

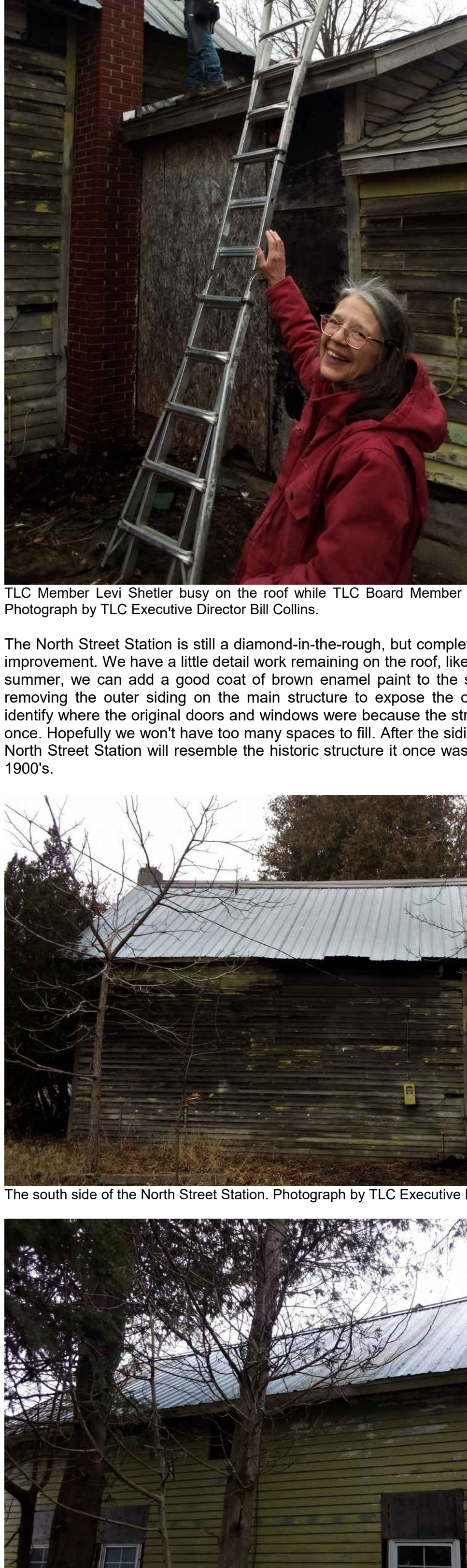
Thumb Land Conservancy News

2023 January 12

North Street Station

Clyde Township, Saint Clair County

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

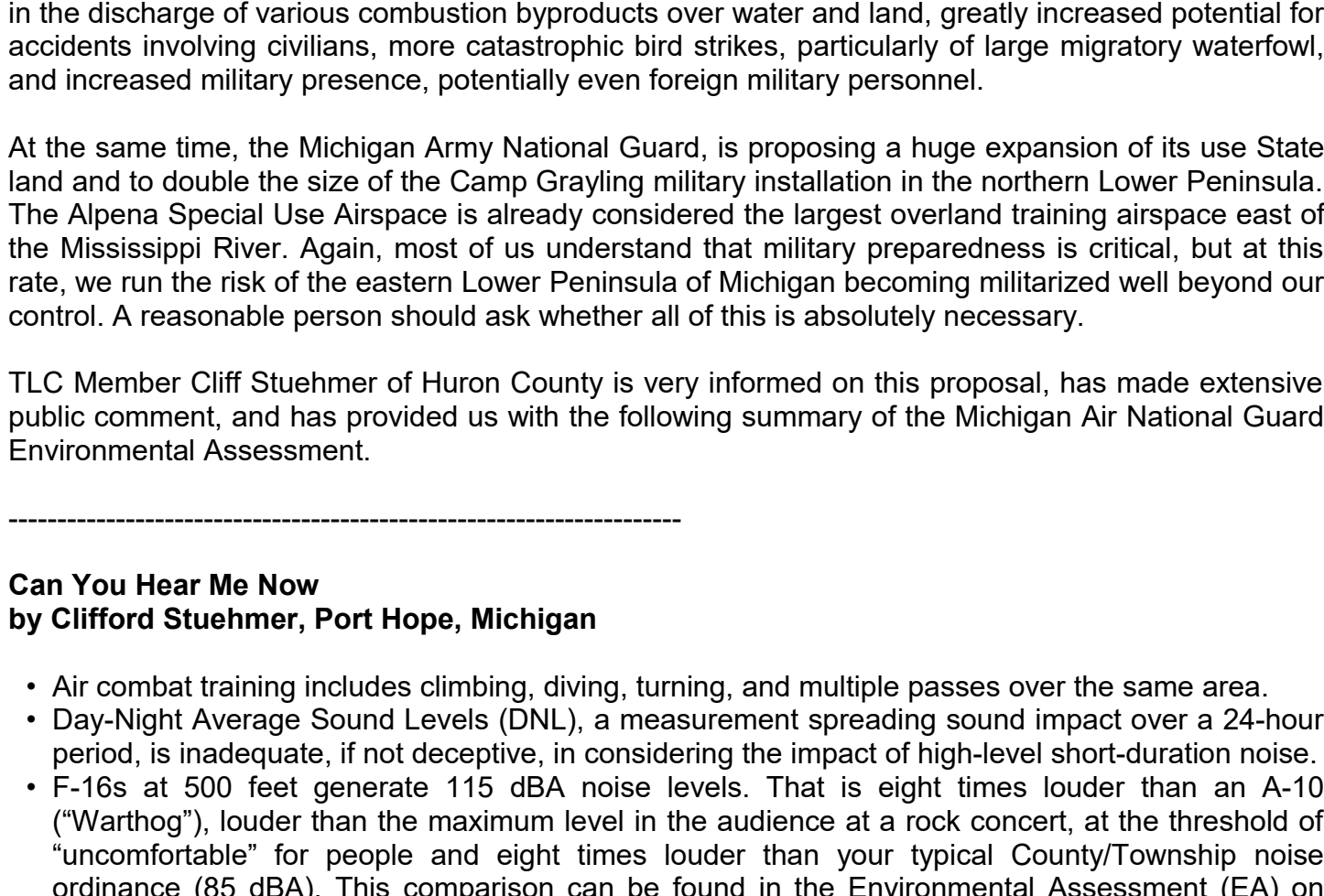


TLC Member Levi Sheller busy on the roof while TLC Board Member Kay Cumbow steps in to say hello. Photograph by TLC Executive Director Bill Collins.

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



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

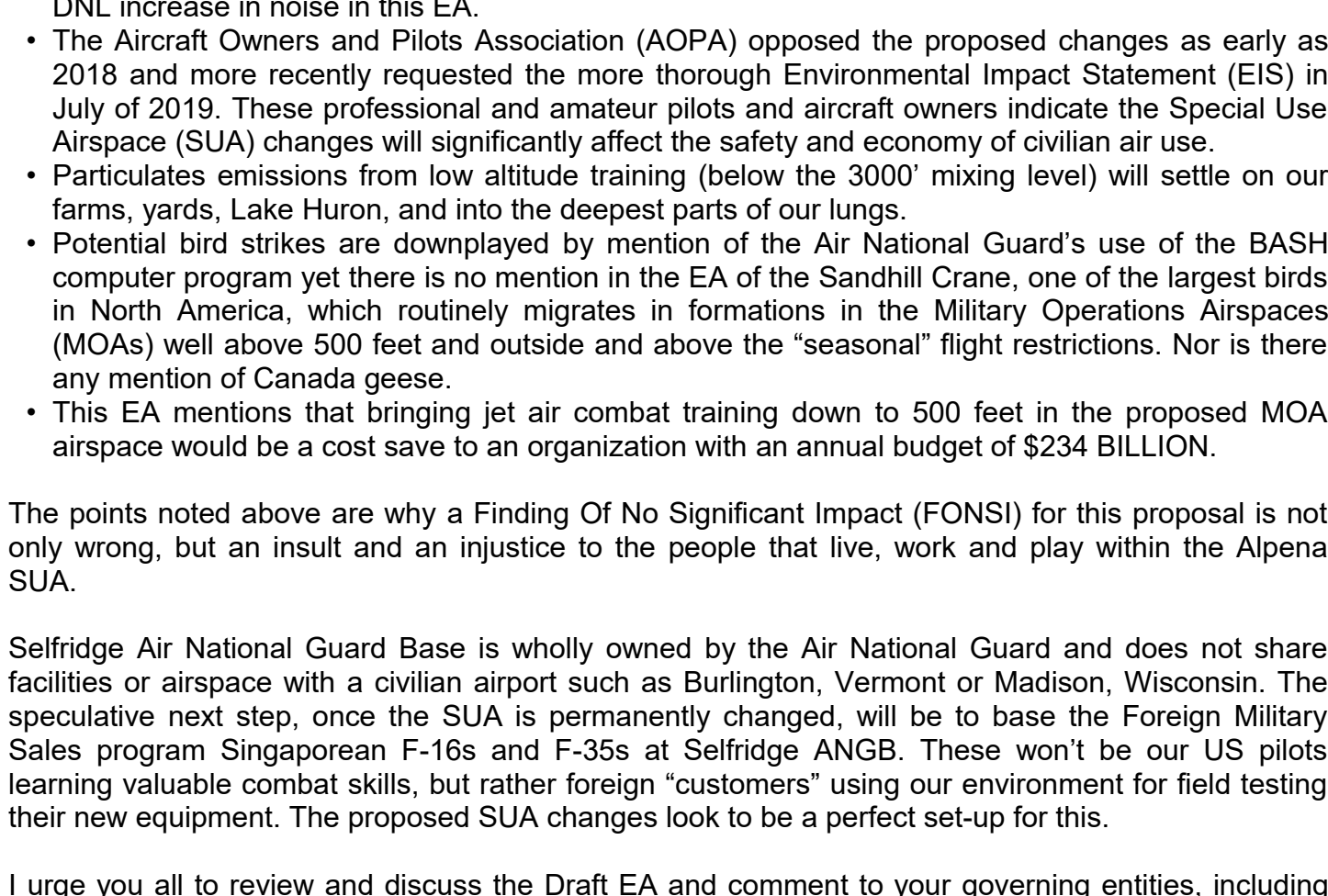


The north side of the North Street Station. Photograph by TLC Executive Director Bill Collins.

Tranquil Ridge Sanctuary

Dryden Township, Lapeer County

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



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

Work will continue on the preserve through the winter, focused on removal of a few invasive Black Locust trees that seem to have spread along Lake George Road from the north.

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

A huge expansion of the Michigan Air National Guard Alpena Special Use Airspace Complex would significantly increase and intensify military combat training across the northern Lower Peninsula and Thumb. The Michigan Air National Guard is currently accepting public comment on their draft environmental assessment, but you only have until midnight of January 14 to submit your comments.

While military defense is very important, especially these days, if you think it is equally important to balance defense with peaceful living, outdoor recreation, wild lands and wildlife, your health, and the general quality of our environment, you would do well to quickly educate yourself on this proposal and make public comment as soon as possible.

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

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

At the same time, the Michigan Air National Guard is proposing a huge expansion of its use State and to double the size of the Camp Grayling military installation in the northern Lower Peninsula. The Alpena Special Use Airspace is already considered the largest overland training airspace east of the Mississippi River. Again, most of us understand that military preparedness is critical, but at this rate, we run the risk of the eastern Lower Peninsula of Michigan becoming militarized well beyond our control. A reasonable person should ask whether all of this is absolutely necessary.

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

Can You Hear Me Now

by Clifford Stuehmer, Port Hope, Michigan

- Air combat training includes climbing, diving, turning, and multiple passes over the same area.
- Day-Night Average Sound Levels (DNL), a measurement spreading sound impact over a 24-hour period, is inadequate, if not deceptive, in considering the impact of high-level short-duration noise.
- F-16s at 500 feet generate 115 dBA noise levels. That is eight times louder than a A-10 (70 dBA) and the maximum level in the audience at a rock concert, at the threshold of "uncomfortable" for people and eight times louder than your typical County/Township noise ordinance (85 dBA). This comparison can be found in the Environmental Assessment (EA) on page 39, Figure 3.1. This is also the level at which the Secretary of the Air Force requires hearing protection for all Air Force personnel ON or OFF base (Air Force Instruction AFI 48-127).
- Even at the 5999-foot flight ceiling, every overflight by F-16 jets will violate local ordinances that limit noise to 85 dBA
- When an F-16 passes overhead at 500 feet, you will be unable to communicate with someone standing three feet away from you without shouting for approximately 20 seconds. This "Shout Zone" extends about 2.5 miles to either side of the flight path (decreasing this time period as you approach 2.5 miles to either side of the aircraft).
- The EA touts a "seasonal" flight restriction concession to help reduce the significant negative impact the noise of low altitude jet combat training will have on tourism along the shoreline. This is an admission of significant impacts from the high noise levels. However, it is an empty concession that does nothing for the full time residents along the shoreline or boaters/kayakers more than 1 mile offshore.
- The prior Foreign Military Sales pilot training Environmental Impact Statement quoted a 0.65% average decrease in property value for each dB increase in Day-Night Average Sound Level (DNL). This translates to about a 4% property value decrease for those areas showing a 6 dB DNL increase in noise in this EA.
- The Aircraft Owners and Pilots Association (AOPA) opposed the proposed changes as early as 2018 and more recently requested the more thorough Environmental Impact Statement (EIS) in July of 2019. These professional and amateur pilots and aircraft owners indicate the Special Use Airspace (SUA) changes will significantly affect the safety and economy of civilian air use.
- Particulates emissions from low altitude training (below the 3000' mixing level) will settle on our farms, yards, Lake Huron, and into the deepest parts of our lungs.
- Potential bird strikes are downplayed by mention of the Air National Guard's use of the BASH computer program yet there is no mention in the EA of the Sandhill Crane, one of the largest birds in North America, which routinely migrates in formations in the Military Operations Airspaces (MOAs) well above 500 feet and outside and above the "seasonal" flight restrictions. Nor is there any mention of Canada geese.
- This EA mentions that bringing jet air combat training down to 500 feet in the proposed MOA airspace would be a cost save to an organization with an annual budget of \$234 BILLION.

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

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

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

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

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

Yes, even trash burning must once again be factored-in to our environmental exposure out here in the country. We thought this was largely relegated to less enlightened times, but a lot of trash is still burned in piles, in barrels, in Amish woodstoves, and increasingly in recently popular outdoor wood burners which provide the indifferent operator with a personal incinerator for everything from treated lumber to plastic to tires to who knows what. Such burning spews all kinds of nasty toxins across our land and waters. Most of these toxins are carcinogenic and disruptive to basic functions within our bodies. They include benzene, styrene, formaldehyde and other aldehydes, dioxin, PCB, furans, heavy metals, chromated copper arsenate, pentachlorophenol, creosote, acids, and other substances. Who is responding to these releases of toxins from burning on private land? No one as far as we can tell. Even fire departments are part of the problem when they burn structures containing treated lumber, vinyl siding, plywood, OSB, PVC pipes, and other materials.

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

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

Those wanting to make public comment on the Draft Environmental Assessment For Modification and Addition of Airspace at the Alpena Special Use Airspace Complex can access the report at this link, located at the upper right of the public notice page:

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

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

Comments on the Draft Environmental Assessment and the Draft Finding of No Significant Impact can be emailed to: NBG_A4.AA.NEPA.COMMENTS.Org@us.af.mil with the subject line "ATTN: Alpena SUA EA" by midnight of January 14.

For more information, see the following articles:

Huron Daily Tribune, 2023 January 04
Concern Over Air National Guard Plan
<https://digital.olivesoftware.com/olive/odn/hurondailytribune/shared/ShowArticle.aspx?doc=HDT-2F2023%2F01%2F04&entity=AR00102&sk=32B01921&mode=text#>

Bridge Michigan, 2022 December 07
Anger Over National Guard Air Training Plan Over Grayling And The Thumb
<https://www.bridge-michigan.com/michigan-environment-watch/anger-over-national-guard-air-training-plan-over-grayling-and-thumb>

Full Circle Nature Sanctuaries and Charles Dodge Nature Sanctuary

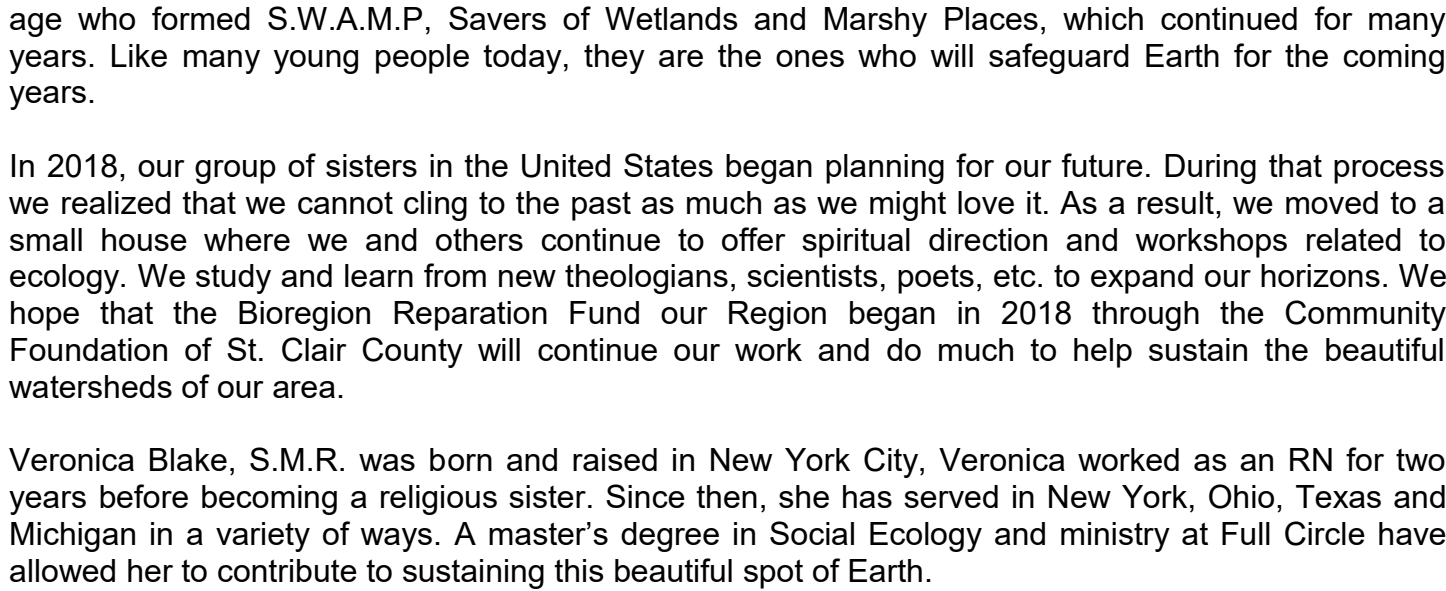
Saint Clair County

In our December meeting, the TLC Executive Board officially named our two new Saint Clair County preserves acquired in the August 11 State land auction. Our new Kimball Township preserve is now the *Full Circle Nature Sanctuary*. Our new Clyde Township preserve is now the *Charles Dodge Nature Sanctuary*.

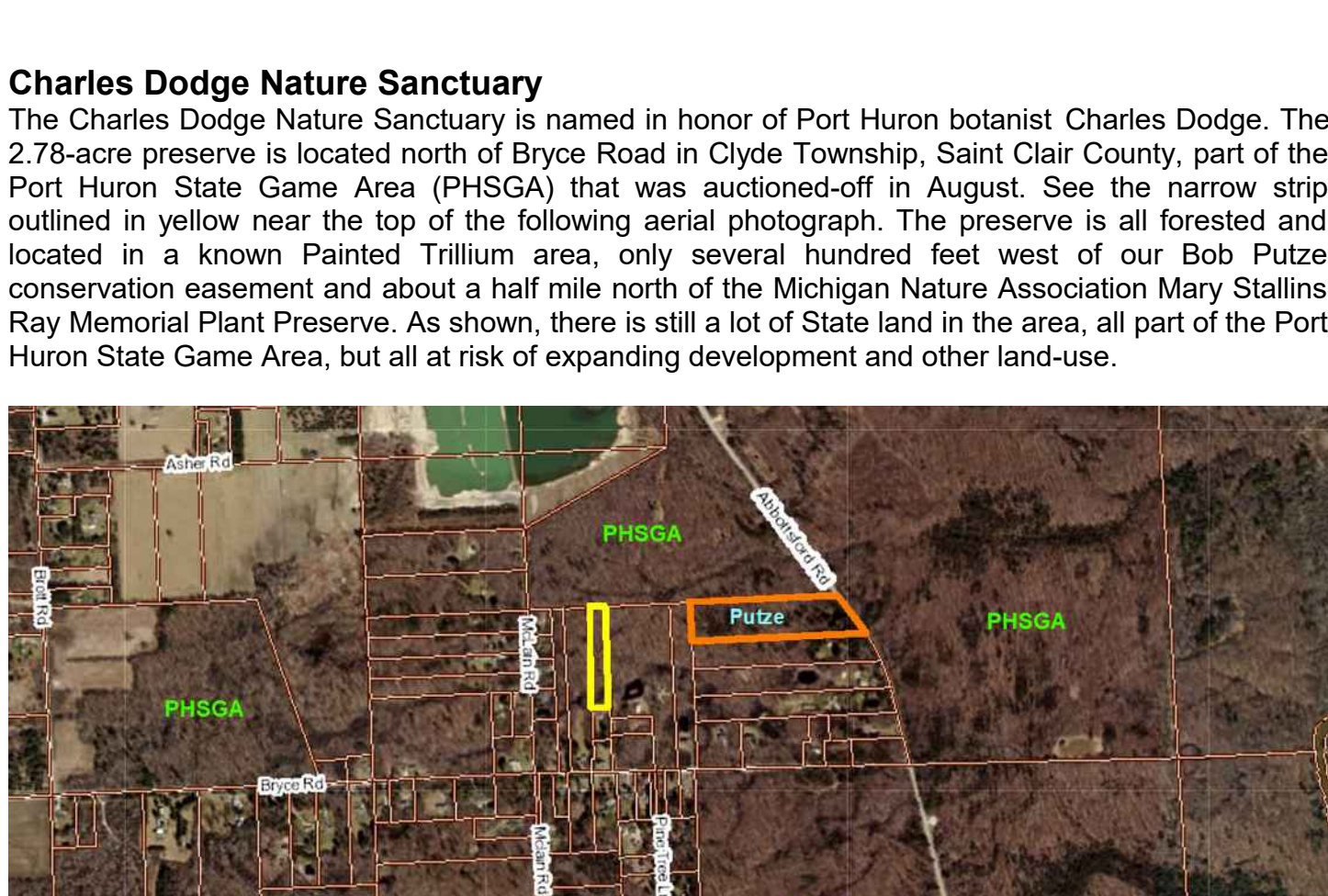
Full Circle Nature Sanctuary

The Full Circle Nature Sanctuary is 8.5 acres of forest at the southwest corner of the Full Circle EcoHouse of Prayer in Port Huron and the continuing work of Sisters Veronica Blake and Concepción González. Most of the TLC Executive Board have been friends of the Sisters for about 30 years, well-known members of the Blue Water area environmental community.

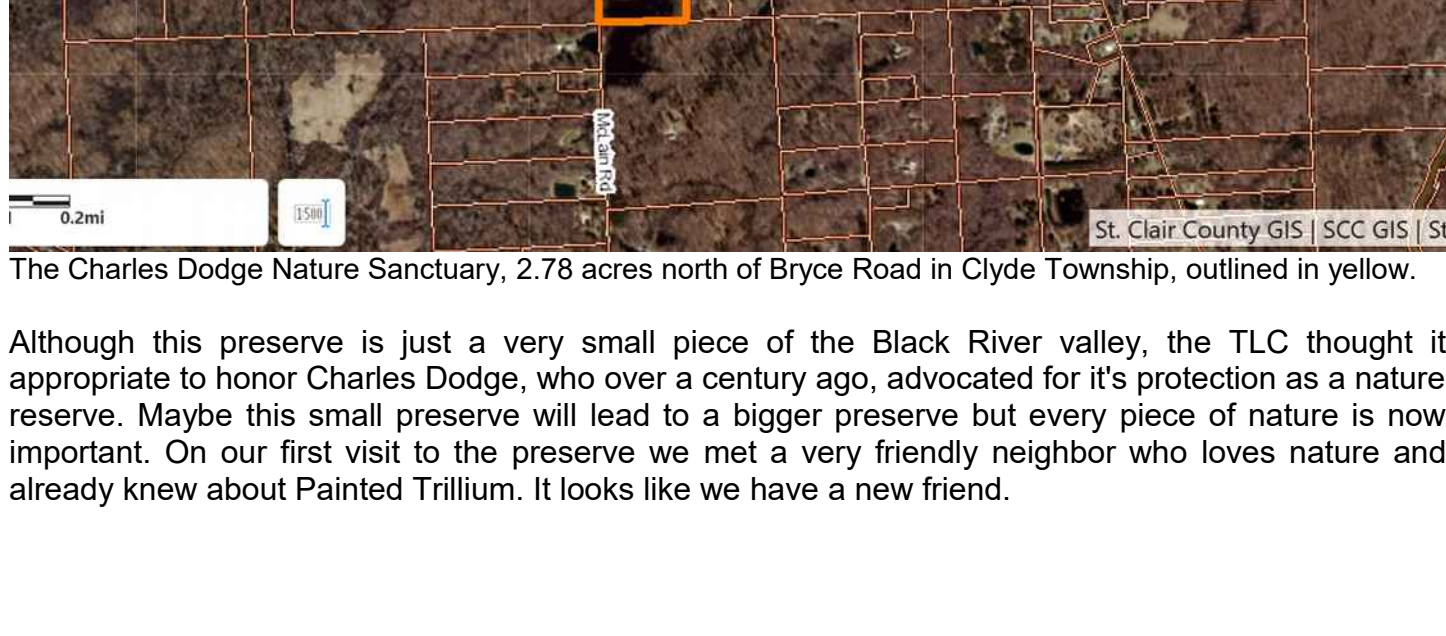
The Full Circle Nature Sanctuary is 8.5 acres of forest at the southwest corner of the Full Circle EcoHouse and Barth Road in Kimball Township, Saint Clair County, part of the Port Huron State Game Area that was auctioned-off in August. The preserve is outlined in yellow on the following aerial photograph. The Full Circle Nature Sanctuary is completely forested and located in an area of well-document Painted Trillium occurrence, a Michigan Endangered wildflower that is now recorded only from Saint Clair County in all of Michigan.



The Full Circle Nature Sanctuary, 8.5 acres located at the southwest corner of Finchbaugh Road and Barth Road in Kimball Township, outlined in yellow.



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



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

Sister Veronica and Sister Concepción are members of the United States Region of the Sisters of Mary Reparatrix, an international religious congregation. Since its founding in France in 1857, the Sisters of Mary Reparatrix have been dedicated to repairing fractured relationships among humans and with God. In the second half of the 20th century, global environmental crises caused them to also focus on the need for humans to repair their relationship to the Earth.

The Sisters with the TLC on the Bidwell Sanctuary on May 17, 2022. Left to right: TLC Board Members Kay Cumbow, Fred Fuller, and Cheryl Collins; Sister Veronica Blake; TLC Member Kate Kenney; and Sister Concepción González of Full Circle EcoHouse of Prayer. Photograph by TLC Executive Director Bill Collins.

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

For more information about the Full Circle EcoHouse of Prayer and the Sisters of Mary Reparatrix, visit their web sites at:

Full Circle EcoHouse of Prayer
FullCircleRetreat.org

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

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

In 2018, the Sisters established the Bioregion Reparation Fund with the Community Foundation of Saint Clair County in order to carry on their legacy of ecological education, spirituality, and restoration in the bioregion defined by Lake Huron, the Saint Clair River and the Black River watersheds. The Bioregion Reparation Fund provides grants which are awarded in alignment with Full Circle's ecological guiding beliefs:

- Earth Community is an interconnected web of life.
- Life within the web is sustained by diversity.
- Every creature in the web deserves respect.
- Justice and peace are integral to the life of the web.
- Compassion toward all leads to healing and reconciliation.
- Creation tends toward communion whose ultimate expression is love.

The TLC was a recipient of a \$4,500 grant from the Bioregion Reparation Fund in 2022 to construct an informational kiosk at our Bidwell Nature Sanctuary, part of the Southern Lake Huron Coastal Park.

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

The following is a personal history written by Sister Concepción:

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

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

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

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

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

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

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

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

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

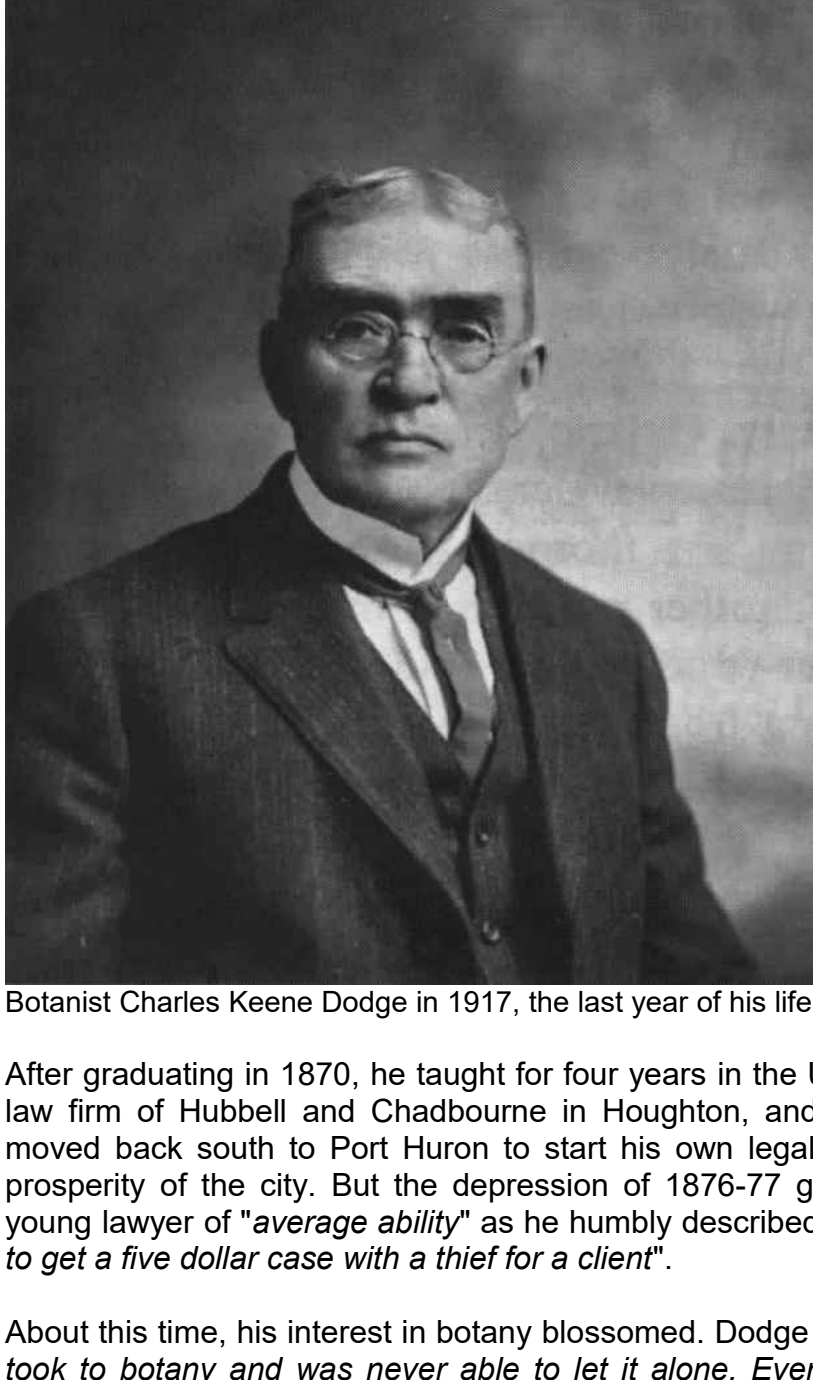
Charles Dodge Nature Sanctuary

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

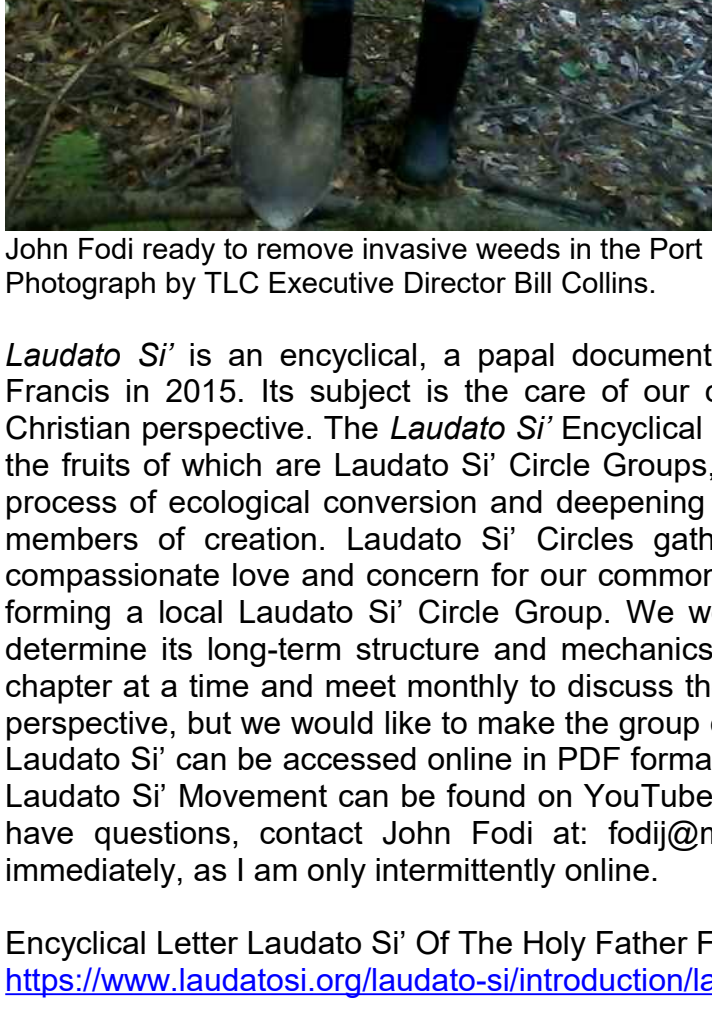
Starting in 1908, at 64, Dodge made many expeditions through the Upper Peninsula with the Michigan Geological and Biological Survey. He explored the western shoreline of Lake Huron from Bay City to Saint Ignace, and was very familiar with the Thumb. His observations of Tuscola County and other regions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

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

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

Blue Water Laudato Si' Circle Group

By John Fodi



John Fodi ready to remove invasive weeds in the Port Huron State Game Area. Photograph by TLC Executive Director Bill Collins.

Laudato Si' is an encyclical, a papal document addressing a particular subject, issued by Pope Francis in 2015. Its subject is the care of our common home, in other words, the Earth, from a Christian perspective. The *Laudato Si'* Encyclical has given rise to the Laudato Si' Movement, one of the fruits of which are Laudato Si' Circle Groups, small groups of people who are committed to the process of ecological conversion and deepening their relationship with God as Creator and with all members of creation. Laudato Si' Circles gather regularly for prayer, reflection, and action in compassionate love and concern for our common home. There is interest in the Blue Water area in forming a local Laudato Si' Circle Group. We would like to let the initial participants of the group determine its long-term structure and mechanics. But to start we would like to read Laudato Si' a chapter at a time and meet monthly to discuss the document. *Laudato Si'* is written from a Christian perspective, but we would like to make the group open to everyone to profit from other points of view. Laudato Si' can be accessed online in PDF format. A film, *The Letter*, which captures the spirit of the Laudato Si' Movement can be found on YouTube. If you are interested in being part of this group or have questions, contact John Fodi at: fodij@mail.com. Please be patient if I do not respond immediately, as I am only intermittently online.

Encyclical Letter Laudato Si' Of The Holy Father Francis On Care For Our Common Home
<https://www.laudatosi.org/laudato-si/introduction/laudato-si-full-text/>

The Letter: Laudato Si Film
<https://www.youtube.com/watch?v=Rps9bs85BII>

The Letter Action Site
<https://www.theletterfilm.org/>

Laudato Si' Action Platform
<https://laudatosiactionplatform.org/>

Note from TLC Executive Director Bill Collins:

Reading our TLC news the past few months, you could be forgiven for thinking that the TLC has become a Catholic organization. We have featured our grant from the Bioregion Reparation Fund established by Sister Veronica Blake and Sister Concepción González of the Full Circle EcoHouse of Prayer. We recently named our new Kimball Township preserve, the Full Circle Nature Sanctuary, in honor of the work of our friends, Sister Veronica and Sister Concepción. This past summer, we tried to purchase the Catholic Youth Organization Girls Camp near Forester. I wrote about my friend, Father Ken Overbeck and his work to protect a little bit of nature in his parish in Massachusetts. Now we are promoting a Laudato Si' Circle Group for the Blue Water Area. It's all kind of a coincidental convergence. But actually, elements of the Catholic Church have been at the forefront of efforts to promote environmental awareness and action in recent years since the election of Pope Francis, his chosen name honoring Saint Francis of Assisi.

The TLC is not a religious organization, nor do we promote any particular religion or lack thereof. We are an organization dedicated to nature protection, passive outdoor recreation, and environmental education, regardless of the beliefs of our members. Of course, we are all free to express our opinions and beliefs, or to not express anything. This is a big part of what life in the United States of America should be about.

It is a shame, however, that most Christians seem to express very little if any meaningful regard for nature while its destruction is now so extensive. To the contrary, there is indifference, uninformed criticism, and senseless push-back on protection efforts which not only puts our world in further peril, but fails to consider the well-being of everyone, especially the poor and future generations. Ultimately, it runs counter to a major foundation of Christian commandments to "... love your neighbor as yourself". It often seems too much to ask that people simply stop and consider the world they are leaving to their own children and grandchildren.

According to the Book of Genesis, nature is God's creation. Just that should mean enough. Despite the curse, and because of it, creation is worthy of more care. Many have argued that God created the world for our "use", meaning to use in any way and to use up as seen fit. However, when most people use vehicles, equipment, tools, or anything they value, they try not to destroy those things. They are careful and maintain them for the next use or the next owner. They are also careful, usually, about how much of something they use, like fuel, knowing they need to pay to replace it. But Genesis doesn't really say or imply just use. Humans were charged to "... have dominion over every living thing that moveth upon the earth." I wouldn't want to argue about which living things "moveth" or don't. Unfortunately, many people think "dominion" means unconditional and utter exploitative domination. But no. "Dominion" as understood by anyone with any sense of maturity and kindness implies a great responsibility. This has been the historical sense of the word. The word "dominion" means authority, sovereignty, control, and ownership, and has typically been used in the context of rule or government. "Dominion" is derived from the Indo-European word *dom* meaning *home*. *Dom* still means *home* in several languages. Yes, *dominate* is one word containing *dom*, but think of others such as *domestic*, *domicle*, *kingdom*, and *freedom*. Like it or not, we all share the same home, or *dom*, the Earth, which is essentially like a *dome*, enclosed by the thin atmosphere above and the land and water below.

Most would agree that the free market system and economic self-interest has generally served the advancement of civilization over the past few centuries, although wealth has accrued largely to the most powerful countries in the temperate zone of the northern hemisphere. Of course, slavery and other exploitations must be factored in. With increasing globalization, the benefits have increased, but so also have the externalized or unaccounted costs of the world's economies. Now, the cumulative choices of so many people intensify the impacts. Large groups of people across the world are left behind, if not directly exploited, and we are all victims of the many unpaid costs of our economic activity, such as pollution, loss of nature, and climate change. Very few of these true costs have ever been included in the prices we pay for products and services. But we all pay for these costs, one way or another, sooner or later, some more than others, and especially future generations. Whether it be our health, our well-being, our taxes, the loss of opportunities, the loss of inspiration, ... these unaccounted costs are catching up with us to the point that no one will be able to pay them. It all gets back to the "*tragedy of the commons*", an old observation dating back at least to Aristotle who stated, "*That which is common to the greatest number gets the least amount of care. Men pay most attention to what is their own: they care less for what is common.*" But before people can truly care even for what they own, they have to know what they own. When they look at land, if all they see is blank space to be used, they don't know and they will never care. Unfortunately, this is the dominant mentality of the world.

What we have now is clearly unsustainable. It worked for a few centuries, a very short time in history, because the Earth is so big and the human population was smaller. The world simply cannot provide unlimited resources and bear the unending costs of our current economies. Science, markets, and economies, like most systems, are just tools. They do not dictate our values or best use of resources. It's up to us to choose and to build our values into these systems as best we can. We can choose the kind of world we want to live in. Untempered by a true attitude of dominion and stewardship, our common home is *doomed*. The *Laudato Si'* encyclical of Pope Francis provides a reasoned Christian perspective on our responsibilities in this common home.

TLC Winter Stewardship

Details will be sent in future e-mails. If you want to work on your own on any of these, let us know.

Date	Activity	Location
January - March	trail and park entrance work	Bidwell Sanctuary
January - March	clean-up and restoration	Tranquil Ridge Sanctuary
January - March	clean-up and sign installation	Full Circle Nature Sanctuary
January - March	clean-up and sign installation	Charles Dodge Nature Sanctuary

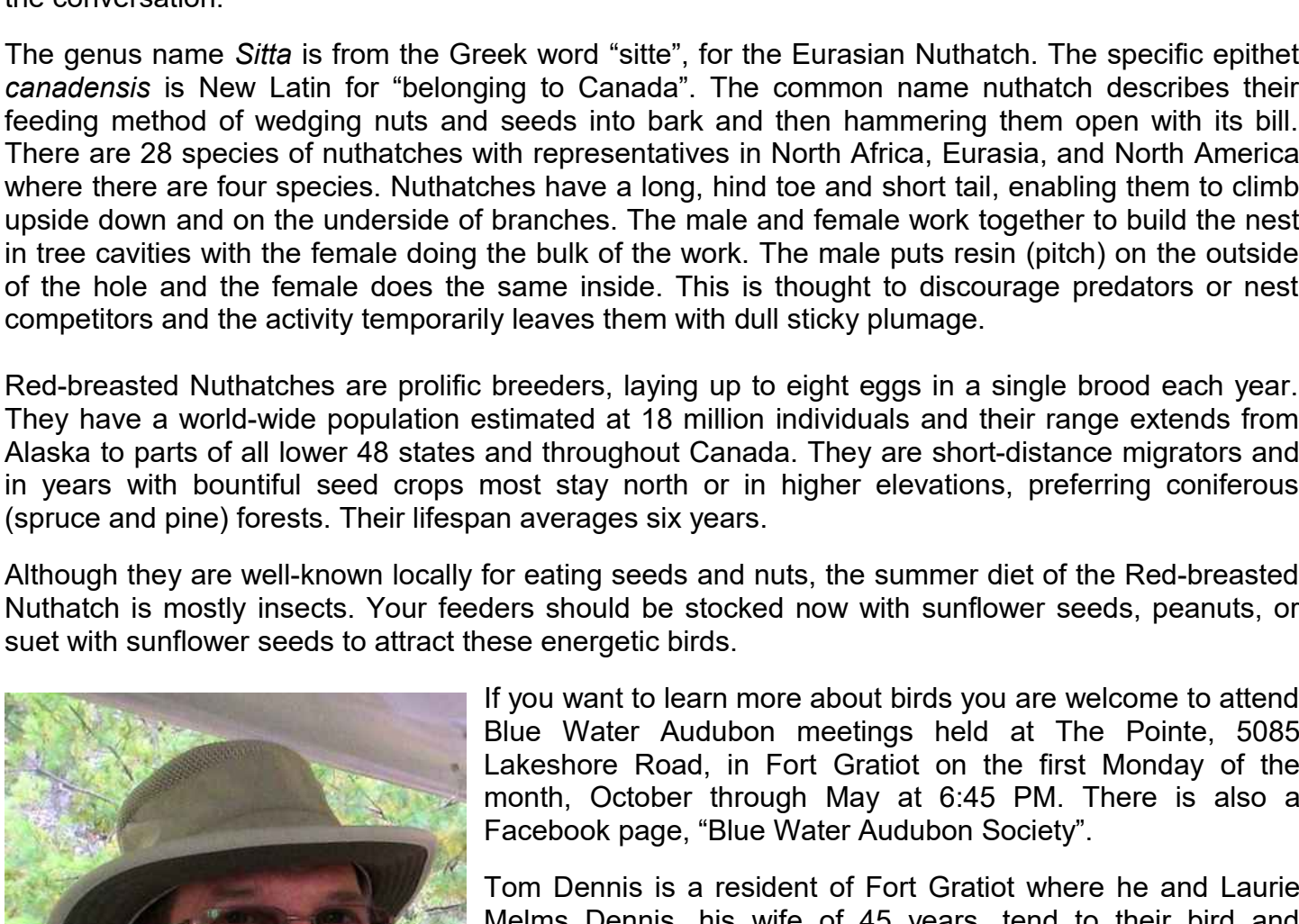
Clyde Historical Society

The first 2023 meeting of the Clyde Historical Society is March 16, Thursday at 6:30 pm at the Ruby Lions Hall at 4535 Brott Road in Ruby. The Clyde Historical Society promotes history education and preservation in Clyde Township, including restoration of the historic Clyde Township Hall near the corner of M-136 and Wildcat Road, next to Bill Bearss Park. As usual, old maps and other historical items will be on display at the meeting.

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

Foul-Weather Friend

By Tom Dennis



Red-breasted Nuthatch. Photograph by Laurie Dennis.

Red-breasted Nuthatch, *Sitta canadensis*

With winter soon upon us, many common summer avian residents have left for warmer climates and are being replaced with cold-weather birds looking for a nourishing environment. The Red-breasted Nuthatch is a welcome visitor to area bird feeders and although we are on the southern edge of their year-round range, they have now arrived in large numbers. These are friendly birds and they can be taught to feed from your hand if you are patient and consistent. Read on and we'll see what makes these energetic fellows special.

The Red-breasted Nuthatch is a medium-sized nuthatch that's smaller than the White-breasted Nuthatch; the only other nuthatch found in our area. The Red-breasted Nuthatch is a dapper species with black head and eye stripe sharply offset by a long, white eyebrow. The upper parts are blue-grey, above cinnamon brown underparts and a white throat. A black general purpose bill and black legs complete the wardrobe. The call is a soft "yank, yank" that is repeated often and as my wife Laurie says "they can be quite easily missed in the background noises" so listen carefully and enjoy the conversation.

The genus name *Sitta* is from the Greek word "sittle", for the Eurasian Nuthatch. The specific epithet *canadensis* is New Latin for "belonging to Canada". The common name nuthatch describes their feeding method of wedging nuts and seeds into bark and then hammering them open with its bill. There are 28 species of nuthatches with representatives in North Africa, Eurasia, and North America where there are four species. Nuthatches have a long, hind toe and short tail, enabling them to climb upside down and on the underside of branches. The male and female work together to build the nest in tree cavities with the female doing the bulk of the work. The male puts resin (pitch) on the outside of the hole and the female does the same inside. This is thought to discourage predators or nest competitors and the activity temporarily leaves them with dull sticky plumage.

Red-breasted Nuthatches are prolific breeders, laying up to eight eggs in a single brood each year. They have a world-wide population estimated at 18 million individuals and their range extends from Alaska to parts of all lower 48 states and throughout Canada. They are short-distance migrants and in years with bountiful seed crops most stay north or in higher elevations, preferring coniferous (spruce and pine) forests. Their lifespan averages six years.

Although they are well-known locally for eating seeds and nuts, the summer diet of the Red-breasted Nuthatch is mostly insects. Your feeders should be stocked now with sunflower seeds, peanuts, or suet with sunflower seeds to attract these energetic birds.

If you want to learn more about birds you are welcome to attend Blue Water Audubon meetings held at The Pointe, 5085 Lakeshore Road, in Fort Gratiot on the first Monday of the month, October through May at 6:45 PM. There is also a Facebook page, "Blue Water Audubon Society".

Tom Dennis is a resident of Fort Gratiot where he and Laurie Melms Dennis, his wife of 45 years, tend to their bird and butterfly friendly gardens. He is a speaker and free-lance writer, passionate birder, advanced master gardener, creation scientist, and naturalist, with degrees from Michigan State University in Zoology and Biology. Tom is an active member of Blue Water Audubon Society, Master Gardeners of St. Clair County, Port Huron Civic Theater, Ross Bible Church, Tapestry Garden Club, Blueways of St. Clair, and is a steward of the Blue Water Riverwalk with Friends of the St. Clair River. Don't forget to "Like" us on Facebook!

Ecology News

If you have any ecologically oriented news articles you'd like to share, please e-mail them to us and they could be included in a future newsletter.

COP15: Nations Reach 'Historic' Deal To Protect Nature

Agreements like this are absolutely critical, but very late, and just the start of what is needed. What constitutes real nature protection is vulnerable to interpretation, more often skewed, if not abused, by opportunistic interests. It's highly unlikely that any protection will be funded in our region as a result of this agreement, but let's hope for the best.

<https://www.bbc.com/news/science-environment-64019324>

The EPA Finalizes A Water-Protection Rule That Repeals Trump-Era Changes

Wetland and watercourse regulation can be complicated to say the least, if for no other reason than it requires picking apart landscapes and drawing lines where nature usually has no clear boundaries. Regulation is a losing game in the long-run because it is more about limiting impacts, not stopping them, and highly dependent on monitoring, enforcement, funding, politics, and judicial review. Regulated features only need to lose once and they are probably gone forever. Clear, simple water protection is needed. One of the simplest is public ownership with a policy of zero impact.

<https://www.npr.org/2022/12/30/1146355861/epa-water-protections-wetlands-rule>

Fears US Supreme Court Could Radically Reshape Clean Water Rules

Wetland regulation is frequently challenged in court. The current Supreme Court majority could eliminate most wetland protection under the federal Clean Water Act. Many people are into the drama of legal decisions. Others just care about environmental protection.

<https://www.theguardian.com/environment/2023/jan/06/us-supreme-court-ruling-clean-water-act-looming>

Animal Activists Say Senate Omnibus Bill Condemns Right Whale To Extinction

There are only about 340 North Atlantic Right Whales left in the world. You would think that if we can create self-driving vehicles, someone could invent ropeless lobster traps and an anti-whale collision system for ships.

<https://www.theguardian.com/us-news/2022/dec/21/senate-omnibus-bill-condemns-right-whale-to-extinction>

Maine Lobster Industry Wins Reprieve But Environmentalists Say Whales Will Die

Maybe you don't really need to eat that lobster.

<https://www.npr.org/2023/01/04/1146637583/maine-lobster-industry-wins-reprieve-but-environmentalists-say-whales-will-die>

Al Gore Helped Launch A Global Emissions Tracker That Keeps Big Polluters Honest

The topic of climate change has been generally avoided in the TLC news because it is such a charged issue with so many people hopelessly entrenched in their attitudes. But it's hard to argue with measurement and real-time monitoring, except apparently for those who believe in a vast network of conspiracies. How January temperatures here in the Thumb are more like November or March could take a lot of explaining.

<https://www.npr.org/2022/11/13/1136376981/al-gore-climate-change>

Climate Trace

The Climate Trace web site provides an impressive perspective on global emissions.

<https://climatetrace.org/map>

ExxonMobil: Oil Giant Predicted Climate Change In 1970s - Scientists

They're not stupid.

[bbc.com/news/science-environment-64241994](https://www.bbc.com/news/science-environment-64241994)

How Microplastics Are Infiltrating The Food You Eat

Add this to the list of things we can't get away from anymore. Awareness of the broad scale and hidden impact of microplastics and other micro and nanoparticle pollution is barely understood.

<https://www.bbc.com/future/article/20230103-how-plastic-is-getting-into-our-food>

Sniffing Out Cancer With Locust Brains

This is not directly related to ecology, but impressive and developed at Michigan State University. Maybe our insect friends are not just bugs. Yet another reason to respect them and consider what our dominion over the Earth really means. What opportunities might we be losing as habitat and species are lost?

<https://msutoday.msu.edu/news/2022/sniffing-out-cancer-with-locust-brains>

The Michigan DNR's Wildtalk Podcast

A good mix of wildlife and outdoor information in these podcasts.

<https://podcasts.apple.com/us/podcast/the-michigan-dnrs-wildtalk-podcast/id1389858029>

Help Fund The TLC With CARS

Like many non-profit organizations these days, you can now support the TLC by donating old vehicles through CARS - Charitable Adult Rides and Services. CARS donates 70% of the net income from all vehicle donations to their non-profit partners such as the TLC.



Depending on your tax situation, your vehicle may be more valuable as an itemized deduction than the income you might get by selling it. Not only do you avoid the hassle of advertising and dealing with potential buyers, but you don't need to get the vehicle in running condition. CARS accepts any vehicle, driveable or not.

To donate, see our donation page at: <https://careasy.org/nonprofit/thumb-land-conservancy>

Or call 855-500-7433

TLC Membership

With your membership, the TLC is better enabled to protect important natural areas in our region. We offer two membership levels: Individual and Family \$40, and Business \$200. Members will receive our e-mail news. Membership is also available in trade for volunteer help. You can also make donations in honor or memory of someone or something. For donations of \$100 or more, your name will be listed on our web site. For larger donations, please contact us for details. Make checks payable to "Thumb Land Conservancy". Mail checks and forms to: Thumb Land Conservancy, 4975 Maple Valley Road, Marlette, Michigan 48453. Make sure you provide us with your mailing address and e-mail address. Providing a phone number is optional but helpful. You can also make donations through the Square link on our web site at ThumbLand.org

