18 March 1997

## 920th Meeting of the Brodie Club

#### Business:

Chair: Fred Bodsworth

Secretary: Jim Rising 17 Members & 5 Guests Present

Guests: Gisela Curwen, Bob Jefferies, Ken Abraham, Trudy Rising, Peter Webb

Minutes approved as circulated

#### Announcements:

Bill Carrick related that Dr. Howard Savage died Sunday, 16 March. There was a minute of silence in his honour and memory. It was requested that donations in Howard's memory may be given for the Faunal Osteology Lab, c/o Department of Anthropology, Sidney Smith Hall, 100 St. George St., Toronto, MSS 3G5, or the charity of your choice. It was noted by several members that few have contributed as much to the Brodie Club as Dr. Howard Savage.

Bill Rapley invited the club to have its annual field trip to the Toronto Zoo, Saturday, 31 May. It was moved and seconded that we accept this offer, and it was approved unanimously.

## Guest Presentation:

Harry Lumsden introduced our quest speaker, Dr. Ken Abraham. Ken did his M.Sc. work at Iowa State University, working with Prof. M. W. Weller of the effects of oil spills on waterfowl, at Prudhoe Bay, Alaska, and his Ph.D working under Dr. Fred Cooke, of Queen's University, on the snow goose program at La Perouse Bay, Manitoba. Ken then did a post-doc under Dr. Dave Ankney, working on geese on Southampton, Is. Thus, our guest speaker is well versed in the biology of arctic geese. Today Dr. Abraham works for the Ontario Ministry of Natural Resources.

Wildlife authorities are faced with a new dilemma: "Are there too many Snow Geese?" This, is in fact part of a more general problem: there have been dramatic increases of populations of all arctic nesting geese that winter in the interior, including Greater and Lesser Snow Geese, Ross's Geese, and Greater White-fronted Geese. Numbers of Brants and Barnacle geese, which winter along the coast, have not similarly increased. For example, the mid-continental population of Snow Geese increased from about 750,000 in 1969 to nearly 3,000,000 today (probably an underestimate; real figure is probably 4.5-6,000,000). Also, there are an additional 500,000 on Queen Maude Island. During the same period of time, the numbers of Greater Snow Geese have increased. In the 1960's, this species was rare; today there are over 600,000. Similarly, Ross's Goose was rare in the 1950's, and there are over 500,000 today. The Lesser Snow Goose colony at La Perouse Bay now numbers 25,000 pairs.

## Why has this happened?

1) The conversion of grasslands and wetlands to agricultural lands. This is probably the single most important factor, as this has increased the amount of food available to wintering and migrating geese, and has as well altered their migration routes and wintering distribution. Whereas in the past most Lesser Snow Geese migrated to the Gulf Coast to winter, today, many winter in Arkansas, and north into Missouri and Iowa.

- 2) There have been some climatic improvements and a re-distribution of breeding populations. The mid-Continental areas of the north were warmer in 1950-1960, whereas it was colder on Baffin Island and northern Mackenzie, resulting in a shift of breeding colonies somewhat southward.
- 3) A number of wildlife refuges have been created along their migration routes. In the base, geese from eastern Baffin Island and Cape Henrietta Maria (mostly "blues") staged in James Bay, then flew to Alabama and Louisiana for the winter. Today they go to Squaw Creek National Wildlife Refuge in northwestern Missouri, and from there south to the Texas coast.
- 4) A decrease in hunting pressure as a consequence of changing social attitudes. Today, less than 10% of the flock is lost to hunting, whereas in the past it was up to 40%.

In Arkansas, rice growing has benefitted the geese. In the 1980's there were a few Lesser Snow Geese that wintered int he state; today there are over 500,000.

Along Hudson Bay, the large populations of geese are responsible for a great amount of habitat destruction, by their foraging activities, grubbing (digging for roots, which creates or enlarges bonds), grazing, and shoot pulling (pull up sedges to eat the roots. The richest foraging areas are in the intertidal area where they feed on <u>Puccinellia phriginodes</u>, and <u>Carex</u>. The delay in the snow melt along Hudsons Bay 1970-1996 has also led to excessive grazing along the coast. The goose droppings lead to an algal bloom, a decrease in oxygen levels, and eutrophication. Also Snow Geese move off the saltmarsh, and back into sedge fens, where they feed on <u>Carex</u>.

The McConnell River Colony initially increased in size, then declined, presumably because of habitat degradation. Desertification and hypersalinity occur. This not only destroys habitat for geese, but also for several species of ducks, 6-7 different species of sparrows, Yellow Rails, and some shorebirds (Semipalmated Sandpipers; Red-necked Phalarope). Some 5,000,000 geese of all species use coastal areas for breeding and staging.

On Akimiski Island, Canada Goose habitat has been destroyed by Snow Geese. Even if the geese were to leave, it would take years for the habitat to recover.

Various game agencies are encouraging hunting (use the entire open season, increase bag and possession limits, etc.), but this doesn't seem to be having an effect.

John Riley thanked the speaker.

# Members Notes and Observations:

Ken Abraham noted seeing a Great Blue Heron, 18 March.

Hugh Curry reported a Ross's Goose is present at Humber Bay, and also a Harlequin Duck there.

Ron Scovell reported a Black Guillemot along Lake Ontario. Also up to 130 King Eiders near Vineland.

John Riley reported a Tufted Titmouse at Coote's Paradise.

# MEETING ADJOURNED at 10:15 PM.

NEXT MEETING: The 921st meeting of the Brodie Club will be held on Apr. 15th

Room 430. Ramsay Wright Bldg., U.of T.

SPEAKER: Dr. Joseph Desloges, Dept. of Geography, U. of T.

SUBJECT: Outburst Floods, Landscape Change and other Catastrophic Research

Chateau Victoria, 740 Burdett Ave., Victoria, B.C. V8W 1B2 Feb. 8, 1997

### Dear Bill:

Here is a report to the Brodie Club from two members in Victoria, Yorke Edwards and Dave Fowle.

Yorke's friends will be happy to know that after some months in hospital and in rehabilitation, he has virtually recovered from the effects of stroke and is as active and busy as ever. Both of us are doing volunteer work in the Department of Mammalogy in the Royal B.C. Museum.

It has fallen to me to read the reports and field notes of Hamilton Mack Laing who collected mammals and some birds for the National Museum in Ottawa from 1927 to 1931 in southern B.C., up the coast as far as Bella Bella and on the north end of Vancouver Island. He was a prodigious recorder and collector so there is a lot of material. I am scanning it for items to include in the Museum's data base on the fauna of B.C. Yorke is doing similar work on material from men who explored northern B.C. before World War I.

The weather here since the beginning of January has been cooler than last year. Spring flowers and bud development seem to be a bit delayed. The gorse is in flower. Bird life around the city is not spectacular. There are a few bald eagles, masses of glaucous-winged gulls (plus some others gulls not yet sorted out) and large numbers of northwestern crows which have adapted to city life. They nest in the trees at the side of the main street in town and regularly visit out 12th-floor balcony to check on plastic bags of fruit and vegetables we keep outside, Patches of shrubs along Dallas Road contain golden-crowned sparrows, song sparrows, towhees, and probably bush-tits, although we have not seen any this year. Last year we saw white-crowned sparrows. House finches seem to be scarce.

From the shore we see a few ducks, bufflehead, mergansers, scoters, goldeneye, a few loons, cormorants and a scattering of harlelquin ducks who stick close to shore, rest on the rocks and feed in shallows. Vicky and I discovered two oystercatchers, black turnstones, and a small flock of sanderlings to-day.

The spectacular creatures are the passing flow of migrating California and Steller's sealions which are coming in from the Pacific and moving up the Strait of Georgia. The California species apparently does not go much past the north end of Vancouver Island. The Museum people tell me that they are all males. The Steller's go on up to Alaska. Barking seals can frequently be heard and they can be seen surfacing and diving quite near the shore. They sometimes gather in small groups where they appear to lie on the surface and thrust their front flippers

up out of the water. No doubt, members of the Brodie Club will be able to explain what that is all about.

The Vamcouver Island Marmot, Canada's most endangered species of mammal, seems still to be declining , now down to probably less than 200. There is a scheme to try to breed some in captivity. The Calgary and Metro Zoos are interested in this. Bill Rapley will have more information.

The great snow storm does not seem to have done much obvious damage except for some branches off the big Douglas fir trees. Apparently some of the big trees at Cathedral Grove on the road to Alberni came down but that seems to have been due to extra strong winds which accompanied the snow and to the fact that the forest has been pretty well clear-cut around the grove, leaving it without buffering protection.

So much for "Observations" from Victoria. Our greetings to Brodie Club members. See you all at the April meeting.

THE TORONTO STAR Tuesday, March 18, 1997

SAVAGE, Dr. Howard Gordon — Passed away peacefully on Sunday, March 16, 1997, at the age of 83, husband of Dorothy, father of Richard and Alicia of Stayner, Ken and Jackle of Florida and Nancy and Rob (Hurlburt) of Richmond Hill. Howard also leaves grandchildren Richard and David, Mark, Trevor, Courtney and Kenny Savage, great-grandson Trevor Jr. Savage and granddaughters Kelly, Lindsay and Julie Hurlburt. Also sister Gladys Coleman of Orillia. Howard was born in Oakville, Ontario on December 28, 1913, attended Oakville High School and graduated from U of T in 1937 with his degree in Medicine. After U of T in 1937 with his degree in Medicine. After serving as a Medical Officer in the Royal Canadian Air Force 1941 to 1945, he began his practice in North Toronto and was also a clinical teacher and Honorary Consultant at the Hospital for Sick Children (Department of Paediatrics). After his retirement from medicine in 1969 he embarked on a new career at the Royal Ontario Museum/University of Toronto as research associate, Department of Anthropology and went on to serve as President of the Ontario Archaeological Society, Secretary of The Brodie Club, Vice President of the Academy of Medicine, Toronto and Chairman, Section of Medical Archaeology and Anthropology, Academy of Medicine, Toronto. He has instilled a great love of learning to his students and will be missed by many friends and colleagues. The family will receive friends at the "HUMPHREY FUNERAL HOME -A.W. MILES CHAPEL" 1403 Bayyiew Ave. (South of Eglinton Ave. East) from 7:00 · 9:00 p.m. Tuesday, March 18 and from 2:00 · 4:00 and 7:00 · 9:00 p.m. Wednesday, March 19. Private family funeral and interment at Spring Creek Cemetery, Clarkson, Ontario to follow. A memorial service to celebrate Dr. Savage's life will be held at the University of Toronto in September 1997. Memorial donations made to the Haward G. Savage Found Osteology Laboratory (University of Toronto), Department of Anthropology, Sidney Smith Hall, 100 St. George Street, Toronto, MSS 1A1 or to a charity of your choice would be appreciated by the

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