowners to determine federal income tax deductions for conservation easements.

December

- Finalized and submitted for recording two conservation easements, totaling about 60 acres on two adjacent parcels, covered largely by mid-successional upland and swamp forest near Port Hope in Huron County. Coordinated with appraisers on behalf of landowners to determine federal income tax deductions for conservation easements.
- Cut invasive Black Locust trees on the Tranquil Ridge Sanctuary in Dryden Township, Lapeer County.
- Began exploring new land acquisition projects in Huron, Lapeer, Macomb, and Saint Clair Counties.

2023 TLC Supporters

- Michael and Gail Anderson, Fort Gratiot
 Connie Bates, Bloomfield
 The Carls Foundation, Bloomfield Hills
 Pete and Angelene Catlos, Fort Gratiot
 William and Cheryl Collins, Marlette
 Consumers Energy Foundation, Jackson
 Dr. Paul Croissant, Clarkston
 Dorothy Craig, Fort Gratiot
 Kay Cumbow, Lynn
 Ducks Unlimited, Dexter
 Richard Duthler, R.A. Duthler Land Surveyor, Imlay City
 Andrew and Natalie Ellis, Cass City
 Dr. Scott Ferguson, Clyde
 John Fodi, Marysville
 Four County Community Foundation, Almont
 Fred Fuller, Yale
 Huron County Community Foundation, Bad Axe
 Carol Kasprzak, Troy
 Dave Ladensack, Summit Realty, Lakeport
 Timothy Lozen and Mark Davidson, Lozen Davidson and Kovar, P.C., Port Huron
 Jack McLiver, Lake Huron Lawns, Lakeport
 David and Edwin Miller, Marlette
 Christine Powell and Bern Smith, Washington, D.C.
 RBF Construction, Flint
 Dan and Wendy Rhein, Port Huron
 Jeff Ronan, LochanDe IT Services, Port Huron
 Cathy Rovano, Sterling Heights
 SEMCO Energy Gas Company, Port Huron
 Blake Short, Port Huron
 Peggy Thorp and Jerry Orlowski, Lakeport
 Elizabeth "Bess" Touma, Washington, D.C.
 Chris Walker, Fargo, North Dakota

2023 TLC Project Contributors

Croissant Sanctuary Brandon Township, Oakland County

- Dr. Paul Croissant, Clarkston
 Timothy Lozen and Mark Davidson, Lozen Davidson and Kovar, P.C., Port Huron

Shorewood Forrest Sanctuary Southern Lake Huron Coastal Park Fort Gratiot Township, Saint Clair County

- The Carls Foundation, Bloomfield Hills
 RBF Construction, Flint
 SEMCO Energy Gas Company, Port Huron
 Dave Ladensack, Summit Realty, Lakeport
 Timothy Lozen and Mark Davidson, Lozen Davidson and Kovar, P.C., Port Huron

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

- Consumers Energy Foundation, Jackson
 Ducks Unlimited, Dexter
 Tracey Nesbitt, Cooper Nesbitt Appraisal, Port Huron
 Christine Powell and Bern Smith, Washington, D.C.
 Elizabeth "Bess" Touma, Washington, D.C.

Loznak Sanctuary City of Marysville, Saint Clair County

- Dan and Wendy Rhein, Port Huron

Deerfield Wind Energy Preserve Stewardship Huron Township, Huron County

- Huron County Community Foundation, Bad Axe

Tranquil Ridge Sanctuary Dryden Township, Lapeer County

- Four County Community Foundation, Almont
 David and Edwin Miller, Marlette

Anderson Conservation Easement Bloomfield Township, Huron County

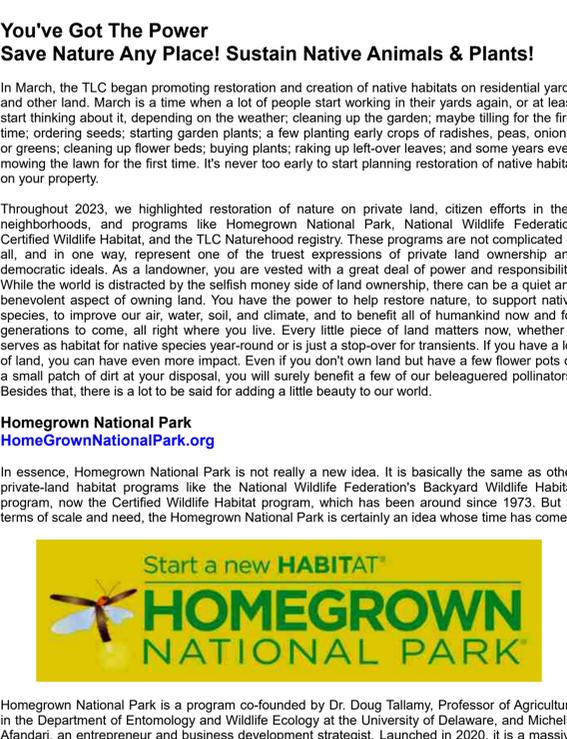
- Michael and Gail Anderson, Fort Gratiot

Ellis Conservation Easement Bloomfield Township, Huron County

- Michael and Gail Anderson, Fort Gratiot
 Andrew and Natalie Ellis, Cass City

Dr. Paul Croissant Land Donation 10 Acres, Brandon Township, Oakland County

On February 22, the TLC accepted the donation of about 10 acres of property from Dr. Paul Croissant of Clarkston. The property is located just south of Ortonville along the east side of M-15 in Brandon Township, Oakland County. Dr. Croissant was introduced to the TLC through Bill Vandercook, a Lapeer-based land conservation consultant who has worked with landowners in the region for many years.



The Croissant property outlined in yellow. Oakland County Property Gateway.

Although the property is outside of our six-county territory, it's not far from Lapeer County and our intent was to sell the approximately 2.7 acres of commercial frontage along M-15 to raise funds for other land purchases. The remaining eastern two-thirds of the property, just over 7 acres, will be protected by a conservation easement. The property is surrounded by commercial and residential development on nearly all sides. It contains some natural wetland, but most of the area was excavated over decades ago for sand and is now covered largely by weedy vegetation including Eastern Cottonwood, Box-elder, and invasive Reed - Phragmites. Although it is a low quality plant community, it is a natural area none-the-less, and is somewhat buffered from M-15 traffic by distance and its location down in a small valley. Being surrounded by many residents along the north and east sides, the Croissant Sanctuary should eventually serve as a nice little preserve for the neighborhood.

Dr. Paul Croissant just retired as a neurological surgeon with Trinity Health in Pontiac. Dr. Croissant has practiced in Oakland County since 1970. He completed his medical training in the Philadelphia area, but as he put it, attended about 12 schools in as many years as a kid because his father served as an officer in the United States Army. His family moved across the United States, even living in Panama for a while. Dr. Croissant later served in the Army Reserve. He flew small airplanes for several years. He enjoyed running for many years, from his late 30s, often running up to 10 miles per day. One of his favorite events has been the annual Crim Festival of Races in the city of Flint. Dr. Croissant has long enjoyed the outdoors, particularly hunting, and has made several trips out West to hunt Pronghorn Antelope, and Africa four times. These days, he mostly hunts pheasants with his bird dog. He and his former wife, Mary Jane, have three adult children and five grandchildren; three granddaughters who are in high school and excellent competitive dancers, and two younger grandsons who are "a hoot".

Our thanks to Dr. Paul Croissant and Bill Vandercook for the opportunity to preserve this land and to enable new land preservation with our proceeds. Our thanks also to TLC attorney Tim Lozen of Lozen Davidson and Kovar, P.C. in Port Huron for writing the donation agreement and advising us as usual. Our phase 1 environmental site assessment was conducted by Applied Ecosystems, Inc. in Burton, Michigan. They did a fine job with friendly service.

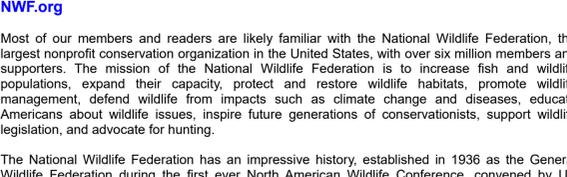
You've Got The Power Save Nature Any Place! Sustain Native Animals & Plants!

In March, the TLC began promoting restoration and creation of native habitats on residential yards and other land. March is a time when a lot of people start working in their yards again, or at least start thinking about it, depending on the weather; cleaning up the garden; maybe tilling for the first time; ordering seeds; starting garden plants; a few planting early crops of radishes, peas, onions, or greens; cleaning up flower beds; buying plants; raking up left-over leaves; and some years even mowing the lawn for the first time. It's never too early to start planning restoration of native habitat on your property.

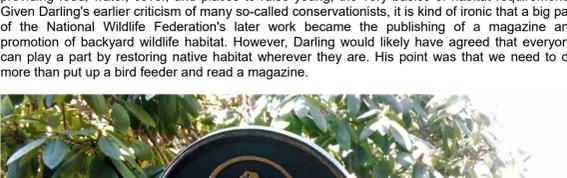
Throughout 2023, we highlighted restoration of nature on private land, citizen efforts in their neighborhoods, and programs like Homegrown National Park, National Wildlife Federation Certified Wildlife Habitat, and the TLC Naturehood registry. These programs are not complicated at all, and in one way, represent one of the truest expressions of private land ownership and democratic ideals. As a landowner, you are vested with a great deal of power and responsibility. While the world is distracted by the selfish money side of land ownership, there can be a quiet and benevolent aspect of owning land. You have the power to help restore nature, to support native species, to improve our air, water, soil, and climate, and to benefit all of humankind now and for generations to come, all right where you live. Every little piece of land matters now, whether it serves as habitat for native species year-round or is just a stop-over for transients. If you have a lot of land, you can have even more impact. Even if you don't own land but have a few flower pots or a small patch of dirt at your disposal, you will surely benefit a few of our beleaguered pollinators. Besides that, there is a lot to be said for adding a little beauty to our world.

Homegrown National Park HomeGrownNationalPark.org

In essence, Homegrown National Park is not really a new idea. It is basically the same as other private-land habitat programs like the National Wildlife Federation's Backyard Wildlife Habitat program, now the Certified Wildlife Habitat program, which has been around since 1973. But in terms of scale and need, the Homegrown National Park is certainly an idea whose time has come.



Homegrown National Park is a program co-founded by Dr. Doug Tallamy, Professor of Agriculture in the Department of Entomology and Wildlife Ecology at the University of Delaware, and Michelle Afandari, an entrepreneur and business development strategist. Launched in 2020, it is a massive cooperative conservation movement that seeks to engage and mobilize anyone with a flower pot, lawn, garden, woodland, ranch, farm, or campus to plant and preserve native species and remove invasive weeds, to support the native plants and animals that are essential for human survival. This grassroots call-to-action has the initial goal of adding 20 million acres of native plantings in the United States. Yes, over 40 million acres of the contiguous States is covered by lawn, relative biological deserts that cover about 2% of the lower 48 connected states. Actually, deserts are more diverse and ecologically valuable for the most part. A 2005 study sponsored by NASA determined that more land is devoted to lawns in the US than to any other single irrigated crop in the country. If successful, Homegrown National Park will regenerate biodiversity by restoring native habitats on millions of acres of private land, creating large interconnected ecological networks outside of parks and preserves. So far, over 26,000 participants have planted nearly 77,000 acres of native habitat in the US and 360 participants have planted about 870 acres in Canada. Ultimately, the target is that all privately held land will include native plantings.



Homegrown National Park really is very simple. Just create a native habitat area, which ideally, you commit to controlling invasive weeds in, register it on the Homegrown National Park web site, and map it. You can even register an area you restored or created previously, but the push is for new areas. It won't cost you anything but your labor and whatever plant stock and other materials you might choose to purchase. Better to propagate native plants for free through locally collected seed and rooted cuttings from natural areas near your property, and use scrap materials to build your own habitat structures. If you look closely at the Homegrown National Park map, you might see that a few personal properties of the TLC Executive Director are mapped in Fort Gratiot and north of Brown City.

Dr. Doug Tallamy is a well known butterfly and moth expert, author of 106 research publications, and has taught insect-related courses for 41 years. One of his primary research goals is to better understand the many ways insects interact with plants and how such interactions determine the nature of animal communities. His books include *Bringing Nature Home*, *The Living Landscape*, *Nature's Best Hope*, and *The Nature of Oaks*. His awards include recognition from The Garden Writer's Association, Audubon, The National Wildlife Federation, Western Carolina University, The Garden Club of America, and The American Horticultural Association. Some of our members and readers may recall articles we featured last May and July about the negative impacts to native caterpillars from spraying *Bacillus thuringiensis* or Btk bacterium to control the invasive Spiny or Gypsy Moth. We relied in part on the research of Dr. Tallamy in determining potentially how many native caterpillar species could be killed in our region.

Michelle Afandari is the founder and CEO of MODA Licensing, a pioneer global licensing and marketing agency established in 1988. Afandari developed, executed, and managed innovative brand extension strategies that resulted in new businesses for corporate and not-for-profit clients including The New York Times, National Trust for Historic Preservation, Victoria and Albert Museum, Champion Athleticwear, LYCRA/DuPont, Tou de France, Ritz Hotel - Paris, Mack Trucks, Snap-on Tools, Meredith Corporation, America's VetDogs, Bushnell, The Henry Ford, UNIPAL International Corp, and UNICEF. In 2008, Afandari founded Retirement, a digital platform "about time" for baby boomers who "retire" rather than retire.

An unlikely partnership developed after Afandari heard Dr. Tallamy give a presentation. Thereafter, the two met virtually many times and joined forces to scale Tallamy's bottom-up call-to-action for planting native plants and restoring biodiversity. As quoted on the Homegrown National Park web site, Dr. Tallamy asked, "... what if each American landowner converted half of his or her yard to productive native plant communities? Even moderate success could collectively restore some semblance of ecosystem's function to more than 20 million acres of what is now ecological wasteland." Afandari's goal was "... to make it as easy as possible, to have a great deal of fun in the process, and to celebrate the creation of new ecological networks."

As they scale on the Homegrown National Park web site, "Our National Parks, no matter how grand in state, are too small and separated from one another to preserve species to the levels needed. Thus, the concept for Homegrown National Park, a bottom-up call-to-action to restore habitat where we live and work, and to a lesser extent where we farm and graze, extending national parks to our yards and communities." The world is at a critical point, beginning to lose so many species from local ecosystems that their ability to produce the oxygen, clean water, flood control, pollination, pest control, carbon storage, and other ecosystem services that sustain us and nature in general, will become seriously compromised. As Dr. Tallamy says, "In the past, we have asked one thing of our gardens: that they be pretty. Now they have to support life, sequester carbon, feed pollinators, and manage water."

Homegrown National Park has the unique focus of attempting to reach those unaware of the biodiversity crisis, while also working and collaborating with aligned businesses, nonprofit organizations, and other entities with aligned missions. The program is intended to catalyze a collective effort of individual homeowners, property owners, land managers, farmers, and anyone with some soil to a plant-affront to all of the bad environmental news these days. Dr. Tallamy's message is a solution-based action - small efforts by many people. Together we can create new ecological networks that will enlarge populations of plants and animals and better enable them to sustain natural population fluctuations indefinitely. While not the perfect end-all solution, achieving the goals of the Homegrown National Park would be a tremendous accomplishment on behalf of nature.

To be a part of the Homegrown National Park, begin by creating an account at this link: <https://map.homegrownnationalpark.org/Account/Register>

National Wildlife Federation NWF.org

Most of our members and readers are likely familiar with the National Wildlife Federation, the largest nonprofit conservation organization in the United States, with over six million members and supporters. The mission of the National Wildlife Federation is to increase fish and wildlife populations, expand their capacity, protect and restore wildlife habitats, promote wildlife management, defend wildlife from impacts such as climate change and diseases, educate Americans about wildlife issues, inspire future generations of conservationists, support wildlife legislation, and advocate for hunting.

The National Wildlife Federation has an impressive history, established in 1936 as the General Wildlife Federation during the first ever North American Wildlife Conference, convened by US President Franklin Roosevelt. Over 1,000 people participated in the conference, representing every US state and parts of Canada and Mexico. Jay Norwood "Ding" Darling, a political cartoonist and environmental activist, was appointed the first President of the General Wildlife Federation. To note a Michigan connection, Darling was born in Norwood, Michigan and lived there until he was 10 years old. In 1934, President Roosevelt appointed Darling as Chief of the US Bureau of Biological Survey, but he resigned from the position in 1935 out of frustration with the lack of interest in funding wildlife protection by the US Congress. During the 1936 North American Wildlife Conference, Darling criticized people who considered themselves conservationists for simply putting up a bird feeder and subscribing to an outdoors magazine. He said that true action was required and encouraged voting against political candidates who did nothing for the environment. So you see, political activism on behalf of our environment dates back at least 88 years, more like 150 years in the US, with origins dating back perhaps over 300 years in Europe.

In 1938, the General Wildlife Federation was renamed the National Wildlife Federation. Action on a national level to protect wildlife has always been the major work of the National Wildlife Federation. In 1973, recognizing the potential for benefiting wildlife in general and for engaging members, the National Wildlife Federation started the Backyard Wildlife Habitat program, which encouraged residential landowners and communities to establish native plantings and wildlife habitat by providing food, water, cover, and places to raise young, the very basics of habitat requirements. Given Darling's earlier criticism of many so-called conservationists, it is kind of ironic that a big part of the National Wildlife Federation's later work became the publishing of a magazine and promotion of backyard wildlife habitat. However, Darling would likely have agreed that everyone can play a part by restoring native habitat wherever they are. His point was that we need to do more than put up a bird feeder and read a magazine.

Now known as the Certified Wildlife Habitat program, the specific goals of the program remain provision of food, water, cover, and places to raise young through the use of native plants and other features such as nest boxes and water gardens. The National Wildlife Federation has since added the use of ecologically sustainable practices to their criteria. According to the National Wildlife Federation web site, here is what your certified wildlife garden should include:

- Food - Native plants provide nectar, seeds, nuts, fruits, berries, foliage, pollen, and insects eaten by an exciting variety of wildlife. Feeders can supplement natural food sources.
- Water - All animals need water to survive and some need it for bathing or breeding as well.
- Cover - Wildlife need shelter from severe weather and places to hide from predators or stalk prey.
- Places to Raise Young - Wildlife need resources to reproduce and keep their species going. Some places have totally different habitat needs in their juvenile phase than as adults.
- Sustainable Practices - How you manage your garden can have an effect on the health of soil, air, water, and habitat for native wildlife as well as human community. Sustainable practices include eliminating pesticides and herbicides, conserving water, planting native species, and many more.

If your property already has all of these critical wildlife elements, you can go ahead and certify it. Any place where you can create a wildlife-friendly garden can be recognized as a Certified Wildlife Habitat. Your yard, a local park, a container garden, urban rooftop, a schoolyard, or a commercial landscape, regardless of size, can serve as important wildlife habitat. Certifying is as simple as providing the four habitat components: food, water, cover, and places to raise young, in addition to practicing sustainable gardening techniques.

For only a \$20 registration fee, a particular area can be certified by the National Wildlife Federation as an official Certified Wildlife Habitat site. There are no specific standards beyond the basic wildlife elements, no verification, and no monitoring or measurement required. The nice part about these types of programs is that they are simple and entrust the landowner with sole responsibility. The program is not a burden, but a positive encouragement. Aside from the rewards of offering wildlife a place to thrive, your certification provides the following benefits: Inclusion in the National Wildlife Federation's Certified Wildlife Habitat national network; Letter of congratulations; Personalized certificate for your wildlife habitat; Optional press release to share your certification with local media; Subscription to the National Wildlife Federation's Garden for Wildlife newsletter; One-year membership to the National Wildlife Federation which includes a subscription to National Wildlife magazine; 10% discount on nesting boxes, feeders, birdbaths and other products from National Wildlife catalog; and Eligibility to purchase and post an attractive yard sign to display your commitment to wildlife and the environment. You also get a rewarding sense of doing your part, and the satisfaction that you may inspire others to follow your example. To get started, go to our web page, National Wildlife Federation - Plant With A Purpose: <https://www.nwf.org/garden> Scroll down and click on Certified Habitats at the far right.

TLC Naturehood Registry

Like the National Wildlife Federation and Homegrown National Park, we have our own habitat or natural area registry; the TLC Naturehood program. The focus of our Naturehood certification is on recognizing natural areas restored using locally endemic seed and plant stock. We can also certify created natural habitats that do not necessarily represent the original native and endemic community, but which still benefit wildlife and the environment. We are also happy to provide you with advice on restoring, creating, and maintaining native habitats, and by connecting you with information and resources. More information about our Naturehood program will soon be available on our web site. In the meantime, contact us by phone or email if you have any questions or seek certification.

TLC Native Habitat Restoration Guide

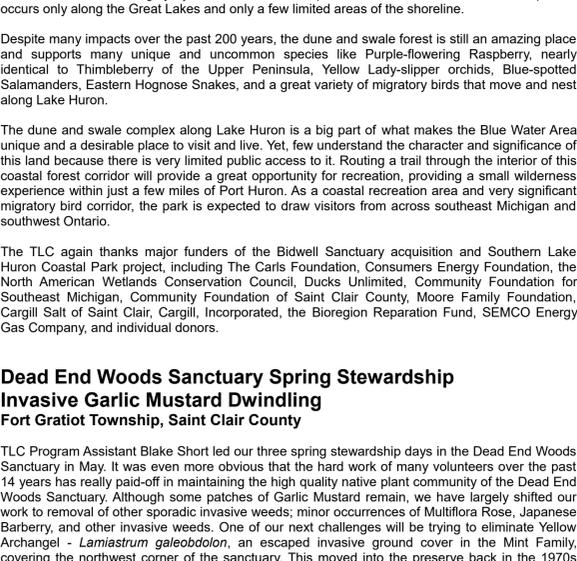
See our March 2023 newsletter for an extensive guide on habitat restoration and creation for your yard or other land. What does it take to convert a lawn or other piece of ground into a native habitat. There are different ways; some difficult, others relatively easy, some that take a long time, and others that yield results fairly quickly. A major consideration is the level of weed control needed, and how much you can commit to. The methods described here are loosely organized according to the wildlife habitat elements as required by the National Wildlife Federation Certified Wildlife Habitat program, which are the basic elements of any habitat. The elements overlaid to large extent. For example, food sources, cover, and places to raise young can all be provided through simply providing suitable vegetation or water or woody debris or some other aspect of a larger habitat. The methods presented in the habitat restoration guide are not intended to be exhaustive, although reading all of it may be exhausting, but are intended to give general guidance based on years of real-world experience in our region.

Bidwell Sanctuary Coastal Trail Development

Burtchville Township, Saint Clair County

Chékhonésink hitkwike schind lékuwake - 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 in the spring of 2023. The trail extends nearly the full half-mile length north of the property. The Bidwell Sanctuary is part of the proposed Southern Lake Huron Coastal Park; a line 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 day-use area of Lakeport State Park. The Southern Lake Huron Coastal Park will eventually protect a 4.5-mile long section of dune and swale forest north of Port Huron, a rare coastal ecosystem, and one of only a few areas remaining from Lake Erie to the Saginaw Bay. Plans are to route a trail on the main dune ridges from near the Fort Gratiot Nature Park at Carignan and Parker Roads, up to the day-use area of Lakeport State Park.



View of a wetland swale from the adjoining upland sand dune ridge on the Bidwell Sanctuary. Photo by Bill Collins.

After being depressed for thousands of years by glacial ice about 2 miles thick, the land in our region began rising as the last glacier melted back. The land is still rising slightly. As the land rose, the old Georgian Bay outlet of the early Great Lakes was blocked. The Nipissing stage of early Lake Huron rose about 15 feet above the present elevation. About 4,500 years ago, water was still draining through the old Chicago outlet, but then redirected to the Saint Clair River outlet which quickly down-cut. The high water rapidly drained, leaving a series of parallel sand ridges separated by mucky wetland troughs or swales from about 2 miles inland to the present shoreline. The ridges were wind-blown dunes and the mucky swales were shrub swamp for a long time before becoming forested and covered largely by cedars. This landscape is known as dune and swale complex. It occurs only along the Great Lakes and only a few limited areas of the shoreline.

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

The dune 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 a coastal recreation area and very significant migratory bird corridor, the park is expected to draw visitors from across southeast Michigan and southwest Ontario.

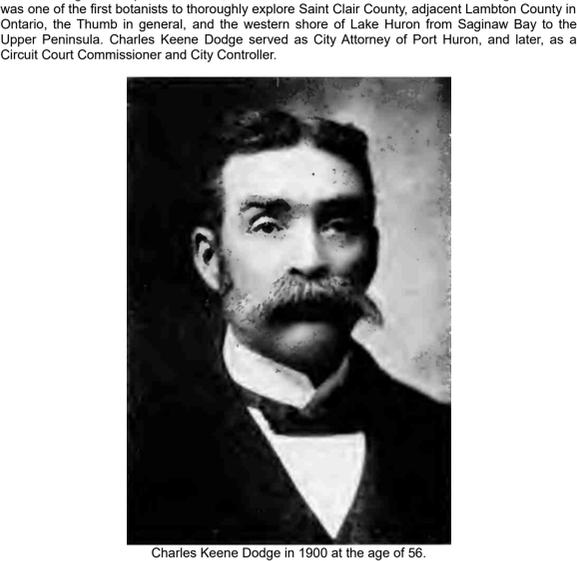
The TLC again thanks major funders of the Bidwell Sanctuary acquisition and Southern Lake Huron Coastal Park project, including The Carls Foundation, Consumers Energy Foundation, the North American Wetlands Conservation Council, Ducks Unlimited, Community Foundation for Southeast Michigan, Community Foundation of Saint Clair County, Moore Family Foundation, Cargill Salt of Saint Clair, Cargill, Incorporated, the Bioregion Reparation Fund, SEMCO Energy Gas Company, and individual donors.

Dead End Woods Sanctuary Spring Stewardship

Invasive Garlic Mustard Dwindling

Fort Gratiot Township, Saint Clair County

TLC Program Assistant Blake Short led our three spring stewardship days in the Dead End Woods Sanctuary in May. It was even more obvious that the hard work of many volunteers over the past 14 years has really paid-off in maintaining the high quality native plant community of the Dead End Woods Sanctuary. Although some patches of Garlic Mustard remain, we have largely shifted our work to removal of other sporadic invasive weeds: minor occurrences of Multiflora Rose, Japanese Barberry, and other invasive weeds. One of our next challenges will be trying to eliminate Yellow Archangel - *Lamium galeobdolon*, an escaped invasive ground cover in the Mint Family, covering the northwest corner of the sanctuary. This moved into the preserve back in the 1970s and 80s from an adjacent yard in Old Farms subdivision. We may even start vegetative enhancement soon, transplanting higher quality native plants to the sanctuary to improve the natural community as a whole.



Swamp forest and a vernal pool on the Dead End Woods Sanctuary. Photo by Bill Collins.

While working on the sanctuary, Blake identified some new native species for us, including *Carex leptoneuria*, *Carex gracilima*, and *Carex brunnescens*, three native sedges that are fairly common in Michigan swamp forests.

Meeting of Southern Michigan Land Conservancies

Okemos, Michigan

On June 16, TLC President Cheryl Collins and Executive Director Bill Collins, attended a meeting of southern Michigan land conservancies at the Michigan Nature Association office in Okemos. The meeting was organized by Diana Kern, Executive Director of the TLC Land Conservancy of Ann Arbor. This was the first gathering of land conservancies that the TLC has ever been invited to in our 15 years of existence. Participants included Blue Huron Headwaters Conservancy, Chippewa Watershed Conservancy, Legacy Land Conservancy, Michigan Land Conservancy, Mid-Michigan Land Conservancy, Southeast Michigan Land Conservancy, Southwest Michigan Land Conservancy, and the Thumb Land Conservancy. Gerrit Johnson, Executive Director of the Michigan Nature Association, also briefly made comment.



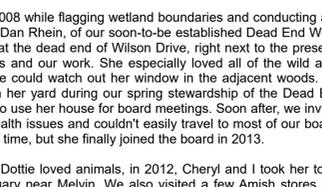
Many topics were discussed at the meeting, including individual conservancy issues, organizational structures, state and federal policy, funding, membership, administration, and goals. Most of the participants shared similar concerns. Insufficient funding sources for land acquisition was perhaps the most common issue.

Two participants that may be familiar to some of our members were Sue Julian, Director of the Blue Huron Headwaters Conservancy in Oakland County, and Jack Smiley of the Michigan Land Conservancy of St. Clair County, Michigan who liked to follow me in the fields as I worked, but sadly disappeared a few years later. Dottie told us that she felt quite isolated in Fort Gratiot until she got to know us. It was our pleasure to have her company and we wish we could have gotten her out more.

New Charles Dodge Video Presentation

On June 17, TLC Executive Director Bill Collins gave a presentation about botanist Charles Keene Dodge to the Clyde Historical Society at their annual Pioneer Day at the historic Clyde Township Hall located across from the Dorsey House at Wildcat Road and M-136 near the edge of the Port Huron State Game Area.

Charles Dodge was a prolific botanist, active in the Port Huron area from 1876 through 1918. He was one of the first botanists to thoroughly explore Saint Clair County, adjacent Lambton County in Ontario, the Thumb in general, and the western shore of Lake Huron from Saginaw Bay to the Upper Peninsula. Charles Keene Dodge served as City Attorney of Port Huron, and later, as a Circuit Court Commissioner and City Controller.



Charles Keene Dodge in 1900 at the age of 56.

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 to pursue his true interest of botany. He eventually collected about 40,000 plant specimens, now held by the University of Michigan Herbarium. Among many works in his lifetime, in 1900, Dodge published *Flora of St. Clair County, Michigan and the Western Part of Lambton County, Ontario*. In 1911, Dodge wrote the *Flora of the Michigan section of History of St. Clair County* by William Jenks, and took this opportunity to lament the loss of a large "... public reservation of 3,000 or 4,000 acres in one place 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.

The Charles Dodge presentation has since been made into a video, which is still in draft form, but will be available to the public in the near future.

New TLC Member and Donor Gifts Sent Out



The TLC sent out a new collection of member and donor gifts in 2023. These included two different embroidered patches, bumper stickers, and hand-made stationary produced from recycled paper fiber by TLC Member Wendy Rhein. A TLC logo patch is given for memberships, and a more elaborate patch featuring rare species of the Thumb is given for donations of at least \$10 above the membership level. We hope to expand our offerings of member and donor gifts in the near future to include hemp fiber bags with the TLC logo and other items.

Loznak Sanctuary Stewardship Continues

Lakeplain Prairie Restoration

Marysville, Saint Clair County

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

Thanks to the continued "slow hasty" of TLC Board Member Dan Rhein in 2023, lakeplain prairie and wetland on the Loznak Sanctuary was gradually restored and new artifacts discovered. Dan essentially adopted the Sanctuary, removing invasive weeds, continuing to refuse along the railroad spur, digging up buried material and industrial debris, and restoring soil and native vegetation cover. He labored diligently from spring through fall, particularly on removing invasive weeds like Phragmites Reed, Callery or Bradford Pear, buckthorn, and Spotted Knapweed. He's also been removing old fill from the native soil layer, Dan transplants native plants to the tar paper debris in the fill. After reaching the wetland area, Dan transplants native plants to the restored areas that he salvaged from on top of the old fill he removed. He's doing this all just with hand tools. He even built a small bridge walkway across a ditch using old concrete debris. Both Dan and his wife Wendy specialize in making it at the front of the Sanctuary. Dan made a preserve sign out of scrap wood and installed it at the front of the Sanctuary. He has been getting a lot of questions and a few compliments from passers-by, drawing more attention to the TLC and this unique preserve.



Tall Boneset, Riddell's Goldenrod, Gray Goldenrod, Mountain Mint, and other lakeplain prairie species on the Loznak Sanctuary. Photo by Bill Collins.

The Loznak Sanctuary is located in a historically industrial area east of Shore 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 and relatively diverse remnant of lakeplain prairie, a rare natural community that once covered large areas near the prairie and lakes. We have identified several plant species on the Sanctuary associated with lakeplain prairie and similar habitat, including: Riddell's Goldenrod, Showy Goldenrod, Stiff Goldenrod, Gray Goldenrod, Fringed Gentian, Mountain Mint, Rough Blazing-star, Tall Boneset, Foxglove Beard-tongue, Nodding Ladies-tresses, Switch Grass, Three-awned Grass, Oatgrass, Purple Love Grass, Sand Dropsseed, Yellow Lady-slipper orchid, Butterfly-weed, Showy Tick-trefoil, and Shrubby Saint John's-wort. 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, and appear to provide vital nutrition for migrating insects like the Monarch butterfly, which are particularly attracted to the Tall Boneset.

The western half of the Sanctuary is a unusual forested ridge and swale landscape which appears to approximately 26 acres of native recovering ridge and swale landscape which it also has to have an interesting alluvial origin along the Saint Clair River dating back about 5,000 years. It likely originates from the same process of post-glacial high water during the Nipissing stage of early Lake Huron, followed by the rapid drainage and lowering of the lake water by about 15 feet as the Saint Clair River outlet down-cut.

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 of these items and see if we can determine their origins and purpose. Historic aerial photographs and mapping show that, other than limited use of the property as part of a munitions factory, beginning and ending 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 briefly, but more likely grazed. The only development apparent at that time was the adjacent Port Huron and Detroit Railroad line to the west. By 1948, a sprawling industrial complex had been developed along with the railroad spur that currently runs through the middle of the Loznak Sanctuary. Except for this industrial area, the vicinity appeared to consist of extensive open land, bordered by forest on the alluvial ridges to the west, and likely was covered by a lakeplain prairie community. Similar lakeplain prairie habitat in the Marysville area, where land use was not so intensive, serves as a refuge for several uncommon and rare plant species remnant of original lakeplain prairie populations that existed prior to Euro-American settlement.

Dottie Craig, March 2, 1931 - October 16, 2023

Our Departed Member of TLC Board

By TLC Executive Director Bill Collins

On October 16, our senior Executive Board Member, Dorothy "Dottie" Craig, passed away at the age of 92. She was a special member of the TLC Board and is missed. She loved having all of us together and generously made her home available for many of our board meetings, lunch cookouts during our spring stewardship in the Dead End Woods Sanctuary, and our first TLC annual meeting.

TLC Board Member Dottie Craig (right) with Co-Historian Linda Lang in the Winningham Room of The Village Club in Bloomfield Hills on October 13, 2023. Photo by Bill Collins.

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

Knowing how much Dottie loved animals, in 2012, Cheryl and I took her to Summer Wind Farms exotic animal sanctuary near Melvin. We also visited a few Amish stores in the area. About this time she gave us her cat "Pumpkin" who liked to follow me in the fields as I worked, but sadly disappeared a few years later. Dottie told us that she felt quite isolated in Fort Gratiot until she got to know us. It was our pleasure to have her company and we wish we could have gotten her out more.

Dottie hosted our first annual meeting in May of 2014 at her house, during which Mike Connell of The Times Herald gave a presentation in her dining room on the history of Native Americans in our region. We later watched a slide show about natural areas of the Thumb in her garden shed. This was the spring after our first "loop vortex" winter. It was still cold for May but we were all happy that we survived the winter and were together with the prospect of spring's arrival. Dottie also contributed financially to the TLC, particularly toward stewardship of the Dead End Woods Sanctuary, printing of our first TLC brochure, and in 2016, purchase of the historic rail station in North Street.

It was always very pleasant to meet at Dottie's house and she loved to host our events, particularly our spring work days and our winter board meetings which were usually near Christmas. Unfortunately, COVID put an end to our events at her house, especially out of concern for her health. We talked about a Christmas or New Year gathering last year but it didn't happen. We are thankful that we were able to take her to The Village Club in Bloomfield Hills last fall to visit the former estate of the original owner of her father's yacht, the "Maid Marian". I think this was the pinnacle of our time together. We even took her on a tour of the grounds of Cranbrook Institute while we were down there.

We all loved Dottie's stories, which she had many. Years ago, Dottie and her husband owned a pet store in Parma, Ohio which was very popular with local kids. At that time, she had a full-grown pet alligator that would crawl up from their basement to the kitchen when it was hungry. Her cat would often sit on top of the alligator with no trouble. Dottie's favorite pets were skunks. Of course, she loved all of the wild animals in her backyard next to the Dead End Woods. She told us all about her early life on Grosse Isle where her parents owned a large farm that was used to supply the military during World War II. Dottie's family had a sense of community responsibility. In 1970, her parents donated land and a building which became the Grosse Ile Community and Youth Center.

Dottie, her favorite Macaw parrot, and pet shop were featured in the Cleveland Plain Dealer in 1961.

Dottie and her skunks in the Cleveland Plain Dealer.

Dottie told us that her father once owned a yacht named the "Maid Marian", a well known vessel on the Detroit River. Dottie and her family loved cruising for recreation on the river and out on Lake Erie, Lake St. 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.

Dottie kept her old toy boat. Photo by Bill Collins.

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." So we did a little more searching and found that Winingham's estate is still intact and is home to the Village Club of Bloomfield Hills. This led to us taking Dottie to visit the Village Club last year on October 13. You can see more about that visit in our 2022 November 13 newsletter <http://www.thumbland.org/News/11392-DottiesDay.pdf>. Our visit was delayed for almost two years due to COVID and we are so glad we were able to visit last fall.

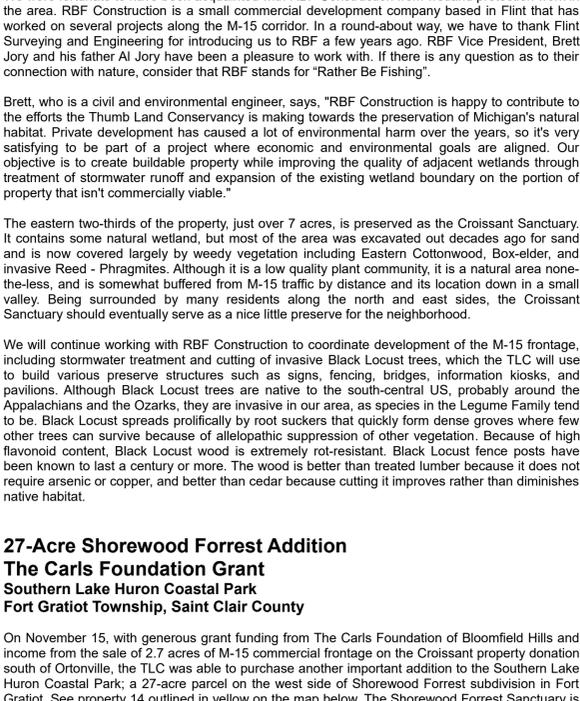
Dottie and I shared an appreciation for classical music. We hoped to attend a concert together of the International Symphony Orchestra with which she was also involved. COVID mostly ruined that plan also. Dottie and I frequently talked by phone until her hearing problems made that very difficult in her last months. I last visited with Dottie at her home in mid September. Cheryl stopped in a few times in early October. We wish we could have had more time together. Dottie was a unique person and we were fortunate to have known her.

To read more about Dottie, see her obituary here: <https://pollockrandall.com/obituaries/16880>

Croissant Property Sale

Brandon Township, Oakland County

On October 11, the TLC sold about 2.7 acres of the M-15 commercial frontage on the Dr. Paul Croissant property donation located just south of Ortonville along the east side of M-15 in Brandon Township, Oakland County. With the donation, our intent was to sell the commercial frontage to raise funds for other land purchases, and to preserve the remaining land with a conservation easement. The M-15 frontage of the Croissant property is covered by highly degraded woodland dominated by invasive Black Locust trees and Box-elder. The traffic on M-15 further diminishes the potential habitat quality. The income from this sale allowed us to purchase the 27-acre Shorewood Forest Sanctuary about a month later.



View northeast of M-15 commercial frontage on the Croissant property. Google Maps Street View.

We were fortunate to have been acquainted with RBF Construction from wetland protection work in the area. RBF Construction is a small commercial development company based in Flint that has worked on several projects along the M-15 corridor. In a round-about way, we have to thank Flint Surveying and Engineering for introducing us to RBF a few years ago. RBF Vice President, Brett Jory and his father Al Jory have been a pleasure to work with. If there is any question as to their connection with nature, consider that RBF stands for "Rather Be Fishing".

Brett, who is a civil and environmental engineer, says, "RBF Construction is happy to contribute to the efforts the Thumb Land Conservancy is making towards the preservation of Michigan's natural habitat. Private development has caused a lot of environmental harm over the years, so it's very satisfying to be part of a project where economic and environmental goals are aligned. Our objective is to create buildable property while improving the quality of adjacent wetlands through treatment of stormwater runoff and expansion of the existing wetland boundary on the portion of property that isn't commercially viable."

The eastern two-thirds of the property, just over 7 acres, is preserved as the Croissant Sanctuary. It contains some natural wetland, but most of the area was excavated about decades ago for sand and is now covered largely by weedy vegetation including Eastern Cottonwood, Box-elder, and invasive Reed - Phragmites. Although it is a low quality plant community, it is a natural area nonetheless, and is somewhat buffered from M-15 traffic by distance and its location down in a small valley. Being surrounded by many residents along the north and east sides, the Croissant Sanctuary should eventually serve as a nice little reserve for the neighborhood.

We will continue working with RBF Construction to coordinate the development of the M-15 frontage, including stormwater treatment and cutting of invasive Black Locust trees, which the TLC will use to build various preserve structures such as signs, fencing, bridges, information kiosks, and pavilions. Although Black Locust trees are native to the south-central US, probably around the Appalachians and the Ozarks, they are invasive in our area, as species in the Legume Family tend to be. Black Locust spreads prolifically by root suckers that quickly form dense groves where few other trees can survive because of allelopathic suppression of other vegetation. Because of high flavonoid content, Black Locust wood is extremely rot-resistant. Black Locust fence posts have been known to last a century or more. The wood is better than treated lumber because it does not require arsenic or copper, and better than cedar because cutting it improves rather than diminishes native habitat.

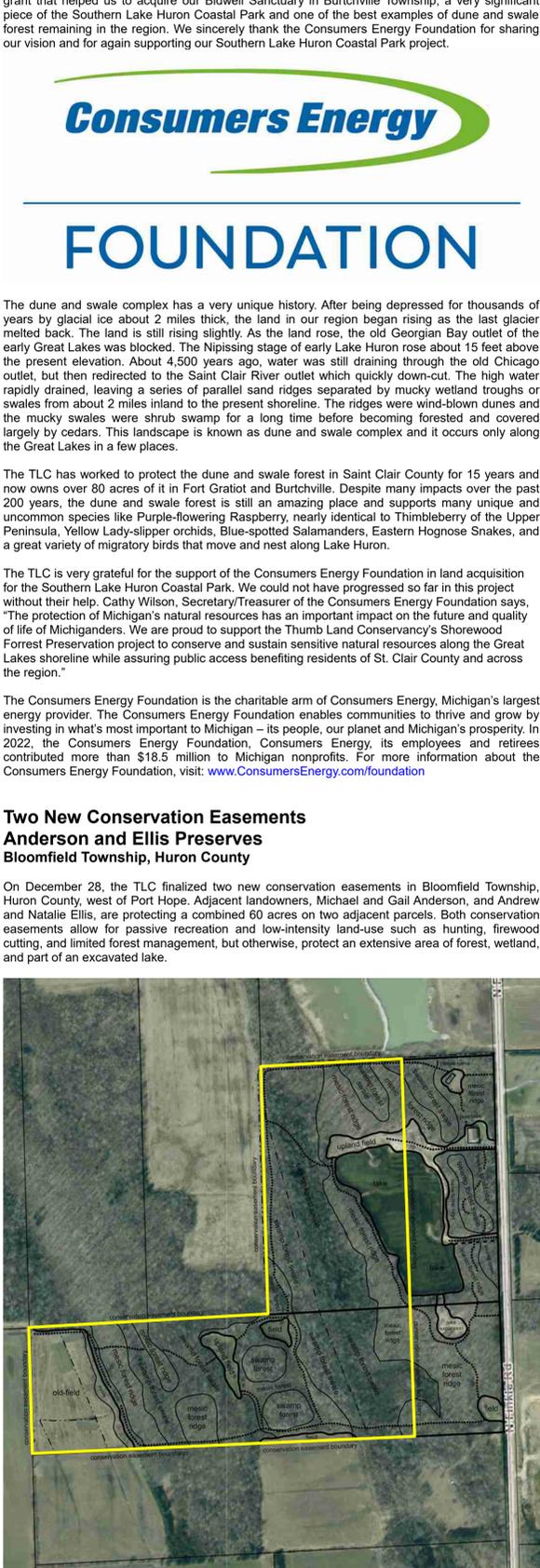
27-Acre Shorewood Forest Addition

The Carls Foundation Grant

Southern Lake Huron Coastal Park

Fort Gratiot Township, Saint Clair County

On November 15, with generous grant funding from The Carls Foundation of Bloomfield Hills and income from the sale of 2.7 acres of M-15 commercial frontage on the Croissant property donation south of Ortonville, the TLC was able to purchase another important addition to the Southern Lake Huron Coastal Park, a 27-acre parcel on the west side of Shorewood Forest subdivision in Fort Gratiot. See property 14 outlined in yellow on the map below. The Shorewood Forest Sanctuary is part of the broad swath of the coastal dune and swale forest along Lake Huron that the TLC has been working to protect since our formation in 2008. This unique complex of parallel sand ridges and mucky wetland swales once extended from the mouth of the Saint Clair River in Port Huron, north well into Sanilac County, and inland from Lake Huron at least 2 miles in some areas.



The Shorewood Forest Sanctuary was important to acquire in part because it allows the only likely trail connection between the two adjacent 80-acre Shorewood Forest parcels. About half of these two 80-acre parcels has been preserved by Saint Clair County as mitigation for permitted impacts to State-regulated wetlands. This acquisition makes possible a 4-mile section wilderness-like coastal trail from near the Fort Gratiot Nature Park south of Carrigan Road north through one of the largest forest tracts in the area. This alone will be a significant public asset. Once connected with the larger Southern Lake Huron Coastal Park, the trail and natural area should be an attraction of regional significance for hikers, birders, and others seeking a memorable outdoor recreation experience.

THE CARLS FOUNDATION

The TLC once again thanks The Carls Foundation of Bloomfield Hills, Michigan for the substantial grant that made this acquisition possible. The Carls Foundation shares our vision for the Southern Lake Huron Coastal Park and our work in the Thumb. In 2020, The Carls Foundation awarded the TLC a match grant of \$150,000 to acquire the Bidwell sanctuary in Burtchville Township, one of the best remaining examples of dune and swale forest in the region.

Elizabeth Stieg, CEO and President of The Carls Foundation, says, "The Carls Foundation is pleased to support the preservation of the Shorewood Forest addition to Thumb Land Conservancy's efforts protecting the dune and swale coastal forest along Lake Huron. This project provides a critical connection for the Southern Lake Huron Coastal Park and future pathway which will benefit the visitors and residents of Saint Clair County."

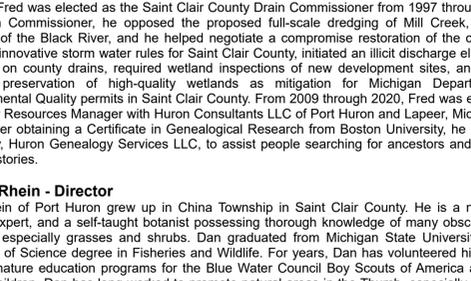
The Carls Foundation was established, by Bill and Marie Carls, in 1961. The Foundation supports projects and programs in children's health and human services and the preservation of natural lands within Michigan through conservancies. In 1924, Bill Carls immigrated to the United States from Germany. With his experience in European apprentice programs, he was readily employed with major industrial companies in Detroit. Numatics, Inc. was started in his garage in 1945 and is where he designed and then patented a unique spool-and-sleeve pneumatic valve. The company, headquartered in Highland Michigan, became a leading worldwide manufacturer of industrial air valves with plants across the globe including Sandusky, Michigan. The Carls Foundation is his legacy to help the children and citizens of Michigan. It is one of the few private foundations supporting land conservancies within the state to preserve and protect important natural lands for today and for the future.

Consumers Energy Foundation Grant

Southern Lake Huron Coastal Park

Fort Gratiot Township, Saint Clair County

On November 17, the TLC received great news from the Consumers Energy Foundation. The Foundation awarded the TLC another substantial grant to acquire more land in our Southern Lake Huron Coastal Park project area, most likely the remaining unprotected land west of Shorewood Forest subdivision. The Southern Lake Huron Coastal Park will eventually protect a 4.5-mile long section of dune and swale forest north of Port Huron, a rare coastal ecosystem, and one of only a few areas remaining from Lake Erie to the Saginaw Bay. Plans are to route a trail on the main dune ridges from near the Fort Gratiot Nature Park at Carrigan and Parker Roads, up to the day-use area of Lakeport State Park. In 2020, the Consumers Energy Foundation gave the TLC a large grant that helped us to acquire our Bidwell Sanctuary in Burtchville Township, a very significant piece of the Southern Lake Huron Coastal Park and one of the best examples of dune and swale forest remaining in the region. We sincerely thank the Consumers Energy Foundation for sharing our vision and for again supporting our Southern Lake Huron Coastal Park project.



The dune and swale complex has a very unique history. After being depressed for thousands of years by glacial ice about 2 miles thick, the land in our region began rising as the last glacier melted back. The land is still rising slightly. As the land rose, the old Georgian Bay outlet of the early Great Lakes was blocked. The Nipissing stage of early Lake Huron rose about 15 feet above the present elevation. About 4,500 years ago, water was still draining through the old Chicago outlet, but then redirected to the Saint Clair River outlet which quickly down-cut. The high water rapidly drained, leaving a series of parallel sand ridges separated by mucky wetland troughs or swales from about 2 miles inland to the present shoreline. The ridges were wind-blown dunes and the mucky swales were shrub swamp for a long time before becoming forested and covered largely by cedars. This landscape is known as dune and swale complex and it occurs only along the Great Lakes in a few places.

The TLC has worked to protect the dune and swale forest in Saint Clair County for 15 years and now owns over 80 acres of it in Fort Gratiot and Burtchville. Despite many impacts over the past 200 years, the dune and swale forest is still an amazing place and supports many unique and uncommon species like purple-flowering Raspberry, nearly identical to Thimbleberry of the Upper Peninsula, Yellow Lady-slipper orchids, Blue-spotted Salamanders, Eastern Hognose Snakes, and a great variety of migratory birds that move and nest along Lake Huron.

The TLC is very grateful for the support of the Consumers Energy Foundation in land acquisition for the Southern Lake Huron Coastal Park. We could not have progressed so far in this project without their help. Cathy Wilson, Secretary/Treasurer of the Consumers Energy Foundation says, "The protection of Michigan's natural resources has an important impact on the future and quality of life of Michiganders. We are proud to support the Thumb Land Conservancy's Shorewood Forest Preservation project to conserve and sustain sensitive natural resources along the Great Lakes shoreline while assuring public access benefiting residents of St. Clair County and across the region."

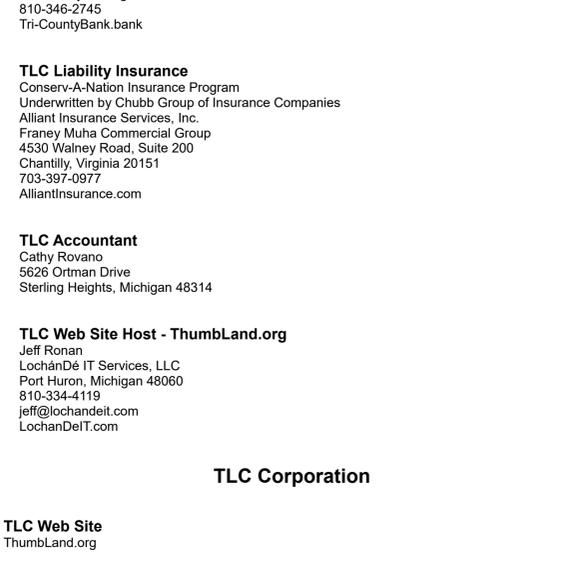
The Consumers Energy Foundation is the charitable arm of Consumers Energy, Michigan's largest energy provider. The Consumers Energy Foundation enables communities to thrive and grow by investing in what's most important to Michigan – its people, our planet and Michigan's prosperity. In 2022, the Consumers Energy Foundation, Consumers Energy, its employees and retirees contributed more than \$18.5 million to Michigan nonprofits. For more information about the Consumers Energy Foundation, visit: www.ConsumersEnergy.com/foundation

Two New Conservation Easements

Anderson and Ellis Preserves

Bloomfield Township, Huron County

On December 28, the TLC finalized two new conservation easements in Bloomfield Township, Huron County, west of Port Hope. Adjacent landowners, Michael and Gail Anderson, and Andrew and Natalie Ellis, are providing a combined 60 acres on two adjacent parcels. Both conservation easements allow for passive recreation and low-intensity land-use such as hunting, firewood cutting, and limited forest management, but otherwise, protect an extensive area of forest, wetland, and part of an excavated lake.



2020 aerial photograph with plant community map showing the Anderson conservation easement to the north and the Ellis conservation easement to the south outlined in yellow.

Both the Anderson Preserve and Ellis Preserve are covered largely by a complex of mid-successional second-growth mesic to wet-mesic northern forest on sand ridges and southern hardwood swamp on wetland swales. The combined conservation easements protect about 13% of the remaining forest in the section, which is part of a broadly agricultural landscape in Huron County. The majority of the new coastal park trail in 2022, the Dead End Woods Sanctuary, the Dearfield 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
Lozen Davidson & Kovar, P.C.
511 Fort Street, Suite 402
Port Huron, Michigan 48060
810-967-3970
LozenLaw.com

TLC Financial Institution
Tri-County Bank
41190 Main Street
Brown City, Michigan 48416
810-346-2745
Tri-CountyBank.bank

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 Ortmann Drive
Sterling Heights, Michigan 48314

TLC Web Site Host - ThumbLand.org
Jeff Ronan
LochanDeIT Services, LLC
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
Marquette, 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: 703998K
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

IRS Search for Charities, Online Version of Publication 78:
<https://irs.irs.gov/app/soi/pub/78Search.do?fn1=41-2247569&names=Kcty=&state=MI...&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 2023 December 31

Current Assets	
Checking/Savings	
Tri-County Bank	61,183.92
Total Checking/Savings	61,183.92
Total Current Assets	61,183.92
Fixed Assets	
Land (12 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
Croissant Sanctuary	0
Shorewood Forrest Sanctuary	180,000.00
Total Fixed Assets	563,522.00
Total Assets	624,705.92
Liabilities and Equity	
Equity	
Opening Balance Equity	624,705.92
Total Equity	624,705.92
Total Liabilities & Equity	624,705.92

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/>

2022 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

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.

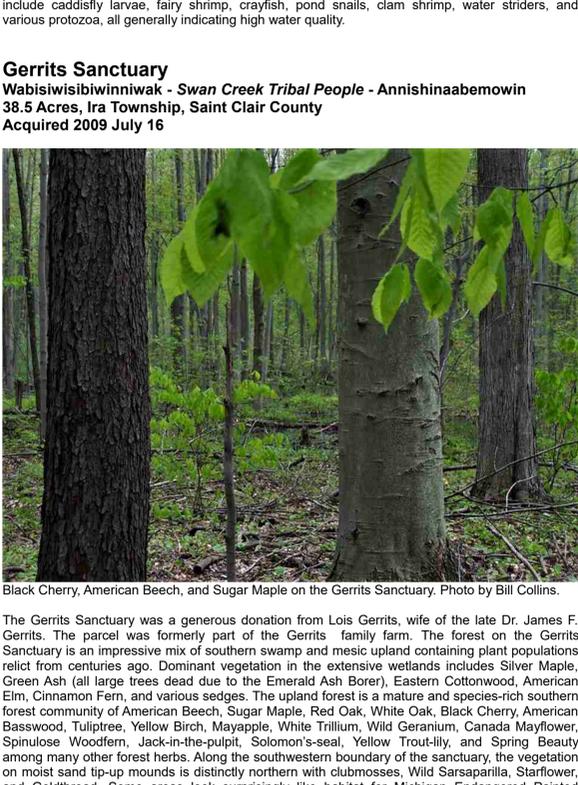
2023 Projected IRS Tax Statement Summary	
Total Revenue	207,459.56
Total Expenses	-188,738.20
Net Income	18,721.36
Revenue	
General Contributions	2149.02
Huron County Community Foundation	
Stewardship Grant	900.00
Croissant Property Sale	101,088.88
Shorewood Forrest Purchase Grants	101,990.00
Anderson & Ellis Conservation Easements	2,000.00
Total Revenue	208,127.90
Expenses	
Shorewood Forrest Parcel Purchase	-181,694.13
Croissant Property Tax & Mailing Fee	-1,692.89
Shorewood Forrest Parcel Appraisal	-2,500.00
Preserve Stewardship	-1,400.00
Local Tax Assessments	-418.18
Liability Insurance	-1,033.00
Total Expenses	-188,738.20
Net Income	18,721.36

In 2023, 91% of TLC revenue was used for preserve acquisition. 1% of TLC revenue was used for preserve stewardship and payment of local tax assessments. One volunteer was paid only for preserve stewardship work in 2022. Less than 1% of TLC revenue was used for administrative costs including liability insurance and general office expense. 5% of TLC revenue was retained as part of a preserve stewardship endowment fund. 5% of TLC revenue was applied to the general fund, which is used primarily to pay local tax assessments and general administrative costs.

TLC Properties

Dead End Woods Sanctuary

Makadewagmitggweyainniwak - Black River Tribal People - Annishinaabemowin
17.6 Acres, Fort Gratiot Township, Saint Clair County
Acquired 2008 December 30

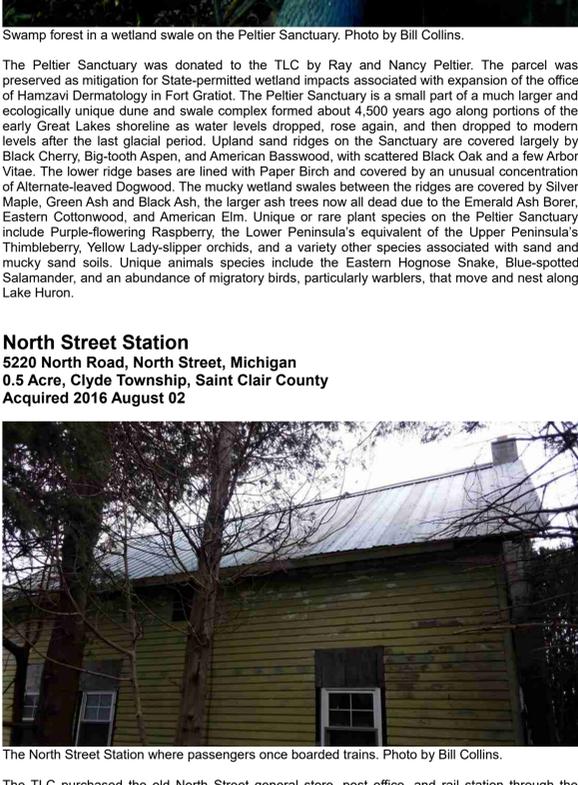


Swamp forest in May on the Dead End Woods Sanctuary. Photo by Bill Collins.

The Dead End Woods, located at the dead end of Wilson Drive, was preserved as mitigation for State-permitted wetland impacts associated with a County drain project. The Sanctuary is part of a highly diverse southern swamp and mesic upland forest community 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 plant 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. 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 historically observed in the wetter portions of the swamp, or vernal pools, include caddisfly larvae, fairy shrimp, crayfish, pond snails, clam shrimp, water striders, and various protozoa, all generally indicating high water quality.

Gerrits Sanctuary

Wabisiwisibiwinniwak - Swan Creek Tribal People - Annishinaabemowin
38.5 Acres, Ira Township, Saint Clair County
Acquired 2009 July 16



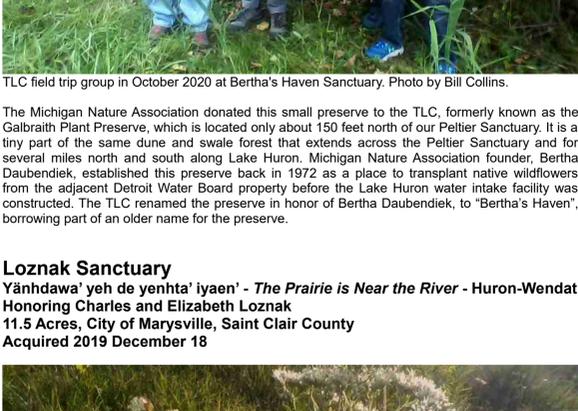
Black Cherry, American Beech, and Sugar Maple on the Gerrits Sanctuary. Photo by Bill Collins.

The Gerrits Sanctuary was a generous donation from Lois Gerrits, wife of the late Dr. James F. Gerrits. The parcel was formerly part of the Gerrits family farm. 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, Pinuslose Woodfern, Jack-in-the-pulpit, Solomon's-seal, Yellow Trout-lily, and Spring Beauty among many other forest herbs. Along the northern 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.

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 2,000 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.

Peltier Sanctuary

Ke'Ya Makoce - Turtle Land - Lakota
11.5 Acres, Fort Gratiot Township, Saint Clair County
Acquired 2010 June 28

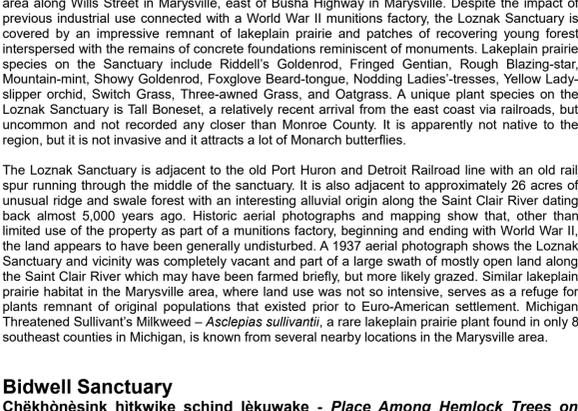


Swamp forest in a wetland swale on the Peltier Sanctuary. Photo by Bill Collins.

The Peltier Sanctuary was donated to the TLC by Roy and Nancy Peltier. The parcel was preserved as mitigation for State-permitted wetland impacts associated with expansion of the office of Hamzavi Dermatology in Fort Gratiot. The Peltier Sanctuary is a small part of a much larger and ecologically unique dune and swale complex formed prior to Euro-American settlement of the early Great Lakes shoreline as water levels dropped, rose again, and then dropped to modern levels after the last glacial period. Upland sand ridges on the Sanctuary 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. The mucky wetland swales between the ridges 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. Unique or rare plant species on the Peltier Sanctuary include Purple-flowering Raspberry, the Lower Peninsula's equivalent of the Upper Peninsula's Thimbleberry, Yellow Lady-slipper orchids, and a variety of other species associated with sand and mucky sand soils. Unique animals species include the Eastern Hognose Snake, Blue-spotted Salamander, and an abundance of migratory birds, particularly warblers, that move and nest along Lake Huron.

North Street Station

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



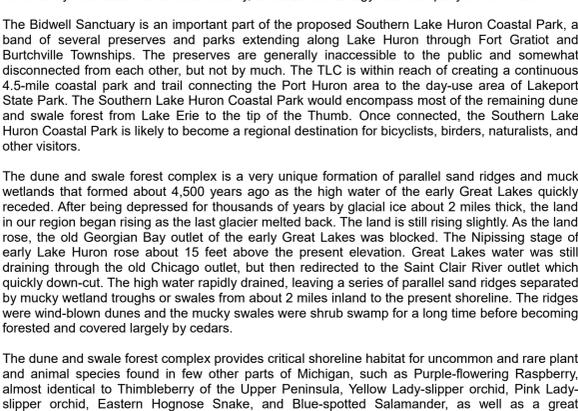
The North Street Station where passengers once boarded trains. Photo by Bill Collins.

The TLC purchased the old North Street general store, post office, and rail station through the Saint Clair County tax auction. This historic structure would have otherwise been demolished. The North Street station is one of 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 Cystere 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.

Bertha's Haven Sanctuary

Bemindooeyenh - An Elder Woman of Great Respect - Annishinaabemowin
0.62 Acre, Fort Gratiot Township, Saint Clair County
Acquired 2019 September 27

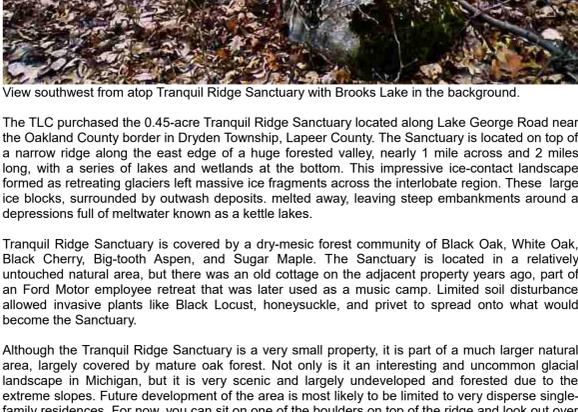


TLC field trip group in October 2020 at Bertha's Haven Sanctuary. Photo by Bill Collins.

The Michigan Nature Association donated this small preserve to the TLC, formerly known as the Galbraith Plant Preserve, which is located only about 150 feet north of our Peltier Sanctuary. It is a tiny part of the same dune and swale forest that extends across the Peltier Sanctuary and for several miles north and south along Lake Huron. Michigan Nature Association founder, 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.

Loznak Sanctuary

Yanhdaw' yeh de yizabeh' iyaen' - The Prairie is Near the River - Huron-Wendat Honoring Charles and Elizabeth Loznak
11.5 Acres, City of Marysville, Saint Clair County
Acquired 2019 December 18



Monarch butterflies on Tall Boneset on the Loznak Sanctuary. Photo by Bill Collins.

TLC attorney Timothy Loznak, arranged donation of the 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. Despite the impact of previous industrial use connected with a World War II munitions factory, the Loznak Sanctuary is covered by an impressive remnant of lakeplain prairie and patches of recovering young forest interspersed with the remains of concrete foundations reminiscent of monuments. Lakeplain prairie species on the Sanctuary include Riddell's Goldenrod, Fringed Gentian, Rough Blazing-star, Mountain-mint, Showy Goldenrod, Foxglove Beard-tongue, Nodding Ladies'-tresses, Yellow Lady-slipper orchid, Switch Grass, Three-awned Grass, and Oatgrass. A unique plant species on the Loznak Sanctuary is Tall Boneset, a relatively recent arrival from the east coast via railroads, but uncommon and not recorded any closer than Monroe County. It is apparently not native to the region, but it is not invasive and it attracts a lot of Monarch butterflies.

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. Historic aerial photographs and mapping show that, other than limited use of the property as part of a munitions factory, beginning and ending 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 briefly, but more likely grazed. Similar lakeplain prairie habitat in the Marysville area, where land use was not so intensive, serves as a refuge for plants remnant of original populations that existed prior to Euro-American settlement of Michigan. Threatened Sullivant's Milkweed - *Asclepias sullivantii*, a rare lakeplain prairie plant found in only 8 southeast counties in Michigan, is known from several nearby locations in the Marysville area.

Bidwell Sanctuary

Chèkhonésink hitkwike thereid lékuwage - Place Among Hemlock Trees on Sandy Ground Where There is Sound of Waves Breaking - Lenape
42.1 Acres, Burtchville Township, Saint Clair County
Acquired 2020 July 17

View northeast from under an Eastern Hemlock tree on the main dune ridge with a large wetland swale in the background. Photo by Bill Collins.

The Bidwell Sanctuary is one of the best examples of dune and swale forest remaining along the eastern shoreline of the Thumb. 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.

The Bidwell Sanctuary is an 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. The TLC is within reach of creating a continuous 4.5-mile coastal park and trail connecting the Port Huron area to the day-use area of Lakeport State Park. The Southern Lake Huron Coastal Park would encompass most of the remaining dune and swale forest from Lake Erie to the tip of the Thumb. Once connected, the Southern Lake Huron Coastal Park is likely to become a regional destination for bicyclists, birders, naturalists, and other visitors.

The dune and swale forest complex is a very unique formation of parallel sand ridges and muck wetlands that formed about 4,500 years ago as the high water of the early Great Lakes quickly receded. After being depressed for thousands of years by glacial ice about 2 miles thick, the land in our region began rising as the last glacier melted back. The land is still rising slightly. As the land rose, the old Georgian Bay outlet of the early Great Lakes was blocked. The Nipissing stage of early Lake Huron rose about 15 feet above the present elevation. Great Lakes water was still draining through the old Chicago outlet, but then redirected to the Saint Clair River outlet which quickly down-cut. The high water rapidly drained, leaving a series of parallel sand ridges separated by mucky wetland troughs or swales from about 2 miles inland to the present shoreline. The ridges were wind-blown dunes and the mucky swales were shrub swamp for a long time before becoming forested and covered largely by cedars.

The dune and swale forest 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, almost identical to Thimbleberry of the Upper Peninsula, Yellow Lady-slipper orchid, Pink Lady-slipper orchid, Eastern Hognose Snake, and Blue-spotted Salamander, as well as a great abundance of migratory birds that move and nest along Lake Huron.

Tranquil Ridge Sanctuary

0.45 Acre, Dryden Township, Lapeer County
Acquired 2021 April 09

View southwest from atop Tranquil Ridge Sanctuary with Brooks Lake in the background.

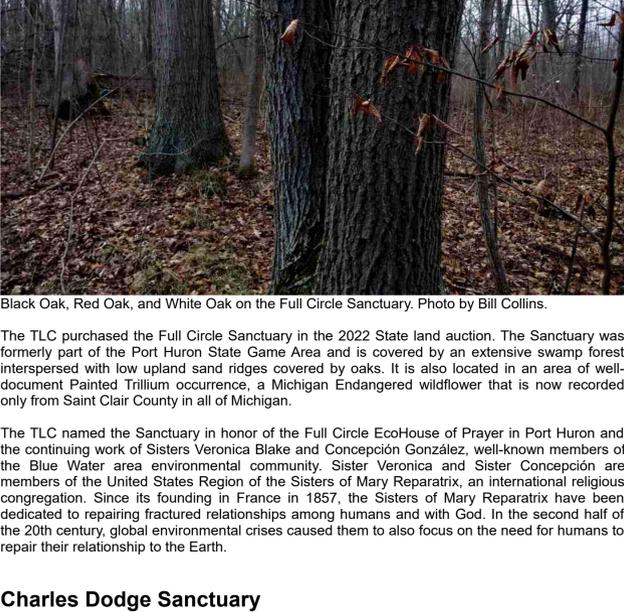
The TLC purchased the 0.45-acre Tranquil Ridge Sanctuary located along Lake George Road near the Oakland County border in Dryden Township, Lapeer County. The Sanctuary is located on top of a narrow ridge along the east edge of a huge forested valley, nearly 1 mile across and 2 miles long, with a series 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.

Tranquil Ridge Sanctuary is covered by a dry-mesic forest community of Black Oak, White Oak, Black Cherry, Big-tooth Aspen, and Sugar Maple. The Sanctuary is located in a relatively untouched natural area, but there was an old cottage on the adjacent property years ago, part of an Ford Motor employee retreat that was later used as a music camp. Limited soil disturbance allowed invasive plants like Black Locust, honeysuckle, and privet to spread onto what would become the Sanctuary.

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 sparse 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.

Full Circle Sanctuary

8.5 Acres, Kimball Township, Saint Clair County
Acquired 2022 August 11



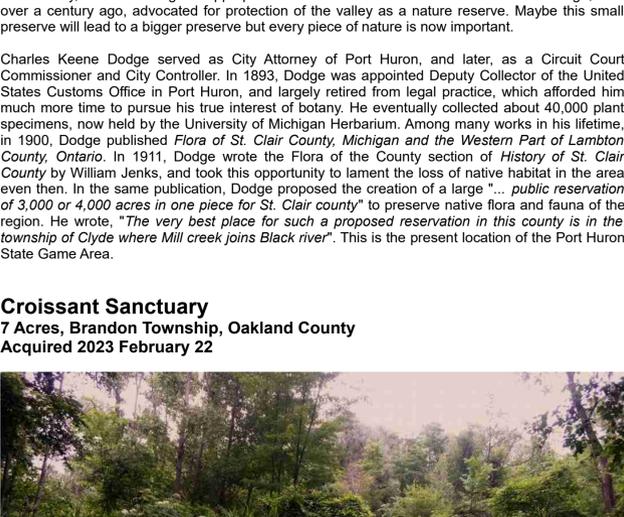
Black Oak, Red Oak, and White Oak on the Full Circle Sanctuary. Photo by Bill Collins.

The TLC purchased the Full Circle Sanctuary in the 2022 State land auction. The Sanctuary was formerly part of the Port Huron State Game Area and is covered by an extensive swamp forest interspersed with low upland sand ridges covered by oaks. It is also 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 TLC named the Sanctuary 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. 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.

Charles Dodge Sanctuary

2.78 Acres, Clyde Township, Saint Clair County
Acquired 2022 August 11



Marginal swamp forest with tip-up mounds on the Charles Dodge Sanctuary. Photo by Bill Collins.

The TLC purchased the Charles Dodge Sanctuary in the 2022 State land auction. The Sanctuary was formerly part of the Port Huron State Game Area and is covered by an extensive swamp forest interspersed with low upland sand ridges covered by a northern forest community of Red Maple, Paper Birch, and Eastern White Pine. The Sanctuary is 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. 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 served as City Attorney of Port Huron, and later, as a Circuit Court Commissioner and 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 to pursue his true interest of botany. He eventually collected about 40,000 plant specimens, now held by the University of Michigan Herbarium. Among many works in his lifetime, in 1900, Dodge published *Flora of St. Clair County, Michigan and the Western Part of Lambton County, Ontario*. 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. 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.

Croissant Sanctuary

7 Acres, Brandon Township, Oakland County
Acquired 2023 February 22



View east of wetland near the middle of the Croissant Sanctuary. Photo by Bill Collins.

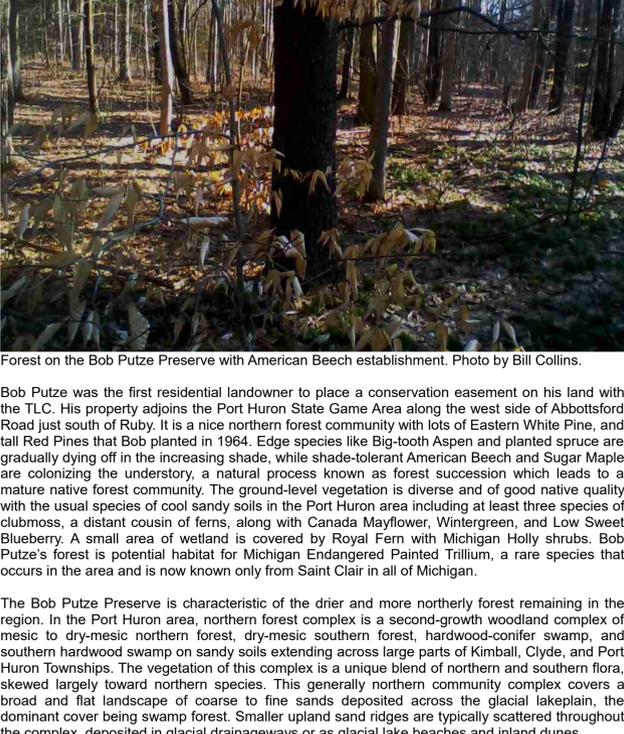
Through the assistance of Bill Vandercook, a Lapeer-based land conservation consultant who worked with landowners in the region for many years, the TLC was given a generous donation of about 10 acres of property from Dr. Paul Croissant of Clarkston. Dr. Croissant was a neurological surgeon with Trinity Health in Pontiac and practiced in Oakland County since 1970. Dr. Croissant has long enjoyed the outdoors, particularly hunting, and has made several trips out West and to Africa. The Croissant Sanctuary is located just south of Ortonville along the east side of M-15 in Brandon Township, Oakland County. The property is outside of our six-county territory but not far from Lapeer County. With the donation, our intent was to sell the commercial frontage to raise funds for other land purchases, and to preserve the remaining land with a conservation easement.

In October of 2023, the TLC sold about 2.7 acres of the M-15 commercial frontage to RBF Construction, a small commercial development company based in Flint. The income from this sale allowed us to purchase the 27-acre Shorewood Forest Sanctuary a few months later. The 2.7 acres of M-15 frontage is covered by highly degraded woodland dominated by invasive Black Locust trees and Box-elder. The traffic on M-15 further diminishes the potential habitat quality. We were fortunate to have been acquainted with RBF Construction from wetland protection work in the area. If there is any question as to their connection with nature, consider that RBF stands for "Rather Be Fishing".

The eastern two-thirds of the property, just over 7 acres, is preserved as the Croissant Sanctuary. It contains some natural wetland, but most of the area was excavated out decades ago for sand and is now covered largely by weedy vegetation including Eastern Cottonwood, Box-elder, and invasive Reed - Phragmites. Although it is a low quality plant community, it is a natural area none-the-less, and is somewhat buffered from M-15 traffic by distance and its location down in a small valley. Being surrounded by many residents along the north and east sides, the Croissant Sanctuary should eventually serve as a nice little preserve for the neighborhood.

Shorewood Forrest Sanctuary

27 Acres, Fort Gratiot Township, Saint Clair County
Acquired 2023 November 15



Wetland swale on the Shorewood Forrest Sanctuary. Photo by Bill Collins.

With generous grant funding from The Carls Foundation and income from the sale of the M-15 commercial frontage of the Croissant property donation south of Ortonville, the TLC was able to purchase another important addition to the Southern Lake Huron Coastal Park; a 27-acre parcel on the west side of Shorewood Forest subdivision in Fort Gratiot. The Shorewood Forest Sanctuary is part of the broad swath of the coastal dune and swale forest along Lake Huron that the TLC has been working to protect since our formation in 2008. This unique complex of parallel sand ridges and mucky wetland swales once extended from the mouth of the Saint Clair River in Port Huron, north well into Sanilac County, and inland from Lake Huron at least 2 miles in some areas.

The Shorewood Forest Sanctuary was important to acquire in part because it allows the only likely trail connection between the two adjacent 80-acre Shorewood Forest parcels. About half of these two 80-acre parcels has been preserved by Saint Clair County as mitigation for permitted impacts to State-regulated wetland. With this acquisition, the TLC has begun planning a 1-mile section of an unpaved wilderness-like coastal trail from near the Fort Gratiot Nature Park south of Carrigan Road, north through one of the largest forest tracts in the area. This alone will be a significant public asset. Once connected with the larger Southern Lake Huron Coastal Park, the trail and natural area should be an attraction of regional significance for hikers, birders, and others seeking a memorable outdoor recreation experience.

TLC Conservation Easements

Bob Putze Preserve

7.8 Acres, Fort Gratiot Township, Saint Clair County
Established 2017 March 17



Forest on the Bob Putze Preserve with American Beech establishment. Photo by Bill Collins.

Bob Putze was the first residential landowner to place a conservation easement on his land with the TLC. His property adjoins the Port Huron State Game Area along the west side of Abbottsford Road just south of Ruby. It is a nice northern forest community with lots of Eastern White Pine, and tall Red Pines that Bob 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 understorey, 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 bluebloss, a distant area of ferns, along with Canada Mayflower, Wintergreen, and Low Sweet Chokeberry. 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 that occurs in the area and is now known only from Saint Clair in all of Michigan.

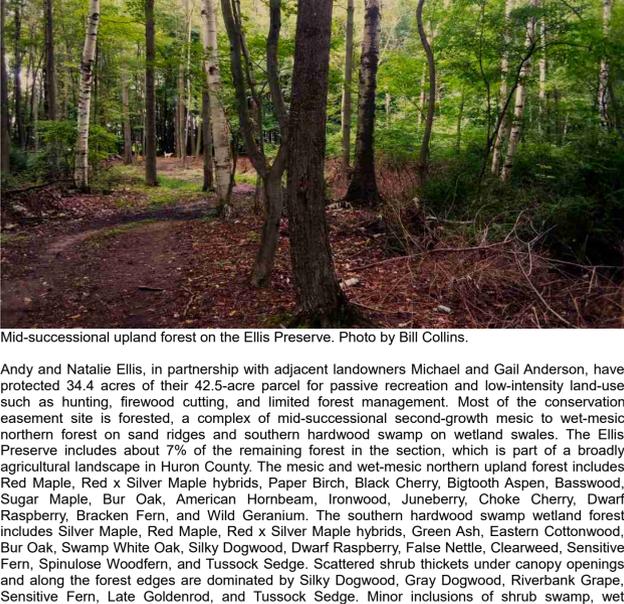
The Bob Putze Preserve is characteristic of the drier and more northerly forest remaining in the region. In the Port Huron area, northern forest complex is a second-growth woodland complex of mesic to dry-mesic northern forest, dry-mesic southern forest, hardwood-conifer swamp, and southern hardwood 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, being in glacial drainageways or as glacial lake beaches and inland dunes.

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. The TLC conservation easement provides the legal basis for that protection in perpetuity.

Because of the value of the TLC conservation easement, Bob Putze could claim a significant federal income tax deduction over 15 years, the property taxes will not be uncapped upon sale, and he could claim a local property tax reduction.

Koester Preserve

79.4 Acres, Fort Gratiot Township, Saint Clair County
Established 2020 April 04



Red Maple, Red Oak, and American Beech sapling on the Koester Preserve. Photo by Bill Collins.

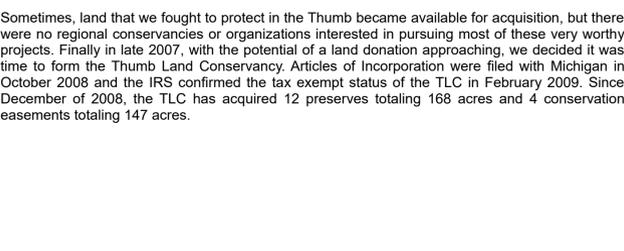
Darrin and Kim Koester were the second landowners to protect their land with a TLC conservation easement on 79.4 acres of their 84.6-acre parcel. The Koester conservation easement protects one of the larger forest tracts remaining in Fort Gratiot Township and significantly reduced the property taxes on this large parcel. The Koester Preserve includes a large area of relatively mature, non-fragmented southern swamp and hardwood-conifer swamp forest complex on seasonally inundated 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, Spinylose 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, Red x Silver Maple hybrids, Black Cherry, Bigtooth Aspen, hazel, Jack-in-the-pulpit, Wild 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 Chokeberry, 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.

The Koesters developed their residence on the north end of the parcel which 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, Panicled 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 Koesters in avoiding regulated wetland impacts, identifying invasive shrubs such as buckthorn and honeysuckle, and advised them on invasive weed control methods.

In addition to receiving a substantial local property tax reduction, because of the value of the TLC conservation easement, the Koesters could take a significant federal income tax deduction over 15 years and the property taxes will not be uncapped upon sale.

Anderson Preserve

24.9 Acres, Bloomfield Township, Huron County
Established 2023 December 28



View south of the lake and surrounding forest on the Anderson Preserve. Photo by Bill Collins.

Michael and Gail Anderson have protected 24.9 acres of their 40-acre parcel for passive recreation and low-intensity land-use such as hunting, firewood cutting, and limited forest management. Most of the conservation easement site is forested, a complex of mid-successional second-growth mesic to wet-mesic northern forest on sand ridges and southern hardwood swamp on wetland swales. The Anderson Preserve includes about 7% of the remaining forest in the section, which is part of a broadly agricultural landscape in Huron County. The mesic and wet-mesic northern upland forest includes Red Maple, Red x Silver Maple hybrids, Paper Birch, Black Cherry, Bigtooth Aspen, Basswood, Sugar Maple, Bur Oak, American Hornbeam, Ironwood, Juneberry, Choke Cherry, Dwarf Raspberry, Bracken Fern, and Wild Geranium. The southern hardwood swamp wetland forest includes Silver Maple, Red Maple, Red x Silver Maple hybrids, Green Ash, Eastern Cottonwood, Bur Oak, Swamp White Oak, Silky Dogwood, Dwarf Raspberry, False Nettle, Clearweed, Sensitive Fern, Spinylose Woodfern, and Tussock Sedge. Scattered shrub thickets under canopy openings and along the forest edges are dominated by Silky Dogwood, Gray Dogwood, Riverbank Grape, Sensitive Fern, Late Goldenrod, and Tussock Sedge. Minor inclusions of shrub swamp, wet meadow, and upland old-field are scattered throughout the forest and along the edges. Approximately 4.6 acres of the Anderson Preserve is part of a roughly 7.5-acre lake excavated in a sand ridge. Roughly half of the Anderson Preserve consists of State-regulated wetland which is connected to a creek that flows into Lake Huron north of the village of Port Hope.

Because of the value of the TLC conservation easement, the Andersons are able to take a significant federal income tax deduction over 15 years, the property taxes will not be uncapped upon sale, and they may be able to claim a local property tax reduction.

Ellis Preserve

34.4 Acres, Bloomfield Township, Huron County
Established 2023 December 28

Mid-successional upland forest on the Ellis Preserve. Photo by Bill Collins.

Andy and Natalie Ellis, in partnership with adjacent landowners Michael and Gail Anderson, have protected 34.4 acres of their 42.5-acre parcel for passive recreation and low-intensity land-use such as hunting, firewood cutting, and limited forest management. Most of the conservation easement site is forested, a complex of mid-successional second-growth mesic to wet-mesic northern forest on sand ridges and southern hardwood swamp on wetland swales. The Ellis Preserve includes about 7% of the remaining forest in the section, which is part of a broadly agricultural landscape in Huron County. The mesic and wet-mesic northern upland forest includes Red Maple, Red x Silver Maple hybrids, Paper Birch, Black Cherry, Bigtooth Aspen, Basswood, Sugar Maple, Bur Oak, American Hornbeam, Ironwood, Juneberry, Choke Cherry, Dwarf Raspberry, Bracken Fern, and Wild Geranium. The southern hardwood swamp wetland forest includes Silver Maple, Red Maple, Red x Silver Maple hybrids, Green Ash, Eastern Cottonwood, Bur Oak, Swamp White Oak, Silky Dogwood, Dwarf Raspberry, False Nettle, Clearweed, Sensitive Fern, Spinylose Woodfern, and Tussock Sedge. Scattered shrub thickets under canopy openings and along the forest edges are dominated by Silky Dogwood, Gray Dogwood, Riverbank Grape, Sensitive Fern, Late Goldenrod, and Tussock Sedge. Minor inclusions of shrub swamp, wet meadow, and upland old-field are scattered throughout the forest and along the edges. Old-field covers the west end of the Ellis Preserve, dominated largely by Wild Carrot, Late Goldenrod, and unidentified grasses with scattered Big Bluestem Grass. Roughly half of the Ellis Preserve consists of State-regulated wetland which is connected to a creek that flows into Lake Huron north of the village of Port Hope.

Because of the value of the TLC conservation easement, the Ellises are able to take a significant federal income tax deduction over 15 years, the property taxes will not be uncapped upon sale, and they may be able to claim a local property tax reduction.

TLC Mission

TLC Territory

The Thumb Land Conservancy is working to preserve natural areas in the Thumb region 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 on and near the Great Lakes, great natural areas in the interior of the Thumb have been largely neglected. In recent years, we are happy to see that some new lands have been preserved, but so much remains unprotected.

There is a common 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 resemble conditions that existed before Euro-American 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 that have been quietly holding their own for centuries. 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 Kenoskee 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 co-founder 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.

TLC board members have been involved with environmental issues and natural area protection in the Thumb for many years. From 1999 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 1990s, as members of the Thumb Bioregional Alliance, we opposed a sprawling 800-acre golf course, condominium, and commercial development on the Wingford Estate along the Black River in the heart 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 Shanon 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. In the 1990s through early 2000s, Bill and Cheryl monitored one of the last populations of Michigan Threatened Pitcher's Thistle in the Thumb. From 1998 through 2023, as Huron Ecologic, Bill and Cheryl worked with several citizen groups to defend natural areas across southern Michigan through State and federal environmental regulations.

Sometimes, land that we fought to protect in the Thumb became available for acquisition, but there were no regional conservancies or organizations interested in pursuing most of these very worthy projects. Finally in late 2007, with the potential of a land donation approaching, we decided it was time to form the Thumb Land Conservancy. 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 December of 2008, the TLC has acquired 12 preserves totaling 168 acres and 4 conservation easements totaling 147 acres.