

# THE BRODIE CLUB



ROYAL ONTARIO  
MUSEUM OF ZOOLOGY

## THE 1,040th MEETING OF THE BRODIE CLUB

The 1,040th meeting of the Brodie Club was held at 7:30 pm on September 21, 2010 in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Chair: Bruce Falls

Secretary: George Bryant

The meeting was attended by 27 members and one guest.

**Roll Call, Present:** Abraham, E. Addison, R. Addison, J. Bendell, Y. Bendell, Bertin, Bodsworth, Bousfield, Bryant, Coady, Currie, Dunn, A. Falls, B. Falls, D. Hussell, J. Hussell, Iron, A. Juhola, H. Juhola, Larsen, Machin, McAndrews, Pittaway, J. Rising, T. Rising, Tasker, Young.

**Regrets:** Aird, Crins, Seymour, Thorpe.

**Guests:** Sharon Hick attended as guest of Jock McAndrews.

**Minutes:** On a motion by Ron Tasker, seconded by Oliver Bertin, the minutes were approved. Bruce Falls thanked Rosemary Addison for the minutes of the June field trip. Rose acknowledges Kevin Seymour's major contribution to the June minutes.

### **Reports of Committees:**

Program—Bruce Falls provided information for fall meetings as follows:

Oct. 19	Chen Shen, ROM	Peking Man
Nov. 16	Arthur Weiss, Joker's Hill Director	Plant Ecology
Dec. 21	Jim Rising, Brodie member	Current research - Sparrows
Jan 18	Laurence Packer, York U.	Hymenoptera

Remaining meetings will be Feb. 15, Mar. 15, and April 19, 2011, with dates for May and June to be determined.

Jim Bendell announced the death of Stewart MacDonald earlier this month in Ottawa. Stewart was known by many Club members.

Members were reminded of annual elections to be held during the October meeting. Please consider volunteering to serve on any of the committees. Rosemary Addison offers to continue coordinating the minutes and will gratefully accept the assistance of any members who would record one or two meetings during the year.

## **SPEAKERS:**

This being Members' Night, the club was privileged to hear six presenters.

### **Ken Abraham—Waterbird and Wetland Research**

This is the 18<sup>th</sup> year of study of nesting Canada Geese on Akimiski Island. Spring melt was the earliest on record. Geese hatched at record early dates as well (most by the end of May). Although Meadow Vole populations were at record high levels, the geese still experienced high predation. Polar Bears were observed daily from 24 April to 8 May and caused some of the predation. Overlaps in timing between the bears coming onshore and presence of



ground nesting birds has increased in the eastern Arctic, providing material for some research papers. A motion sensitive camera photo (courtesy of graduate student Stacy Gan) showed a Polar Bear predating on a nest. The first Snowy Owl in the 18 years was observed. Southern overshoots included: Northern Mockingbird, Mourning Dove, and Bohemian Waxwing. The largest numbers of Glaucous Gulls on record were recorded, perhaps because counts began earlier in the spring.

This was a breakout year for American White Pelican in Akimiski Strait; 156 pelicans with 21 nests on June 6. Thereafter numbers dropped. Researchers then kept their distance in case they were a cause in the decline. On June 8 there were 101 Double-crested Cormorant nests, an increase from 30 in 2006, with six chicks already hatched. By July 15 there were 70 chicks.

At Burnt Point Creek in Polar Bear Provincial Park, Northern Mockingbird, Ruby-throated Hummingbird, Mourning Dove and Red Phalarope were noted. On Big Stone Island in Hannah Bay 150 Herring and Ring-billed Gull nests, but no eggs, were observed on July 7. Was this the result of earlier human visits?

Ken revisited his 1979-1980 study sites at East Bay, Southampton Island. The salt marsh where high densities of Brant formerly nested is now bleak and barren; the ground is dry and hyper-saline, and without Brant. Freshwater sedge fens are now heavily grazed with remnant, sparse diminutive graminoids. Many areas are dominated by dead moss; many upland ridges have only a few lichens. Over the 30 years, Snow Goose numbers have trebled and Ross' Goose has gone from accidental to common. Cackling Goose nests on the study area increased from 35 to over 500 and there has been a reciprocal change in Brant numbers dropping from 450 nests in the 1980s to 75 in 2010. Caribou were introduced to the island in the late 1960s after having been extirpated. They increased to about 30,000, but now number 19,000. Along with climate change (e.g., less snowfall, warmer summers) and possibly isostatic rebound of the low lying coastal area, these changes in herbivores may explain the degraded and desertified landscape.



### Jean Iron—James Bay Red Knot and Shorebird Survey

From 15 July to 16 August 2010, Jean was part of a ROM team based at Longridge Point- a long gravel ridge jutting from the western shore northwards into James Bay. From base camp to the tip of Longridge is about 6 km. Each time the tide recedes, large areas of wet mudflats provide extensive feeding areas. Southbound shorebirds that breed farther north stop to feed at Longridge.

Researchers are studying the endangered eastern *rufa* subspecies of the Red Knot, investigating the number of knots using Longridge as a migratory stop, which populations they are from, where they were banded and the length of time they stay.

The highest number of Red Knots tallied was 2062 on 2 August. About ten percent of *rufa* Red Knots have coloured leg flags indicating the countries where they were banded: Argentina-orange, Chile-red, Brazil-blue, Canada–white, Virginia and Florida–lime green. Lime green flags from Delaware Bay were most common. All told, they noted 821 flag re-sightings representing 249 individuals. Eighteen days was the longest stay by a knot.

The mudflats of James Bay are of hemispheric importance to Red Knots and other shorebirds. The plentiful food resources enable them to molt body feathers while they fatten prior to their long flight south. Red Knot researchers were pleased to see that knots and other shorebirds were plump and in good body condition. Twenty-six species of shorebirds benefited from the mudflats at Longridge before undertaking long migrations south, many flying nonstop to South America.



Highest day count for all species was 16,209 on 9 August. Jean showed a selection of photos including the top ten shorebirds from the most abundant White-rumped Sandpiper to the Semipalmated Plover, followed by other regular, but less common, shorebirds. She explained the sequence of most shorebirds' southbound migration: female adults first, then male adults, and finally the juveniles.

Vagrant birds included a Western Meadowlark and three Eastern Kingbirds. A White-rumped Sandpiper with a Western Sandpiper-like bill and reddish scapulars merited consultation with experts. Other animals observed included richly coloured Hudson Bay Toads, Woodland Caribou, Ermine peering into a cabin and three dead Belugas, possibly a female with young. An electric fence around the camp provided protection from Black Bears raiding food supplies while researchers were away. At the end of their stay, it was discovered the fence had not been working!

Responding to a question, Jean said that Merlin and Peregrine Falcons were preying upon shorebirds, particularly during August, and perhaps more significantly, were disturbing them, preventing birds from resting and feeding. This mirrors the effect of the increasing populations of introduced Peregrines on the declines in Semipalmated Sandpipers using the Bay of Fundy.

Project funded by Royal Ontario Museum and Ontario Ministry of Natural Resources.

Photos and information: [www.jeaniron.ca/2010/JamesBay2010/index.htm](http://www.jeaniron.ca/2010/JamesBay2010/index.htm)

## **David and Jeremy Hussell- The Wheatears of Iqaluit** **or What We Found on the Tundra**

This was the continuation of a project begun in Iqaluit in 2007. Iqaluit is the largest town in the Canadian Arctic and has ten meter tides, the second highest in the world. The signs are bilingual: Inuktitut and English—one stating “Dog Sled Parking”!

This year David was there for eight weeks, and Ricky Dunn and Jeremy for three. The objectives were to find wheatear nests, band the birds, and more especially, find birds with geolocators.



The biggest unknown to researchers is the fall migration route from Baffin Island across the Atlantic Ocean to Africa. Last year 26 geolocators were installed on adult wheatears. The researchers were disappointed there were no returns of the 2009 geolocators and only one return from the 56 adults banded over the preceding three years. Clearly the birds show low site fidelity. Some wheatears migrate from Alaska and the Yukon across Siberia to sub-Saharan Africa, taking forty days to do it. This is the longest migration of any passerine.

This year 45 nest sites were found all within five kms of Iqaluit; clearly Iqaluit is the Northern Wheatear capital of North America! Most nests are under large boulders or in rock crevices, and hard to access by humans. Several nests were in man-made structures. Nests are heavily insulated by raven and gull feathers. Wheatears lay between six to ten eggs, and unprecedented in the Arctic, this summer three females tried a second brood. Adults have a complete molt, sometimes started while they are still feeding young.



At one natural site, David removed some boulders and photographed the nest. In 1953, back when Iqaluit was Frobisher Bay, George Sutton and David Parmelee photographed a wheatear nest site. The rocks had not moved and David was able to find the very same spot. Some unnatural nest sites were found under concrete blocks supporting a driveway, in a low retaining wall of a large residence, in a gabion wall and one with eight young under the eaves of a roof. David showed a fascinating sequence of an adult feeding young.

Jeremy specialized in finding cliff nests along the shore and in a valley. He trekked 300-400 kms in eighteen days; apparently the life expectancy of a pair of his hiking boots! As elsewhere, wheatear nesting was dense: three nests being within sight of each other in one gorge. Jeremy also discovered and documented a wide diversity of items as garbage, some quite isolated from other apparent human activity.

In answering a question, David advised that because the nests are constructed in rock cavities, the only predator that can access the young is the Weasel.

### **George Bryant- Muskoka Big Herp Day, 2010**

There are about 45 species of reptiles and amphibians in Ontario, with two areas of concentration: Essex-Kent Lake Erie shores and southern Georgian Bay/ south-west Muskoka, the latter area having 35 species. Inspired by the number of herps he saw in Muskoka Barrens a few years ago, George organized an annual “Big Herp Day”. Having tallied 19 species during the previous two years, the target this year was 20.

We have one lizard species in Ontario, the Blue-tailed Skink, and it is abundant under and around exposed rocks.

Last year the group spotted four Massasauga Rattlesnakes, this year none, although George sees them commonly on the road on warm nights. Non-venomous snakes observed this year included the fossorial Ring-necked, Garter, Water, Red-bellied, and Ribbon Milk, the latter two now being on the Ontario species at risk list.



It was overcast for most of the day so turtles were not basking. Only Blanding’s and Painted were noted.

By flipping logs around Hardy Lake, the group found Red Eft, Spotted Salamander, Red-backed Salamander and Blue-spotted Salamander. On the previous day, while scouting, George was pleased to find a pond with a congress of chorusing Mink Frogs. Frogs, both Green and Bull, and Leopard and American Toad were abundant but not calling on the “Big Day”. So, although a few Mink Frogs hopped about on the verge of the pond, the group did not have the full experience.

Live herp species seen for the day numbered 16, plus Spring Peepers heard, and Snapping Turtle eggs and a dead Smooth Green Snake observed, for a total of 19, one short of the goal. As a bonus, the group discovered a northern Black Widow spider at the extreme edge of its range.

But what about Wood Frog, not recorded that day? George put about twenty candidate tadpoles in an aquarium and waited for results. In quick order they sprouted legs, dehisced their tails, turned warty emerald green and left home; nary a Wood Frog amongst them! Field guides suggest Gray Tree Frog tadpoles have a distinctive stoplight (red and green) tail pattern lacking on these individuals. The guides must be wrong.

### **Jim Bendall- Changing Populations of Blue Grouse on Vancouver Island**

Jim did field work on Blue Grouse (now Sooty Grouse) populations in the Campbell River valley starting about 1952. There was one road out of the area so all hunters went through a checkpoint. When Jim began the study, the limit was five birds/hunter/day with a possession limit of thirty. There were tremendous populations of Blue Grouse then; sometimes he checked whole truckloads of harvested grouse. By 1972, grouse numbers were severely depleted; the consequence of a steady decline since the 1930s when



censusing commenced. In forty years, the grouse had been almost eliminated; there are probably very few now.

Jim's studies of the grouse included aging and sexing birds. There seems to be a good production of chicks that would more than compensate for decline. Mass of adult females actually increased from 800 grams in 1950 to about 920 grams now. So the hens are still choosing the better habitat. The problem is there is so little of it left. Changing forestry practices including massive clear-cuts, single species tree plantations and the absence of forest fires are the major factors. Jim still spends a day or two every other year in the area and continues to collect records. When he goes back now, they are logging trees that were planted when he first worked there. Now he has to go up the mountainside above timberline to see Blue Grouse.

Much of this information is contained in the monograph: [Blue Grouse: Their Biology and Natural History](#) by Fred C. Zwickel and James F. Bendall published by NRC Research Press.

### **Trudy Rising- Brazil Travels, August- September 2010**

Trudy and Jim Rising were fortunate to visit several natural areas in Brazil including Itatiaia Park near Sao Paulo, the Pantanal in Mato Grosso state, and Cristalino Jungle Lodge in Amazonian rain forest on the banks of the Rio Cristalino in the extreme north of Mato Grosso.



Trudy was delighted by the colourful birds and the spectacle of the Pantanal during the dry season. The Rufous-collared Sparrow was very common as were Jabirus by the hundreds and the very exotic looking Hyacinth Macaw and Scarlet Macaw. Some of the other birds seen with their guide, Raphael Santos, were Sunbittern (photo by Raphael), a young Harpy Eagle, Gray-necked Wood Rail, Rufescent Tiger Herons, Sungrebes, Scarlet-headed Blackbird, Mato Grosso Antbird,

Pygmy Kingfisher, a Spectacled Owl, and the unspectacular endemic Chapada Flycatcher.

Pantanal waterholes were surrounded by hundreds of caimans, while capybaras cavorted in the fields. Some people visit the tropics many times but never see Giant Otters. Trudy and Jim were fortunate to see them on two different occasions on their first visit to Brazil.



Also seen were tropical frogs and a five foot Anaconda. It had been spied by a volunteer guide who was star-gazing by the river. The snake was brought to camp for all to appreciate and then released.

## **NOTES & OBSERVATIONS**

*Helen Juhola.* Helen and Aarne cruised the Rideau Canal during late May. They were pleased to see large flocks of Black Terns at Kingston Mills. Painted, Map and Snapping Turtles all showed nesting activities, remarkable since on a previous visit about ten years' ago the same activity had been noted on June 21 – a full three weeks later.

Helen also highly recommended a book titled *The Secret Life of the Natural History Museum Dry Store Room* by Richard Foley. The book offers an insight into the fascinating world of the Natural History Museum of London. The author writes not only about the exhibits, but also about the work behind them and the men and women who carried out this work. Helen has a copy which members may borrow.

She also shared an article from the Times Colonist of Victoria BC, April 6, 2010 which suggests that howling with wolves may stress the animals either psychologically or physiologically.

*Jock McAndrews.* Jock was recently dragged off to Peter's Woods, Northumberland County by his dogs. The giant White Pines are still as impressive as ever. Along the trail the conservation authority has recently felled several snags. Jock was impressed by the number of woodpecker cavities now available for inspection in the fallen trees.

*Jean Iron.* Jean distributed some clay pigeon shaped rocks which had eroded out of the James Bay limestone. ROM experts labelled them "tabular coral": Jean had another name for them.

*Hugh Currie.* Hugh reported on the once-in-a-lifetime spectacle of one and sometimes two Long-tailed Jaegers patrolling the Hamilton beach over the past several days much to the delight of birdwatchers. *"A near adult Long-tailed Jaeger with long tail streamers has been patrolling close to shore at Hamilton's van Wagner's beach for the past two weeks. Until this year the only reliable way for a southern Ontario person to see one is to go to the Arctic. It is best seen from Hutch's restaurant. Sometimes one or two juveniles are seen here and there is a good chance of seeing Sabine's Gulls in the distance."*

Bruce Falls thanked the speakers.

The meeting was adjourned at 9:39 p.m., members and guest then partaking of refreshments which were organized by Ann Falls and Trudy Rising.

## **CORRESPONDENCE**

Ron Pittaway on Sept. 22 emailed: *"Jim Bendell mentioned the passing of Stu MacDonald at the Brodie meeting last night. Stu took me on my first Christmas Bird Count in 1959 when I was twelve. Even though Stu had forgotten his binoculars that day, we (he) found the second highest number of bird species on the count. He astonished me with his ability to lure in birds by imitating a wounded rabbit. Stu did the line illustrations and range maps in The Birds of Canada and his study skins are among the best I've seen. The obit below mentions only some of his many accomplishments."*

<http://www.legacy.com/can-ottawa/Obituaries.asp?Page=LifeStory&PersonID=145503566> (some of this obituary follows)

“Stewart MacDonald was born in Bayhead, NS in 1927 and traveled to Ottawa to work for the National Museums of Canada at the Victoria Memorial building on McLeod Street. Responsible for collecting, mounting and helping to create many of the dioramas that filled the mammal and bird halls until recently, Stewart’s achievements were visible and enjoyed by generations both young and old. Opportunities for travel into the High Arctic after WW II began with the Smithsonian Institute based with the crews operating remote weather stations across the Arctic. This introduction brought a love for a part of Canada that few people experience and one that would never leave Stewart's heart. Stewart was one of a few who helped establish the baseline studies and the collections of flora, fauna and conditions at a time when the influences the Arctic feels today were not at issue. Tirelessly trudging with a toboggan and camera, Stewart walked where few (if any) footsteps had preceded. Stewart retired from a long and distinguished career as Curator of Vertebrate Ethology with the Canadian Museum of Nature. Some of his efforts, over those years, culminated in the establishment of the High Arctic Research Station at Polar Bear Pass on Bathurst Island, NU and its protection as a National Wildlife Area. Photographs from his years in the Arctic compiled a traveling exhibit, An Arctic Oasis, which circled the world for a decade and brought recognition to the issues of Arctic Canada. For his pioneering work in the Arctic, Stewart was awarded the Canadian Geographic Society's Massey Medal in 1992. Notwithstanding these accomplishments, Stewart was most proud of, and will also be remembered for, his mentoring work with the many students and young scientists who went on to build the body of knowledge about the Arctic that we rely on today.”



David Hussell, Sept 22: *“I first got to know Stu as a calm and firm voice on the radio when I was doing my Ph.D. research on Devon Island in 1966 -1969. His camp on Bathurst Island, ours on Devon, and several other remote camps were in daily contact with the Polar Continental Shelf base at Resolute.*

*After we moved to Kanata in the 1990s, I ran into him a couple of times in the local hardware store. It turned out that he lived a few kilometres up the road in Dunrobin. At that time Jeremy was a regular attendee at the Macoun Field Club, the teenage naturalist club attached to the National Museum and the Ottawa Field Naturalists. I discovered that Stu had earlier been the adult mentor of that club for a few years. I said something to the effect that although I didn't have the patience or talent for that task myself, I very much admired those who fill that important role for young naturalists. There was a pause; then he said in his slow and quiet voice: “You know, David, as far as I am concerned, it is the only route to immortality.” It took me a few moments to understand what he meant; and Ron: I suppose that you are living proof of the wisdom of that observation, and I am sure that there are many others.”*

### **NEXT MEETING**

The next meeting will be held at 7:30 pm on Tuesday, Oct. 19 in Room 432 of the Ramsay Wright Zoological Laboratories. The speaker will be Ken Shen of the ROM who will talk on “Peking Man.”