



2022

Michigan Conservation  
Results Report

The Nature  
Conservancy 



# TABLE OF CONTENTS

A VOICE FOR MICHIGAN'S FORESTS..... 4-5  
CONNECTING PEOPLE & NATURE..... 6-7  
ADVOCACY FOR LANDS & WATERS..... 8-9  
FORESTS FOR CLIMATE SOLUTIONS..... 10-11  
2022 BY THE NUMBERS..... 12-13  
FOR RESILIENT FARMS & CLEAN WATER... 14-15  
GREAT LAKES, GREAT FISHERIES..... 16-17  
SEEKING NATURE IN OUR CITIES..... 18-19  
ROOTED IN SCIENCE..... 20-21  
FACES OF TNC..... 22-23



## REASONS FOR HOPE



**Patrick Doran**  
Associate State Director

At The Nature Conservancy, we tackle big, global conservation issues—from climate change to biodiversity loss. These challenges can seem insurmountable. But the work we do brings exciting breakthroughs that keep us inspired and urge us onward.

One of those moments came at the end of 2022, when TNC protected 32,500+ acres of Keweenaw Peninsula's lands and waters. This was a big win for the large-scale conservation we pursue across Michigan and beyond—but it's not over yet. If you are able to donate to this effort, we could really use your help! (See page 4 for more information.)

To those who have already given to support this project, or our many other conservation efforts in Michigan: **Thank you.** Every one of the achievements featured on the pages of this

annual report is the result of countless contributions—of all kinds—by TNC staff, partners, donors and community members: from the launch of a new program for healthy forests (page 10), to a restoration experiment for whitefish (page 16), to a milestone to celebrate for a hard-working garden in the heart of Detroit (page 18).

Big or small, every conservation moment moves us forward.

Which is why, this year, I encourage you to join us in the field! Help us track what wildlife or plants are thriving on our preserves. Snap a photo of an interesting species when you visit and post it to the iNaturalist app ([bit.ly/tnc-inaturalist](https://bit.ly/tnc-inaturalist)), or send it directly to [miplaces@tnc.org](mailto:miplaces@tnc.org). The next conservation moment could be just down the trail.

In conservation,

A handwritten signature in black ink that reads "Patrick J. Doran". The signature is written in a cursive, flowing style.

Patrick J. Doran

### Don't miss out on future conservation results!

Sign up to receive monthly conservation updates and news from Michigan.



[nature.org/naturenews](https://nature.org/naturenews)

COVER: Lake Superior shoreline along the Keweenaw Peninsula. © Devin Leonarduzzi/Quincy Aerial, LLC

ABOVE: Early morning loons cruising on Littlefield Lake in Isabella County. © Christine Loose-Randall/TNC Photo Contest 2022

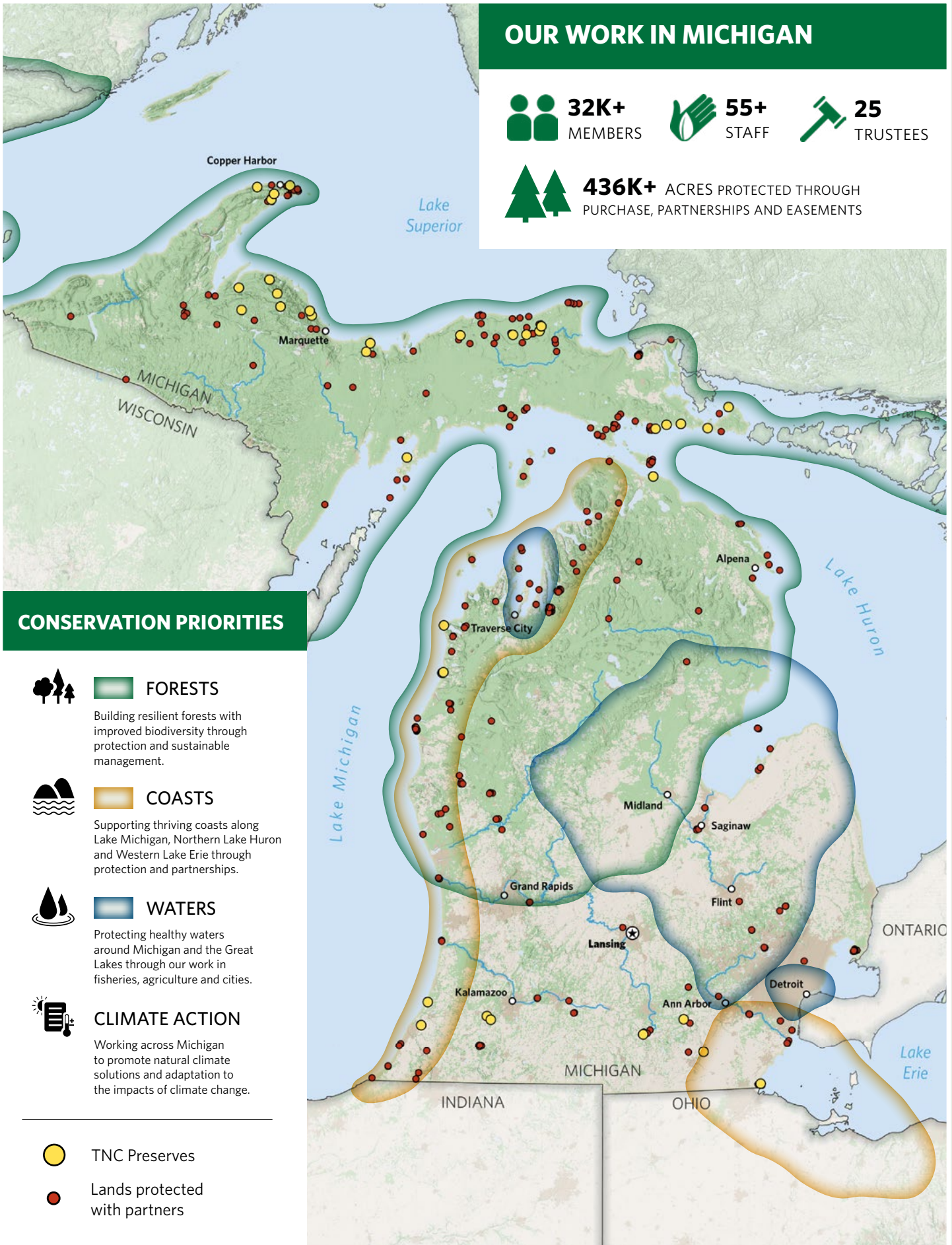
# OUR WORK IN MICHIGAN

**32K+**  
MEMBERS

**55+**  
STAFF

**25**  
TRUSTEES

**436K+** ACRES PROTECTED THROUGH PURCHASE, PARTNERSHIPS AND EASEMENTS



## CONSERVATION PRIORITIES



### FORESTS

Building resilient forests with improved biodiversity through protection and sustainable management.



### COASTS

Supporting thriving coasts along Lake Michigan, Northern Lake Huron and Western Lake Erie through protection and partnerships.



### WATERS

Protecting healthy waters around Michigan and the Great Lakes through our work in fisheries, agriculture and cities.



### CLIMATE ACTION

Working across Michigan to promote natural climate solutions and adaptation to the impacts of climate change.



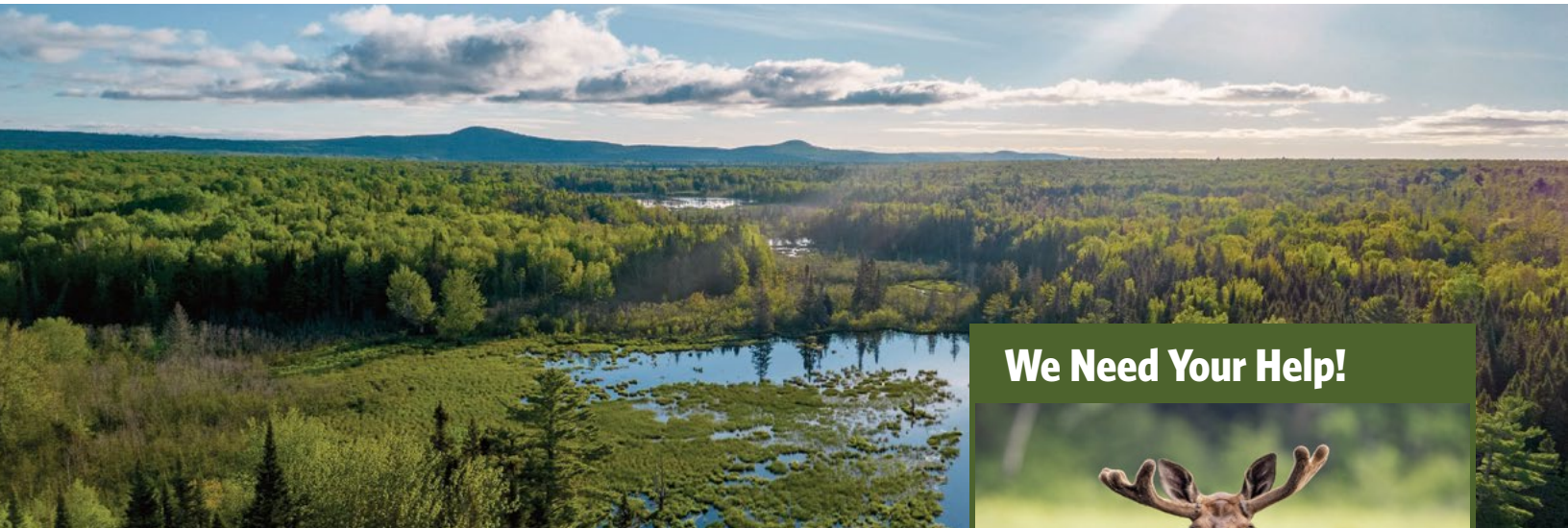
TNC Preserves



Lands protected with partners



# A VOICE FOR MICHIGAN'S FORESTS



## From Migration Flyways to Superior Shores: Conserving the Keweenaw

### FOR PEOPLE AND NATURE

In 2022, The Nature Conservancy announced the protection of more than 32,000 acres in the Keweenaw Peninsula, known as the Keweenaw Heartlands. We completed this acquisition in two parts, purchasing 22,772 acres directly from The Rohatyn Group (TRG) in October and acquiring 9,769 acres in December from a conservation-minded buyer who had purchased the remainder.

Surrounded by the blue waters of Lake Superior, the Keweenaw Peninsula is one of the most unfragmented forested and freshwater areas in the United States: a top TNC priority for biodiversity and climate resilience. This acquisition nearly doubled the peninsula's protected lands, which provide habitat for many iconic species, from gray wolves and pine martens to the migratory raptors and songbirds that can be spotted here on their long annual journeys.

**ONLINE** | The Keweenaw Peninsula is identified in TNC's Resilient Lands Mapping Tool ([maps.tnc.org/resilientland](https://maps.tnc.org/resilientland)) as a highly resilient and connected area.

### A COMMUNITY-DRIVEN SUCCESS

TNC's success in the Keweenaw Peninsula will depend on collaboration with a diverse group of community leaders, the State of Michigan and many people who love the Keweenaw. Together, we are ensuring that the protection of this one-of-a-kind property can also help the local community shape a stable economic future around the sustainable management of the peninsula's iconic lands and waters, and the outdoor recreation, sustainable timber and other ecosystem services they provide.

To support the community's planning efforts, TNC hired the consulting firm RES (Rural Economic Success) Associates, LLC. RES led public meetings with more than 300 participants, held approximately 60 in-depth interviews and surveyed more than 1,800 respondents, to understand what they value most about this land. Between interviews, meetings and surveys, roughly one quarter of the adults in Keweenaw County have engaged in the project to date.

Learn more: [nature.org/keweenaw](https://nature.org/keweenaw)

ABOVE: Part of the newly acquired Keweenaw Heartlands. © Devin Leonarduzzi/Quincy Aerial, LLC

## We Need Your Help!



© Scott Suriano

Inspired by TNC's work in the Keweenaw? Our bold, swift action to protect these lands required significant loans, and we are now fundraising to pay them back.

Please consider giving to support this exciting conservation effort. Call TNC's Development team at **(517) 316-0300** to learn how. Thank you to everyone who has already contributed!

## What's Next?

### The Keweenaw Peninsula

As interim owners of the property for the next 3-5 years, TNC will steward the property and lay the foundation for its long-term conservation success. With community members, we will develop an ownership and management plan that protects the property's many natural and cultural features and provides for recreational access for a resilient Keweenaw community. We currently expect long-term ownership to be primarily public, divided between the local township, county, State of Michigan and special purpose districts.

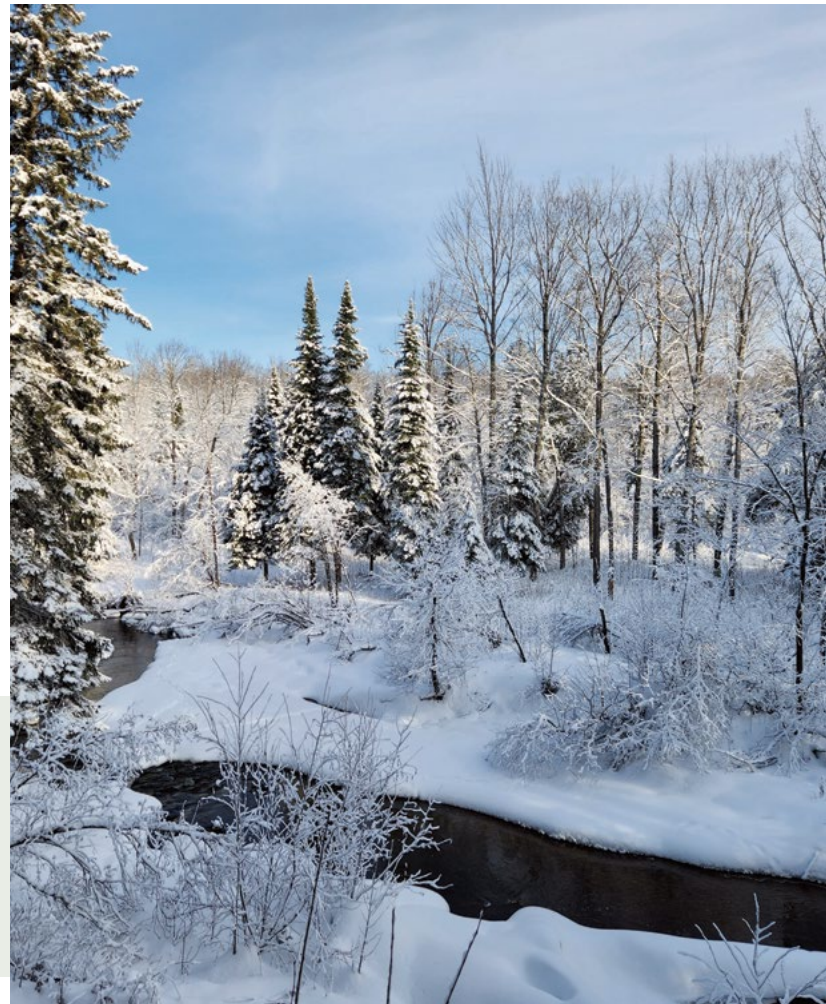


## Stewarding Slate River

Since The Nature Conservancy acquired the [Slate River Forest Reserve](#) in Baraga County in 2021, we have been getting to know this 10,000-acre forest and its four miles of the Slate River—assessing what it will take to assure its long-term conservation and understand how it fits into our long-term goal to protect and connect the Michigamme Highlands region. TNC has developed a forest management plan, begun a carbon project and completed timber inventory on approximately half of the reserve—all important steps to make sure it is managed in line with a long-term conservation vision.

Recently, TNC's application to add the reserve to our [Forest Stewardship Council](#)® FSC®-C008922 certificate was also approved. FSC® certification provides confirmation of our use of sustainable forestry practices on Slate River Forest Reserve that also benefit the local community. The majority of the reserve will also be enrolled in Michigan's Commercial Forest Program, which allows for public access on foot for hunting and fishing—a win-win scenario for recreation and conservation.

RIGHT: Slate River after a fresh snow. © Alex Helman/TNC



## Setting the Standard for Sustainable Forestry

With our FSC® application for Slate River Forest Reserve approved, all 47,000 acres of TNC's forest reserves in Michigan are now FSC®-C008922 certified. We support a more robust market for FSC® certified forest products, in part by demonstrating our own commitment to responsible forest management through this widely recognized third-party program.



## Vital Partnerships in Conservation

Sometimes our conservation partners need us to step in to help them achieve their goals in protecting lands and waters, and this helps TNC further its goals, too. Here are two examples of meaningful cooperation among Michigan's conservation organizations.

- In July, TNC transferred a 160-acre parcel on [Silver Mountain](#) to the U.S. Forest Service (USFS). This property includes part of Silver River, an important cold-water tributary that supports a self-sustaining population of brook trout. TNC purchased it on behalf of the USFS in 2019, and held it until they could secure the necessary funding to add it to the Ottawa National Forest.
- In October, TNC provided a loan to the Upper Peninsula Land Conservancy to help them acquire 186 acres near Marquette, for the establishment of the [Dead River Community Forest](#). This includes critical floodplains and diverse riparian areas that provide habitat for more than 40 bird species, and play an important role in protecting water quality for the local community.

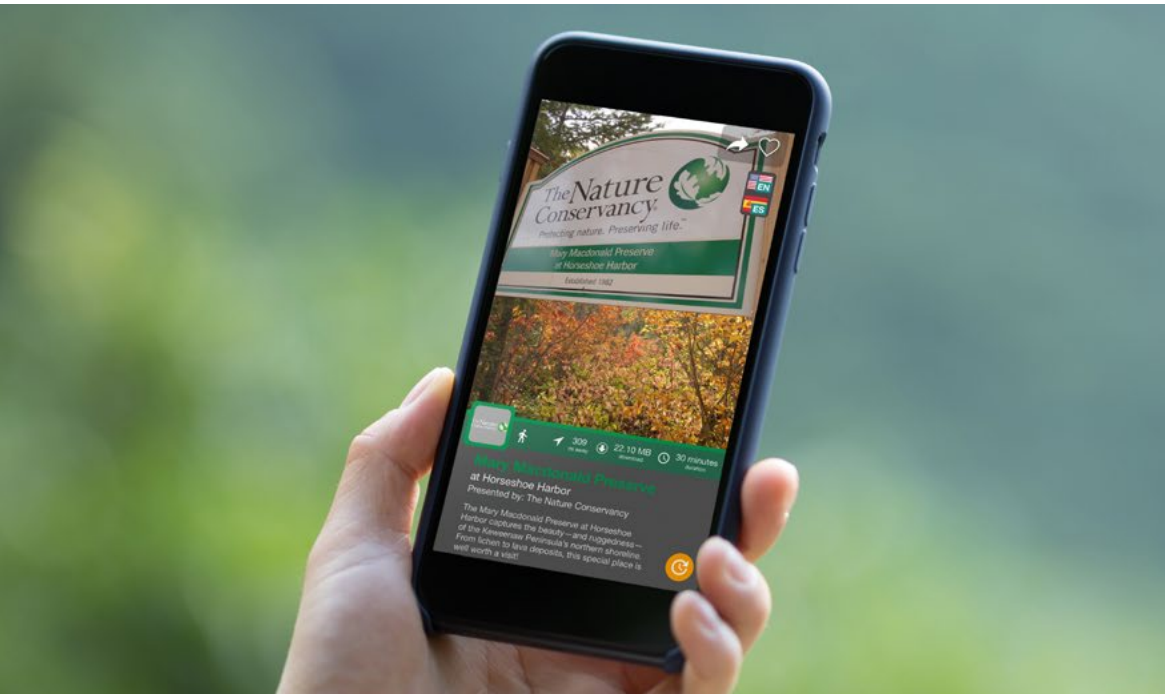
---

*"With the help of The Nature Conservancy, the Upper Peninsula Land Conservancy (UPLC) recently acquired the Dead River Community Forest in an exciting multi-partner effort. A key focus of the project, now that the land purchase is complete, is community-focused education and recreation opportunities that are being designed hand-in-hand with the local community, and in partnership with educational organizations such as Northern Michigan University's SHINE initiative."—Andrea Denham, UPLC*

LEFT: View of the Sturgeon River Gorge from the top of Silver Mountain. © U.S. Forest Service



# CONNECTING PEOPLE & NATURE



 **ONLINE**

## Let's Go Exploring!

Take an immersive audio tour of seven TNC Michigan preserves—on-site or from the comfort of home!

Visit [nature.org/miexplore](https://nature.org/miexplore) to learn more.

## Building a Legacy at a Preserve Near You

The Nature Conservancy owns and manages more than 30 preserves across Michigan. In addition to protecting Michigan's unique ecology, these preserves provide opportunities to connect with nature. In recent years, TNC has made a concerted effort to improve access, trails, information and the overall experience of visitors at our most popular preserves, to support safe and meaningful outdoor experiences and encourage people to conserve nature in their everyday lives.

Recent updates include:

- Expanding and relocating the parking lot at Gerstacker Preserve, which connects to a new trailhead with multiple trail route options.
- Beginning updates to the trail system at Ross Coastal Plain Marsh Preserve, which will reopen part of the preserve that has been closed since 2020 due to a massive tree blowdown.
- Completing both Spanish- and English-language audio tour options for three of our most popular Upper Peninsula preserves—Mary Macdonald Preserve at Horseshoe Harbor, Helmut & Candis Stern Preserve at Mt. Baldy and McMahon Lake Preserve—all available through [nature.org/miexplore](https://nature.org/miexplore).
- Enrolling all TNC Michigan preserves in AllTrails ([alltrails.com](https://alltrails.com)), to make information on preserves, including GPS-linked trail maps, more widely available to hikers.



© Jessica Worful/TNC

## In the Spotlight: Mary Macdonald Preserve at Horseshoe Harbor

In 1982, Mary Macdonald donated the first piece of TNC's oldest preserve in the Keweenaw Peninsula: the [Mary Macdonald Preserve at Horseshoe Harbor](https://nature.org/miexplore). Today, this 1,200-acre preserve is one of our most popular in Michigan, drawing thousands of visitors in the summer months. Here, a path through a forest of conifer and birch trees leads down to a picture-perfect beach, framed by the rugged bedrock of the Lake Superior shoreline. We've recently improved the preserve's trailhead with a new parking area, bike rack and informational kiosk, to help new and returning visitors get better acquainted with this special place.

ABOVE: The TravelStories audio tour app is easy to use on the trail or at home. © Izf/Shutterstock

## North Point: *The Next Chapter*

In 2022, The Nature Conservancy completed the transfer of our [North Point](#) property, near Alpena, to a regional conservation partner, Huron Pines. These 1,384 acres were acquired by TNC in 2018 after many years of hard work by partners including the National Oceanic and Atmospheric Administration (NOAA), Huron Pines and the Friends of Thunder Bay National Marine Sanctuary (TBNMS).

While ownership will go to Huron Pines, TNC will hold a conservation easement that limits future development, and the Friends of TBNMS will continue to host programming on the property. Along with the North Point property, TNC also transferred an additional 155 acres to Huron Pines that will be the new Birdsong Bay Nature Preserve. “Our partnership with Huron Pines dates back years, and these lands are undoubtedly in good hands,” says Helen Taylor, TNC state director.

The biodiversity of North Point is outstanding—from four miles of Lake Huron coastline and fertile coastal wetlands to habitat for rare plants and insects. It also lies along one of the most significant flyways in the United States, hosting 200+ migratory bird species every year. With its incredible natural riches, there is also significant potential for stewardship and education, such as school-group tours, research opportunities and low-impact recreation. Such activities encourage a deeper understanding of the importance of conserving special places like North Point.



**A Great Lakes Destination:** Already, Viking Cruises has begun incorporating a stop at the North Point property into their popular Great Lakes cruises. TNC staff joined them to lead seven tours in 2022. In addition to raising awareness of the conservation value of this Lake Huron shoreline, opportunities like this help bring tourism revenue to local communities. Photo © Shaun Howard/TNC



## Celebrating Saugatuck

As we pursue the big conservation wins of tomorrow, it's also important to reflect on the successes of the past. In 2022, the 10-year anniversary of the protection of the [Saugatuck Harbor Natural Area](#) provided Michigan's conservation community an opportunity to do just that.

In June, TNC and the Land Conservancy of West Michigan co-hosted the Michigan Natural Resources Trust Fund (MNRTF) board meeting in Saugatuck, and celebrated all that has been achieved here together. The MNRTF, in partnership with generous philanthropic leaders of West Michigan, made the protection of this special 173-acre coastline possible, with its gorgeous stretch of dunes, wetlands and bluffs along Lake Michigan (photo, left). It was acquired by the City of Saugatuck in 2011 after more than two decades of a community-led effort, ensuring that its forests and dunes, and the unique species that dwell here, would always be protected.

This also opened up the area to all members of the public for hiking and the enjoyment of its outstanding scenic and natural features—for the first time in more than a century. As we had hoped, the community has continued to use and benefit from the protection of this property, long after it was secured.

## Getting 'Good Fire' on the Ground

Spring of 2022 marked a great field season for TNC's prescribed fire management. With several key trainings under their belts, and the leadership of new burn boss Bruce Miller, TNC's restoration team was able to re-introduce “good fire” to three southern Michigan preserves this year. This provides a natural process these savannas and wetlands need to thrive.

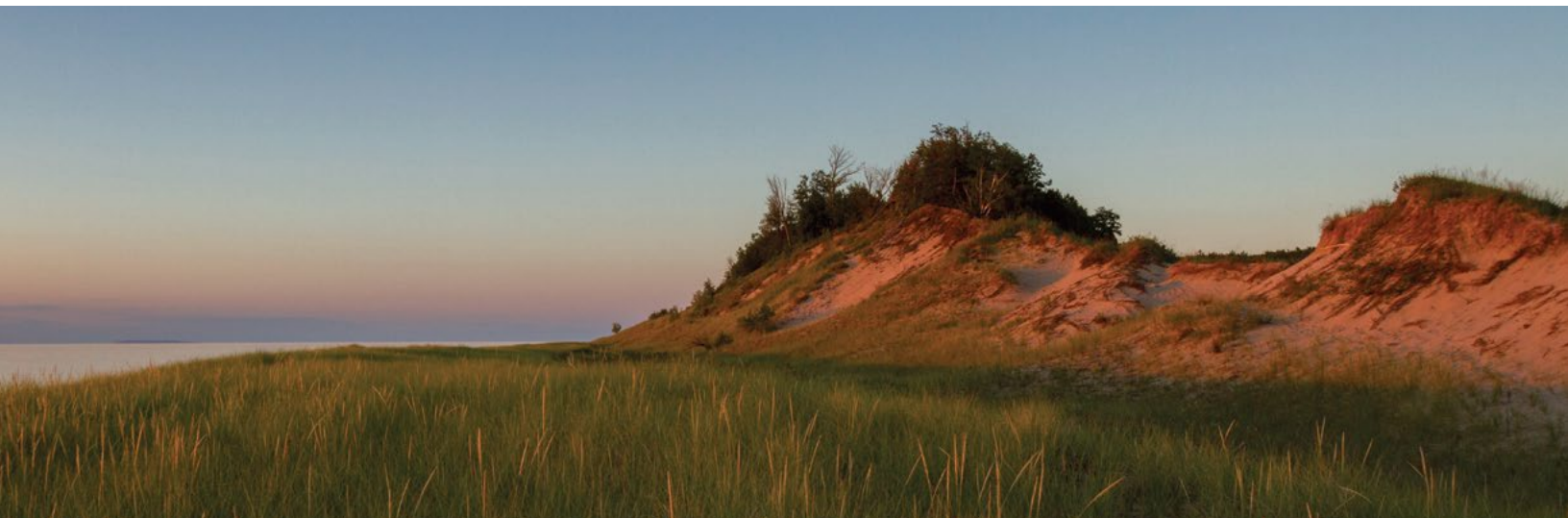
Our investment in prescribed fire capacity had impact beyond our preserve boundaries. For example, we were able to support other TNC chapters, including Ohio and Indiana, with their fire programs this year. Staff also led a field-based fire training for students enrolled in the Urban WildFIRE program, a U.S. Forest Service-funded workforce development program for students traditionally underrepresented in STEM careers.

*TNC's restoration crew works all over the state, in all kinds of weather, to care for our preserves and help their unique habitats thrive. In 2022, this team completed restoration work on more than 600 acres, protected with outdoor gear generously donated by Carhartt!*





# ADVOCACY FOR LANDS & WATERS



## Encouraging Investment in Parks and Water

In March, the Michigan Legislature passed Public Act 53 of 2022, allocating \$4.3 billion in one-time funding for state infrastructure. The Nature Conservancy and partners strongly supported the bill, including distributing a floor letter to all members of the House and Senate urging the inclusion of funding for state and local parks. As part of the *Coalition for a Strong and Prosperous Michigan*, we provided recommendations to address urgent water infrastructure repair and replacement needs across the state, all of which will benefit the health of our Great Lakes and the people who rely upon its waters.

Ultimately, \$2.3 billion of the historic state funding included in the act was designated for the improvement of Michigan's water infrastructure, with an additional \$450 million for state and local parks. These investments were made via the Building Michigan Together Plan, which includes many of Michigan's Infrastructure Investment and Jobs Act funds.

While this one-time funding represents an important step, we continue to support the development of ongoing funding streams as well—such as the [full endowment of the State Parks Endowment Fund](#)—to ensure long-term investment in Michigan's lands and waters.

## Tackling the Climate Challenge

TNC provided recommendations, expertise and input to the State of Michigan's Climate Solutions Council through two technical workgroups, helping inform the state's new [MI Healthy Climate Plan](#). We continue to participate in discussions on renewable energy siting and the compilation of a state greenhouse gas inventory with agency staff and elected officials.

This plan, which was released in April 2022, represents an early but important step on the long road to carbon neutrality for the state. TNC's input is one of many actions we are taking to publicly reinforce the importance of smart siting of wind and solar installations, sustainable forest management, investing in water infrastructure, supporting industrial decarbonization investments and more, to achieve that net-zero goal.

## What's Next?

### Recovering America's Wildlife Act (RAWA)

One of TNC's ongoing commitments is advocating for state and federal policies that help address the global biodiversity decline. This includes supporting the passage of the Recovering America's Wildlife Act (RAWA), a federal bill that would invest nearly \$1.4 billion per year in state, local and Tribal efforts to help wildlife at risk—more than 12,000 species across the country—and support outdoor recreation and associated jobs.

As of the end of 2022, this bill, which is sponsored by Michigan Representative Debbie Dingell, had already passed the House and a key Senate committee with bipartisan support. Unfortunately, [RAWA was not included](#) in the spending package Congress approved for fiscal year 2023. In the coming year, TNC will continue to encourage the reintroduction and passage of this important bill.





© Roman Melnyk

## Reducing the Climate Impacts of Dairy

With the Michigan Milk Producers Association (MMPA), TNC is delivering a three-year pilot program to help 30 Michigan dairy farmers implement feed management and production practices that reduce dairy cattle methane emissions and support soil health. Some of the innovative aspects of this program include its individualized approach to each farm operation, its use of feed amendments and its integrated focus on the entire dairy supply chain, including milk suppliers and buyers as well as farmers.

So far, in the first year of the program, TNC has enrolled three farms with a total of 878 dairy cows. These initial participants were supported through a unique and generous partnership with local Rotary Clubs. The Clubs' support enabled us to provide a "proof of concept" to MMPA and their milk purchaser partners, in turn helping to unlock additional funding for dairy farm incentives from Nestlé that will support our remaining 27 farms over the next two years.

## Connecting with Agricultural Policy Leaders

Last August, Department of Agriculture Secretary Tom Vilsack came to Michigan, joining Sen. Debbie Stabenow and Rep. Dan Kildee in [announcing new funding](#) to assist farmers in implementing nutrient reduction practices, as part of the Inflation Reduction Act (photo, right).

TNC staff were among the guests invited to attend the announcement. During a tour of the Michigan State University Saginaw Valley Research Farm, TNC staff had the opportunity to show Secretary Vilsack, Sen. Stabenow and Rep. Kildee a SoilWarrior strip tillage machine (photo, right) and answer questions about our newest Saginaw Bay-area project promoting strip tillage in sugar beets (see page 14).



© Ryan Hermes/TNC



© Rebecca McNitt/TNC

## The Intersection of Climate and Agriculture

As part of our ongoing effort to engage Michigan's agricultural community in climate conversations, we hosted a joint breakfast with the Michigan Agri-Business Association (MABA) in March 2022 to showcase new technology in the agronomy sector and how it can support better climate outcomes (photo, above). More than 40 people attended, representing federal, state and local government, academia, commodity groups and energy companies.

## What's Next? Manufacturing Workshops

One step on the path to carbon neutrality will require increasing the sustainability of industrial operations across Michigan. In early 2023, The Nature Conservancy will be holding [three new regional workshops](#) in partnership with the Michigan Manufacturers Association, building on a virtual Sustainability in Manufacturing series completed in early 2022 that was attended by representatives of 50 companies. Steelcase, Consumers Energy and Hemlock Semiconductor, will host these pragmatic workshops at their facilities.

The workshops will focus on providing small- and medium-sized manufacturers with practical resources and guidance on topics such as energy management; how to pursue sustainability certifications; and building a sustainability plan that addresses the environmental, social and governance components of sustainable manufacturing.



# FORESTS FOR CLIMATE SOLUTIONS



## Family Forest Carbon Program Comes to Michigan

How can your average family forestland owner contribute to saving the planet? This is exactly the question we hope to address as The Nature Conservancy's Michigan, Wisconsin and Minnesota chapters expand the Family Forest Carbon Program (FFCP) to the Great Lakes Northwoods. This program, a partnership with the American Forest Foundation, gives small forest landowners a pathway to access carbon markets while improving the health of their forests.

Participating landowners commit to 20-year contracts to apply one of two management practices that increase carbon sequestration and storage in their forests. The first, Growing Mature Forests, focuses on growing northern hardwood species such as maple, beech and birch for longer periods with fewer harvests. The second, Promoting Diversity in Aspen, focuses on increasing the number of trees remaining in aspen stands during certain types of harvests, and leaving more habitat around the edge of harvested areas.

We hope to enroll 95,000 acres of small family forestland in Michigan by 2030, with the goal of storing and sequestering 712,000 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) every year, above business-as-usual scenarios. That's 712,000 metric tons of greenhouse gases kept out of our atmosphere, a natural contribution to the fight against climate change.

Learn more: [familyforestcarbon.org](https://familyforestcarbon.org)

## Forester Workshops Boost Awareness of FFCP

As a payment-for-practice program, FFCP requires forest management plans to be in place and certain standards met both for enrollment and if landowners want to harvest while enrolled. FFCP will pay consulting foresters to write those plans and verify that the standards are met.

To help expand the reach of FFCP and provide training to foresters, TNC held five all-day workshops in three states this summer, with 61 foresters attending. In addition to an in-depth look at the program's supported practices and the practicalities of implementing them, we also provided background on forest carbon projects and methodologies.

## New NIACS Climate Forester Guide

TNC and the Northern Institute of Applied Climate Science, a forest management collaborative, have partnered on a series of guides for landowners and foresters designed to help them make climate-smart decisions about the forests they manage.

Released in the fall, Michigan's new guide, "[Climate Change Field Guide for Northern Michigan Forests](https://forestadaptation.org)" (view at [forestadaptation.org](https://forestadaptation.org)) reflects the best available science with extensive input from foresters, scientists, state agencies and conservation organizations. This information can help landowners and forest managers choose the practices that will safeguard their forests and secure carbon benefits, across nine northern Michigan forest types.



## Making Carbon Count

The team at TNC is always looking for new tools to help us better manage Michigan's lands and waters, including our state's 20 million acres of forests. Here, we are using revenue from the sale of carbon offsets to apply on-the-ground management practices that increase a forest's health, diversity and natural ability to reduce atmospheric greenhouse gases like carbon dioxide.

These carbon offsets are based on the best available science. TNC's commitment to tangible and lasting positive impact means that before we launch a carbon project on our reserves, we do all the assessment necessary to assure the carbon offsets we offer are real, verifiable and additive.

This verification process is done by an independent third party to ensure an honest and transparent assessment of the carbon stocks produced by a particular forest. This allows us to do two important things: establish a clear starting point, or baseline, and then track the additional carbon that the forest sequesters and stores over time as a direct result of how that forest is managed.

This assessment was recently completed for our new Michigamme Highlands Carbon Project (photo, right), which spans 13,660 acres of the Slate River Forest Reserve and the recently acquired northern section of the Wilderness Lakes Reserve. We expect that the American Carbon Registry will be able to begin issuing carbon credits for this project in mid-2023.

Revenue from these carbon credits will help us fight deforestation, forest conversion and unsustainable management. And, by using our forest reserves to demonstrate the potential of carbon credits to support forest protection and improved forest management, we help other forest landowners join in stewarding healthy, resilient forests for future generations.



© Emily Clegg/TNC

## Planting Trees for Healthy Waters

For over a decade, TNC has partnered with the U.S. Forest Service to restore and protect forests along streams and rivers in the Ottawa National Forest, planting trees on over 1,100 acres. This spring, we continued that tradition by planting more than 44,000 native seedlings, particularly in areas threatened or impacted by pests like the spruce budworm and emerald ash borer (photo, left).

Healthy, diverse forests have a critical role to play in healthy freshwater ecosystems. They prevent erosion, maintain shade cover over streams and preserve the colder water temperatures that fish and other aquatic species depend on, especially in a changing climate. But Michigan's northern forests, including those of the Ottawa National Forest, do even more for water. The streams they help filter are headwaters of the Great Lakes themselves—which 40 million people depend on for clean drinking water.



© Mindy Kartola/TNC



© John Lerdal/TNC

## Growing Ross Preserve

TNC's 1,500-acre [Ross Coastal Plain Marsh Preserve](#) features an incredibly varied landscape, from sandy, tree-dotted dunes to rich wetlands and forests. This helps make it part of an important "climate corridor" that will help species adapt to changing conditions.

To ensure the preserve can continue to play this important role, TNC undertook a significant restoration—removing 43 acres of an introduced red pine monoculture, and replacing it with 2,300 saplings of native tree species that better reflect the forest's natural diversity. Now at the end of its first growing season, this area is already showing signs of developing into a more diverse, disease-resistant and climate-resilient forest (photo, left).



# 2022 BY THE NUMBERS

**32,541** ACRES NEWLY PROTECTED  
TOTALING 437,000 ACRES TO DATE

**1,544** ACRES TRANSFERRED TO PARTNERS  
FOR LONG-TERM PROTECTION



© Rebekah Wuchner/TNC

**45** MILES OF TRAILS MAINTAINED  
FOR BETTER VISITOR EXPERIENCES

**79,000+** ESTIMATED VISITS  
TO TNC PRESERVES ACROSS THE STATE



© Alex Helman/TNC

**144** ACRES REFORESTED  
WITH WHITE PINE AND OTHER SEEDLINGS  
IN THE OTTAWA NATIONAL FOREST

**13,660** ACRES OF RECENTLY PROTECTED  
FORESTLAND ENROLLED IN A CARBON PROJECT





© Andrii Zastrozhnov

**1.5M** GALLONS OF STORMWATER  
MANAGED BY THE GREEN STORMWATER  
INFRASTRUCTURE INSTALLATION AT  
SACRED HEART CHURCH

**86,000** BUSHELS OF SUSTAINABLY  
RAISED WHEAT HARVESTED THROUGH  
A SUPPLY-CHAIN PARTNERSHIP



© Rebekah Wuchner/TNC

**1,200** ATTENDEES AT TNC EVENTS

**2,125** HOURS OF CONSERVATION  
CONTRIBUTED BY...

**108** VOLUNTEERS AND INTERNS



© Kim Steinberger/TNC

**661** ACRES OF PROTECTED LANDS  
MANAGED FOR ENHANCED ECOLOGICAL  
HEALTH BY TREATING FOR INVASIVE  
SPECIES, PLANTING NATIVE SEEDS, USING  
PRESCRIBED FIRE AND MORE



© TNC

**6** TRIBUTARIES SURVEYED FOR WHITEFISH  
AND OTHER NATIVE FISH SPECIES

**10** PEER-REVIEWED PAPERS  
PUBLISHED IN SCIENCE JOURNALS



# FOR RESILIENT FARMS & CLEAN WATER



## Sustainability Through the Supply Chain

The Nature Conservancy is piloting a new performance-based conservation program for Saginaw Bay-area wheat farmers, partnering with Star of the West Milling Company to integrate “nature-based bonuses” directly into existing wheat supply chains. This [Sustainable Option Wheat](#) program sets sustainable production standards for wheat growers to follow. They then receive bonuses (8.5-16.5 cents per bushel) based on the number of sustainability practices they successfully apply, when they bring their grain to market. TNC tracks the environmental benefits from these practices, including the reduction of sediment and nutrient runoff as well as greenhouse gas reduction.

This pilot program tests multiple factors for long-term success at once: agronomic feasibility, environmental benefit and market feasibility. In the coming years, we hope this will inform a common sense “blueprint” for producing and marketing sustainably raised crops that other grain processors (and commodities) could follow.

This year was the kickoff for Sustainable Option Wheat, and it took the team just two weeks to fill all the available spots—more than 930 acres, with another 3,000 acres already lined up for the 2023 crop year. The first-year harvest, now verified and sold, produced more than 86,000 bushels of sustainably grown wheat!

ABOVE LEFT: Wheat field. © Michael D-L Jordan/dlp; ABOVE, RIGHT: Farm visit with members of TNC, HSBC, Kellogg's, Star of the West, Environmental Initiative and Michigan farmer Don Morse. © Paul Beczkiewicz/TNC

## Sharing Solutions

The Saginaw Bay watershed is Michigan's largest, and the current focus of our soil health program. The Saginaw Bay watershed is Michigan's largest, and the current focus of our soil health program, which is supported through the generosity of numerous donors including the Cook Family Foundation, the Herbert H. and Grace A. Dow Foundation and the Meijer Foundation.

However, the lessons we are learning here are relevant in many other agricultural areas. We recently held the first of three planned knowledge-exchange workshops between Saginaw Bay watershed and Western Lake Erie basin partners. This effort, supported by the Fred A. and Barbara M. Erb Family Foundation, will allow us to expand the reach of our findings on how to help farmers make a permanent switch to on-farm conservation practices that protect water quality, create healthier soils and reduce greenhouse gas emissions.

## A Sweet Deal for Sugar Beets

At this year's AgroExpo, TNC co-hosted an equipment booth with strip till manufacturer SoilWarrior. This allowed us to highlight our new Accessing Subsidized Strip-Till Equipment Trial (ASSET) pilot project, which helps sugar beet farmers access technical support and the specialized equipment they need to make the switch to strip tillage without financial risk. Strip tillage is a practice with significant potential benefits for soil health, especially when used with a crop like sugar beets that is known for extensive tilling methods that often leave the soil bare and subject to erosion for much of the growing season.

TNC aims to enroll 10 sugar beet farms into this partnership program with Michigan Sugar Company over the next five years.



# Spotlighting Farmer Leadership

The Nature Conservancy held our third biennial Soil Health Hero Awards at the Great Lakes Crop Summit in January 2022, honoring four farmers for the work they are doing to advance a thriving, regenerative agricultural system in the Saginaw Bay watershed. An agribusiness award was also presented earlier that month at the Michigan Agri-Business Association’s annual conference.

These Soil Health Hero Awards are an opportunity for TNC to recognize local sustainability leaders, and hopefully inspire and encourage others to follow their example. Some past Soil Health Heroes have also gone on to play a leadership role in local farmer-led watershed groups—connecting with their peers for knowledge-sharing around soil health and water quality. This year’s Soil Health Heroes were no different. Several winners have already gone on to establish a new farmer-led group within the Cass River Watershed.

## Soil Health Hero Awardees

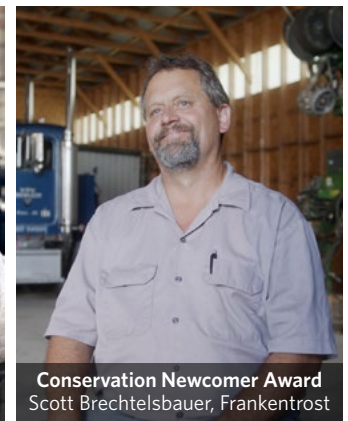
To watch videos of their stories, scan the QR code or visit [soilhealthheroes.com](https://soilhealthheroes.com).



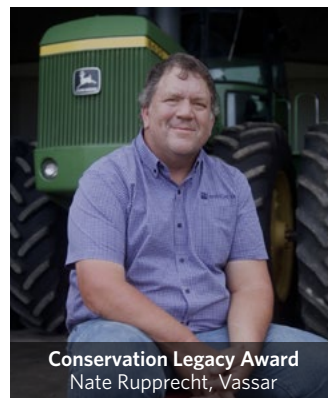
**Conservation Excellence Agribusiness Award**  
Lisa Woodke, Frankenmuth



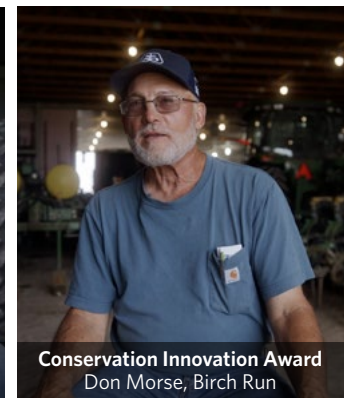
**Conservation Impact Award**  
Pohl Dairy, Mt. Pleasant



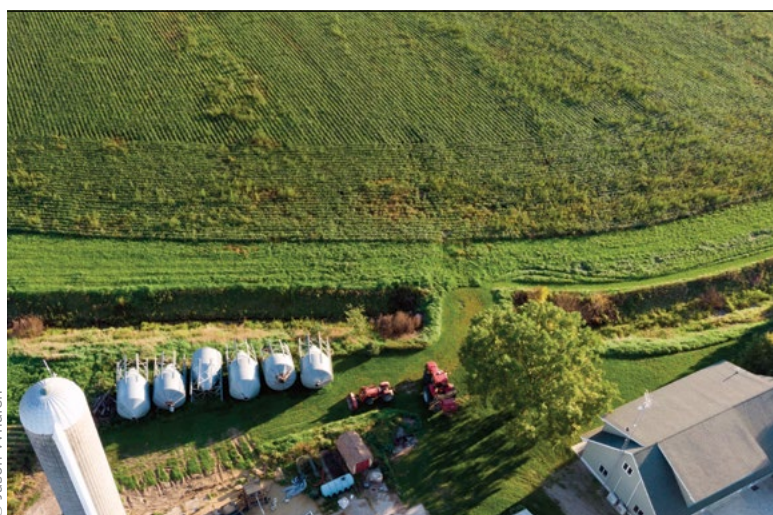
**Conservation Newcomer Award**  
Scott Brechtelsbauer, Frankentrost



**Conservation Legacy Award**  
Nate Rupprecht, Vassar



**Conservation Innovation Award**  
Don Morse, Birch Run



© Jason Whalen

## What's Next? Midland Edge-of-Field Program

Managing farm fields to increase water filtration helps them retain water and recharge groundwater, and mitigates the potential for downstream flooding in heavy rain. TNC’s emerging farmer incentives program in the Midland area, funded by the Rollin M. Gerstacker Foundation, will pilot the use of these practices to help reduce flood risk in a community that was hit hard by historic 2020 floods. In support of this program, TNC recently helped launch a new farmer-led watershed group in the Tittabawassee River watershed.



# GREAT LAKES, GREAT FISHERIES



## Restoring Whitefish to Rivers

This fall, The Nature Conservancy began working with the Sault Ste. Marie Tribe of Chippewa Indians (Sault Tribe), Little Traverse Bay Band of Odawa Indians and Michigan Department of Natural Resources (MDNR) to test methods for re-establishing river runs of whitefish that once thrived throughout the Great Lakes.

After spawning whitefish from Lake Huron, the team took the fertilized eggs to the Sault Tribe hatchery. Approximately 100,000 of those eggs were placed in the Carp River near St. Ignace, in November, with another 100,000 added at a later stage of development in January (photo, above, left). In the spring, we will track the emergence of larval whitefish. Depending on what we learn here, we plan to add additional restocking experiments in other Lower Peninsula and Eastern Upper Peninsula rivers in the coming years.

By “overwintering” whitefish eggs in rivers, we hope to help the fish imprint on their upstream habitat and return as adults to spawn. Ultimately, this could give them a head start on survival and help address declining whitefish populations in the Great Lakes. TNC’s work to support Great Lakes fisheries, including this project, is made possible by the generosity of numerous donors, including the Herbert H. and Grace A. Dow Foundation, the DTE Energy Foundation and the Meijer Foundation.

### WATCHING FOR WHITEFISH

Since 2018, TNC has also worked with scientists from the MDNR and the Sault Tribe to survey Michigan rivers for whitefish in the fall, with six tributaries surveyed in 2022 (photo, above, right). While the team have found many species during their survey efforts, including an extraordinary number of steelhead trout and walleye, no tributary-spawning whitefish have yet been detected in Michigan outside of the Escanaba and Cedar Rivers, both Green Bay tributaries. These data show the need for restoration efforts and demonstrate a low risk of our experimental restocking efforts interfering with any existing populations.



## Mysteries of the Kiyi

The kiyi, a relative of the whitefish, once thrived throughout the Great Lakes. Now, they can only be found in Lake Superior. Since 2017, TNC has worked with the Sault Tribe and the U.S. Geological Survey (USGS) to collect spawning kiyi in late December and January (photo, above), to gather the data needed to determine the feasibility of catching and rearing this fish for possible reintroduction in the lower Great Lakes, to strengthen a vulnerable food web.

As we work to publish [our findings on kiyi](#), we are also working with the Sault Tribe, Little Traverse Bay Band of Odawa Indians and USGS to begin to spawn and experimentally raise kiyi in tribal hatcheries and USGS facilities. This requires collecting spawning fish from Lake Superior in the winter, which we were unable to do last winter due to challenging weather conditions. This winter, we hope to be more successful.





© Jason Whalen/Fauna Creative

## Reef Assessments for Restoration

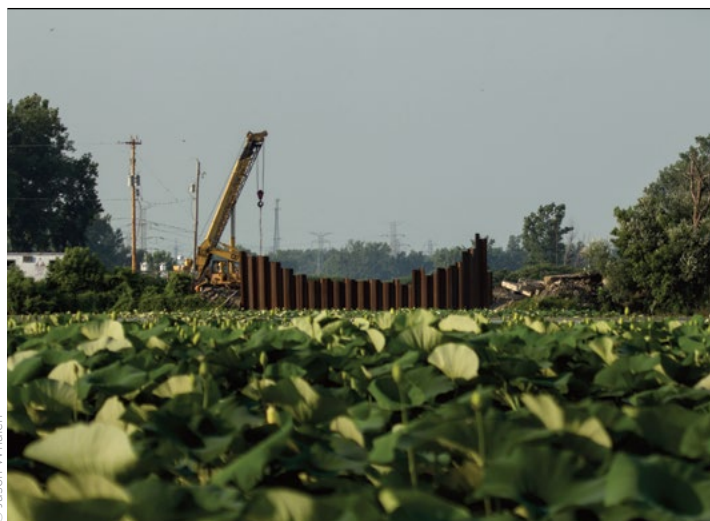
There is growing recognition of the importance of Great Lakes reef habitats as native fish spawning and nursery habitat, due in part to The Nature Conservancy’s work in this area over the past decade—including our 2015 reef restoration in Grand Traverse Bay. However, most Great Lakes reefs have never been studied, and so we know very little about them, including their size, habitat features, how they’ve been impacted by development or invasive species or what fish are using them.

To answer those questions—and help begin prioritizing reefs for protection and restoration at a Great Lakes scale—TNC is working with partners in Lake Michigan and Lake Erie to assess the status of underwater reefs. This includes fall surveys to assess fish spawning activity, spring surveys to assess what larval fish are emerging, summer surveys of invasive species and mapping habitat features and conditions.

In Michigan, TNC worked closely with MDNR, the Grand Traverse Band of Ottawa and Chippewa Indians, USGS and Central Michigan University to assess the status of 15 underwater reefs in eastern Lake Michigan in 2022. We are continuing this work in 2023. We are also coordinating communication with the related projects in Green Bay and Lake Erie, so that we are learning from each other and using comparable methods.



© Paul Vecsei



© Jason Whalen

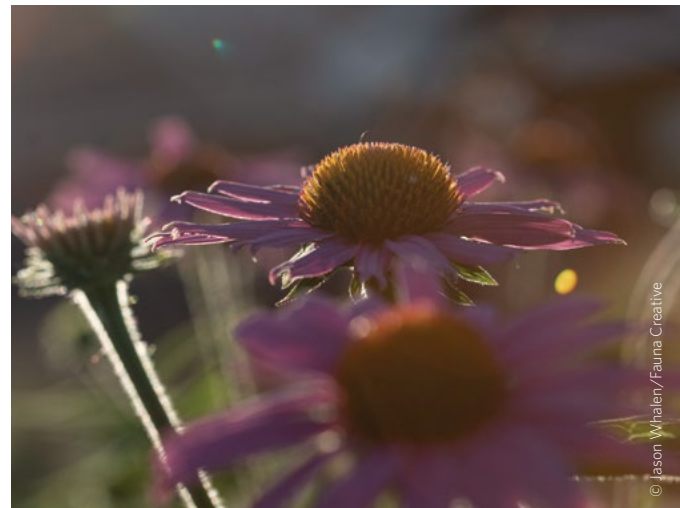
## What’s Next? Lake Erie Shoreline

The final phase of the [Erie Marsh Restoration](#) project is underway! Through this project, a decade in the making, TNC has enhanced the quality and diversity of 748 acres of wetland through the installation of dikes and water control structures, with just 198 acres left to go. Already, the preserve’s restored connection to Lake Erie has improved the habitat it provides to fish, migratory birds and other wildlife.

TNC will build on this effort with an emerging project nearby in North Maumee Bay, where we will use innovative techniques such as floating islands of vegetation to restore and protect an eroded bottomland along the shore of Lake Erie.



# SEEKING NATURE IN OUR CITIES



## The Story of a Garden

After three years of nurturing (and several years of hard work before that) a garden is flourishing in Sacred Heart Church’s parking lot. Here, The Nature Conservancy worked with the church to replace part of its pavement with pollinator-friendly plants and engineered features that slow or capture stormwater runoff—green stormwater infrastructure (GSI) that enabled the church to cut its drainage charge in half through Detroit’s Green Credit program. This project was generously supported by numerous donors including the Ralph C. Wilson, Jr. Foundation.

This June, TNC and Sacred Heart Church held a ribbon-cutting ceremony to celebrate the completion of this landmark project—and the people who made it happen (photos, above). This marks the end of TNC’s formal involvement in this project, which has included providing volunteer stewardship training and maintaining the gardens for their first several growing seasons. Going forward, the church’s Garden Club will make sure the gardens continue to thrive.

Nature-based GSI, like the installation at Sacred Heart Church, helps communities reduce local flooding, protect clean water and beautify their neighborhoods. This project will continue to be an impactful demonstration of the importance of GSI, as TNC encourages Detroit developers to take it up as a standard practice for stormwater management.

Relive the story of the Sacred Heart Church project: [bit.ly/detroitshc](https://bit.ly/detroitshc)

## Making the Case for GSI

To provide a more robust picture of the potential of GSI to Detroit project developers, The Nature Conservancy is compiling data and information that includes interviews with GSI practitioners, case studies of GSI projects, and the costs and benefits of existing stormwater management projects.

As part of this study, which is supported by the Fred A. and Barbara M. Erb Family Foundation, TNC assessed 14 stormwater management projects in Detroit. We found that, while the cost per gallon managed varied greatly across projects, green alternatives could be cost-competitive with traditional “gray” infrastructure in at least some cases. This helps us provide counterexamples to common perceptions of barriers to GSI, such as high costs.





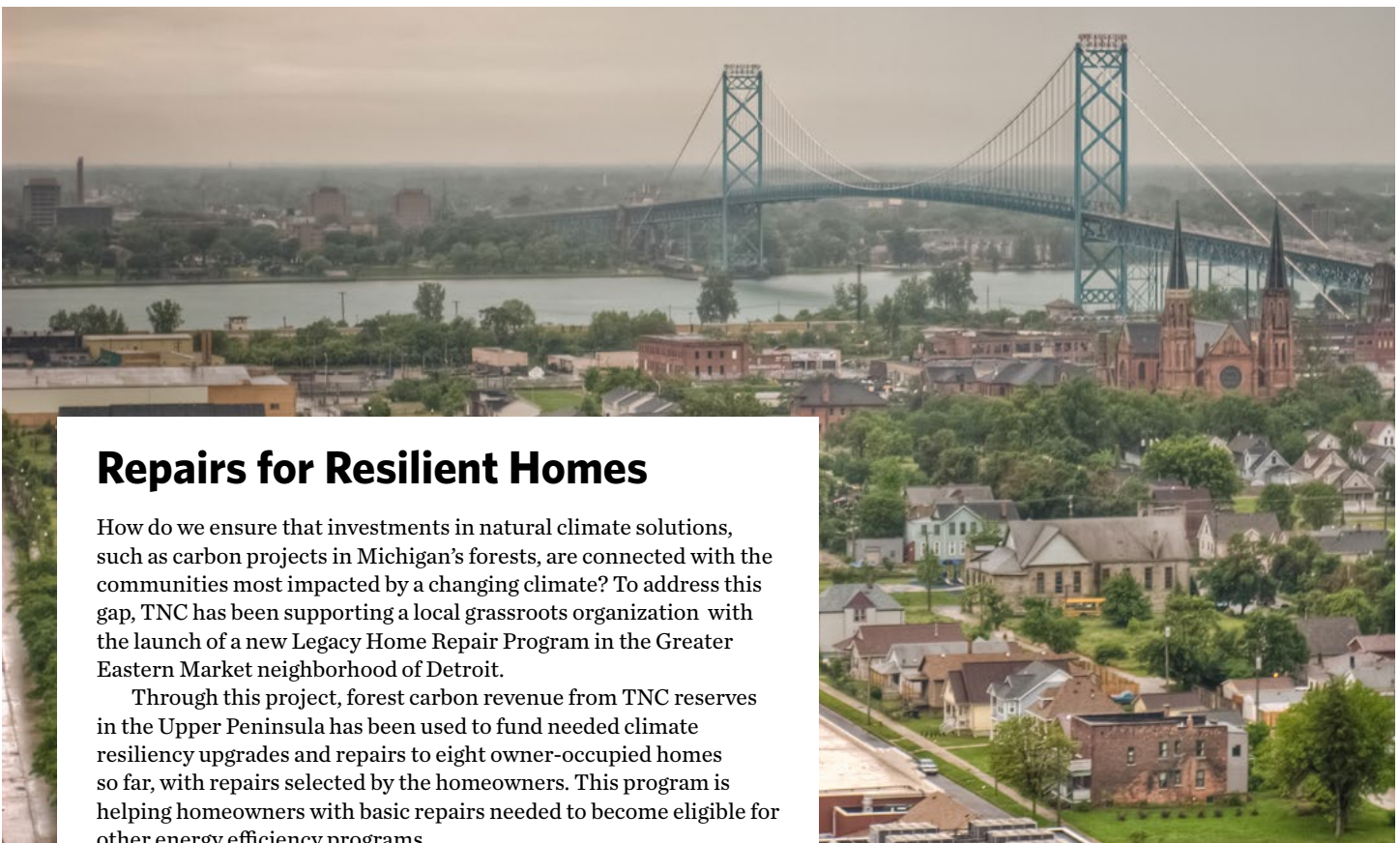
## What's Next? Greater Eastern Market

The Eastern Market Stormwater Management Network Plan has begun to pick up momentum after the City Council approved zoning changes that are essential to its implementation. This plan was developed in partnership with the City of Detroit, Eastern Market Partnership, and Detroit Economic Growth Corporation and with support from the Ralph C. Wilson, Jr. Foundation. The plan includes GSI greenways—connected natural areas that also manage stormwater—in the [city's expansion of the Greater Eastern Market area](#).

Now, TNC is working with the first wave of project developers in the expansion area to ensure they can adhere to the stormwater design guidelines of the Network Plan and provide examples of successful GSI installations that others can follow. TNC has formalized our partnership with the first business and is providing them with technical stormwater design support as they develop the final plans for their new light-industrial development.

By incorporating GSI into neighborhood greenways, these Greater Eastern Market businesses will be able to manage the maximum amount of stormwater, qualify for a significant drainage charge credit and contribute to attractive greenspace that benefits the community.

© Mike Osinski



## Repairs for Resilient Homes

How do we ensure that investments in natural climate solutions, such as carbon projects in Michigan's forests, are connected with the communities most impacted by a changing climate? To address this gap, TNC has been supporting a local grassroots organization with the launch of a new Legacy Home Repair Program in the Greater Eastern Market neighborhood of Detroit.

Through this project, forest carbon revenue from TNC reserves in the Upper Peninsula has been used to fund needed climate resiliency upgrades and repairs to eight owner-occupied homes so far, with repairs selected by the homeowners. This program is helping homeowners with basic repairs needed to become eligible for other energy efficiency programs.

© Carl Ballou



# ROOTED IN SCIENCE



## Science on TNC Preserves

Science is always more impactful when it is shared. At The Nature Conservancy, we conduct collaborative research and share our learnings widely; we also learn from the efforts of others. Sometimes, that research is carried out right here on TNC's Michigan preserves.

Since 2003, we have hosted 41 partners conducting research at 19 preserves across both the Lower and Upper Peninsulas, with researchers from multiple universities and organizations. This year, a record 12 new partner projects were launched on our preserves. For example, at the Zetterberg Preserve at Pt. Betsie, University of Louisville researchers are studying the composition, health and connectivity of interdunal wetlands, and at Ives Road Fen Preserve, a survey of dragonfly species by the University of Michigan is now underway.

The on-the-ground data and academic analyses provided by these studies can help TNC, and others, improve our land and water conservation and management decisions.



© Jason Whalen/Fauna Creative



## Tracking Water Quality in Saginaw Bay

Saginaw Bay and its watershed face numerous challenges to water quality, including excess nutrients and sediment in runoff, which degrade habitat conditions and contribute to harmful algal blooms and unhealthy beach conditions. However, there is a critical data gap on water quality over time, which means that local and regional decision-makers lack the information they need.

In response, TNC has convened partners to form the Saginaw Bay Monitoring Consortium, which is developing and implementing a coordinated monitoring framework for the watershed. With key federal funding recently approved, the consortium has begun to purchase and install new streamgages (photo, left) and sampling equipment. TNC is developing an online dashboard to make the monitoring information gathered by partners available to the public.

Providing more comprehensive and current information will ensure that everyone impacted by the health of the Saginaw Bay watershed can understand just how water quality is changing here—over time and at scale—and better align complementary efforts to protect it.

© David Karpovich





## Sharing Science Around the Globe

TNC’s “Great Lakes to Great Lakes Initiative” was launched in 2014 to help share knowledge between the North American Great Lakes and African Great Lakes and better address challenges faced by both freshwater systems. This knowledge exchange continues today.

In May, a [delegation of nine scientists](#) traveled from Africa to the Midwest to conduct research and share their work, through the African Women in Science program. This program, led by the International Institute of Sustainable Development-[African Center for Aquatic Research and Education Program](#), supports and guides African women scientists to catalyze positive change on the African Great Lakes and their tributaries, and helps ensure more female scientists’ perspectives are part of conversations surrounding fresh water.

The cohort, consisting of teachers, fisheries experts, a meteorologist and doctoral students, spent two weeks meeting with their North American counterparts, including TNC staff, and learning about methods for addressing Great Lakes issues. At the Joint Aquatic Sciences Meeting in Grand Rapids, the world’s largest gathering of aquatic experts, the visiting scientists presented their research and participated in roundtable discussions. TNC trustees Linda Apsey (ITC Holdings Corp.), Terry Barclay (Inforum) and Gretchen Valade (Carhartt), also contributed their expertise by providing the scientists with leadership training, one-on-one exchanges with women executives and new Carhartt field gear.

## New Tools for Clean Energy

Reducing power sector emissions will require a significant shift toward more renewable energy sources like solar and wind power. This year, The Nature Conservancy released a mapping tool to help companies and communities identify the best places in the central U.S. to quickly develop renewable energy while avoiding impacts to important wildlife and habitats. This tool, Site Renewables Right ([nature.org/SiteRenewablesRight](http://nature.org/SiteRenewablesRight)), combines more than 100 GIS layers of wildlife habitat and land use data for 19 Midwestern states, including Michigan.

Additionally, the forthcoming expansion of TNC’s Power of Place tool to the Midwest this summer will help the climate conservation community model potential scenarios for meeting net-zero emissions goals in a cost-effective and low-impact way.

Both tools reflect the need to look at renewable power through the lens of the needs of both people and wildlife, living side-by-side on a shared landscape. TNC will promote these tools in Michigan as we seek to encourage greater production of conservation-minded renewable energy.



## Floor to Canopy: A Study of Regeneration

Patterns of tree regeneration—the small seedlings and saplings that may eventually become the new forest canopy—tell an important story for Michigan’s forests. This year, TNC’s current Essel and Menakka Bailey Conservation Fellow, Dr. Catherine Henry, added to that story with new research on the factors that impact tree regeneration and the resulting diversity of tree species.

Using U.S. Forest Service data, she also analyzed changes in regeneration over time. The results highlight some concerning trends, such as the declining regeneration of key species like sugar maple in northern hardwood forests. But they also highlight opportunities to improve species regeneration—for example, using timber harvests to promote tree diversity by allowing species with various light preferences to thrive.

Data-driven research such as this continues to help TNC refine management of our 47,000+ acres of working forest reserves across Michigan’s Upper Peninsula.

## What’s Next? 30x30: America the Beautiful

Evidence suggests that 30% of the world’s lands and waters must be protected to avert the dual crises of climate change and biodiversity loss. At the UN Biodiversity Conference COP15 in Montreal, Canada, in December, international representatives adopted the [Global Biodiversity Framework](#), which includes a target of conserving 30% of the planet by 2030. Currently, approximately 19% of Michigan’s lands and waters can be counted toward that goal.

To help inform further conservation investments in Michigan, TNC is working with partners to develop resources, including a story map and interactive data viewer, that can support strategic decision-making.



# FACES OF TNC



© Rebekah Wulchney/TNC

## 2022 Publications

Sharing research across the broader scientific community is important to ensure that decisions are made based on the best available science. TNC's Michigan team publishes an average of 10 peer-reviewed papers a year in science journals. In 2022, this included the following articles:

- [Defining coastal resilience in the Great Lakes: A systematic review and critical comparison.](#) | *Journal of Great Lakes Research*
- [Need for harmonized long-term multi-lake monitoring of African Great Lakes.](#) | *Journal of Great Lakes Research*
- [Groundwater in Crisis? Addressing Groundwater Challenges in Michigan \(USA\) as a Template for the Great Lakes.](#) | *Sustainability*
- [Sapling stocking targets for multiple management goals in northern hardwood forests: How do stands measure up?](#) | *Journal of Forestry*
- [A Scientific Synthesis of Marine Protected Areas in the United States: Status and Recommendations.](#) | *Frontiers in Marine Science - Ocean Solutions*
- [Towards a framework for invasive aquatic plant survey design in Great Lakes coastal areas.](#) | *Management of Biological Invasions*
- [Planning for people and nature: Identifying quality-of-life indicators to inform conservation programs for agricultural soil health, Great Lakes coastal wetlands, and urban green infrastructure.](#) | *Conservation Science and Practice*
- [A Synthesis of the Great Lakes Restoration Initiative According to the Open Standards for the Practice of Conservation.](#) | *Journal of Great Lakes Research*

## Volunteer Highlight: Chuck Pearson



Long-time TNC volunteer Chuck Pearson was recently recognized for his commitment to conservation as “Volunteer of the Year” with the annual Abby Mahan Gartland Award from [Heart of the Lakes](#), a statewide honor. Chuck has dedicated thousands of volunteer hours helping to maintain TNC's Ives Road Fen Preserve, where he leads volunteer workdays, provides guided hikes to local high school and college classes, and shares his knowledge with TNC staff.

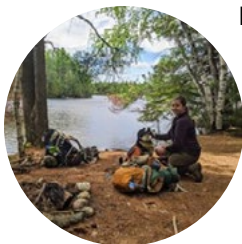
Thank you, Chuck, and congratulations!

## 2022 New Fellows and Interns



### Autumn McGowan | Conservation Fellow

Autumn, a graduate of the University of Illinois at Chicago with a bachelor's degree in public policy, is passionate about conservation work and the ways in which environments and communities interact. As a Conservation Fellow at TNC, a position supported by the DTE Energy Foundation, she is contributing research, analysis and field work to a range of conservation projects.



### Echo Aloe | Conservation Law Intern

A third-year law student at Michigan State University College of Law, Echo made a career change to pursue her interest in environmental and conservation law after previously teaching high school history and economics. The analysis of the Recovering America's Wildlife Act she completed as an intern with TNC—an opportunity sponsored by Jeff and Cynthia Littmann—has helped us better anticipate the bill's potential impact in the Great Lakes.





# 2022: In the Field



All photos courtesy of TNC staff



## TNC MANAGEMENT TEAM

Helen Taylor, *State Director*

Patrick Doran, Ph.D., *Associate State Director*

Rich Bowman, *Director of Policy*

Kari Marciniak, *Director of Strategic Communications*

Jeremy Wittrock, *Director of Development*

Randy Gavorin, *Director of Operations*

Peggy Shannon, *Director of Finance*

## 2023 BOARD OF TRUSTEES

David W. Barfield, *Chair*

Terry A. Barclay, *Vice-Chair*

Robert L. Anthony, *Treasurer*

Gerard M. Anderson

Linda H. Apsey

Essel W. Bailey Jr.

Jocelyn K. Coley

Thomas B. Cook

Mary F. Draves

John M. Erb

Paul C. Hillegonds

Katrina J. Lewandowski

Charles A. Lippstreu

James M. Nicholson

Stephen R. Polk

Philip H. Power

John M. Ranke

David M. Rice

Lloyd A. Semple

Vivian Day Stroh

Robert R. Tisch

Gretchen R. Valade

Barbara Van Dusen

Peter S. Walters

William A. Zehnder



RIGHT: Common loon with a small northern pike and side salad for breakfast. © Jenifer Selwa/TNC Photo Contest 2022

## CONNECT WITH US!



Follow us on social media: [@TNCMichigan](#).



Sign up for our e-newsletter: [nature.org/naturenews](#).



Learn more at our website: [nature.org/michigan](#).



Speak up for nature: [nature.org/actnow](#).