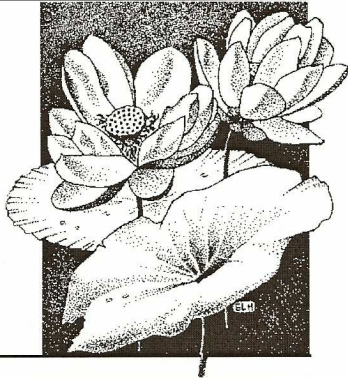


Lotus

NEWSLETTER
of the
NORFOLK FIELD NATURALISTS



October 2010

Meeting Notes

September 2010 Meeting

Shirley Rothery

The Monarch Butterfly was the topic at NFN's first fall season monthly meeting. Members who have seen Monarchs lately were keen to hear our speaker Professor Jeremy McNeil. Professor McNeil earned a Ph.D. in Entomology and Ecology in 1972 and he worked in the Biology department at Laval University for 30 years before briefly retiring and then moving to the Biology Department at the University of Western Ontario. His special interests include: seasonal migration, the interactions between insects and plants and the effects that climate change may have on insect migration.

We all love the bold and bright orange and black colours of Monarch Butterflies. The bright white, yellow and lime green caterpillar is just as easy to spot against green milkweed leaves as the orange and black adult. If they are easy to spot does this not pose a threat to their survival? Will their predators not spot them easily too? Professor McNeil explained the Monarch Butterflies have aposematic colouration; their bright colours warn other creatures that they are either poisonous, dangerous, or foul tasting.

Monarchs have a special relationship with milkweed. The female lays about 75 eggs in her lifetime on the underside of milkweed plant leaves, one egg per plant. She does this so that her offspring will not have to compete for their food. Many animals find milkweed hard to consume. Its milky fluid contains latex and this substance gums up the mouths of other insects but the Monarch has a strategy. It scores or trenches a vein on the underside of a milkweed leaf. This causes the leaf to droop over and shuts off the flow of the latex bearing sap. The Monarch



caterpillar then eats below the score line. Milkweed contains cardiac glycoside; by ingesting this the caterpillar / butterfly becomes toxic, i.e. its bright colours are not a ruse, it really is poisonous.

Do Monarch butterflies born in Ontario migrate all the way to their wintering ground in Mexico and back to Ontario the following spring? Professor McNeil answered that this appears to happen; Monarchs tagged in southern Ontario have been found back in Ontario the following year and since they can not survive an Ontario winter we must assume they have made the round trip. It is more usual however, for the Monarch to stage or make it part way and then to reproduce and for its offspring to continue the trek.

How do the Monarchs know when and where to migrate and when to stop? Professor McNeil suggested that temperature and daylight were the clues the Monarchs use. Warm, slightly windy fall days set them in motion. They do not travel on cloudy or rainy or overly windy days. 60% of winds go south in the fall and north in the summer. The Monarch uses these prevailing winds as it flaps its wings and then uses thermals to glide south and west in the fall. Monarchs have been spotted as high as a 1 km up in the sky.

As to how they know when to stop, the professor pointed out that the Monarchs come down in oyamel fir trees in a mountainous region of Mexico, an area about the size of London, Ontario. These firs have waxy needles that stay on the tree for many years, so

they retain the odour of the urine of the millions of Monarchs that winter there. Professor McNeil thinks that the Monarch smells its way back to its winter roost. As the air heats up, the scent (that has accumulated over many years and contains cardiac glycoside from the milkweed plant) is wafted aloft. Smelling this, the Monarch knows it has arrived.

Professor McNeil has been to the wintering grounds of the Monarch many times. The butterflies can number as many as a million insects on a single tree, a truly amazing and beautiful sight, he says. At rest the undersides of their wings are primarily white by now, making the trees appear to be covered in a snowy cloud. As the air heats up and the butterflies begin to stretch their wings, a golden light created by their upper wings appears. The insects fill the air as they forage and drink during the day.

The local people are very protective of the Monarch butterflies. They keep sightseers to the periphery of the colony and block entrance to all interior paths. Unfortunately, armed thugs raid and cut down oyamel fir trees that seem to re-appear in the nearby lumber mill. The other hazard that Monarchs face on their wintering grounds is predation by two birds. One bird eats its wings and then vomits, but it continues to do this anyway. The other bird is much more clever. It removes the Monarchs head slits it down the back and then eats its innards, which do not produce ill effects for the bird.

My son and I just happened to be on Hastings Drive in Long Point last Friday when conditions were perfect for Monarch migration, i.e., warm and sunny with light winds. There were thousands of butterflies in the air and perched on trees and bushes along the road. We were thrilled to see them and wished them well on their marathon journey.

The Monarch Butterfly photos accompanying this article were taken by Bernie Solymar at the Tip of Long Point on September 18, 2010 as the migrating butterflies congregated there, waiting for the right conditions to continue their journey.



NFN Summer Field Trips

Audrey Heagy

Big Creek National Wildlife Area

This year 21 people came out for an evening hike around the dike at the Big Creek marsh on 8 June. With that many people it was hard to spot birds, though we were able to spy into a Red-winged Blackbird nest from the observation tower by the parking lot and there were lots of Marsh Wrens singing their heads off. Red Admiral butterflies were in evidence and I spotted my first Monarch caterpillar of the year, munching on milkweed. We didn't see any snapping turtles but there were many, many nests that had been dug up, presumably by hungry skunks, raccoons and coyotes. Towards the end of the hike we found one spotted turtle starting to dig a nest on the path. Like the spotted turtle we saw in 2009, the shell of this adult female had notches indicating it had been marked by researchers studying the survival of this endangered species.

Hummingbirds and Butterflies

Fifteen people participated in our July hike at the property of Audrey Heagy & David Okines. David Okines, a licensed hummingbird bander, demonstrated the multi-step process of banding a hummingbird.

Hummingbird bands are custom made from a sheet of aluminum pre-stamped with the band markings. Each band is given a unique combination of letters and numbers. The bands need to be cut from the sheet to precisely the right size for the bird's leg. Only the Ruby-throated Hummingbird normally occurs in Ontario but banders in other parts of North America must prepare different sized bands for the various species they encounter. Once the band is cut, all its edges must be smoothed and then the band is shaped into a semi-circle. Before banders can band a hummingbird, they must spend a lot of time getting the bands ready to use.

To catch hummingbirds, David used specially designed traps, each containing a hummingbird feeder. Once a bird was feeding on the sugar water, he pulled a cord and the trap door on the side of the trap slide shut. He carefully picked the bird out of the trap and put it in a small cloth bag for transport. At the banding table he showed how he uses special pliers to fit the tiny band on the hummingbird's tiny leg. He then determined the species, age, and sex of the bird and took some measurements. All of the birds captured that afternoon were adult females, who would have been busy feeding nestlings. The young

aren't ready to leave the nest until late July. Male hummingbirds don't help with raising their young. Once the birds had been banded, they were released and speedily headed off to start feeding again.

Most people then went for a walk along the hot, sunny trails leading through the overgrown field.



Photo credit: Donna Boyle

A few fritillary butterflies went zipping past. We weren't able to find any Monarch caterpillars although some had been spotted a few days earlier. Many people commented on the diverse vegetation growing in what had been a pasture up until 10 years ago. The pasture plants have been supplemented with various seeds brought in from nearby natural areas by birds, mammals, and the wind. The property owners haven't added any plants but they do try and control some of the invasive non-native plants such as Queen Anne's Lace, Autumn Olive, and Multiflora Rose.

Walk on Acorus Restoration Nature Trails

The August hike at the Acorus Restoration native plant nursery west of Walsingham had good weather and a good turnout. Before we headed out on the trails we enjoyed mint tea and elderberry muffins provided by our hosts, Paul and Stephanie. Paul then led us around the trail explaining how they were using some parts of the former tobacco farm for producing native prairie grass and wildflower seeds. Since 1995, several former fields have been restored to natural habitats by planting site-appropriate native grasses, flowers, trees and shrubs. Trails also wind through some very nice mature woods and cross over a wet meadow along a small stream. This riparian area had formerly been flooded for an irrigation pond but they drained the pond and restored the area by planting various wet meadow species. The Great Blue Lobelia, Boneset and Joe-Pye-Weed were in full flower and made for a very colourful display.

A highlight for many on the hike was seeing a very large snapping turtle submerged in about a foot of water in one of the small water-filled cells used for growing aquatic plants. This turtle was likely feeding on the many frogs that were also living in these water beds. Following the hike many of us chose to head into a plastic-covered greenhouse where some huge Black-and-Yellow Spiders were taking advantage of

the steady stream of insects being pulled in by the ventilation fan at the back. These spiders are named for the striking pattern of black and yellow markings on their abdomen.

We then had a chance to check out the retail plant nursery and the other gardens near the store. Many of us took the time to wander along the paths in the labyrinth garden where the plants are all labelled. This garden provides an excellent chance to see how various native wildflowers do in a garden setting (some grow quite large!). Not only are these wildflowers attractive to people, but many are excellent for attracting insects. Flowers of several species were buzzing with bees and butterflies. Walking the garden paths is a contemplative experience, enhanced by thought-provoking quotes on small signs scattered throughout. A short trail around a small dug-out pond nearby provides ideal habitat for other water-loving plants and wildlife.

The retail nursery carries a wide array of native plant species that grow in aquatic, wetland, forest, meadow and prairie habitats. Many are adaptable to backyard settings and can attract wildlife to your garden. The store is open to retail customers during the gardening season (closed on Mondays and Tuesdays) and the trails are always open to the public. Thanks Paul and Stephanie for your hospitality and sharing your knowledge and your wonderful property and gardens with our group.

Upcoming Fall Workshops ### See back page for costs and contact details.

Saturday, October 30, 2010, 9:30 am – 3:30 pm
Using Computer Software to work with your Digital Nature Photographs

BSC photographer Ron Ridout will instruct on the use of photo-editing software (free GIMP software) to edit, print and store digital photographs. This is a hands-on workshop with a computer workstation available for each participant to use. Location: Norfolk District Business Development centre, 4077 HWY 3 East, Simcoe.

Saturday November 13, 2010, 9:30am to 12:30pm
Feeding birds

Jody Allair of BSC will cover a wide range of topics about bird feeding including advice on bird feeders and bird food, identifying feederbirds, making your backyard more bird-friendly, and participating in Project FeederWatch. Location: Bird Studies Canada, 115 Front Road, Port Rowan.

Next Meetings

Tuesday, November 9, 2010

The Natural Heritage of
Pinery Provincial Park

Alistair McKenzie, Pinery Provincial Park

Tuesday, December 14, 2010

Members Social and Silent Auction

Come early - Doors open at 6:30 pm

Upcoming NFN Events

2010

Tue. Oct 26 7:30 p.m.

**Movie: Taking Root, the Vision
of Wangari Maathai (2008)**

Sat. Oct 30 9:30am- 3:30pm

**Workshop: Using Computer
Software to work with your
Digital Nature Photographs.**

Pre-registration required.

\$40 per person (lunch not incl.)

Registration form on website or
Shirley Rothery 519-586-9535

Sat. Nov 13 9:30am - 12:00

Workshop - Bird Feeding

Pre-registration required

\$10 per person Kids free

Email jallair@birdscanada.org or
Shirley Rothery 519-586-9535 or
shirleyrothery@hotmail.com

Tue. Nov 23 7:30pm

Movie: Sharkwater (2006)

Christmas Bird Counts



**Sun, Dec. 19 -Woodhouse
(Simcoe Area)**

David Okines 519-586-9464
davidokines@aol.com

**Sun. Jan 2, 2011 - Fisherville
(Haldimand County)**

Linda Thrower 905-774-1230
giantindians@3web.net

NFN Meetings

Norfolk Field Naturalist meetings are held the second Tuesday of the month from September to May. The election of Directors takes place at the September meeting.

Meetings take place at the Simcoe Seniors Centre on Pond Street. They are free and visitors are always welcome. Doors open at 7:15pm; program begins at 7:30pm.

About the NFN

Norfolk Field Naturalist members participate in meetings and frequent field outings, many of which are family-friendly. Membership fees, due in September, are \$20- Individual and \$30- Family; donations are eligible for income tax credits; Charitable Registration #119058691.

Guest speakers present programs on interesting and relevant natural history and conservation topics.

Club members receive the Lotus newsletter with articles on local natural history and club activities. It is published bi-monthly from October to June by volunteer club members. Copies of the Lotus are available at meetings but will be mailed (free of charge) to members if not picked up. Articles published in the Lotus reflect the views and opinions of the authors and do not necessarily reflect those of the NFN. Visit the NFN website at:

www.norfolkfieldnaturalists.org

Next issue of Lotus:

December 2010

Input cutoff date:

Wed. Dec. 1, 2010

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2010 - 2011 NFN Directors with Contact and Project Information

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Director-at-large	(position currently vacant)		
Director-at-large	(position currently vacant)		
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