turtle tracks

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Message from the Chair

Hello.

My name is Gaynor Orford and I am the Chair of the FOMB. I have been a Friend of Misery Bay since 1995, and was on the original Board (1996 – 2002) that got this ball rolling.

After retiring from teaching in 2011, I was asked to join the Board again and took on the Vice Chair's position under John Diebolt. My background is in Science (MSc Laurentian University 1982), and Education (BEd Nipissing 1988).

Becoming involved with Misery Bay again in 2011 afforded me the opportunity to use my skills and my love of the natural world to develop exhibits in the Centre.

As the new Chair, I will support the initiatives that are currently underway, (the exhibit plan, and the trail update project) to the best of my ability.

Misery Loves Company.

Vice-Chair's Report

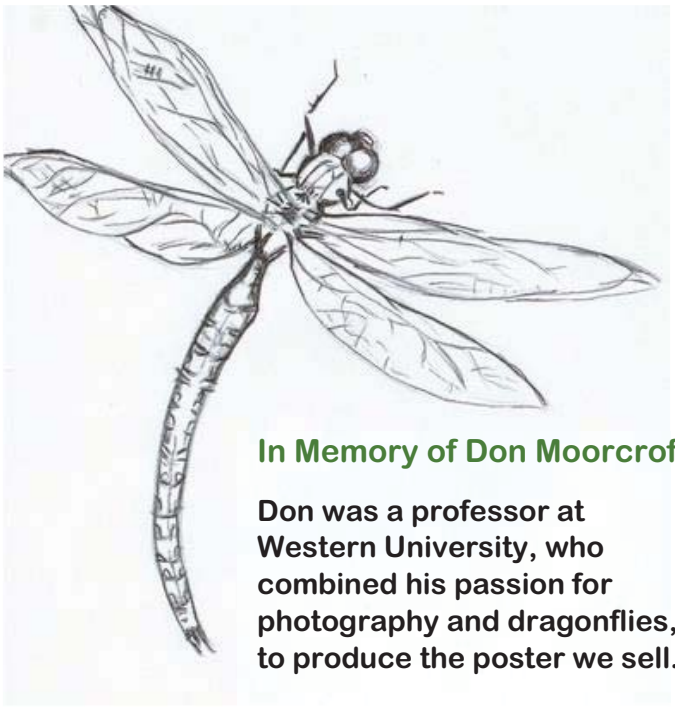
As you may be aware, John's term as chair is up. This reality hit like a ton of bricks, and thinking about where we are now, is in no small part attributable to the time and energy John has invested in "all things Misery".

- We now enjoy a much improved relationship with our Parks partners.
- The portico walkway and road from the parking lot allow for barrier free access to the building.
- The necessary assessments of the Sifferd cottage have been completed.
- The Gazebo is up.
- Phase 1 of the Interpretive plan is underway.
- Phase 1 of the barrier free access to the bay has been initiated.

Thankfully, John has volunteered to chair a special projects committee to keep the Interpretive plan and the trail accessibility plan moving forward.

Last year's Canoe Raffle was a great success. All tickets were sold and $3,500 was raised for educational materials. And so the fun began deciding what to purchase.

To date, we have acquired a new TV, a Rocks and Minerals collection for reference purposes, additional animal tracks, a solar power kit, tree identification kit, fossil molds, kids' activities storage cubbies, shelving units, poster panels on the Floristic regions and the turtles, the ROM Butterfly Guide for the library and an insect rearing cage.



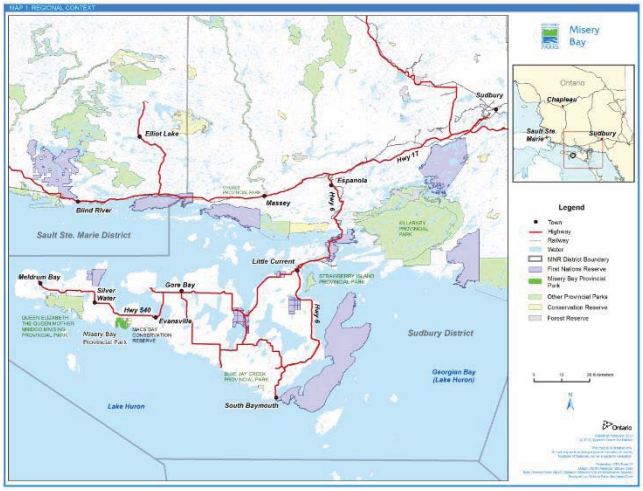
In Memory of Don Moorcroft.

Don was a professor at Western University, who combined his passion for photography and dragonflies, to produce the poster we sell.

Manitoulin Island and New Park Land

Media coverage in the Manitoulin Expositor and the Manitoulin West Recorder covered the announcement of new park lands in the Manitoulin district. Lands were added to Misery Bay Provincial Park and two new parks were established in the Manitoulin district on March 6th, 2014 (see map).

Ontario Parks worked with the Nature Conservancy of Canada to establish these new provincial parks. These lands were identified following the mandate and objectives of Ontario Parks, which is found in the Provincial Parks and Conservation Reserves Act…



To establish and manage provincial parks:

1. *To permanently protect representative ecosystems, biodiversity and provincially significant elements of Ontario's natural and cultural heritage and to manage these areas to ensure that ecological integrity is maintained.*
2. *To provide opportunities for ecologically sustainable outdoor recreation opportunities and encourage associated economic benefits.*
3. *To provide opportunities for residents of Ontario and visitors to increase their knowledge and appreciation of Ontario's natural and cultural heritage.*
4. *To facilitate scientific research and to provide points of reference to support monitoring of ecological change on the broader landscape.*

Fulfilling the mandate and objectives is a huge job. It takes many hands and many years to deliver. A partnership with the Nature Conservancy of Canada makes it possible for Ontario Parks to acquire important areas. The agreement with the Friends of Misery Bay has enabled development and operations by the people in the 'Manitoulin community' that support the objectives of Ontario Parks in Misery Bay.

So, what's so special about the new Manitoulin park lands?

Ontario Parks' mandate is to protect 'representative ecosystems', 'biodiversity' and 'provincially significant' areas. Ontario Parks looks at these three ideas on a landscape basis, which is the Manitoulin ecological district or ecodistrict. The Manitoulin ecodistrict includes Manitoulin Island and immediate adjoining islands with similar geology[1]. It is one of 46 ecodistricts across the province.

Ontario Parks studied the Manitoulin ecodistrict to understand what representative ecosystems are there. The landforms and vegetation that occur in the existing parks were compared to the diversity of landforms and vegetation in the whole Manitoulin ecodistrict. The Manitoulin ecodistrict landforms include the Paleozoic rocklands and glacial deposits, lowlands with wetlands and modern-day island shorelines. The natural variety or biodiversity also considers the range of vegetation communities and species that grow on the landforms in the ecodistrict. Information on aquatic communities was included.

The greatest biodiversity in the Manitoulin ecodistrict is found in wetlands, alvar and shoreline vegetation communities. Discussions

[1] Manitoulin ecodistrict contains all the limestone based Islands from St Joseph to Halfmoon east of Fitzwilliam Channel and the Duck islands to the south and Vidal Island to the north.

with NCC determined that the priorities for land acquisition were to acquire and protect representative wetlands, alvar and shoreline communities in the ecodistrict.

The study looked at the combinations of landforms and vegetation communities in the existing parks and conservation reserves in the ecodistrict. This work found that Misery Bay has the largest and most diverse wetland in the ecodistrict with fen, bog and swamp communities – that makes it provincially significant. NCC and Ontario Parks looked at the Misery Bay shoreline and alvar communities and areas to the west and found larger and more diverse alvar centred on East Belanger Bay to Christina Bay. Bedrock is the dominant landform there and pavement alvar, as they are called, are the largest and most diverse in the Manitoulin ecodistrict – that makes them provincially significant. The area north of Burnt Island was named by NCC as Queen Elizabeth The Queen Mother Mnidoo Mnising (Q). Comparing the variety of alvar plants found at Misery Bay to those at the Q both have populations of several species of rare plants like Manitoulin gold, ram's-head lady's-slipper, Hill's thistle, Pitcher's thistle, Great Lakes wheatgrass, northern dropseed, and purple-stemmed cliff-break. Dwarf lake iris in the Q is not found on the alvar at Misery Bay. Further work in the ecodistrict determined that the wetlands and alvar on Strawberry Island than those at Misery Bay and the Q. Strawberry Island alvar developed on shallow soil on weathering limestone bedrock and supports the largest most diverse grassland alvar in the Manitoulin ecodistrict with species at risk including Gattinger's agalinis – that makes them provincially significant. And looking at the shoreline wetlands on the Strawberry Channel they were determined to be the largest and most diverse coastal wetlands in the ecodistrict – that makes them provincially significant.

So how big are these parks?

Misery Bay with the additions is now 1,046 hectares, the Q has 6,530 hectares and Strawberry Island is 1,145 hectares.

The Misery Bay additions include three parcels. There's a block on the west was the Ironside property, an area on the north, east of the park access road is known as the Donohue lands, and Ontario Parks purchased an in-holding along the southeast shore that was referred to as Curly's Camp, which includes the location of the new shelter (gazebo) that was built this past spring / summer.

Is the land acquisition over? The short answer is, no. Ontario Parks works to assess and refine park boundaries to add lands that would complement their ecological integrity. That is to say that a park boundary should contain the ecosystems that the park is meant to represent and protect by following ecological communities that are important. Ontario Parks has two principles in the Provincial Parks and Conservation Reserves legislation to guide the planning and management of Ontario's system of provincial parks and conservation reserves:

1. Maintenance of ecological integrity shall be the first priority and the restoration of ecological integrity shall be considered.
2. Opportunities for consultation shall be provided.

There will be additional boundary refinements proposed in the upcomming planning for Misery Bay to amend the existing management plan to incorporate the additions that have been added and some additional tweaking to make the boundary more ecological.

Planning will also follow the second principle to provide opportunities for the public to comment on proposals to manage the existing park lands and add more lands to the park boundary.

The planning amendment to the Misery Bay management plan and the new plans for the two

new parks will describe the boundaries and the proposed management of these lands. I look forward to provide opportunities for the Friends of Misery Bay and the wider public to comment on proposals to manage these parks relative to the provincial park mandate and objectives as described at the beginning of this article.

The Friends of Misery Bay (FOMB), your members and executive know all about working with Ontario Parks, from the germ of an idea to establish the park in the first place to getting funding for infrastructure to bring in access to the east side, to laying out and managing trails, to the day to day challenges of operating a visitor centre in what is now an official operating season. Misery Bay is all about collaborating with others around mutual interests to conserve nature while making a place for people to discover the important natural areas of the Manitoulin ecodistrict through recreation and research within these natural areas in a way that they are sustained for future generations to be inspired by their wonder, as we are today.

What can I say… thank you!

Will Kershaw
Senior Management Planner
Ontario Parks, Sudbury

Spotted Coral-root

By Marcel Beneteau

Misery Bay is home to 25 of the 35 species and varieties of orchids that grow on Manitoulin Island. While some of these are restricted to remote wetland areas of the park, one of the most interesting species can easily be spotted along the trails in early summer throughout the park. Spotted Coral-root (*Corallorhiza maculata*) grows in a variety of environments, from moist coniferous and mixed forest to dry lichen beds in open sandy areas. A small, seemingly inconspicuous plant rarely exceeding 30 to 40 cm in height (12 – 15 in.), Spotted Coral-root reveals itself, upon closer examination, to be a veritable jewel of the forest floor.

The *Corallorhiza* genus, which also includes Early and Striped Coral-root, is named after the branching, coral-like rhizome from which the plant grows. Like many orchids, the main activity of the plant occurs underground. Coral-roots are leafless mycrotrophic plants, meaning they produce no chlorophyll and rely instead on a complex arrangement of mycorhizal fungus attached to the roots of nearby plants to provide them with food. They send up shoots only when conditions are just right, which means the flowers can be abundant one year and absent for many years after that.

Photo 1:

var. occidentalis, close-up of flower

Photo 2:

var. maculata, close-up of flower

Photo 3:

var. maculata, opening flowers. Note twisting flower-stalks.

Photo 4:

clump of var. occidentalis

The smooth brightly-coloured scapes rise from the ground and produce 5 to 50 small delicate flowers starting just past the mid-way point. Like all orchids, the flower is composed of three petals and three sepals. The sepals and upper petals are nearly indistinguishable and are yellowish-brown to reddish purple above and slightly paler below. The lower petal is extended into a flattened lip, in this case white with dark maroon spots. The lip is surmounted with a yellowish column, which consists of the fused male and female reproductive organs. The flower is largely self-pollinating and produces seed capsules after the flowers die. Many orchid flower stalks execute a 180 rotation from the first appearance of the flower buds to the full flowering of the blooms; this feature can be clearly seen when examining the stalks of the Spotted Coral-root, which flower from the bottom of the spike to the top.

Two varieties of Spotted Coral-root are found in Misery Bay. The Western variety (var. *occidentalis*) flowers earliest, from mid-June to early July. It generally has darker, more reddish-purple stems. The lip of the flower has flared sides and a rounded tip; two small bracts (tiny leaf-like structures) are visible at the base of each flower stalk. The plants of this variety tend to grow in clumps. *Corallorhiza maculata var. maculata* blooms a little later, from early July into early August. The mostly solitary stems tend to be a more yellowish-brown colour and the sides of the lip are straight and parallel with a less-rounded tip; the bracts at the base of the flower stalks, while present, are too miniscule to be seen without magnification. The base of the stem in both varieties is wrapped in a paler-coloured sheath.

In spite of their striking appearance, Spotted Coral-roots blend into the background and are easily overlooked in their sun and shade-dappled environment. Though not a rare plant, the visitors who spot one are themselves rather rare. Keep your eye on the trail edges to discover this fascinating example of Misery Bay's biological diversity!

References:

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- Bruce-Grey Plant Committee (Owen Sound Field Naturalists), *A Guide to the Orchids of Bruce and Grey Counties*, Owen Sound, Stan Brown Printers Limited, 3rd reprint, with additions, 2005.
- Morton, J.K. and Joan M. Venn, *The Flora of Manitoulin Island and the adjacent islands of Lake Huron, Georgian Bay and the North Channel*, Waterloo, University of Waterloo Biology Department, third edition, 2000.
- Risen, Kim and Cindy, *Orchids of the North Woods*, Duluth, Kollath +Stensaas Publishing, 2010.

Marcel Beneteau and his wife, Sabine, have been spending summers and weekends near Kagawong for the past ten years and fell in love with Misery Bay on their first visit. They have since spent countless hours walking the trails, bird watching and photographing the amazing diversity wildflowers the park has to offer. Now that they are both retired they have more time to get involved with the organization and this is why Marcel gladly accepted the nomination to the board of the Friends of Misery Bay. He looks forward to working with the various committees to maintain and develop this hidden treasure among Ontario's parks.

School Visits 2015

This Spring, three local schools came to the Park for class trips.

On June 4th 98 students, plus teachers and chaperones, from Central Manitoulin Public School descended upon the Park. They were all a part of the school's Green Club whose activities won the School the RDSB's Green School designation.

Students from the ELK class to Grade 7 were present. With the help of Nancy Kains, Eric Harper, and Peg Balkind, we divided the students into smaller groups and hit the trails. The big thrill of the day was the turtle talk at the beach with Donnell and Mike, who had located a turtle for the students to see. Donnell and Mike gave the students tips on how to help turtles cross the highways safely, as well as presenting interesting facts about this threatened species.

On June 16th the Grade 1 and 2 classes from Lakeview Public School, along with teachers and chaperones, visited. This is the 3rd year that the Grade 2 class has come. These enthusiastic youngsters were given clipboards, pencils and a scavenger hunt list of things to look for on the trails, and became so engaged that the hour hike took over two hours to complete. Back at the Centre they were introduced to the local fur bearers and enjoyed quiet time activities.

On June 17th the students from St. Joseph's School in Sheshegwaning arrived. The entire school came – all 10 of them and we had a great time doing the scavenger hunt, playing the habitat game, and looking around the centre. One student told his teacher that this (Misery Bay) was better than Science North!

The students told me a couple of turtle jokes:

Why did the turtle cross the road?
To get to the Shell station!

Is a turtle without a shell naked, or homeless?

White Admiral and Red-spotted Purple Butterflies

By Peter Ford

Until recently it was thought that White Admiral (Limenitis arthemis arthemis) [Fig. 1] and Red-spotted Purple (Limenitis arthemis astyanax) [Fig. 2] butterflies were two distinct species. It is now recognised that they are a single species capable of interbreeding.

Fig. 1 White Admiral butterfly

Fig. 2 Red-spotted Purple butterfly

The White Admiral tends to be the more northerly and is common in Ontario, whilst the Red-spotted purple is more common to the south. The underwing surface of the White Admiral is similar to the dorsal surface in having a brownish background with prominent white bars whilst the Red-spotted Purple gets its name from the red spots on the underside of the wings [Fig.3].

Fig. 3 Red-spotted with wings folded to show ventral aspect

The two populations overlap in the great lakes region and it is in this area that hybrid forms [Fig. 4] are most commonly seen. Hybrids usually lack most or all of the white bars across the wings which are seen in the White Admiral. Varying degrees of hybridisation can often be seen in the Misery Bay Park, but the pure form of the Red-spotted Purple is less common here than the pure form of the White Admiral.

Fig. 4 Intermediate form – note the traces of white bars on forewing

The caterpillars of both subspecies are very similar and resemble large bird droppings. The food plants of the caterpillars are similar for both and include wild cherry, poplar and aspen. The Red-spotted Purple is more often found on wild cherry.

The blue sheen of the Red-Spotted Purple resembles the colouring of the Pipevine Swallowtail which has an unpleasant taste although the former does not and this is thought to be an example of Batesian mimicry affording some protection to the Red-spotted Purple. The Pipevine Swallowtail is very much a southern butterfly and is an uncommon visitor to Southern Ontario which might help explain the predominantly southern distribution of the Red-spotted Purple as there would be little advantage to mimic a distasteful insect which did not occur in the same area.

Peter Ford is a semi-retired physician who moved, with his wife Sally who is also a physician, to Manitoulin six years ago from Kingston. They came to Canada from Scotland in 1976 and both worked at Queen's University. Peter has had a long time interest in natural history particularly insects and especially lepidoptera (moths and butterflies). He has been on the board of Friends of Misery Bay for one year and is currently the vice-chair of the board.

Misery Bay BioBlitz

At the end of May, Misery Bay hosted a Bioblitz. This event was organised by Nancy Kains of the Manitoulin Nature Club, in conjunction with Ontario Nature, and Manitoulin Streams.

Taking a snack break during the Bioblitz.

Experts from these organisations, as well as Laurentian University, led groups of nature enthusiasts into the many diverse habitats within the Park, to identify and count as many different species as possible, with a primary focus on reptiles and amphibians. The bird and plant species are still being collated.

Despite the miserable weather, everyone had a great time, and enjoyed a barbequed meal cooked by FOMB volunteer, Floyd Orford.

Species Documented

Reptiles

Turtles

Painted 1
Blanding's 2
Common Snapping 1

Snakes

Garter 1
Milk 2

Boy with garter snake. Photos by Al Tribinevius.

Amphibians

Eastern Redback Salamander 28
Blue Spotted 1 (needs photo check)
Spring Peepers 10's
American Toad 3
Leopard Frog 4
Green Frog 1

Salamander. Photo by Peter Barnett.

Insects

Dragonfly 1(photo submitted)
Water Spider1
Water Strider1
Dragonfly nymphs 8
Bark beetle 1
Ground beetle 1

Fungus

Jelly 10's
Turkey Tails 10's
Marasmus 10's
Penioforarufa
Buttery Collybia

Spring peeper.