THE BRODIE CLUB

ROYAL ONTARIO MUSEUM OF ZOOLOGY

THE 2010 FIELD DAY AND PICNIC OF THE BRODIE CLUB

The Brodie Club met for the annual field day and picnic at the Koffler Scientific Reserve at Jokers Hill, King Township, Saturday, June 12, 2010. Jock McAndrews organized the field trip, making arrangements with Arthur Weis, director of the Koffler Scientific Reserve. Arthur will be the speaker at the November, 2010 meeting. The notes about the day were written by Rose Addison with contributions by Fred Bodsworth, Bruce Falls, and Kevin Seymour and photos by Ed Addison.

There were 13 members and one guest: E. Addison, R. Addison, Bodsworth, A. Falls, B. Falls, Iron, Machin, McAndrews, Pittaway, J. Rising, T. Rising, Seymour, Tasker, and Nancy Hanna, guest of Fred. Regrets were received from Abraham, Aird, Bertin, Bryant, Eadie, Juholas, Larsen, Tomlinson and Young.

Members met at the renovated lab space at the Koffler Scientific Reserve at 10 AM. The day was overcast with intermittent light drizzle. The birds continued in song throughout the morning and afternoon with the dull light. As we assembled we were treated to a good look at a Bluebird. Nancy got the scope on it for an up-close view.

Jock led the group along the lane to the dammed ponds (see route in yellow on satellite map). The south side of the lane has been reforested with Scots Pine. The north side is open grassland and ponds. An unusual tree caught our interest. Enid Machin identified it in the field as a hop hornbeam. Later in the morning Fred and Nancy stopped at the tree. Fred emailed the following: "*A good day yesterday. Always good to get together in the field. ..... As expected the leaves and bit of twig I brought home keyed out perfectly to hop hornbeam, Ostrya virginiana. I didn't get close enough to make an estimate of trunk diameter. I guess Ed did. Apparently it is an old fence-row forest-edge tree that has had a lot of abuse and contortions to contend with to survive. Maybe a lot of browsing by generations of million dollar horses."*


R Addison beside large hop hornbeam

The Honour Roll of Ontario Trees cites the largest ironwood nominated to date in Elgin County with a diameter of 35.8 cm and height of 58 m. Using the length of the walking stick in the photo a conservative guesstimate of the diameter of the Jokers Hill tree is 80 cm. Maybe this is an Ontario record!

We returned to the lab at noon and enjoyed chats and discussions as we ate our lunches under the shelter at the west end. We had a glorious view over the grass fields down to the ponds and could hear quite a lot of bird song as we ate.

After lunch, Jock discussed the geology of Jokers Hill. About 15,000 +/- 1,000 years ago during the last ice age, a glacier ice lobe came down the St. Lawrence Valley into the Ontario basin and expanded northward to meet a second glacier lobe moving down from the north. Sediment-laden meltwater flowing along the suture formed the Oak Ridges Moraine, including the Jokers Hill area known as the Glenville Hills. More specifically, the Hills were formed by a subglacial river that flowed southward in what are today Cooks Bay and the Holland River Valley including the Holland Marsh. When this river reached the suture, it emerged like an upside-down Niagara Falls, lost its capacity to carry sediment and deposited sand and gravel kames that are the Glenville Hills. Further west along the valley, the sub-glacial river turned south and beyond Pottageville Swamp emerged again to deposit the kames of the Happy Valley Hills. (Ron and Mary Tasker have/had land on this height of land between the Lake Huron and Lake Ontario drainages.) From the Happy Valley Hills, the water flowed over the Niagara Escarpment into the Mississippi drainage and down to the Gulf of Mexico.

South of Uxbridge Brook the Dagmar Hills are also similar melt-water deposited kames.

Ron Tasker asked Jock to describe the differences between a kame, an esker and a drumlin.

- A kame is an irregularly shaped hill of sand and gravel deposited by glacier meltwater.
- An esker is a long winding ridge of stratified sand and gravel deposited by a sub-glacial river.
- Drumlins are spoon-shaped hills formed beneath a glacier with their long axis parallel with the movement of the ice with the blunter end facing upglacier. There are two theories on how they were formed. Firstly, as a glacier moves it deforms the underlying sediments into hills. Secondly, John Shaw advocates a melt water origin whereby subglacial meltwater flowing under high pressure forms cavities that are immediately filled with sand and gravel: for detailed explanation click on: http://www.sentex.net/~tcc/sgfcrit.html

Fred commented that there is a good drumlin at the end of Lawrence Ave. East where you go down into the Rouge. In correspondence with Fred he added this information: *"I thought for a long time that the landform I was referring to was a remnant of an esker but somewhere recently (I think Physiography of Southern Ontario, Chapman and Putnam) I found something to indicate it is a drumlin, which makes more sense. It is the south end of Ridgewood Road which runs south to Lawrence Avenue very near where Lawrence ends at Rouge Beach Park.*

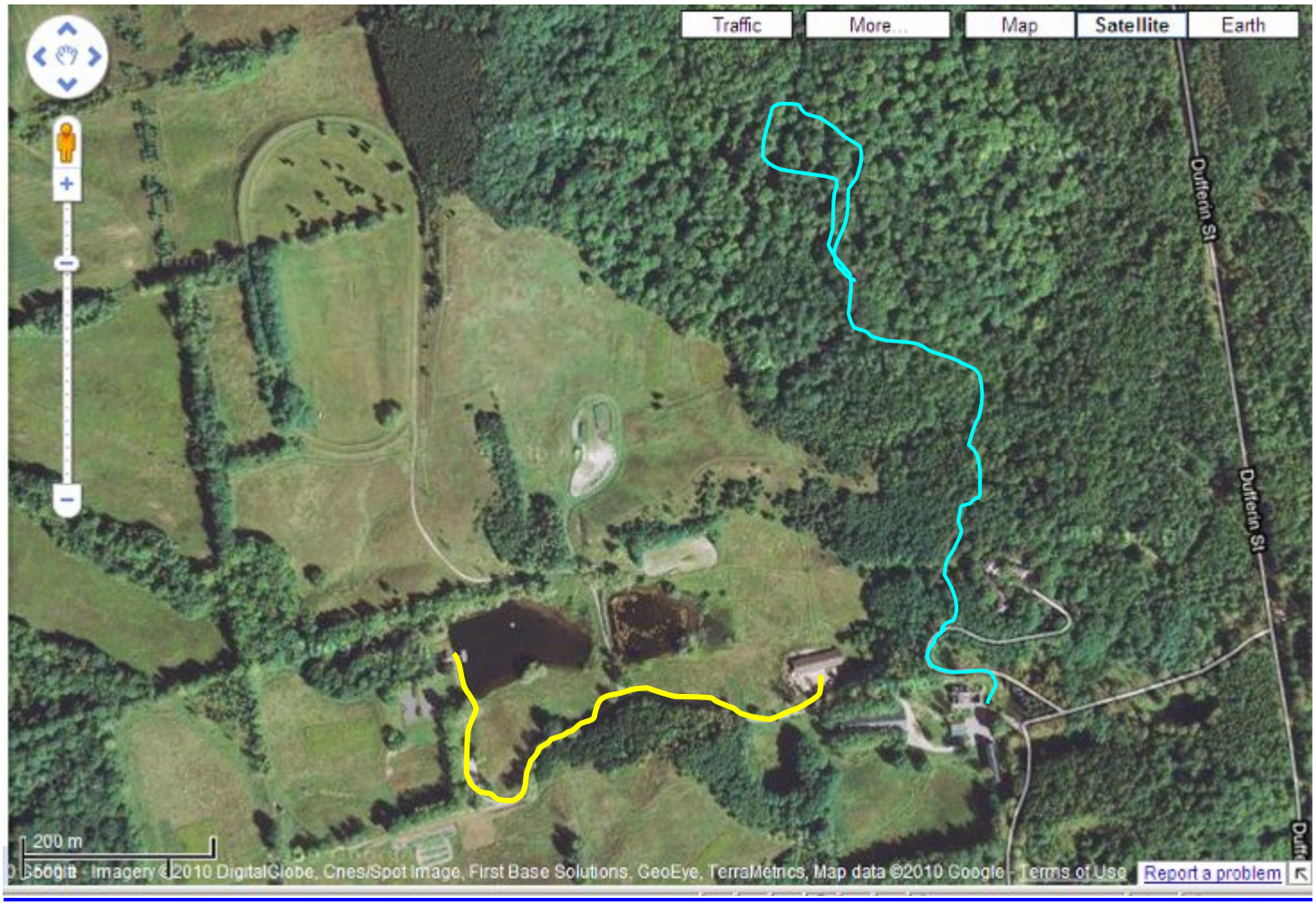
It is a striking formation now aptly called Ridgewood. The street runs along the top of the ridge which is so sharply crested there is barely room for the street, houses on each side and backyards which drop off sharply to the plain below that is now all suburban housing.

The south end, where Ridgewood curves down a hill to Lawrence, must originally have extended southward to where it reached and was cut off by present Lake Ontario.
A much larger chunk of the south end has now been chopped off more abruptly than ever to make a space for Lawrence Avenue and the GO train to pass between it and the lake. It rises pretty sheer right at the north edge of Lawrence. Drive by and you can't miss it. It's worth looking at. Google Earth shows it and its wooded sides clearly at 43 47'10"N 79 07'39"S. The top appears to be about 15m above Lake Ontario, 10m or so over the plain below. "

Kevin noted that glaciers only move forward… and that the movement is caused by the pressure of the ice above.

Jock and Ron Pittaway both said that lots of elk antlers have been found in this area dating back 3,000 to 5,000 years and questioned if elk could survive in forest. Ed Addison replied that, yes, there were wapiti distributed throughout much of eastern North America in early days according to Seton in "Life History of Northern Mammals" (1909) [Seton's information was for 1500 A.D.].

We finished up at our lunch spot and regrouped for our hike to "the big trees" (route in teal on satellite map).



This walk initially followed a trail through some hardwoods. We noted a lot of two invasives, Garlic Mustard and Swallowwart (Dog Strangling Vine), at the beginning of the trail. The following information on Swallowwart is from the OMAFRA website: http://www.omafra.gov.on.ca/english/crops/field/news/croptalk/2006/ct_0306a7.htm

"Dog Strangling Vine is an extremely aggressive plant species from the milkweed family that has traditionally inhabited field borders, roadside and rail tracks. More recently it has been creeping into agricultural fields and pasture lands across Ontario, mainly east of Toronto… Dog Strangling Vine is a perennial with a horizontal woody rootstalk or rhizome. The stems can range in length from 60 to 200 cm… with a twining or scrambling configuration, hence giving it the "strangling" moniker. The leaves are ovate (oval) in shape, have smooth margins, with hairs being present on the margins and major leaf veins on the underside of the leaf. Flowers will produce pods containing seed that is similar in appearance to common milkweed.

Dog Strangling Vine can reproduce by seed and by its massive underground root system (rhizomes). The seed is extremely viable once it germinates and the rhizomes can also propagate many new plants. An example of this was illustrated in a growth room experiment conducted at the Department of Plant Agriculture, University of Guelph. Every time a rhizome section was cut, two new plants would arise from each severed end.

In one season the vine has been known to grow as much as 1 to 2 m in size. Flowering generally begins in late-May and ends around mid-July. The fruit pods release seed from mid-August to early-November."

As we moved further into the woods, the Garlic Mustard and Swallowwart petered out and we were happy to see a lovely selection of native plants including:

Baneberry
Blue Cohosh
Clintonia
Dame's Rocket
Early Meadow Rue
Hepatica
Jack in the Pulpit
Jewel weed
Red-berried Elder
Mountain Maple
Sarsaparilla
Toothwort
Trillium
Wild Columbine
Wild Ginger

There were some very healthy ferns. Thanks to Ann and Bruce Falls who sent along this list:

Lady Fern
Spinulose Wood Fern
Intermediate Wood Fern
Christmas Fern
Ostrich Fern
Sensitive Fern - some very large specimens, possibly introduced species or variety (see photo at right)

Jock led us "off trail" and we followed a small valley until we came upon some "old growth forest" where we saw some very large sugar maples, pine, oak and hemlock.

Kevin Seymour kept a list of species of birds seen/heard during the field trip and has written the following:

"40 species were seen, the highlights were: Eastern Meadowlarks and Bobolinks in the fields, Eastern Bluebird where we ate lunch, and finally Mourning Warbler, Pine Warbler and Blackburnian Warbler on territories in the forest (assumedly, because they were in the correct habitat and still singing in June!). Other nice to see/hear but expected species included Indigo Bunting, Scarlet Tanager and Rose-breasted Grosbeak.

Here is the bird list…. Others may have seen species that I didn't hear about, but I recorded all that I saw or heard that others saw. It was a total of about 3.5 hours birding (10:30 to noon and then about 1:30 to 3:30), and I have 40 species listed. I made a rough attempt at the number of individuals too. Here they are in order of seeing or hearing them:

House Wren 2
Chipping Sparrow 4
Scarlet Tanager 1
Indigo Bunting 2
American Goldfinch 12
Song Sparrow 5
Great crested Flycatcher 2
Common Yellowthroat 1
Red-winged Blackbird 13 (probably undercounted)
Eastern Bluebird 1
American Crow 7
Rose-breasted Grosbeak 2
Eastern Wood-Pewee 2
Tree Swallow 5
Northern Cardinal 2
Rock Pigeon 1
Eastern Meadowlark 2
Barn Swallow 7
Field Sparrow 1
Bobolink 5
Northern Flicker 1
Savannah Sparrow 2

Eastern Kingbird 2
Brown-headed Cowbird 1
Black-capped Chickadee 8
Yellow Warbler 1
American Robin 1
Mourning Warbler 1
Ruby-throated Hummingbird 1
Canada Goose 12
Baltimore Oriole 2
Cedar Waxwing 7
Ovenbird 2
White-breasted Nuthatch 2
Yellow-bellied Sapsucker 1
Pine Warbler 1
Red-eyed Vireo 2
Wood Thrush 1
Yellow-rumped Warbler 1
Blackburnian Warbler 2

For mammals, all I saw was an Eastern Chipmunk. For herps there was a Green Frog, someone saw or heard a Spring Peeper, and there was the one Red-backed Salamander that I found."

We returned to our vehicles at about 3:30 and wished each other "good summers" before we headed our separate ways.

A very big "THANK YOU" to Jock for hosting the 2010 BRODIE Club Field Day. As Kevin wrote "*A very nice spot overall, and so close to the city!"*

NEW BUSINESS

Bill Crins has nominated Don Sutherland as a member of the BRODIE Club. The nominating committee has forwarded this biographic sketch for inclusion in the minutes.

Donald A. Sutherland

Growing up in Toronto, my interest in birds developed at an early age under the tutelage of the late Dr. R.L. MacMillan. Initially confined to local ravines and the Toronto Islands, my birding experience gradually expanded to include places like Long Point, Rondeau, Point Pelee and, in summer, the southeastern Georgian Bay area. Through university years I was fortunate enough to find summer employment as a seasonal naturalist in such parks as St. Lawrence Islands National Park, Charleston Lake and Algonquin provincial parks. There, surrounded by keen naturalists like Ron Pittaway and Bill Crins, my interests expanded to include other facets of natural history, particularly vascular plants.

Early in my career I worked as a consulting biologist for both government and the private sector, conducting environmental impact assessments and reconnaissance life science inventories of parks and other protected areas. With Mary Gartshore and Jon McCracken, I conducted the *Haldimand-Norfolk Natural Areas Inventory* –a comprehensive two-year assessment of significant natural areas in the then amalgamated municipalities of Haldimand and Norfolk. Subsequently, I

was involved in similar inventories of the District of Muskoka and the Regional Municipality of Hamilton-Wentworth.

I have been involved in a number of the province's natural history atlases. In various capacities I was heavily involved in both of Ontario's breeding bird atlases, both as a participant and species account author, and as a co-editor of the *Atlas of the Breeding Birds of Ontario, 2001-2005.* In 1984, together with Mike Oldham, I was a co-initiator of the Ontario Herpetofaunal Summary and in 1995 I initiated the *Ontario Odonata Atlas Database*, a compilation of all available distributional records of the province's damselfly and dragonfly species.

I am a founding life member of the Ontario Field Ornithologists and am just beginning a third term as a voting member on its Ontario Bird Records Committee. I am also a life member of the New York State Ornithological Association, the Minnesota Ornithologists' Union, Bird Studies Canada (LPBO), and the Ottawa Field Naturalists Club.

My interests in natural history are now diverse and, in addition to birds, include mammals, amphibians, reptiles and turtles, freshwater fishes, unionid mussels, insects, and vascular plants.

I am currently a biologist in the Natural Heritage Information Centre with the Ministry of Natural Resources, Peterborough.

CONTACT INFORMATION

John Casselman writes "*Bev (Scott) has moved from Kingston to Lindsay and consolidated things a bit, I think at the request of his daughter, who lives in the Lindsay area. He has a nice apartment with views west and north and a large balcony, and he has made it very much as things were in their condo in Kingston. And he is quite well. He uses a cane, very apologetically, now. It's remarkable that he has never had anything done to his knees, etc., but he gets around very well.* "

We wish Jock and Sharon all the best as they move from the Beach in Toronto to their new home in Port Perry.

Please update your contact information for Bev and for Jock:

Bev Scott,
Apt. 508,
41 Angeline St. S.,
Lindsay ON
K9V 3L1

Jock McAndrews,
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Port Perry ON
905-978-2668

NEXT MEETING

The next meeting will be members' night, Tuesday, September 21. The meeting will be at 7:30 pm in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Hope all members have some enjoyable walks, hikes, adventures and time outside this summer and we will look forward to hearing about travels, discoveries, etc at Members' Night in September☺