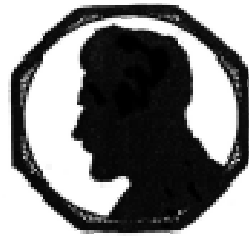


THE
BRODIE
CLUB



ROYAL ONTARIO
MUSEUM OF ZOOLOGY

THE 1,003rd MEETING OF THE BRODIE CLUB

The 1,003rd meeting of The Brodie Club was held on May 9, 2006 at the Ramsay Wright Zoological Laboratories at the University of Toronto.

Chairman: Jennifer Young
Secretary: Ed Addison

There were 19 members and six guests:

Jeremy Hussell, guest of Ed and Rosemary Addison
John Casselman, John Sparling and Brenda Gibson, guests of Bruce Falls
Sharon Hick, guest of Jock McAndrews
Dierdre Tomlinson, guest of David Tomlinson

Bev Scott, who became a member of the Brodie Club in March, 1947, attended, was acknowledged by the Chair and welcomed by all.

The minutes of the 1,002nd meeting were approved without change.

NEW BUSINESS:

Bruce Falls noted that he had the Brodie Club photocopy of Louise Herzberg's book on Dr. Brodie and that it was available for members to borrow and read.

Paul Aird proposed that Bruce Falls' history of the Club as presented at the 1000th meeting be published. Discussion followed both about the history and the Brodie Club archives. Suggestions about the history included speaking with local archivists (Sandra Eadie), approaching the Ontario Historical Society (Helen Juhola, an OHS member), having the talk placed on the Ontario Nature website (Glenn Coady) and submitting it to the Canadian Field-Naturalist (Paul Aird). The ROM continues to be suitable for the Brodie Club archives. However, if interest in them waned at the ROM, the Ontario Archives or Ontario Historical Society could be approached.

John Casselman and John Sparling will be accepted and welcomed as members of The Brodie Club at the next meeting, in September. The club constitution requires a month between circulating membership applications and acceptance.

Discussion of the field trip led to a motion (Glenn Coady/ Ann Falls) that the field trip will be to the gardens in Aurora of members Harry Lumsden and David Tomlinson with a picnic lunch at Addisons'. The trip will begin at 10:00 hrs on Sunday, June 25 at Lumsden's. Maps

will be distributed to members. A letter will be sent to member Bill Rapley, with thanks for having invited the Club to the Metro Toronto Zoo and acknowledging Club interest in visiting the zoo on another occasion.

This will be the last Brodie Club event of the season. Hope to see you there.

SPEAKER:

The speaker, member Bill Crins from the Ontario Ministry of Natural Resources (OMNR) in Peterborough, was introduced by Bruce Falls. He spoke on:

HOW PROTECTED AREAS ARE SELECTED:

Some results from Ontario over the past decade

The OMNR selects protected areas to meet targets for types of parks (e.g. wilderness, nature reserve, etc.) to be present within specific areas; to ensure representative landforms and vegetation types in specific areas; and for special purposes such as scientific perspectives. The basis of this approach was a 1977 document *Nature's Best* that reaffirmed the desire to protect representative geological, terrestrial and aquatic ecosystems.

'Gap analysis' is the major technique of the Ontario approach to identify representative areas. Areas are judged to be representative based on either a life science focus (ecosystem representation) or an earth science focus that identifies unique landforms. Sometimes areas selected by the two approaches coincide, sometimes they don't. To date, the identification of representative aquatic ecosystems has been slower.

A major value of protected areas is that they provide a baseline for comparative purposes when assessing changes in non-protected areas, i.e. monitoring change.

"Protected areas" refers to a wide variety of types of areas including regulated protected areas such as parks, areas of natural and scientific interest (ANSIs), areas protected through land stewardship and others. The spatial framework for evaluating areas for life science representation is to assess occurrence of representative areas within ecodistricts of which there are 77. Representation of earth science areas is through stratigraphy which is a combination of landforms, geological process and time. There are 43 earth science areas in Ontario.

At the lowest spatial resolution, the ecological land classification (ELC) in Ontario is comprised of three ecozones: Hudson Bay Lowlands, Ontario Shield and Mixed wood Plains. Below that are the ecoregions and ecodistricts which flow directly from Angus Hills' original classification of 1959. There has been some minor adjustments from Hills' work such as the identification now of five ecodistricts instead of one ecodistrict in area 3S north of Red Lake.

Meeting park targets is one of the three main reasons for identifying protected areas. Park targets include one wilderness park/ecoregion; one natural environment park and one waterway park/ecodistrict and nature reserves and conservation reserves based on representation as defined by a number of factors.

The gap analysis technique is established to select the "best" representations of landform/vegetative associations in each ecodistrict or landform area and to do so in a uniform, repeatable manner. Firstly, the gap analysis applies a 'coarse filter' defining the landform units and a 'fine filter' identifying the vegetation in response to the landform units. The next step is to identify human created disturbance such as roads, hydro corridors and recent logging on the rest of the Crown land base within the ecodistrict under consideration. Buffer areas are applied to

disturbed areas (e.g. 400m on either side of a road). The next step is assessment of existing representation and finally to identify areas to fill gaps in the protected areas currently represented.

Criteria for assessing potential protected areas occur at two spatial scales, the landscape scale and the local scale. The two criteria of evaluation at the landscape scale are the level of representation of the area within the protected areas system and the condition (quality) of an area under consideration. Examples of new protected areas chosen mainly for their representation of landform/vegetation include in ecodistrict 5E-13, the Sandy Islands just off Batchawana Bay in Lake Superior (one of the few areas with exposed Cambrian sandstone). Other areas chosen for their providing increased representation include Island Lake Forest and Barrens, inland from Pointe au Baril (5E-7), the Carden Alvar (6E-9) and alvars on Manitoulin Island.

With respect to assessing for condition (quality), man-made disturbances are a negative but the acceptability of natural disturbances such as burns and blowdowns are a positive. It is recognized that nothing south of the Hudson Bay Lowlands is free of man-made disturbances but they do wish to exclude mining operations, recent logging and artificial corridors (e.g. hydro lines).

At the local scale, there are a number of criteria of evaluation including diversity, ecological considerations and special features. Diversity measures include the number of landform/vegetation sites; the diversity of age classes of vegetation types; and species diversity although this latter information is seldom available. Ecological considerations include the influence of surrounding areas on the area under study. For example, are the headwaters of aquatic systems within the area pristine and of high quality or are they extensively polluted by industry. The core area might be expanded to protect headwaters. The special features criterion usually focuses on rare species known to occur on a site under consideration for protection. These local criteria are important in identifying both the level of priority for protection and the placement of boundaries for the area. For large wandering species such as caribou, it is very difficult to include all of their home ranges within protected areas.

Assumptions associated with the Ontario method of identifying sites for protection include:

- the basis for planning is province-wide;
- ecodistricts are the best scale at which to make assessments;
- representation is based only on our current distribution of landform/vegetation types, not past or future distributions;
- the current diversity will meet our representation needs of the future;
- implementation is easier on Crown land than on private lands;
- protecting private lands will depend on stewardship agreements, etc.

Limitations of the OMNR approach include:

- OMNR has “minimum” guidelines for targets. Some interpret these as adequacy guidelines but OMNR does not!
- most assessment is vegetation based rather than species-based, leading to a bias towards vegetation;
- quaternary geology are coarse data layers that are difficult to integrate with layers of data at other spatial scales;
- there is no temporal component to the process. We are only assessing representation in the present.

Progress

The percent representation of all features in an ecodistrict has been increased through the Lands for Life (L4L) process for some ecodistricts (examples in table below).

General Area	Ecodistrict	Pre-L4L % Representation	Post L4L % Representation
Geraldton	3W-4	16	34
Spanish R/ Algoma Highlands	4E-3	23	74
Killarney Prov. Park	5E-3	91	97
West side Algonquin	5E-9	91	91

Specific areas still poorly represented in protected areas include north of Cochrane, Geraldton, south of Chapleau and north of Red Lake. Large areas requiring more work include the Hudson Bay Lowlands and the Carolinian zones. In southern Ontario, comprised largely of private land and much development, there remains great need for protected areas, despite some private/public partnership acquisitions such as Alfred Bog and Wainfleet Bog.

QUESTIONS:

- Do some single issue considerations change the analysis framework? Yes, the planning process and all those who input to it influence the decisions. The process described above produces a product to submit to the planning process. What comes out of the planning process could be very different.
- John Casselman asked why protection of aquatic systems hasn't kept pace with protection of terrestrial systems. This is partially a lack of uniform classification methods for aquatic systems. Most biologists working with aquatic systems have worked with populations rather than the systems. There are staff working on terrestrial as compared to aquatic systems.
- Are we moving towards integrating our efforts across jurisdictional (provincial) boundaries? Yes, but mainly "baby steps" to date. Manitoba, Ontario and the First Nations are doing co-operative work in the area of Woodland Caribou Provincial Park, there are cooperative initiatives among Michigan, Wisconsin, Minnesota, Ontario and Manitoba in an area near the west end of Lake Superior. The IJC is a strong example of inter-jurisdictional efforts.
- Are the gap analysis tools used in management? Yes, they are now being used to integrate with management-oriented systems like the FRI (Forest Resource Inventory) databases and surficial geology management systems.

Bill Crins was thanked by Glenn Coady.

OBSERVATIONS:

- Paul Aird: There are fewer Crows than expected near the escarpment in the Orangeville area. Discussion included speculation that West Nile Virus may have impacted these crows.
- Jock McAndrews described his observation of the Ivory-billed Woodpecker at the Buffalo Museum.
- David Tomlinson has had a pair of Pine Siskins on his Aurora property since late March and expects that they are nesting locally.
- Bill Crins reported what might be the first record of a European Widgeon for Peterborough County. It was on Rice Lake on Easter weekend.
- Kevin Seymour and Glenn Coady observed a male Garganey (Eurasian Teal). It is the third record for this species in the Ontario records.
- Rosemary Addison reported two Great White Egrets in Kincardine, the first seen there in 30 years.
- Ellen Larsen reported on an excellent exhibit about Darwin currently open at the Museum of Natural History in New York City.
- John Sparling was at Pelee last weekend and saw a Black Vulture, Eurasian Widgeon and increasing birds coming through on Monday. The highlight on the trip back was watching for 20 minutes a male Wild Turkey strutting and displaying in front of a chrome bumper on a large parked truck. The bumper was reflecting the turkey's image which reinforced the turkey's behaviour.
- Sandra Eadie reported on a few highlights of a trip to Namibia. Hopefully, we can hear more at a club presentation.
- Ed Addison reported suckers spawning at the outlet of Mountain Lake near Minden. The whitefish were attracted to the site and eating sucker eggs. Common Loons were foraging in the area for smaller suckers, but had little to no impact on the larger suckers and whitefish.
- Glenn Coady reported Red-tailed Hawks nesting on the southwest corner of the Legislature at Queen's Park. He saw copulation and setting on the nest.

The meeting was adjourned on a motion from Sandra Eadie and Aarne Juhola.

Field Trip:

The annual field trip will be held on June 25, starting at 10 a.m. The trip will begin at 1000 hrs on Sunday, June 25 at Harry Lumsden's place in Aurora, move to the Addisons' nearby for a picnic lunch, and then David Tomlinson's Merlin's Hollow on the other side of Yonge St. A map is attached.

Lumsden will offer a tour of his garden, a fascinating place full of rare and exotic species that he collected himself in Siberia. He also breeds Trumpeter Swans in large numbers.

Tomlinson has a very pretty English garden tucked away on the other side of Aurora, where he grows a wide variety of plants that aren't supposed to grow in Canada.

I have never been to Addison's place, but I'm sure it's worth a visit.

Harry Lumsden
144 Hillview Rd.
Aurora, Ont.
L4G-2M5
905-727-6492

To get to Lumsden:

- Head up the DVP/404 to Aurora SR (Wellington St.)
- go west past Yonge St.
- keep going west two blocks to George St.
- south on George St., two blocks to Hillview Rd.
- head west to the end.
- Can't miss it.

Edward & Rosemary Addison
107 Kennedy St. W
Aurora L4G-2L8
h: 905-727-4476
ecolink@aci.on.ca

From Lumsden

- east on Hillview
- south two blocks on George St.
- west on Kennedy St. W, to #107

David Tomlinson
181 Centre Cres.
Aurora, Ont.
L4G-1K3
905-727-8979

Tomlinson is one block east of the railway tracks, north from Centre St.

From Addison to Tomlinson:

- one block east on Kennedy
- north on George, past Lumsden to Aurora SR (Wellington St. W or #16)
- east on Aurora SR, past Yonge St., past railway tracks
- first left
- right on Centre St.
- left on Centre Cres., a tiny laneway.

Can't miss it. Actually, you can, easily, but think positively and keep your eyes open.

Parking is a limitation at Tomlinson's. People can park at the train station on Wellington Street and walk over to Tomlinson's.

When coming from Highway 400 North:

- take King City/Nobleton exit and head east
- continue through King City to Dufferin Street [ESSO station on SW corner]
- turn left on Dufferin and continue to second stoplight [Snowball]
- turn right on Aurora Road, cross Bathurst Street and continue past three sets of lights
- George Street is second street on right past 3rd lights
- turn right [S] on George and right at Hillview [second right]
- Harry's place is at end of Hillview

The Google map to Addison can be found at:

<http://www.google.ca/maps?f=q&hl=en&sl=43.834527,-79.365234&sspn=1.739455,3.702393&q=107+Kennedy+st.+w,+aurora&ll=43.997445,-79.470506&spn=0.013553,0.028925&om=0>

Somenos Lake

By Yorke Edwards
Our Western Correspondent

When I was young and in the B.C. government's provincial parks department, I often drove north up the east side of Vancouver Island and stopped for a few minutes by a small lake named Somenos, near the town of Duncan. Usually ducks were there, or a hawk was in a distant tree, and in spring there were loud songs from a gang of Pacific tree frogs. But I was soon driving again to work miles north. When free from such work I was often at that lake with its shallow edges crowded with green water plants. One memorable spring day there I enjoyed distant songs from the rare Black-headed Grosbeak, an orange Finch with its loud rich songs crossing the lake. Its loud calls became part of the lake. Trees growing in wet soil by lakes are in such places for this loud and rare bird.

Through winter and into spring, the ducks and geese are the most numerous birds at or on the

lake, but in spring the most numerous ones are swallows, some towering and swooping after insects, others going low across the shallow edges of wet vegetation as well as open water, all catching insects on or above the water. Most numerous were Tree Swallows, blue and white, and on a fence by the road near the lake were several dozen bird boxes, all in a row. Less numerous flying over the water were other swallows, barns, rough-wingeds, and violet-greens, all sweeping over marsh and lake catching insects above the lake and sometimes neatly picking insects from the water.

Ice over the lake is rare so some ducks stay through winter, and some also stay later for nesting. Always there are Mallards, a few Canada Geese and some Widgeons staying around the year. Others visit only a while, others go through winter then go in spring. Through winters, there are Widgeons, Green-winged Teals, a few Shovelers, and many Coots pretending to be ducks. Spotted Sandpipers nest

there, while Rails hide in the reeds. One day in July, a huge and resting flock of Western Sandpipers were on the shore, all males leaving their females when they have eggs. Males don't help.

One spring day with a friend we went to the lake to go into it, wanting to find Marsh Wrens and their nests. We waded in, often wet to the chest as we pushed slowly through bulrushes that were growing in about three to four feet of water. We

found surprisingly many nests that were empty, but several did have eggs. We did see old nests, some new empty ones, and a few with eggs. Were the many empty nests meant to make hungry hunters want eggs? We had a good hunt, and we felt lucky to have found the Wrens and their nests, a rare species living close to their northern edge in western Canada.

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