

THE
BRODIE
CLUB



ROYAL ONTARIO
MUSEUM OF ZOOLOGY

THE 1,049th MEETING OF THE BRODIE CLUB

The 1,049th meeting of the Brodie Club was held at 7:30 pm on Tuesday, September 20, 2011 in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Chair: B. Falls
Secretary: E. Addison

The meeting was attended by 24; 23 members and 1 guest.

Roll Call:

Present: Abraham, E. Addison, J. Bendell, Y. Bendell, Bertin, Boswell, Crins, Dunn, Eadie, A. Falls, B. Falls, D. Hussell, J. Hussell, Iron, Lumsden, McAndrews, Pittaway, Riley, J. Rising, T. Rising, Seymour, Tomlinson, Young.

Regrets: R. Addison, Bodsworth, Bousfield, Bryant, Currie, Curry, Gray, A. Juhola, H. Juhola, Larsen, Machin, Norm Martin, Norma Martin, Rapley, Slessor, Strickland, Sutherland, Tasker.

Guest: Sharon Hicks, guest of J. McAndrews

Minutes: Minutes of the 1048th meeting were moved for approval by Oliver Bertin and seconded by David Tomlinson.

Announcements and New Business

- Bruce Falls/Ed Addison announced that the speaker at the October meeting [October 18] will be Jeremy McNeil, an ecologist from University of Western Ontario. His topic is Lepidoptera Migration in Response to Habitat Change.
- 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 take notes for one or two meetings during the year.

SPEAKERS:

Eight members made presentations.

Bruce Falls –Remembering Yorke Edwards

“Our corresponding member Yorke Edwards died on August 16th of this year at 86 years of age and his wife Joan died August 26th. The Edwards were good friends of Ann and me, and of the Bendells.



I first met Yorke in Jim Baillie’s office at the ROM when we were high school students. Yorke and I became the best of friends. We went on many natural history trips with our friends but often just walked and talked about our hopes. Yorke hoped to work in a museum. Jim Baillie encouraged us and other young naturalists in many ways. When J.H. Fleming died and left his collections and library to the museum there were many duplicate publications and Jim sold them to us for \$2 a foot. Yorke and I each acquired several feet. We were pretty broad in our selections and I remember joking about a publication on the worms of Siberia. Jim also picked up used binoculars and sold them to young birders. That is how Yorke and I got our first 7x50s – spoils of war.

The first mention I found of Yorke in the Brodie Club minutes was a talk he gave in 1946 about his mammal studies at the newly established Wildlife Research Station in Algonquin Park. I was a guest at that meeting. Yorke encouraged me to get a job at Wildlife and he, Jim Bendell and I shared a great summer there in 1947. Yorke became a member of the Brodie Club on March 18, 1947 at the 442nd meeting. Later records showed that he chaired a meeting in January 1951 but later that year he joined the corresponding membership as his career took him away from Toronto. As we all know he took corresponding literally and contributed to our newsletter over many years.

One of the things Jim Baillie emphasized was the keeping of good notes, and Yorke took this very seriously. He began writing accounts of our field trips when we were in high school. His daughter tells me that he made his last entry a few days before his death. Imagine a nature diary covering seventy years!

Yorke graduated from U of T in forestry about 1948. He moved to UBC for graduate work with Ian McTaggart-Cowan, a distinguished wildlife biologist. Yorke’s biological research was primarily as a mammalogist.

I won’t give details of his career because you will receive obituaries by his colleagues with the minutes (appended at the end of the minutes). In 1951 he joined the BC Forest Service and championed nature interpretation, founding “nature houses” in BC parks. In 1967 he moved to the Canadian Wildlife Service and established Wildlife Centres across Canada such as the one at Wye Marsh. In 1972 he finally got his museum – the Royal BC Museum in Victoria, first as assistant director and then director from 1974 until his retirement in 1984. Yorke was an enthusiastic leader, an influential writer and an inspiring speaker in the cause of nature interpretation and conservation. The Brodie Club has lost a distinguished member and I have lost a dear friend.”

John Riley –Labrador

John was in Labrador for a helicopter reconnaissance of some land areas. They flew as far north as Nain. John showed only a handful of photographs, but each was of high impact. In showing a tailings pile from an iron ore mine, John noted that there are five or six large companies mining for iron in the Labrador trough. Some of these endeavours are massive with one company about to hire 4000 employees. The Labrador trough is also rich with fens.

Another photo showed trails produced by the George River caribou herd among ground lichens. John noted that the George River herd was recently large but has declined drastically. In four days of flying not one caribou was seen. This was unprecedented for the experienced biologists with whom John flew.

John showed photos of two plant species common in Labrador and rare in Ontario. One was the bog aster, *Eurybia radula*.

Bill Crins –Mata Atlântica Forest of Brazil

The Mata Atlântica has been known for its great biodiversity with about 23,000 species of plants and 1,000 species of birds. No large tropical rain forest has suffered as much loss of habitat. Only seven percent of the original biome remains.

Bill visited the Mata Atlântica in SE Brazil last October, staying first at the Guapi Assu Bird Lodge. Some species that Bill saw [and many of which he showed pictures of] included: Chestnut-backed Antshrike (*Thamnophilus palliatus*); Common Potoo (*Nyctibius griseus*) cleverly disguised as the end of a bare branch; Tropical Screech Owl (*Megascops choliba*); White-eared puff bird (*Nystalus chacuru*); Capybaras (*Hydrochoerus hydrochaeris*); a peacock butterfly; a frog disguised very much like a leaf; a beetle and flying ant with there being a convergence of appearance between these members of two distinct groups of insects, at least when the ant's wings were closed; orchids and a lily.

From the second location visited, Bill showed photos of: Green-headed Tanager (*Tangara seledon*), a bird strikingly bright in colour; Maroon-bellied Parakeet (*Pyrrhura frontalis*); Brazilian Tanager (*Ramphocelus bresilius*), spectacularly red in colour; Black-breasted Plovercrest Hummingbird (*Stephanoxis lalandi*), a highlight of the trip; Streamer-tailed Flycatcher (*Gubernetes yetapa*); Three-toed Jacamar (*Jacamaralcyon tridaetyla*); lizards; and a large *Scleria* sedge.

Jean Iron –Red Knots and Other Shorebirds of SW James Bay

Jean returned to the north between 16 July to 14 August 2011 to study shorebirds in southwestern James Bay as a part of the survey led by the Royal Ontario Museum. The main focus of the study was surveying for the rufous subspecies of the Red Knot (*Caladris canutus rufa*) which is endangered provincially and nationally. Sponsors of the study include the Royal Ontario Museum, Moose Cree First Nation, Ontario Ministry of Natural Resources, and Canadian Wildlife Service.

A number of sites were examined including Long Ridge, Little Piskwamish and North Point. Jean has previously worked at Long Ridge. This year she was at North Point which is closer

to Moosonee. This year's team included Minnie Sutherland, a Moose Cree First Nation (MCFN) woman who was new to birding and a great addition to the team. Any future conservation initiatives for shorebirds in this part of the Hudson Bay Lowlands will require the support of the MCFN.

In the mid-1970s, 2500 Red Knots were observed in one day at North Point. This summer from the three abovementioned camps the maximum number of red Knots seen was 5930 on 1 August. Since this number is 25-30% of the estimate of all members of the subspecies, these three sites are extremely important to the future of the birds. The Red Knots use these areas on their return from breeding in the Arctic. They stop over and forage on the prolific invertebrate fauna prior to their long flights southward. With use of data loggers, red Knots have been documented to fly 5100 km south from James Bay to the Caribbean islands in eight days. There must be some excellent foraging areas used in the winter range also since one bird has been documented to fly 8000 km north in just six days! The longest stay documented for individual Red Knots on the James Bay study sites have been 18 days in 2010 and 16 days in 2011.

Yellow Rails (*Coturnicops noveboracensis*) were not observed this year despite 60 being seen in 2009. It was speculated that low water and drying out of tidal pools may have been an influencing factor. Three-spined Sticklebacks (*Gasterosteus aculeatus*), a 'species of concern' in Ontario, were found dead in the dried-out tidal pools.

The maximum count of Semipalmated Plovers (*Charadrius semipalmatus*) seen from the three study sites was almost 34,000 on 7 August. Outside of the Bay of Fundy, these study sites perhaps represent the largest documented concentration of Semipalmated Plovers.

The approximately 45,000 White-rumped Sandpipers (*Calidris fuscicollis*) from the three study sites on 11 August may represent the highest concentration of this bird species in eastern North America.

With several million shorebirds using the Ontario James Bay shoreline as feeding grounds prior to migration, there are hopes that the data collected from the study will encourage some protective designations.

This summer a Bronze Copper butterfly (*Lycaena hyllus*) was observed at North Point. In 2010 Don Sutherland collected a Bronze Copper at Long Ridge. These records are the most northerly sites at which this species has been reported in Ontario.

Harry Lumsden –Behavioural Responses from and Injuries to Trumpeter Swans from Snapping Turtles

Predation on Trumpeter Swans (*Cygnus buccinator*) by Snapping Turtles (*Chelydra serpentina*) was documented in Rhode Island in 1972. In Aurora, Harry has lost some cygnets and suspects Snapping Turtles as the cause. In 2007, Harry first observed an adult Trumpeter Swan doing a 'stamping attack' on the back of a Snapping Turtle, moving aside and then attacking again if the turtle moved. Harry has now observed this behaviour a number of times involving birds of both sexes and birds that were young of year, four, six, and nine years of age. Attacks can be as brief as two stamps or as prolonged as seven minutes.

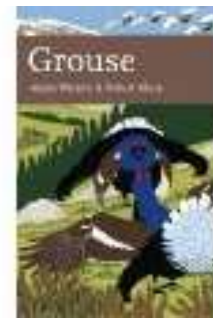
Harry postulates that this is an innate behaviour and that a turtle moving in the water is the specific stimulus. Harry's daughter, Deborah, made him a dummy turtle to test these ideas. The pulling of the dummy through the water did not elicit 'stamping attacks' but did stimulate a 'forward alert position' which the birds hold, a behaviour that may indicate the location of danger.

The swans would also initiate duets where the male would call first and the female would respond with a call of a different pitch within one second of the male ending its call. Duets are observed to continue for prolonged periods. Swans have conducted duets when Harry has trapped cygnets. The function of this behaviour may be to alert local communities, swans or otherwise, of present danger.

Injuries observed in swans were shown and were mainly restricted to damage of the bills and face, often resulting in upper and lower mandibles not being aligned.

Jim Bendell –New Books on Grouse

Jim described and gave a brief review of two recent books on grouse. The first, Collins New Naturalist: The Grouse Species of Britain and Ireland, was written by the well-known scientists and authors Adam Watson and Bob Moss. It covers a thorough discussion of the wide range of aspects of grouse biology that has been a part of the seminal research of Watson and Moss and their colleagues, including their work on population regulation where they describe nothing as simple as density dependent regulation. They note the potential role of kinship (tolerance of other family members) at higher densities.



The second book, Greater Sage-Grouse: Ecology and Conservation of a Landscape Species and Its Habitats, was published in May, 2011 for the Cooper Ornithological Society. It also addresses the conservation of species. Jim noted that the layout projected the areas of emphasis or lack thereof. The only picture of a sage grouse was on the cover of the book. The contents of the book contained little about sage grouse emphasizing instead the sagebrush (*Artemisia tridentata*) ecosystem and other factors that may be leading to the current rapid reductions in sage grouse populations.

Oliver Bertin –Brier Island, Nova Scotia



Oliver Bertin visited Brier Island, the home of Joshua Slocum, a Canadian sailor who was the first person to circumnavigate the world single-handed. Brier Island is an isolated outpost, 2.5 hours and two ferry rides south of Digby, N.S., at the end of a long sandy peninsula that juts out into the currents that swirl around the mouth of the Bay of Fundy.

Brier Island has only one store. The island is full of wild and windy moors, wetlands, forest, interesting geology and wildlife that have made it an ecotourism destination. The Nature Conservancy of Canada owns 1,200 acres -- one-third of

the island. Unlike the sandy islands to the north, the geology is basalt with quartz and agate veins.

The flora include fields of wild Brier Rose (*Rosa canina*), wild orchid, the endangered Eastern Mountain Avens (*Geum peckii*), Bluebead Lily (*Clintonia borealis*), Pink Lady's Slipper (*Cypripedium acaule*), Fireweed (*Epilobium angustifolium*), Yellow Iris (*Iris pseudacorus*), Blue Iris, Shrubby Cinquefoil (*Dasiphora fruticosa*) and Pitcher Plant.

Oliver was very interested in the aquatic life, which was surprisingly rich because of the swirling of the Atlantic and Fundy currents around the island. A pair of 45-foot Humpback Whales (*Megaptera novaeangliae*), Seals, Puffins (*Fratercula* spp.), Guillemots, Petrels, Gulls, Northern Fulmars (*Fulmarus glacialis*), Cormorants, Northern Gannet (*Morus bassanus*), Jaegers, Shearwaters and Terns were observed. There is an active fishing industry where the locals go after Lobster for two months in the winter and long-line for Halibut (*Hippoglossus sp.*) and Pollock (*Pollachius sp.*) in the summer. There is a small fish farm that keeps the local environmentalists busy.

Jeremy Hussell –Nesting Records for Iqualuit, Baffin Island

While working as a field assistant for Wheatear (*Oenanthe oenanthe*) research around Iqualuit, Jeremy walked approximately 300 km searching for nests. While doing so he documented with both observations and photos young of the year White-crowned Sparrows (*Zonotrichia leucophrys*), Savannah Sparrows (*Passerculus sandwichensis*) and Dark-eyed Juncos (*Junco hyemalis*) being reared by adults.



Adult and fledgling White Crowned Sparrows (D. Hussell photo)

In the eastern Arctic, the nesting range of none of these species is reported to include Baffin Island. Upon being asked if he thought that these new records might be indicative of trends in global warming, Jeremy responded that it would be difficult to so conclude since his making these previously unreported observations could be influenced by the fact that nobody has likely previously placed comparable effort in searching for passerine nests in the area.

David Hussell noted that care must be taken in conjecture about the effects of global warming as reflected in reports of passerine nests. This is due to large variation in nesting occurrence between years. David cited an abundance of American Robin (*Turdus migratorius*) in Iqualuit annually from 2007 to 2010 and none present in 2011.

OBSERVATIONS:

The Bendells report possibly observing a Grey Kingbird (*Tyrannus dominicensis*) at their property in the Ottawa Valley.

CORRESPONDENCE:

From Ed Bousfield.. "Sorry, unable to attend this always enjoyable meeting. Expect to complete work on arctic amphipod crustaceans at the CMN lab here (Ottawa) by December, and back in the Toronto region by January."

From oliver.bertin@utoronto... "I met Yorke Edwards seven or eight years ago when I was editing the Brodie Club newsletter. Yorke sent me a typically gentle note asking if I would like a short reminiscence of his life as a naturalist. The answer, of course, was: "Yes. I'd love it." That one-line message answer opened the gate to a long and fascinating series of well-written articles about his life as a provincial naturalist in British Columbia.

He would send those articles right on schedule every month, a day or two before the newsletter deadline. Sometimes, he would tentatively ask if I enjoyed the stories and would I like another. I would reply, "Of course," and he would go back to his computer and send me another within hours.

He obviously enjoyed chatting about his days in the 1940s and 1950s, traveling all over the country, through woods and mountains, but as he got older, he would sometimes have difficulty getting his thoughts down on paper. But he never missed a deadline and never objected to my polishing.

He was an excellent naturalist, a wonderful correspondent and a fine writer. I still miss him."

NEXT MEETING

The next meeting will be held Tuesday, October, 18th at 7:30 pm in Room 432 of the Ramsay Wright Zoological Laboratories. Jeremy MacNeil from University of Western Ontario will speak on Lepidoptera Migration in Response to Habitat Change.

The meeting was adjourned at 9:22 pm.

Remembering Yorke Edwards, former Director, Royal BC Museum

Courtesy Royal BC Museum

Victoria, BC - Yorke Edwards, biologist and director of the Royal BC Museum from 1975 to 1984 died on August 16 at age 86.

For almost half a century Yorke Edwards was a pioneer in wildlife biology, nature education, conservation, and museum life, stimulating people to think more deeply about the world and our place in it.

"His commitment to natural history and its interpretation was evident in all he accomplished. We are sad about this loss, particularly for his family, but also for those that worked with him here and elsewhere," said Royal BC Museum CEO Pauline Rafferty.

Roger Yorke Edwards was born in Toronto in 1924. As a youth, along with his friends, John Crosby, Robert Bateman and Bristol Foster (all of whom also become well known in biological circles) he was an enthusiastic member of the Royal Ontario Museum's Intermediate Naturalists Club. In 1948 he received his bachelor's degree in forestry at the University of Toronto. He then came to UBC in Vancouver to study with Ian McTaggart Cowan; by 1950 he had his Master's degree in zoology and botany.

In 1951, Yorke began a challenging job as a research officer with the British Columbia Forest Service in Victoria. In those days, provincial parks were managed by the Forest Service, and much of his wildlife research was concentrated in places like Manning and Wells Gray parks.

Yorke championed a new cause in 1959 - nature interpretation in parks. He talked his superiors in the Forest Service into giving it a try. From meager beginnings it blossomed into a major undertaking. Over the years it brought nature houses, interpretive signs, nature trails, and naturalists talks to most parts of the province. Widely admired, the program set a standard for outdoor education across the country. In 1967 Yorke accepted an invitation from the Canadian Wildlife Service in Ottawa to create the same thing on a national scale. During the following years five Wildlife Centres sprang up across Canada, from Bonaventure in the Gaspé of Quebec to Creston in the Kootenays of BC

Yorke returned to BC in 1972 to become the Assistant Director of the Provincial Museum, and from 1974 to 1984 he was its Director. In the 1960s he had been president of the BC Museums Association and had written and spoken volumes on museums and the museum community. This, along with his museum experience in Toronto, and especially his extensive work in public education, prepared him for managing a major museum. His accomplishments while at the museum included: support for the Museum Train tour of the province from 1975-79; the cross-Canada tour of the First Nations Legacy exhibition; publication of several natural history books; the opening of the Natural History gallery in 1979; increasing support for the Friends of the Provincial Museum; beginning the popular Newcombe lecture program; and more.

Yorke served on the executive boards of many conservation and natural history organizations ranging from the Canadian Nature Federation to Owl and Chickadee magazines, from the BC Forest Museum to the Nature Conservancy of Canada. He won many awards for his dedication to the understanding and preservation of Canadian nature, including the Interpretation Canada Award for Outstanding Achievement, and Canada's 125th Year Medal. He was a Fellow of both the Royal Geographical Society of Canada and the Canadian Museums Association. The scope of Yorke Edwards' writing is impressive; his publication list includes over 320 entries. Some of his wildlife management papers, especially those based on his studies in Wells Gray Park, are classics. He also wrote widely on birds, but perhaps his most influential works are those dealing with wildlife conservation and park interpretation. He recognized the value of writing for children and worked hard at it. Naturalists' newsletters and magazines are full of his articles, as are journals and books about museums. His book, The Mountain Barrier, was a popular treatment of the ecology of the mountains of western Canada.

Dr. Rob Cannings, current Curator of Entomology at the Royal BC Museum and a world expert on dragonflies, knew Yorke well. "While a young wader of ponds and student of nature growing up in the Okanagan, I counted Yorke Edwards among my biologist heroes. He was the inventor of the Parks Branch naturalist programs and their treasured nature houses. At 15 years old I was devastated when Yorke turned down my job application and said I was 'still a bit green.' But I got the job the next year and it was the beginning of what became my life's work. When I started working at the museum in 1980 it was the fulfillment of a dream cherished ever since I'd used the museum's old Handbook No. 2 to identify Long-toed Salamanders. I got the job not because of my relationship but because, under Yorke's influence, I'd become a generalist in natural history and public education, as well as a specialist in a particular discipline. He will be deeply missed by all who learned from him, as I did."

Thousands who have worked in - or visited - parks, wildlife centres, and museums, as well as those who have read his articles or heard his talks, will all carry a little bit of Yorke Edwards with them.