



The Peninsula Naturalist

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Newsletter of the Peninsula Field Naturalists Club

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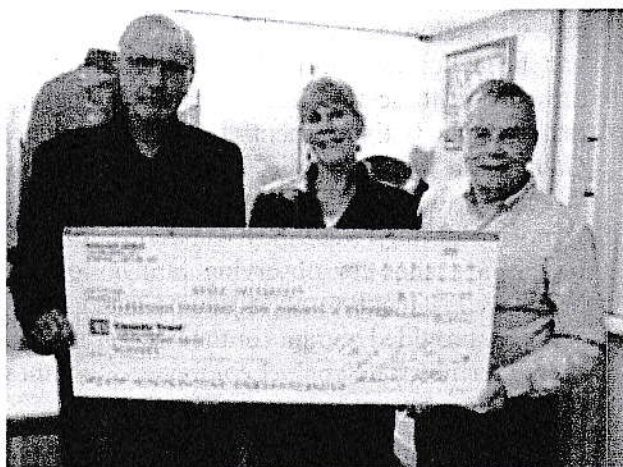
NIAGARA BIRDS OVERSUBSCRIBED

We are happy and excited to announce that in less than one year from publication date, our book *NIAGARA BIRDS* is now completely SOLD OUT. Our print run was two thousand copies and after donating some two hundred books to Niagara area high schools, libraries, the thirteen municipalities, our contributors and other worthy organizations, the remainder were sold to the general public. We have decided that there will not be a second printing of this Niagara Regional bird guide.

The excess after all expenses from this not-for-profit venture resulted in a gain of \$15,450.00 which was donated to the Trustees of Brock University as an endowment in perpetuity and designed to provide support annually to a student in Biological Sciences. Christine Jones, Director, Alumni Relations, is pictured above receiving our cheque for this endowment to be known as the NIAGARA BIRDS BURSARY.

We wish to express our deep gratitude to the Peninsula Field Naturalists' Club for their generous contribution to the publication of our book and for their considerable help in numerous administrative matters. We specifically wish to thank your President John Potter for his help and interest in fund raising and in the promotion of our book, and to your Treasurer Don Minchin for his accounting expertise in auditing our books and for issuing all required income tax receipts.

We wish to acknowledge and thank PFN members Marcie Jacklin, Maggie Smiley, John Stevens, Katherine Stoltz and Paul Summerskill for their substantial contribution to the content of *NIAGARA BIRDS*.



Many PFN members purchased a copy of *NIAGARA BIRDS*. Thank you one and all for helping make this such a successful venture.

Kayo Roy and John Black

Here we are again, not far from another Christmas Bird Count. At the Owl Foundation, this seasonal count might mean that some of the owls counted were bred or rehabbed and released by the Owl Foundation. It's nice to think that the little Screech Owl on your count list might have been one that you saw first on your TOF tour. Well, it *could* have been...

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**IMPERILLED BUTTERFLY
CONSERVATION AND MANAGEMENT
(OR OUR ADVENTURES WITH THE
RAREST LEPS)**

DEANNA LINDBLAD & MARK BUMA

Initially it was my expectation that the September 2011 presentation was to be about the Karner Blue butterfly and its extirpation from Ontario - which was why I expected that Deanna was to be our only speaker. However, that was before I knew what Deanna and Mark had been doing in the past three years. As it turned out, these two had been on an odyssey that included time spent in Toledo, Ohio; Gainesville and Miami, Florida; Portland, Oregon; Southern California; and Chicago, Illinois. Not only were they wandering in some of the best sites for observing rare butterflies, but the USA Institute of Museums and Library Services provided a grant for their research. And the butterflies (or 'leps'= Lepidoptera) that they were studying were rare and gorgeous.

Commenting first about the Karner Blue butterfly, a species which formerly fed on Wild Lupine, Deanna pointed out that this butterfly had been considered extirpated in Ontario since 1991, and was listed as extirpated by OMNR in 2009. Also, OMNR have no criteria for the feasibility of re-introducing the species to Ontario. However, the butterfly still exists in the USA around Toledo, Ohio, and is not difficult to rear. The caterpillars feed on Wild Lupine, pupation requires about 25-40 days, and the adults live about 5 days. The rim of the Niagara Gorge near Queenston Heights was where the Karner Blue was formerly found, and Deanna suggested that the Butterfly Conservatory, with its expertise in raising butterflies, might be an appropriate unit to rear introduced Karner Blues for release in the Niagara Parks area. Since Niagara Parks use prescribed burns periodically to control undergrowth, the burn plan would have to be designed so as not to eradicate released butterflies. Locations such as Pinery Prov. Park, Alderville First Nation, St. Williams, and the Lake Huron shoreline also would be possible sites to re-instate the species.

Another rare species, the Mitchell's Satyr, formerly was found in southern Michigan and in the Toledo area in Ohio. A small brown butterfly, recognizable by the presence of 4 eyespots on the forewing and 6 on the hindwing, this species inhabits fens and similar boggy wet meadows.

In Gainesville, Florida, at the McGuire Centre Natural History Museum, our speakers were overwhelmed by the size of the butterfly collection - 9.5 million specimens! As is the case with the Niagara Butterfly Conservatory, at the McGuire Centre the public can see the rearing process. Appropriately, the Miami Blue butterfly was being reared - a species which my outdated butterfly guide refers to as a 'common Florida Blue'. Another species of interest in Florida was the Atala, a colourful species with iridescent blue-green forewings. This species was feared to be extinct after hurricane Andrew swept Florida (and had been also thought extinct after hurricanes, fires in the Everglades, and because of real-estate development near Miami). Mark and Deanna mentioned that hurricanes had also been responsible for the release of various snakes, iguanas, etc. - not a comforting thought for tourists. Fairchild Botanical Gardens was recommended for a visit, with the flora including Banyan and Baobab trees.

The Portland, Oregon, stop for our speakers centred on the Oregon Zoo, where Taylor's Checkerspot and Oregon Silverspot butterflies were the significant species of interest. The names 'Checkerspot' and 'Silverspot' are appropriate, as the markings on the wings of these beauties feature distinctive white or silvery-grey spots. The host for the Taylor's Checkerspot is a Viola species. Deanna noted that the researchers in Oregon were quite inventive in their methods and equipment for rearing butterflies; caterpillars being reared in corrugated cardboard substrates in a greenhouse compartment was one example. A highlight of the visit was being able to release some of the reared butterflies into the wild.

The California session of Mark and Deanna's excursion took place in an unusual location. The

Calos Verdes Blue butterfly had been found in a US government Defense Fuel Support Point, which meant that this rare butterfly was surviving in about as secure a location as could be found. The Irvine Ranch, a 50,000-acre spread, was another point of interest for 'undisturbed' habitat – undisturbed except when severe wildfires occasionally occur. The habitat for this butterfly and for the Quino Checkerspot (which feeds on Quinoa plantain) is a coastal scrub which is under pressure of the 'urban sprawl' problem in California.

The last location, the Peggy Notebaert Nature Museum in Chicago, was home to the Regal Fritillary, the Silver-bordered Fritillary, and the Swamp Metalmark, all of which are more northern species. The Fritillary species favour Viola as a host, while the Swamp Metalmark usually feeds on Swamp Thistle. Baltimore Checkerspot is also present in the area.

In their commentary, Deanna and Mark noted that, in several cases where introduced plants had been planted intentionally for butterfly feeding, the butterflies had actually preferred wild plant species that had been largely removed to allow planting of the introductions. Nature will, apparently, take its own course sometimes.

In the question session, Deanna reminded us that our own most-recognized butterfly, the Monarch, performs the amazing migration to California and Mexico, with several generations along the way, so that those arriving at the destination have never actually been there before. If the southern habitat is disturbed, one wonders how the Monarch will adapt.

(For those interested in butterfly identification and information, the Peterson Field Guide Series has the book by Alexander Klots 'A Field Guide to the Butterflies of North America'. And also 'The Butterflies of Canada' by Layberry, Hall and LaFontaine is an excellent local reference.)

AFTER THE NAI - PART 3

In the October 2010 and May 2011 issues of 'The Peninsula Naturalist', I described the process that the Niagara Peninsula Conservation Authority (NPCA) was following to utilize information from the Natural Areas Inventory (NAI) in creating a Natural Heritage System for Niagara. A Natural Heritage System, as I explained then, is essentially a 'roadmap' of the Region, showing the natural features in the landscape, assessing the value of those individual features, and suggesting the best allocation of our shared habitats, according to our preferences.

Since the acronym for 'Natural Heritage System' is 'NHS' (which can be misconstrued as having something to do with hospitals and health), the project has been re-named "Nature for Niagara's Future".

The organization of the 'Nature for Niagara's Future' personnel involves a Steering Committee; a Scenario Development Team; and an Outreach and Education Committee. The Steering Committee has oversight of the entire project, while the other two groups are more specific in their objectives. What follows here mainly summarizes the activities of the Scenario Development Team.

Last October, I explained that the Scenario Development Team (the cluster of people from various occupations that have interests in the allocation of land in Niagara Region) were about to embark on determining, by consensus, how much wildlife habitat, significant hydrological features, forest cover, parks, farmland, urban areas, etc. were considered necessary in Niagara. Then a computer program (Marxan) would attempt to blend the Team's preferences with the NAI data to create maps of the Region, showing where various natural features complemented human purposes, and what options existed for flexibility in their locations.

You can appreciate that some man-made entities, such as urban boundaries, existing roads and active quarries don't offer much flexibility - so the Marxan program would be set to not accept these items in its calculations of land beneficial and available to the proposed system. Also, the program would be set to generally avoid including farmland, as long as the habitat land requirements could be met without farmland being involved. Through the summer and early fall, the computer and Marxan did their work, calculating and producing maps of the results to satisfy the Team's various requests.

At this time, Marxan has delivered a number of maps of possible options for the Team's consideration, based on our instructions of what features we would like to include. As we anticipated, there are areas in the Region where farmland exists and should continue to exist; areas like the Wainfleet Bog and Willoughby Marsh which would be best left undeveloped; and places like Short Hills Provincial Park which should be retained. Since the definition of 'farmland' has been based on mapping of soils suitable for agriculture, rather than on actual cropped farmland, there is some land which is classed as 'farmland' but which in reality is covered with woods - the maps clearly show many small farm-woodlots.

In addition, some maps show (for example) how a larger area of wildlife habitat could be retained in one part of the Region by reducing the habitat in another less-desirable location - possibly by allocating the less-desirable location to be used for a different purpose. These tradeoffs, which the Marxan program calculates in a few hours, dramatically simplify the decision-making job of the Team members - although human preferences might not agree with Marxan's calculated choices.

What the Scenario Development Team members are now tasked to do is to reach consensus on which of the various maps of options encompass the sites and allocations of features most suitable to the needs and wishes of all (or most of) the various members of the Team. The latest set of maps includes one which

shows clearly what pure 'science' would indicate as the preferable scenario for land allocation. However, to be responsive to the Team's requirements, a 'pure science' scenario may not be the preferred one. We will soon see whether a single 'best' scenario will be achieved, or whether at least a scenario acceptable to all of the folks on the Team will be agreed upon. That scenario will be vetted by the Steering Committee and may become "Nature for Niagara's Future".

(Since writing the preceding explanation, the Scenario Development Team has decided to advance three scenarios to the Steering Committee for discussion. Two of these are baseline scenarios; while the third is a compromise which seems to provide an acceptable amount of area for biodiversity, ecological and hydrological functions without displacing urban, quarry or active farmland uses.)

The Editor, with thanks to Deanna for proofing.

IT JUST AIN'T FAIR!!

Sometimes 'Nature' works in mysterious and unfair ways. Back in May, I reported that a pair of Eastern Phoebes had built a nest in a secluded corner of our house. We watched, cautiously, as the nest was built and the female apparently settled down to brood. By early June we were certain that at least one baby was in the nest, judging by Mama's feeding routine. We were absent for a week in mid-June, being present when our 4th grandchild was born. On our return, it seemed curious that Mama was not paying much attention to her nest - and what was that oddly-shaped blob dangling from the nest-edge? I investigated, and discovered that apparently the baby had somehow fallen out of the nest, became tangled by one leg in a dangling bit of fibre, and was now merely a mummified remnant. Whether the baby had attempted flight, we will never know - but needless to say, the parent birds abandoned the nest soon after. We can only hope they try again next year...

by Sayit Aintso

TWO BILLION TREES AND COUNTING (THE LEGACY OF EDMUND ZAVITZ)

John Bacher

How to tell the story of a man who was part activist, part scientist, part politician, and possibly the least-known ecological savior of his home Province? That, in essence, was the mission of Dr John Bacher when he told the PFN on October 24, 2011 about the life and work of Edmund John Zavitz.

John's research of the career of Edmund Zavitz brings forward as well a history of a segment of time in Ontario, a time when the Province was relatively new and somewhat foolish, when farmland was desirable, and whole Counties of forests were cut and burned to create farmland. It also explains the folly of this approach, the degree to which parts of Ontario became deserts, the extent to which fertile soil was replaced by windblown sand – and how one man made a difference in reversing this ecological disaster. That story is the legacy of Edmund Zavitz.

Edmund John Zavitz was born in 1875 in Ridgeway, Ontario, where his family's house still stands at 477 Ridge Road. An indifferent pupil, he eventually finished high school at St. Catharines Collegiate, where the Principal, Ross Robertson, was hardly an encouraging influence. An early photo that John Bacher displayed shows Zavitz (probably as a labourer) standing in front of the Eber Cutler Drygoods Store in Ridgeway.

Zavitz graduated in 1903 with a B.A. from McMaster University, where he became interested in forestry and reforestation. He studied forestry for a year at Yale, and received a M.Sc. in Forestry from University of Michigan in 1905. He joined the Ontario Agricultural College in Guelph as a lecturer, and began experimenting with species of trees for reforestation. Some of his plantings of pine still exist on the Arboretum at the University of Guelph.

While at Guelph, Zavitz was already aware of the degree of farmland soil-loss that was occurring by wind-erosion after forests were cleared to create fields. In 1907 he bicycled from Guelph to the Georgian Bay area and travelled about with Premier E.C. Drury, seeing first-hand the damage of wind-erosion in Simcoe County. This trip led eventually to the inception of the Midhurst Forestry Station near Barrie, and probably was the inspiration for the County forest system which was later put in place in several Counties where land-loss was an issue. (John's presentation included many of Zavitz's dramatic wind-erosion damage photos).

Zavitz's career in forestry expanded greatly in 1909, when he joined the Ontario Department of Lands, Forests and Mines. One of his first efforts was starting a provincial tree nursery in Norfolk County where windblown tracts of sandy former farmland required restoration. We might now recognize this as the St. Williams nursery, where the nursery tract has now been renamed as the "Dr. Edmund J. Zavitz Forest". In 1912, Zavitz was named Provincial Forester, becoming supervisor of forest protection and forest inventory programs. By 1917, he helped develop the Forest Fires Prevention Act which organized forest fire control in Ontario, and by 1924 he was instrumental in starting to use aircraft in operations and fire-fighting in the Department. By this time he was the Deputy Minister. Strangely, in 1935, during the premiership of Mitch Hepburn, Zavitz was removed as Deputy Minister and appointed Chief of Reforestation, a definite demotion. Nonetheless, he continued working and writing until at least age 80, producing four books on forestry. Much of the photography in these books was his own, having started photography at an early age. In 1952, McMaster University granted Zavitz a Doctorate of Laws.

All of this and more was the message of John's presentation, and is the substance of his new book "Two Billion Trees and Counting". At about \$26, this is a 'must' for anyone who cares about trees in Ontario.

UPCOMING EVENTS

ST. CATHARINES CHRISTMAS BIRD COUNT

SUNDAY, DECEMBER 18, 2011

COORDINATOR : MARCIE JACKLIN, 905-871-2577

AFTER-BIRDING PARTY AT NORTH PELHAM YOUTH HALL, 1718 MAPLE STREET, NORTH PELHAM
CONTACT JOHN/ MARY POTTER (905-892-2566) IF YOU WILL HELP AT THE AFTER-BIRDING PARTY

- Ω -

LAKE ONTARIO MID-WINTER WATERFOWL SURVEY (‘DUCK COUNT’)

SUNDAY, JANUARY 8, 2012)

COORDINATOR : JOHN BLACK, 905-684-0143

PARTICIPATION IS LIMITED - PLEASE CALL JOHN B. BY DECEMBER 15, 2011 FOR DETAILS



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 .

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The Editor welcomes written articles or artwork on any natural history topic. Handwritten articles are accepted; if possible, please submit typewritten articles, computer disks, or email to jmpotter@talkwireless.ca. Colour photos (jpg) accompanying articles are welcome. All pieces of artwork will be accepted; 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 2012:

Feb 4; April 7; Oct. 6

2010/11 PFN EXECUTIVE

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