



ROYAL ONTARIO MUSEUM of ZOOLOGY

THE 977th MEETING OF THE BRODIE CLUB

The 977th meeting of The Brodie Club was held on Sept. 16, 2003 at the Ramsay Wright Zoological Laboratories of the University of Toronto.

Chairman: Jean Iron Secretary: Oliver Bertin

There were 20 members and three guests Guests: Ron Pittaway, guest of Iron

Dorothy Andrews, guest of Fred Bodsworth Kevin Seymour, guest of Jock McAndrews

NEW BUSINESS:

Nominations for officers and committee members will be held at the October meeting. Treasurer **Jennifer Young** does not plan to run again due to commitments at home. Members might like to volunteer for the secretary's post to give a fresh look to the minutes, either permanently or occasionally for meetings they are particularly interested in. A wide range of committee positions are also open.

Retiring treasurer **Young** asked members to pay their annual dues at the next meeting, in cash or by cheque payable to The Brodie Club. The charge is \$10 for singles and \$15 for families, most of which is spent on the monthly mailings.

Bruce Falls showed photographs taken at previous celebratory meetings and several documents relating to the history of the club that had been in the possession of Bill Carrick. They are attached.

Several members expressed satisfaction with the June field trip to Carden Plain, and enjoyed **John Speakman's** hospitality at his Lake Simcoe cottage. Members saw an abundance of plants and grassland birds.

The next meeting will start at the new time, 7:30 pm, on Oct. 21 when the speaker will be proposed member **Kevin Seymour**, assistant curator of palaeobiology at the Royal Ontario Museum. **James Thomson** will speak on Nov. 18 and **Edward Bousfield** at the December meeting, which will be held a week earlier than usual, on Dec. 9, because of the Christmas festivities.

Aarne and Helen Juhola were welcomed as new members to the club. **Seymour** was proposed as a member by McAndrews. His biography was attached to the August mailing.

MEMBERS MEETING:

Iron participated in 2002 and 2003 in a Ministry of Natural Resources goosebanding expedition headed by **Ken Abraham** to Polar Bear Provincial Park. The site was near Peawanuck, on the shores of Hudson Bay, 1,400 km north of Toronto.

The group rounded up and banded large numbers of Snow and Canada Geese at a time when the adults and goslings were flightless. The Snow Geese were found in two morphs, white and blue. The adult blue geese tended to be dark grey over much of their bodies, with a wide variety of patterns. In 2002, the crew also banded about 90 Ross's Geese, including some Ross's X Snow hybrids. Ross's Geese are usually found further northwest, in Manitoba.

The crew saw Polar Bears every day, either alone or with cubs, and often quite close. Iron saw many Caribou, singly and in small groups, and a Gray Wolf, now considered a different species from the more familiar Algonquin Park Timber Wolf. Other sightings included the colourful Hudson Bay subspecies of the American oad, Whimbrels and a Willow Ptarmigan.

Jim **Bendell** invited members to his study area near Gogama, a small town between Sudbury and Timmins. The site is in the southern boreal forest, an area with an abundance of jackpine, black spruce and sphagnum bogs. There are bear, loons, Boreal Chickadees, Gray Jays and innumerable blueberries in the area. The geological features include glacial beaches, eskers and spillways.

Bendell is studying the distribution dynamics of the Spruce and Ruffed Grouse. Spruce Grouse is the more northerly species, found from southern Georgian Bay to Hudson Bay, while the Ruffed Grouse ranges from the Appalachian highlands to southern James Bay.

The two species are often found in great abundance in the same general area. But there is one key difference: Spruce Grouse are found in jackpine forests, while Ruffed Grouse are only in aspen woods on the edge of the boreal forest.

Bendell tried to explain this distribution pattern. He measured the temperature and humidity of the two habitats in nearby sites. He found that Ruffed Grouse habitats tended to be 3C warmer and slightly drier than Spruce Grouse areas.

The same was true of nesting sites. He pursued the subject and found that Spruce Grouse prefer moist areas, possibly because their eggs have larger pores and therefore tend to lose water faster than do Ruffed Grouse eggs.

He concluded that the two species may be adapted to slightly different microclimates possibly because their eggs have different moisture requirements.

Bodsworth commented on the apparent explosion of Hooded Warblers in southern Ontario. This species commonly breeds in mature deciduous forests in the southern United States, nesting in Canada only in the Carolinian forests north of Lake Erie. It was long considered an exotic rarity anywhere in Ontario. However, the species has spread north and east over the past 50 years, reaching north of Lake Ontario into Peel, York and Dufferin counties.

Bodsworth said the Hooded Warbler was first recorded in Ontario, in Hamilton in 1860. He has been credited with finding the first nesting pair in Canada, in Elgin County in 1949.

The species was rare in Ontario into the early 1980s, when it was recorded during the five-year Breeding Bird Atlas of the time in only 21 atlas squares in the province along the north shore of Lake Erie. That number has more than doubled to 54 squares in just the first two years of the atlas currently being conducted. In 2002, the Canadian Wildlife Service found 251 territorial males at 76 sites in 12 counties, indicating a rapid Increase.

Bodsworth said the population explosion may be partly explained by climate warming, pushing the breeding range northwards, and by the recent increase in selective logging of mature deciduous woodlots, which has created forest openings and provided more nesting sites. When logging stops, the warblers disappear; when logging resumes they return.

McAndrews attended a meeting in Reno, Nevada where he presented a poster about his studies in Crawford Lake, north of Burlington, Ont. He has studied the lake for 34 years, looking at the sediments for pollen, diatoms and rotifers. The sediment cores show an increase in diatoms and rotifers that are related to either pollution or agriculture during the aboriginal period that started in 1286 and again after Europeans moved into the area. His work led to the reconstruction of an Iroquoian village on the site.

McAndrews also went on a field trip through the Nevada deserts. Among other interesting phenomena, he saw what appeared to be a wild stallion herding a harem of donkey mares.

Norm Martin has studied hillside forest communities in Algonquin Park for more than 50 years. Over that time, he has noticed a fairly consistent change in tree species following forest fires or other disturbances. His study area included Joe Lake, Lake of Two Rivers and Smoke Lake. He mapped the sites in 1953 and again in 2002.

The first species to appear after a forest fire tend to be poplar, white birch and red maple.

After one generation, they are replaced by either balsam spruce or, depending on the microclimate, a mix that includes white and red pine, red and white oak and red maple. This second stage peaks about 150 years after a fire.

The third stage peaks 350 years after a fire. It includes sugar maples, beech and yellow birch.

The fourth and last stage is hemlock. It starts to appear after 200 years, and can be found after 400 years and sometimes considerably longer.

Martin noted many exceptions to this general rule. Near the Lake of Two Rivers, the forest appeared to skip stage two and move onto the sugar maple forests of stage 3. Near Joe Lake, a patch of sugar maples sprang up after a fire, possibly because there was an abundance of seeds in the area.

Mary Boswell travelled by ship along the north shore of the St. Lawrence River from Rimouski to the Quebec-Labrador border in late June and early July of 2002. She found isolated fishing villages, with picturesque houses perched high on rocky bluffs or down beside the fishing wharf. The locals live a sparse existence, relying on cod and capelin in the summer and moving south in the winter. There are no cars and no roads in many villages. The local people often drive their ATVs to and fro in the village along

narrow board walks. Boswell found an abundance of ground-hugging flowers and evidence of a Basque whaling station at Red Bay, Labrador.

On the return voyage, she stopped at Anticosti Island, a region that was remarkable for its waterfalls. The island was apparently owned at one time by a chocolate baron who stocked it with deer for his hunting friends. The deer have bred in great numbers, causing severe damage to the vegetation. The last stop before returning to Rimouski was Quarry Island in the Mingan Archipelago National Park Reserve, the site of spectacular hoodoos.

Sandra **Eadie** spent one month in British Columbia and Alberta last July. She saw a wide variety of plants near Revelstoke, in a park created by town residents who want to preserve the beauty of the area. Near Golden, she saw wild orchids, a Ruffed Grouse and female Blue Grouse of the Richardson subspecies. She also visited the Columbia Icefields and Radium Hot Springs.

OBSERVATIONS:

Bertin said that on his last visit to Radium Hot Springs, he flew through the Crowsnest Pass in the cockpit of an aging DC-3. The plane flew so low -- or so high -- that he saw Mountain Goats leaping up the sides of steep cliffs, far above the clouds.

McAndrews took part in an FBO field trip to Northumberland Co. He found a forest of oak and white pine growing on sand; both species displayed abundant reproduction.

Ron Tasker has seen only one Cardinal in 20 years of visits to Manitoulin Island, a solitary bird near Gore Bay. This year, he saw five. He also saw a Wild Turkey and a Black Bear on the island this summer.

Bendell saw two Turkey hens and 20 chicks -- all introduced birds -- near his house near Almonte in the Ottawa valley. He was thrilled to find a recent reference in the Canadian Journal of Zoology, which said that mammalian population cycles may be determined intrinsically by the animals themselves.

Yvonne Bendell saw a Lynx near Timmins. She said it behaved just like a domestic pussy cat.

Eadie saw a Raven on a Toronto Ornithological Club field trip to Durham Forest, while another member saw an otter. She also spied Mars through the planetarium above the UofT Physics building.

The meeting adjourned at 9:55 pm.

NEXT MEETING:

The next meeting will be held at 7:30 pm on Oct. 21 in Rm 432 of the Ramsay Wright Zoological Laboratories of the University of Toronto. The speaker will be proposed member **Kevin Seymour** who will talk on "Ice Age faunas of the Toronto area."

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