# THE BRODIE CLUB

## MINUTES OF THE 889th MEETING

The meeting, chaired by Jim Bendell, was held in the Faunal Laboratory, Department of Palaeontology, University of Toronto, November 16, 1993.

Guests were Vicky Draper (Fowle), Marcie Jacklin (Knapton) and Maudie Reynolds (Reynolds). After correcting a few spelling and other errors, the Minutes of the previous meeting were accepted.

As the Club's representative to the FON, Norman Martin reported on a number of matters of interest.

Bruce Falls introduced the evening's speaker, Richard Knapton. Highlights of his formal education as a biologist include a PhD at Lakehead University, post-doctoral studies at UBC, employment at the University of Manitoba where he studied clay-coloured sparrows, and in Algonquin Park studying white-throated sparrows. He has also conducted guided tours with Gus Yachi.

He is currently the Long Point Waterfowl and Wetlands Research Director, working with the Long Point Bird Observatory. The Long Point peninsula is a World Biosphere Reserve and a Ramsar Site. Its wetlands, among the most extensive in Ontario, are rated as Class 1 by the Ontario Ministry of Natural Resources.

Throughout his talk, Richard used a number of slides to illustrate features of the peninsula, the lighthouse at the extreme eastern tip, the LPBO structures, vegetation and fauna, etc. Some of the major inlets are large but remarkably sterile. Some host rare and unusual plants. One especially large area of American Lotus, shown in flower in one slide, is the most extensive in Canada.

Among the project's major purposes is to monitor staging waterfowl. This is undertaken primarily by ground, water, and aerial surveys. Estimating numbers of waterfowl from the air, especially when they occur in large concentrations, requires experience and skill. It is difficult to differentiate some species from others.

Totals of all species tallied in the autumns of 1991, 1992 and 1993 were 64,500, 70, 200 and 58,500, respectively. From the results, calculations are made of "species-days-use" a term devised to asist in developing trends in numbers. When data from Richard's studies were combined with those since 1969 suplied by the Canadian Wildlife Service, some general trends became apparent. The declines in diving ducks correlate well with the occurrence of drought years on the Prairies.

Trapping, banding and the use of radio transmitters on individual birds proved useful and indicated that birds stayed for periods ranging from 7 to 21 days.

Information about waterfowl foods and food resources in Long Point Bay was gained from data gathered at check stations from hunters where crops and digestive tracts were collected. Analysis of the contents showed much variety, including such items as corn in a wood duck, zebra mussels in a scaup, snails in greater scaups, and wild celery in canvasbacks. Ingested lead shot was encountered only occasionally.

Three hundred and seventy sampling stations, using an Eckman dredge, were established in the Bay, a few on property of the Long Point Company and some on CWS property. Clams, quagga and zebra mussels, chara, and snails were among the items frequently brought up by the dredging.

In Long Point Bay, canvasbacks frequented celery beds and ate celery but no zebra mussels, while redheads fed largely on chara and frequented areas where it predominated.

Zebra mussels are recent invaders of Long Point Bay. Quagga mussels are more recent arrivals but already are almost as common as zebra mussels and may eventually out-compete them.

In 1991, zebra mussels were concentrated in the eastern areas of the bay, sometimes reaching attaining concentrations of 25,000 per square metre. In 1992 they were much less abundant, peaking at 5,000 per square metre, but had extended their range throughout the bay area. There was a marked decline in total biomass in 1993.

Widgeon are always present among convasbacks as klepto-parasites. White-winged scoters, old squaws, and both species of scaup consume large numbers of zebra mussels, with 90 to 100% of stomachs containing them. 57% of buffleheads contained these mussels. Redheads, canvasbacks, rednecks, and ruddies eat few mussels. The one black duck examined had eaten a single mussel and goldeneyes sampled were found to have been largely eating larvae of invertebrates.

Scaups and canvasbacks seem to be benefitting from the presence of the mussels. The water of Long Point Bay is becoming clearer. As a result, plants such as wild celery, which need lots of light, are doing better than formerly and canvasbacks are responding accordingly.

Another study is of mute swans. Their increasing numbers are a matter of sufficient concern for consideration to be given to implementing control procedures.

A study of the effects of disturbance by humans and the birds' responses is in only its first year. Preliminary data suggest that in the early fall the effects are slight but much more severe later in the season.

Few waterfowl nest in the Long Point marshes perhaps partly because of a large population of snapping turtles. The numerous predacious fish in the bay may also be significant. The generally low density and diversity of invertebrates may reflect low levels of fertility of the substrate.

The speaker invited questions and comments throughout his talk and a number of significant contributions evoked interesting explorations of views and theories bearing on the speaker's discussions.

Anne Falls thanked Dr Knapton for his stimulating discourse which drew hearty applause.

## Members' Reports:

Carrick reported that one of his swans at Lake Scugog had been wounded and he suspected that this had been caused by a deer hunter.

Knapton had seen 2 snowy owls at Port Weller. A greater black-backed, herring, Bonaparte, and ring-billed gulls were present in the Niagara area and one purple sandpiper above Niagara Falls. He also reported that 1100 red-throated loons had been seen flying over Lake Ontario recently.

Boissoneau had seen a bobcat stalking along a fence near a well-wooded area of Con.V1, Township of Brock. There are local reports of the species breeding in the area.

Riley reported a bobcat seen on about 5 occasions in the Township of Mono and a blond raccoon shot in that area recently.

Falls told of a junco with white cheek patches and some white speckles on its back in his back yard.

Bodsworth noted that there had been numerous winter finches - redpolls, siskins, red-breasted nuthatches, pine grosbeaks, etc. The dusky flycatcher present for several weeks on Toronto Island has disappeared.

Reynolds said that the unusually large numbers of finches at his feeding stations into mid-November had suddenly disappeared, along with most mourning doves, bluejays, black-capped chicadees, and grackles.

Speakman recently saw a flock of snow buntings and has heard house finches in what he felt was virtually full song. The pileated woodpecker which has been absent from his Lake Simcoe property most of the summer re-appeared recently and seems to have resumed its house-keeping and nightly occupation of a cavity of one of the trees on the property.

Yvonne Bendell reported a fox found dead in the Port Credit area.

Jim Bendell told of experiences with mice in their cabin near on a recent visit. At first, the cabin, stove, and stove-pipe were free of mice but the storage shed was infested. He placed "mouse seed" in the shed and a sign warning of the presence of toxic chemicals. The sign was soon shredded by the mice and all the seed taken. Later, 6 Peromyscus were found in the stove with feathers and 8 litres of cherry stones. The mice disappeared when the stove was lit but the seeds cooked and exploded noisily all night.

**Norma Martin suggested that there would be merit in holding the next meeting of the Club on December 14th rather than on its normal 3rd Tuesday, the 21st, in order to reduce conflicts during the week of the 25th.**

**This was generally supported, providing notices and these Minutes could be sent out soon enough for all members to receive notice in adequate time.**

Harry Lumsden - Secretary