

# turtle tracks

Friends of Misery Bay

400 Misery Bay Road Evansville ON, P0P1H0

#### **FALL 2023**

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### Chair's report

This past season has seen many changes here at Misery Bay, starting with the election of new FOMB board members :

Rachel Windsor, President/Chair
Dagmar Werkmeister, Vice-President/Vice-Chair
Jim Cahill, Treasurer
Phyllis Cacciotti, Secretary & Membership Coordinator
Dale Scott, Trails & Special Projects
Mike Hobson, Trails & Special Projects
Peg Balkind, Assistant Treasurer
Ken Mackenzie, Volunteer Coordinator

The other big change was to have Ontario Parks staff member Brad Grant join our summer student staff at the visitor center, working alongside Maylen, David and Alynna. Brad provided great leadership and guidance and the staff appreciated all the knowledge he shared with them about the park alvar ecosystem. Brad also

oversaw the implementation of Ontario Parks' new parking system, which allows visitors to pay for parking by simply scanning a QR code on their phones.

Our summer staff did a fantastic job assisting almost 90 visitors a day, while leading several guided hikes. They also organized walks and educational activities for a number of school groups.

This summer we had colourful new apparel come into our gift shop. We look forward to the summer of 2024 when we plan to add more products. Remember – all profits from our store go to the Friends of Misery Bay to help with staffing and special projects.

Rachel Windsor, Chair, Friends of Misery Bay

#### Personal note:

I have been a member of the FOMB board for two years now and I was a staff member for two summers before that. This park has become such a special place to me. Walking the beautiful trails has such a magical feeling, and I'm so happy I get to be on the board and to be part of the team working to make sure Misery Bay stays that way.

- Turtle Tracks has invited other board members to share their motivations for getting involved with the Friends of Misery Bay – here are the responses we received:

### Jim Cahill, Treasurer

Hello all, my name is Jim Cahill. I joined the Friends of Misery Bay's (FOMB) Board a few months ago. At the same time, I took on the Treasurer role. Why did I join the Board and why did I take on the Treasurer role? Before I answer, I thought I would provide some background information about myself. I bought a property on Manitoulin Island (Mudge Bay area) 21 years ago and visited the Island each summer with my five children for the first 18 years before moving here permanently

3 years ago. My education and work background can be summed up as follows: After high school, I pursued an undergraduate Bachelor of Arts degree with a major in Economics. Additionally, I trained as a Chartered Professional Accountant and worked in the financial management industry in Toronto up until my semi-retirement 3 years ago.

I have in the past sat on Boards and currently I sit on two other not-for-profit Boards. My family and friends

and I have hiked Misery Bay Provincial Park's trails many times over recent years and I loved each and every hike! The environment at Misery Bay Provincial Park is so unique. I have great appreciation for this environment and the environment and outdoors in general. For these reasons I chose to purchase a lifetime FOMB

membership a couple years ago and I began to volunteer to help clear the trails. I joined the FOMB's Board as Treasurer because I love the park and I felt that I could bring my financial background, my business experience and my experience with other not-forprofit Boards to the FOMB's Board table to assist where I can.



### **Ken Mackenzie, Volunteer Coordinator**

This is my last year as a Board member, so wishful thinking for future projects:

Since the spring of 1989, when Dan and Veronica Bingamen took our families to the Sifferd side of Misery Bay, I have looked forward to and enjoyed hikes around Misery Bay, and especially on the west side. I still have hopes that the FOMB and Parks Ontario will work on a trail to the west side that is usable whatever the Lake Huron water level.



### Why "Misery Loves Company"

### Phyllis Cacciotti, Secretary and membership coordinator

I decided to join the Friends of Misery Bay Board for several reasons, but primarily to create a stronger linkage between two great clubs: the Friends of Misery Bay and the Manitoulin Nature Club. Since I also have the privilege of serving as President of MNC, I could see that both clubs have similar goals revolving around nature, conservancy, awareness and preserving the beautiful flora and fauna we have on Manitoulin Island. It is so critical at this time in our history that we bring to the forefront the need to protect ecosystems here on the Island and elsewhere, as well as to get our fellow residents of Manitoulin more involved in conservancy.

I have no background or credentials in the numerous fields of biology and science, but I do have an appreciation and passion for the benefits of being in nature—it centers and calms us and connects all of us together. We all need to be rooted to Mother Earth and enhance our appreciation of nature in this stress-filled and chaotic world we live in. The added threat of extinction of many wildlife and botanical species is real and along with climate change, it's scaring us all.

Let's get out and do our part, with no better place than the Misery Bay nature reserve, to explore, revel and protect the diverse natural habitats. To quote from *An Illustrated Guide*  to the Flowering Plants of Misery Bay Provincial Park and Manitoulin Island "there are 448 kinds of vascular plants—trees, shrubs, herbs, flowers, ferns, grasses, sedges and rushes." The park comprises 15 km of shoreline on Lake Huron and is dominated by alvar which, when the cracks fill with silt and gravel, support the growth of many shore and marshloving plants. In addition, the park supports considerable wildlife with many butterflies, turtles, and other wild creatures such as otter, fishers, fox, coyote, and other mammals. What a treasure!!

On October 4<sup>th</sup>, a small group of Manitoulin Nature Club members joined together on a gentle hike down to the beach and John Diebolt was kind enough to fill us in on some of the geography and history of the park. He pointed out some of the 23 old beach lines that were left behind by the glaciers receding leaving behind humungous rocks. Three of us walked further on this beautiful fall day and did most of the Inland Alvar Trail. For the most part, it's easy walking but I was worn out by the time we got back to the Visitors' Centre to eat our lunch. In the years to come, as I serve as Secretary on the FOMB Board, my hope is that we can do many back and forth field trips and presentations between the

membership of FOMB and the MNC and work towards the common purpose of creating enjoyable opportunities to get out in the great outdoors and to increase our knowledge and awareness of

conservation. There is so much information to share and not a lot of time to do it so let's get out there, even in our backyards, and turn misery into fun!



- Suzanne, Rob & Rodney—learning from John



Luka & Lily, our youngest hikers



### **Ecological Restoration on Manitoulin Island**

by Megan Bonenfant, Nature Conservancy of Canada

You've likely heard by now that the International Union for Conservation of Nature has declared 2021–2030 as the UN Decade on Ecosystem Restoration. Defined by the Society for Ecological Restoration as the "process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed", ecological restoration maintains and enhances biodiversity and the benefits that nature provides to people.

Ecological restoration includes actions both big and small; can be done by anyone, anywhere; and is a powerful way to reconnect with the land that sustains us all. I have the privilege of practicing ecological restoration here on Manitoulin through my work as a conservation biologist with Nature Conservancy Canada (NCC). The Nature Conservancy of Canada is Canada's leading national land conservation organization. Since 1962, NCC and its partners have helped to protect 15 million hectares, coast to coast to coast, including nearly 30,000 hectares of land across the Manitoulin Island archipelago. With the assistance of many dedicated partners and volunteers, our ecological restoration efforts on these lands in 2023 included:

- Removing problematic invasive species, such as:
- o purple loosestrife from the trails at NCC's Manitoulin South Shore property
- white sweet-clover from the Bur Oak Savannah at NCC's Kip Fleming property
- o garlic mustard and giant knotweed from the forests of Cockburn Island
- o Phragmites along the North Channel Shoreline at NCC's Vidal Bay property
- Cleaning up legacy dump sites, including 9 truckloads of old asphalt shingles from an alvar at Vidal Bay
- Removing obsolete infrastructure (old hunt stands, fencing)





Purple Loosestrife

(photos by Marcel Bénéteau)

Garlic Mustard

Our team also had the privilege of assisting some of our partners with their great restoration work across the island, including controlling invasive *Phragmites* with the Manitoulin Phragmites Project and tree planting at a restoration site on the Kagawong River with Manitoulin Streams.

NCC is just one of many players doing this important work on Manitoulin and I am inspired everyday by the dedication, knowledge, generosity, and skills of the people who work to care for this island. Below is an incomplete list of organizations around the island who undertake or support ecological restoration work – I know there are more out there. Theirs are not my stories to tell, but I encourage you to learn more about their work and be inspired:

- Manitoulin Streams
- Manitoulin Phragmites Project
- Land First Youth Initiative
- Ga Gitigemi Gamik (We Will Plant Lodge)
- Sheshegwaning Lands and Resources Department
- Wiikwemkoong Department of Lands and Natural Resources
- Rainbow Farm North
- Ontario Nature
- Escarpment Biosphere Conservancy
- Ontario Parks

We haven't yet reached the halfway mark in this Decade of Ecosystem Restoration. Looking back on what has been accomplished so far, I am filled with hope about what we can achieve by 2030 and beyond.

https://www.natureconservancy.ca/en/where-we-work/ontario/our-work/natural-areas/manitoulin-island-archipelago.html

Ed. Note: In keeping with the spirit this international initiative, Turtle Tracks in this issue has decided to add reports from a few of our local organizations working towards these goals here on Manitoulin Island.

Have a look at just a few of the projects underway by these dedicated groups:

Escarpment Biosphere Conservancy
Friends of Manitoulin Turtles
Manitoulin Streams

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## **Escarpment Biosphere Conservancy**

by Roy Jeffery, EBC volunteer

Manitoulin hikers now have a choice of several new and improved hiking trails as a result of the completion of a project funded by a generous grant from FedNor. All of these trails were built on properties acquired by the Escarpment Biosphere Conservancy in the last 10 years. The project was spearheaded by EBC volunteers Sean O'Hare and myself.



My favourite property for hiking is the 594-acre preserve on the shore of Lake Wolsey. It is truly a haven for wildlife and hikers alike. Nine kilometres of trail travel through beautiful forest and moss-laden mazes of rocks and crevices and wind over the escarpment, then drop down the other side to arrive at a sandy beach and a view of Lake Wolsey. From there the trails follow the path of a beautiful stepped shale creek upstream to the pretty little Stone's Lake. The creek is known locally as Sucker Creek for the White Sucker that spawn there each spring. Bald Eagles favour this area for the ready food source and multiple generations of eagles can often be found there. The eagles are not the only ones. The combination of large and small lakes, sandy shores, wetlands, escarpment and mixed forest provides habitat to a huge variety of species, making this area a bird watcher's dream. Lake Wolsey is also part of the

Manitoulin Island North Shore IBA (Important Bird Area).

After entering the access road at 2019 Poplar Road proceed (carefully if your car has low clearance) west to the small parking lot. Take a picture of the map board to have on your phone for later reference. The main trail follows the escarpment through cool cedar forest and mature hardwood stands, meandering through a labyrinth of moss and fern-covered rocks. Keep an eye out for the white blazes to stay on track. Eventually, the trail runs alongside the rock face, giving you a chance to examine it up close. This section of the trail does get more technical and requires a moderate amount of balance and fitness. Side trips can include a trip to the sandy beach or the gorgeous shale creek, or taking the blue trail to a hardwood valley where you can see the Stone Lake delta.

Remember as you hike that these lands are the traditional homeland of

the Anishinaabe peoples. Treat the land with respect and thankfulness. The creation and stewardship of these

trails is all carried out by volunteers so take time to leave them in even better condition than you found them.

https://escarpment.ca/see-our-preserves/manitoulin-island-and-sudbury



### Report by Amelia Thompson

- What did the Snapping Turtle say to the Blanding's Turtle?
- Well, nothing, turtles can't talk, so they got some Friends to speak up for them!



Blanding's Turtle (top) and Painted Turtle (bottom), Misery Bay (photos by Marcel Bénéteau)

The Friends of Manitoulin Turtles came together over the past year thanks to Wiikwemkoong Shkakamik Kwe Genwemaajig (Wiikwemkoong Species at Risk Working Group). Inspired by the turtle awareness and nesting habitat work they have undertaken, Shkakamik Kwe Genwemaajig decided to plant the seed for a grassroots group to cover more ground and reach more people to protect this Species at Risk. Our goals are to reduce road related turtle mortality, and educate Manitoulin residents and guests about issues turtles face, like nest predation, and what we can all do to help.

Manitoulin Island is home to four of the eight turtle species in Ontario. Of those four, one, the Blanding's Turtle, is Threatened in Ontario and Endangered in Canada. The Snapping Turtle, Painted Turtle, and Northern Map Turtle are all Special Concern. Turtles have been around since dinosaurs walked this earth and our modern world has led to a terrifying decline in populations within a handful of decades.

Signage is an important tool to alert drivers where turtles may be active. Out of the many kilometers of highway on Manitoulin Island there are surprisingly few turtle or wildlife awareness signs. Not only have roads been constructed across corridors turtles have been using for thousands of years, those roads also contain shoulders made of easy-to-dig gravel - an ideal nesting material. Providing nesting sites that prevent turtles from nesting on shoulders or crossing roads, may be practicable in some locations. If you think you may have an area that would make a suitable nesting site, let us know and we can provide you with more information.

Freshly laid turtle eggs have an enticing smell that predators can't resist. If a nest location is known, and the landowner permits, covering the

nest immediately after the female turtle leaves with a heavy object on top of something like a barbecue grill or a milk crate, is a great temporary measure to protect the nest from predation until the smell wears off the eggs. If an anchored wood frame and mesh nest protector with exit holes is available, that's great, it can be left on until hatchlings emerge. Do you have questions about nest protection? Send us a message, we may be able to help.

Is there a turtle on or near a roadway? Let us know the date and location, maybe take a picture, and email us at islandturtles@yahoo.com. We are always gathering data to help determine where turtle awareness signs might have the most benefit. If you are an iNaturalist user, upload your turtle sightings and consider joining iNaturalist Projects like Natural Heritage Information Center (NHIC) Rare Species in Ontario.

facebook.com/manitoulinturtles



Snapping Turtle laying eggs at intersection of Noble Road and Gordon 4th Line

#### **Meet the Ericas**

by Marcel Bénéteau

The *Ericacea* family of plants is a large and important one on Manitoulin Island and many of its members can be found within the confines of Misery Bay Provincial Park. We have already encountered several members of this family in previous columns: the Pyrola family is now included in the *Ericaceae* supergroup (see Fall 2020 issue), the Monotropa genus, which includes Ghost Pipes, is now also considered part of this family (Spring 2019), as is Trailing Arbutus (Spring 2021). The plants featured in the present column are a little different, in that they are can all be considered shrubs, instead of herbaceous plants like most wildflowers. To be fair, some may be a bit small and low to the ground to be considered shrubs, but they all have woody stems.

This is an important group of plants for both humans and animals. They all produce berries, which are an important food source for wildlife. Many of them have also long been used by First Nations and settlers alike, both for nutritional and medicinal purposes. The best-known members of this group are blueberries, even though they are not common on Manitoulin. Blueberries need acidic soil, of which there is not an overabundance on the slab of limestone we call home. Some plants can be found in bogs and fens, or on the quartzite outcroppings near Sheguiandah, and also in some sandy openings in coniferous stands here and there throughout Misery Bay Park. They come in two species – Lowbush Blueberry (Vaccinium augustifulium) and Velvet-leaf Blueberry (V. myrtilloides). The latter is the one you will find along the inland alvar trail in the park (Fig. 1).

Note the upside-down, urn-shaped little flowers that bloom in early spring. These actually formed by five fused petals and that form, with variations in size and colour, is repeated on half a dozen other species of *Ericaceae* that grow in the park.



Fig. 1 Velvet-leaf Blueberry

Bearberry (*Arctostaphylos uva-ursi*) is probably one of the most widespread plants in the park, growing in most open sunny spaces in the forest as well as on the alvar. It covers the ground in low, sprawling mats. The flowers resemble very closely those of blueberries, but the lip of the tiny urn is tinged in bright pink (Fig. 2, next page). The red berries, which ripen in late summer, are edible but not very appetizing, having a dry, pasty

texture (Fig. 3). Apparently, this does not deter bears from bulking up on them for the winter, hence the common name. The plant is sometimes referred to as Kinnikinnick, especially in Western Canada. Among the Anishnaabe, Kinnikinnick referred to a mixture of leaves – which included Bearberry – that was dried and smoked. A tea made of the leaves was used as a diuretic and to treat urinary infections.



Fig. 2 Bearberry flowers



Fig. 3 Bearberry fruit



Fig. 4 Leatherleaf



Fig. 5 Bog Rosemary

Leatherleaf (Chamaedaphne calyculata) (Fig. 4) and Bog Rosemary (Andromeda polifolia) (Fig. 5) are mainstays of the Misery Bay fen and both could be readily observed along the old boardwalk that used to run along the edge of this fragile habitat. The familiar upside-down urn shape is once again on display on both plants, although the Bog Rosemary flowers look as though they've been blown up like a balloon. It should be noted that,

although the name of the plant derives from fact that the leaves look just like the Rosemary leaves that you grow in your herb garden, the bog plant is actually quite toxic.

Two more Ericas produce the urn-shaped flowers, but are definitely at the lower end of the scale to be considered shrubs. Wintergreen (Gaultheria procumbens) is a small woody plant that usually produces no more than two or three flowers underneath its shiny, evergreen leaves (Fig.6). This small plant is easily overlooked and usually grows in the shade of the overhanging boughs of spruce or fir. The fresh, slightly minty wintergreen scent of the crushed leaves is quite powerful. All "wintergreen" flavoring for food and beverages was once made from this plant before scientists were able to develop a chemical substitute in the laboratory. An oil made from boiling the crushed leaves was used as a topical remedy for rheumatism and arthritis. It also has antiseptic properties. The bright red berries are tasty and refreshing.



Fig. 6 Wintergreen



Fig. 7 Creeping snowberry flower

Even more diminutive is the is Creeping Snowberry (*Gaultheria hispidula*) (Fig. 7). This one is more of a woody vine than a shrub and produces some of the smallest flowers you will find in the park (no more than four or five millimeters across). As the name implies, it does creep, usually over the sphagnum moss in the damper parts of the forest. Tiny, oval leaves alternate along a rough woody stem, with the miniscule bell-shaped flowers hanging underneath. Later in the summer it will



Fig. 8 Snowberry

produce a white, egg-shaped berry, which has a similar flavour to Wintergreen (Fig. 8).



Fig. 9 Small Cranberry plants

Not all members of the Ericaceae family produce the inverted urn-shaped flowers. Large and Small Cranberry grow in cedar swamps and boggy areas of the park. They have creeping stems, similar to those of Snowberries, that send up stalks with a single, five-petaled flower at the



Fig. 10 Small Cranberry, close-up of flowers

top of each one. These unique little blooms have a peculiar look. The flower droops down but the waxy white petals curl upward, revealing a colourful, beak-like cluster of stamens and pistil pointing down to the ground. Both Large and Small species are nearly identical in appearance, the main difference being in the size of the fruit. Both photos shown here are of Small Cranberry (*Vaccinium oxycoccos*) (Fig. 9 & 10).



Fig. 11 Labrador Tea



Fig. 12 Labrador Tea, close-up of flowers

The next member of the family, Labrador Tea (Rhododendron groenlandicum) (Fig. 11 & 12) also needs moist and shady areas to grow. It is quite widespread towards the end of the Mac's Bay trail at the far eastern end of the park. A larger shrub that will grow up to a meter in height, it produces clusters of bright white five-petaled flowers. As the Latin name indicates, it is part of the Rhododendron genus. Its beneficial medical effects have long been touted for everything from respiratory problems to "female disorders" to cancer. Recent tests have shown it to have antibacterial properties and to demonstrate some promise for the

treatment of diabetes. Some sources consider it mildly toxic and/or narcotic and state that it should be used in moderation.

One last member of the Erica family that grows in the park should not be used in any quantity whatsoever, as it is definitely poisonous. Sheep Laurel (*Kalmia angustifolia*) is without a doubt one of our most beautiful flowering shrubs (Fig. 13). But it is also popularly known as Lambkill, which should be a hint to avoid consuming it in any form. The plant is rare on Manitoulin and grows only in areas like bogs and fens; the photo included here was taken in a small cedar swamp near South Baymouth.



Fig. 13 Sheep Laurel (Lambkill)

This has been a quick survey of a group of plants whose environmental, cultural, and even economic importance have been with us for untold generations. Their sturdiness and adaptability quietly add beauty to some of the most inhospitable habitats. Yet many of them are all but unknown to most people as they rush about their busy lives. Misery Bay gives us a great opportunity to reconnect with this amazing family of plants.

#### References:

- Dickinson, Timothy et al., The ROM Field Guide to Wildflowers of Ontario, Royal Ontario Museum, 2004.
- John Morton and Joan M. Venn, *The Flora of Manitoulin Island*, University of Waterloo Press (3<sup>rd</sup> edition), 2000. https://www.minnesotawildflowers.info/search?family=Ericaceae&wh https://cdnsciencepub.com/doi/10.1139/cjb-2021-0086

# Kagawong River Site 142 Stream and Riparian Restoration

Ed. Note – reprinted from Manitoulin Streams Fall 2023 Newsletter – thanks to Seija Deschenes. Just one of their many ongoing projects...

This year's restoration work was largely conducted in Kagawong, with perhaps the most prominent site being KAG 142, located across the river along the main trail. This eroding bank was restored using bioengineering techniques and riparian restoration to stabilize the stream bank, enhance aquatic and shoreline habitat, and reduce the negative impacts of climate change such as flooding and erosion.

### Accomplishments at KAG 142:

4 boulder clusters
7 root wads
30 boulders
3 gravel spawning beds
30m linear shoreline restored
137 trees
242 shrubs
150 milkweed plants
100m² native grass seed





Prior to restoration, entire trees were falling from the eroded bank into the river and a large log jam was accumulating.





Root wads and boulders were placed along the bank to stabilize it and create habitat for fish. The steep bank was turned into a more gradual slope that was filled with native plants including milkweed for monarchs and pollinators.





Volunteers from the Nature Conservancy of Canada, the MNRF's Stewardship Ranger, and volunteers from Sheguiandah, youth rangers, farmers market helping plant native trees and shrubs along the reshaped bank.





# Kagawong River Site 180 Restoration

This year's second restoration site along the Kagawong River was KAG 180, located past the road bridge, at the mouth of the river. KAG 180 is an important site because it is the first opportunity for salmon to spawn when they enter the river. Enhancing spawning habitat in this location provides migrating fish with a suitable location to lay their eggs early on in their journey, which may be important in the future with climate change low water threats upstream. To enhance fish habitat at KAG 180, bioengineering techniques involving placing rock weird and spawning gravel were used, while riparian restoration was employed to stabilize the bank and prevent erosion and protect during flooding events.

### Accomplishments at KAG 180:

2 vortex weirs (182 boulders total)
6 root wads
Boulder clusters (25 boulders total)
3 spawning beds (165m^2 in area)
80m of linear shoreline restored
8 trees
308 shrubs
150 milkweed plants
230m^2 of native grass seed planted



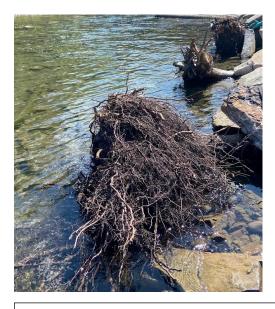
Prior to restoration, KAG 180 was a missed opportunity for fish habitat.



Placement of silt screens by the contractor during the creation of the rock weirs confines sediment kicked up during the construction process.



Rock weirs were created, and gravel was placed inside them to encourage use of this area by spawning fish.



Root wads were placed along the banks at KAG 180 to stabilize them and create fish habitat.



We had lots of help tree planting at KAG 180! We were fortunate enough to have assistance from participants of the Debaj event, as well as grade 2s and 3s from a salmon tour, and volunteer tree plant.



In imagery taken with Liam's drone, we get an overhead view of KAG 180, clearly showing the line of boulders and rock weirs.



