



copy

The Peninsula Naturalist

Volume 219

Newsletter of the Peninsula Field Naturalists Club

October 2008

PRESIDENT'S MESSAGE – OCT. 2008

Would someone please tell me where the summer of '08 went? It seems like only a few weeks ago that we were at Niagara Shores, enjoying a walk and barbeque – and then poof! I trust that everyone has enjoyed the summer and is now gearing up for the other great Canadian season. Canada does have two seasons, of course – 'Winter' and 'Construction' – one white, one polychromic.

I intended to begin this message with comments about the Natural Heritage Inventory but, as we say, something came up. The 'something' is the Province of Ontario's new Endangered Species Act. By now, some of you may be saying 'that's old news. Why write about it?' On the other hand, perhaps it slipped past you while the summer weather was balmy.

However, any time a government at whatever level decides to re-write legislation which is intended to protect living things, it is never too late to take a long look at what's being proposed. The government passed the Act back in May 2007, but for various reasons it only came into effect on June 30, 2008. In the meantime the Act was subject to consultation with various interest groups, including the forestry industry and advocacy groups like EcoJustice and the David Suzuki Foundation. A dust-up occurred over last-minute exemptions that neither industry nor environmentalists had

expected to be included; both sides thought the other was being favoured.

In any case, the Act is the first to combine science-based listing of endangered species with mandatory habitat protection and mandatory recovery planning. It also offers flexibility mechanisms to encourage stewardship and accommodate certain land uses that do not jeopardize the survival or recovery of endangered species. The habitat protection aspect is one that has great potential to be beneficial. In looking at published reports on which species are endangered, threatened, or of special concern, urban development and destruction of habitat keep popping up as causes for the risk to species from butterflies and birds to plants, reptiles and amphibians. Right now, in Niagara, 12 species face extinction and another 23 are threatened, mostly by human activity. And (amazing to me!) American Beech isn't even on the Canadian list...



These odd objects are a fungus called Dead Man's Fingers, seen in West Lincoln on our Inventory.

MALCOLMSON WILDFLOWER OUTING, MAY 11/08

A "Group of Seven" (2 Youngs, 2 Burns, 1 Kellam, 1 Heatherton, 1 Potter) set out through the wilds of Malcolmson Eco-Park on a cool May morning, not to paint but at least to observe and photograph.

In spite of the cool day, a number of bird species were about - some Mallards on the water in the Amphibian Wetland and another male on the Waterfowl Pond. An Oriole (Northern?) was also seen near the Pond, and another PFN member (Elaine Gillesby), when met on a trail, reported having seen a Scarlet Tanager.

On the small plant side, Trout-lily, Jack-in-the-Pulpit, False Solomon's Seal, Solomon's-Seal, May-apple, Virginia Mountain-mint, Storksbill (a rather pretty five-petaled pink flowered alien with fern-like leaves), and Kidney-leaved Buttercup were seen.

Of interest among the various trees and shrubs were Sweetgum (a remnant from the old Seaway Authority nursery), a very large and old Willow (Black?), numerous Basswoods (one quite large) and at least three Butternut trees. The remains of many alien Oriental Bittersweet vines hung from various trees, and Poison-Ivy was prevalent, including some which have developed a tree-like shape from climbing up and through the Frost fence on the Seaway side. An incursion of European Buckthorn is becoming rampant along the trails. In the parking-lot area, Paw-Paw trees were just beginning bloom, and the (so-called) Dwarf Chinquapin Oaks on the berms were at least two meters in height.

Don Heatherton was the best historian on this outing, as a result of his memories of the appearance of the property and its gardens when it belonged to the Seaway Authority. Back then, the circular garden in front of the Lord & Burnham Greenhouse was a real showpiece.

SEASON'S END BBQ AND OUTING, JUNE 21/08

The final outing of the 2007-08 year was an excursion to Niagara Shores for a walk and barbeque. The weather was looking a bit ominous, but a gaggle of hardy souls about 14-strong appeared at the appointed hour.

Some members may recall that in former times Niagara Shores was a property managed by the Niagara Peninsula Conservation Authority. More recently Niagara Shores has been considered a municipal park. It encompasses Four Mile Pond which is an excellent spot for ducks, herons, muskrats and large carp. Along the Lake Ontario shoreline, bank swallows nest by the hundreds, and can almost always be seen darting about catching insects. In the wooded areas of the property, plants of interest include both highbush and lowbush blueberry, several species of oaks, large black cherry trees, and some of the largest serviceberry trees to be found.

All this and more was on the tour as we walked the paths of the property, through the woods and along the edges of the pond. A cluster of painted turtles were sunning on a semi-submerged log as we passed by, while a large snapping turtle seemed to be considering whether to have turtle on the half-shell for lunch. Large carp were splashing in the shallows of the pond. Near the end of the walk, a large green mass was seen, the result of a number of trees and shrubs being blanketed by Oriental bittersweet - an alien vine that deserves pruning to the ground.

We barbequed sausages, hamburgs and veggie-burgers on the portable barbeque, enjoyed relaxing and chatting, and were lucky that the rain just started as we packed the last of the lunch gear into the truck. Another tailgate party, another year of PFN outings complete. Thanks to those who helped with the cookin'!

LOOKING AHEAD

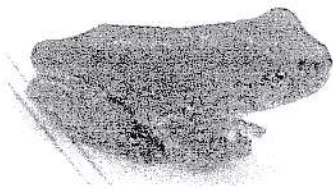
The PFN Executive could use a few new members. At the next Annual General Meeting in November 2008, the following members will be standing for re-election:

President:	John Potter	for 3 rd term
Secretary	Wendy Bradley	for 2 nd term
Membership	Brian Calvert	for 3 rd term
Director	Barbara Austin	for 3 rd term
Director	John Black	for 3 rd term
Director	Moira Davidson	for 3 rd term
Director	Lorraine Desjardins	for 2 nd term
Director	Don Stevenson	for 3 rd term

Director Brian Joule is halfway through his second 2-year term, and Treasurer Don Minchin will be beginning his 4th term. By default, Past-President Roman Olszewski will be beginning his third term. Note that the office of Vice-President is currently vacant, and one Director position is also unfilled.

We know environmentalists believe in re-cycling, but I'm sure that you also know what develops when one group carries the load for too long. Anybody up for taking on some of the burden?? Volunteers??

On an entirely different note, the Executive recently noted that the Photographic Exposition at the last Pot Luck Dinner was well-received. As a result, we would like to make this an annual event. Please take this as your first notice of the 2009 PFN Photographic Expo and start considering which photos in your nature collection you would like to share with the rest of the Club members. Further info next time.



Green Tree Frog - West Lincoln - ca. 2 cm long.

NATURAL HABITAT PRESERVATION IN ONTARIO - A MIXED RECORD

I think it could be fairly said that Adam Shoalts is opinionated. I suspect that Adam himself, if asked, would likely agree with that assessment. For those who missed him at the PFN meeting on September 22, you missed an opportunity to hear a poised, well-spoken young naturalist who "calls 'em as he sees 'em". Not only an excellent speaker but also a person who shows talent as a writer, and a genuine interest in both the political and the environmental sides of Nature.

Adam is a native of Fenwick, currently studying history at Brock University. At an early age, he was captivated with the story of Grey Owl, and developed a desire to go into the wilderness for adventures of his own. The woodlands around Fenwick provided his first brushes with nature.

However, he felt the need to go farther afield, and in his late teens he and a friend canoed the Otonkwin-Attawapiskat River just south of Polar Bear Provincial Park, in a area where he informed us that the Ontario government has now allowed diamond-mining claims to DeBeers International. That canoe trip is the basis for his book 'Spirit of Adventure'. He clearly questions the government's process of allowing mining claims on crown land to foreign companies. He also admits to wrecking his father's handmade cedar-strip canoe in a car accident (Adam was not the driver at the time!).

Adam was also the founder of the Friends of Coyle Creek, a citizens' group advocating for the preservation of Coyle Creek in a healthy condition, and is a writer on nature in Niagara for local newspapers. In his discussion of Ontario's preservation of natural habitat, he questioned the wisdom of the siting of windmills for power generation; raised concern over the extent to which forests are being removed; and mused upon how many trees could have been planted with the money spent on the new LEED building at Ball's Falls.

ROCK POINT PROV. PARK OUTING

On Sunday, September 21/08 a group from the Niagara Falls Nature Club and Peninsula Field Naturalists met in Fonthill for a trip to Rock Point Provincial Park.

We decided to travel via Port Colborne and along the lakeshore. A stop at the ponds in the Wainfleet Wetlands yielded Great Egrets plus Blue and Green Herons, a good start to the day. Further along while looking for reported Red Headed Woodpeckers (no luck), we found an Eastern Bluebird and a White Breasted Nuthatch. A quick stop at Harborview yielded a Sanderling along with a few gulls, one of which was a Bonaparte's.

At Rock Point Prov. Park, although the sky was still slightly overcast the park was a blaze of color. The Goldenrods and Asters are spectacular at this time of year.

We made our way to the viewing stand hoping to find some shorebirds but as we approached a Merlin was sighted. One Dunlin and a few Killdeer were all we could find; perhaps the Merlin was the culprit here. As we walked along the shore we came across plants such as Beach Clotbur, Path Rush and Bur-Marigold (*Bidens laevis*). A bonus however was a Red Saddlebags dragonfly perched on a shrub.

After lunch at the day use area, we hiked along one of the trails through some bush and on through a meadow area. We saw three different species of Dogwood and two species of Viburnum, all bearing fruit. Another eye-catcher was a fine example of Spicebush with its bright red fruit. In the bush area a number of different fungi were noticed and some pictures were taken in order to hopefully identify them later. Probably the overcast was the reason for a lack of butterflies although we did see a couple of Sulphurs and a few Monarchs but not what we had hoped for. The keen eyes of a couple of birders found a Yellow-bellied Sapsucker for all to see.

Although birds, butterflies and dragonflies were not abundant all the participants seemed to enjoy the outing.

Contributed by Rick Young – Thanks, Rick! - Ed.

BALL'S FALLS DOORS OPEN OUTING

October 18, 2008, was Doors Open Day in Niagara. Among many other attractions, the new LEED® building at the Ball's Falls Conservation Centre was participating in Doors Open, so a group of PFN members decided to avail themselves of the free viewing.

At 10:0 am, we met at the new building, but since the Doors Open personnel were not quite ready, we elected to first go on a hike to the Lower and Upper Falls. The weather was delightfully warm, the fall colour was still brilliant, and the property was awash with other tourist-types enjoying the day. We were temporarily joined by a group of Girl Guides whose chanting loudly ensured that no birding would be possible.

Along the trail to the Upper Falls, Brian Calvert pointed out some of the geological features, including a horseshoe-shaped rock formation where Twenty-Mile Creek had carved a waterfall before the last glaciation dumped enough gravel and rock to block the former riverbed. It is astounding to realize that once a major settlement with a variety of factories existed where now there are only remnants of stone walls amongst the trees and rock formations.

Back at the NPCA building, architect Greg Redden explained the design concepts of the new building. LEED® stands for 'Leadership in Energy and Environmental Design' and the new building has been situated and constructed to meet the LEED® standards. The orientation of the structure takes the best advantage of the sun for light and heating. *(Cont'd next page)*

BALL'S FALLS DOORS OPEN OUTING (continued)

The main heating is by geothermal capture from a tubing system two meters under the parking lot. The non-potable water is captured from precipitation on the roof, stored in a large reservoir under a garden at the front of the building, and any excess water overflows into a water canal around the gardens.

The septic system is self-contained and uses low-flow fixtures and a large bacterial digester to replace the need for an external weeping bed. Structural materials are all 'local'-sourced.

Outside, the landscaping uses native plants and shrubs consistent with the Niagara area. The only external services required are electricity and potable-water trucked in for drinking. Altogether, the building is quite advanced from the days when an eco-friendly building was thought to be one built underground with a grass roof.

IT'S NOT EASY BEING GREEN!

Or mottled brown, or spotted, or any of various other colours that frogs and toads are. When Kermit the Frog sang his song 'It's Not Easy Being Green' years ago, who would have thought that Amphibia would become the equivalent of the proverbial 'canary in the coal mine', when it came to chemical pollution. Lately, however, reports are suggesting that frogs, toads, and other amphibians are being severely stressed by unspecified pollutants. Pesticides just naturally come to mind.

Now, a University of Pittsburgh study, published in the October 1 issue of 'Ecological Applications', points directly at malathion.

It turns out that malathion - the most popular insecticide in the United States - can decimate Leopard Frog tadpole populations by altering their food chain.

Normally tadpoles in a pond feed on bottom-dwelling algae. These bottom-dwelling algae require sunlight to grow. If the sunlight is blocked, the bottom-dwelling algae die, and the tadpoles starve. Phytoplankton, or floating algae, which grow on the surface on the pond, can block sunlight by covering the pond surface. What normally keeps the floating algae from doing this is tiny organisms called zooplankton.

Here's where malathion comes in. What happens is that a low dose of malathion may not kill the tadpoles directly, but it will kill the zooplankton. Without the zooplankton, the floating algae grow, the pond surface is covered with floating algae, no sunlight gets down to the bottom-dwelling algae, and the tadpoles have no food source, so they starve.

This chain of events happens over several weeks. Some tadpoles, such as those of the Wood Frog, mature rapidly and are not affected by the changes. However, tadpoles of Leopard Frogs mature more slowly and the continuing lack of bottom-dwelling algae prevents these tadpoles from developing into adult frogs.

This situation seems to happen more with repeated low doses of malathion than with one single large dose. The scientists who studied it say that the results probably would be the same with a number of other insecticides in use in North America. Also, the USA laws do not require testing the chemicals on amphibians, so nobody knows the indirect risk effects of insecticides on Amphibia. The scientists say "These results demonstrate that we need to take a much broader view of the consequences pesticides might have in our world." Amen, Brothers!

OLDEST LIVING TREE FOUND IN SWEDEN

The world's oldest known living tree, a conifer that first took root at the end of the last Ice Age, has been discovered in Sweden, researchers say. The visible portion of the 13-foot-tall (4-meter-tall) "Christmas tree" isn't ancient, but its root system has been growing for 9,550 years, says Leif Kullman, professor at Umeå University's Department of Ecology and Environmental Science in Sweden.

Discovered in 2004, the lone Norway spruce represents the planet's longest-lived identified plant. Kullman's team found the shrubby mountain survivor at an altitude of 2,985 feet (910 meters) in Dalarna Province. The tree's incredible longevity is largely due to its ability to clone itself. The spruce's stems or trunks have a lifespan of around 600 years, but as soon as a stem dies, a new one emerges from the same root stock. So the tree has a very long life expectancy.

Bristlecone pines in the western USA are generally recognized as the world's oldest continuously standing trees. The most ancient recorded, from California's White Mountains, is dated to around 5,000 years ago. Their age is determined by counting tree rings, which form annually within their trunks. But in the case of the Norway spruce, ancient remnants of its roots were radiocarbon dated.

The study team also identified other ancient spruces in Sweden that were between 5,000 and 6,000 years old. Trees much older than 9,550 years would be impossible in Sweden, because ice sheets covered the country until the end of the last Ice Age around 11,000 years ago, Kullman noted.

The research forms part of an ongoing study into how and when trees colonized Scandinavia after it had thawed.

Prior to Kullman's studies the general concept was that spruce migrated to this area about 2,000 years ago. However, deglaciation may have occurred earlier than generally thought and perhaps the ice sheet during the Ice Age was much thinner than previously believed. The tree study may also help explain how plants will respond to current climate change, Kullman said. Trees have an ability to migrate much faster than people had believed.

Global warming made the ancient mountain conifers easier for the study team to find. For many millennia they survived in the mountain tundra as low-growing shrubs perhaps less than a meter high. Kullman said "Now they are growing up like mushrooms—you can see them readily."

But climate change could also swamp these living Ice Age relics. The treeline has climbed up to 655 feet (200 meters) in altitude in the past century in the central Sweden study area, the team found. A great change in the landscape is going on. Some lower mountains which were bare tundra less than a hundred years ago are now totally covered by forest. Mountains tend to provide a refuge for the planet's venerable trees because of reduced competition from neighbors and other plants and because the sparser vegetation around the timberline is less vulnerable to forest fires.

Another factor is reduced human impacts such as logging, said Tom Harlan of the Laboratory of Tree-Ring Research at the University of Arizona. Human activity lower down has demolished all sorts of things that could have been extremely old. Harlan says the newly dated Swedish spruce trees have "quite an extraordinary age." He accepts Sweden having a tree which has been growing for more than 8,000 years. He noted dead remains of Californian bristlecone pines dating to about 7,500 years ago have been found up to 500 feet higher in altitude than any living bristlecones. So at one time trees were pushing aggressively into areas they had not been in before, he said.

(James Owen, Stockholm: National Geographic News Apr. 14/08)

Ramblings...

On a sunny October morning, the trees outside are splashed with colour - red, gold, orange. Autumn has come again. With the arrival of autumn, goldenrods fade from yellow to brown, asters lose their purples and blues, and wildflowers generally become scarce. This is a signal to those of us who were involved with the Natural Heritage Inventory that our outdoor work is done. Now the crunching of data and the writing of reports begins, and it's time to consider - what did we gain?

A massive amount of data about the Niagara woods and wild areas are now stored on paper or on computer disks at the Niagara Peninsula Conservation Authority. More information awaits at the Royal Botanical Gardens where collected specimens are being identified by taxonomists. That knowledge is destined to be useful when planning decisions are being made, particularly when planning might affect Niagara's dwindling areas of forest and swamps.

In some cases, species of plants were found which have not been seen in Niagara for nearly a century. We can say with satisfaction that we helped to provide that data.

Those several of us who volunteered to do fieldwork, to go into the fields and woods and mosquito-infested slough forests, have gained immensely in our abilities to recognize native and alien plants and trees. Equally, we have acquired an understanding of how many species of flora are all around us, yet we cannot identify them.

Some of us have developed new interests in the taxonomy and habitats of species which we took for granted, or never really looked at closely to discover what makes them distinct. And we've gained, personally, a greater delight in the botanical diversity of this Region.

We also gained, I believe, a wealth of goodwill capital among the private landowners who generously allowed inventory people to enter their fields and forests, and to record and photograph what they saw and heard. The landowners of Niagara will, in the long run, benefit from the observations of this past three summers. They will have better information about wetlands and why they should not be drained. They will receive better advice about planting reforestation species, as a result of what was learned about the current health of the woods. They will be able to see, in the summaries of data, which species of plants and trees are endangered, and act accordingly.

We thank them all for their generosity.

The following photo shows a Blue-Spotted Salamander, who we encountered in West Lincoln in the course of our inventorying. It was sightings like this that made the work worthwhile. -- Ed.



EVENTS OF INTEREST

The Christmas Bird Count will take place on December 14, 2008.

Please note that this is a change from what was originally published in the pink Meetings and Outings Programme. Please contact Marcie Jacklin at 905-871-2577 for details if you are a birder or driver.

The Round-up After-Birding Party will be held at the North Pelham Youth Hall, 1718 Maple Street, North Pelham. Please contact John or Mary Potter if you are willing to assist in helping at the Hall before, during, and after the Party – 905-892-2566.

REMINDER

The November PFN meeting is traditionally our **Dessert Night**, as well as being our Annual General Meeting. Please remember to bring some goodies for the Dessert Sharing.



The Peninsula Field Naturalists Club

A non-profit organization started in 1954 with the objectives to preserve wildlife and protect its habitat, to promote public interest in and a knowledge of the natural history of the area, and to promote, encourage and cooperate with organizations and individuals having similar interests and objectives. Affiliated with Ontario Nature (ex-FON) and Nature Canada (ex-CNF).
P.O. Box 23031, 124 Welland Ave., St. Catharines, ON. L2R7P6

The Peninsula Naturalist Newsletter

Published: February, May, October

Circulation: 130 copies per issue

The Editor welcomes written articles or artwork on any natural history topic. Handwritten articles will be accepted, and if possible, please submit typewritten articles, or computer disks containing your file. All pieces of artwork will be accepted, although line drawings are preferable, as they are better suited to photo copying. New ideas and constructive criticism are always welcome.

Editorial Staff: John Potter

Labelling/Mailing: Kay Smith

– please send submissions to the above address –

Deadlines for submissions 2007:

Jan. 28; April 10; Sept. 30

2007/8 PFN EXECUTIVE

President	John Potter
Past Pres.	Roman Olszewski
Vice-Pres.	
Secretary	Wendy Bradley
Treasurer	Don Minchin
Membership	Brian Calvert
Director	Barbara Austin
Director	John Black
Director	Brian Calvert
Director	Moira Davidson
Director	Lorraine Desjardins
Director	Bryan Joule
Director	Don Stevenson