

THE BRODIE CLUB



Established 1921

Website: <http://thebrodieclub.eeb.utoronto.ca>

THE 1,085th MEETING OF THE BRODIE CLUB

The 1,085th meeting of the Brodie Club was held on Tuesday, 15 September, 2015 in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Chair: Bruce Falls

Secretary: Rose Addison

The meeting was called to order at 7:33 pm and was attended by 23 members and 4 guests.

Roll Call:

Present: E. Addison, R. Addison, Bryant, Crins, Currie, Curry, Daniels, Downing (corresponding member from Halifax), Dunn, Eadie, A. Falls, B. Falls, Hussell, Iron, A. Juhola, H. Juhola, Larsen, McAndrews, Peck, Pittaway, T. Rising, Seymour, Slessor, Zoladeski.

Guests: Penny Downing (guest of Michael Downing), Justin Peter (B. Falls), Dominique Stone (guest of B. Falls), Sharon Hick (McAndrews)

Regrets: Abraham, Bertin, Carley, Martyn, Obbard, J. Rising, Speakman, Sutherland, Tomlinson, J. Bendell, Y. Bendell

Minutes: Minutes of the June 2015 Field day and Picnic to the Mulock Cawthra property and member David Tomlinson's garden in Aurora were approved

Committee Reports:

Program: Ed Addison announced upcoming speakers.

Bill Crins will be the speaker for the Oct. 20 meeting. Bill's topic is Natural Heritage Systems of Ontario: The Essential Components.

Dates for remaining 2015 meetings are Oct. 20, Nov 17, and Dec. 15.

FON: Glenda Slessor shared materials sent from Ontario Nature and made them available to members. She noted that the financial support of the Brodie Club (\$300) for a student to attend the summer Youth Summit was much appreciated. Slessor also informed members of the recent decision of the Ontario Court of Appeal that ON Nature and Wildlands League have the right to appeal a lower court ruling which upholds a provincial regulation that exempts major industries from complying with the Endangered Species Act.

Refreshments: Ann Falls requested that additional members consider joining the Refreshments Committee.

New Business: Bruce Falls reminded members that elections for committees will take place at the October meeting. R. Addison circulated a sign-up sheet.

SPEAKERS: ANNUAL MEMBERS' NIGHT

Bill Crins: Natural History Highlights from a Trip to Ecuador, March 2015

Crins took us on a trip from the Pacific side of Ecuador, east over the Andes and down into the Amazon basin through several major ecosystems. Santuario Rio Silanche, a rain forest reserve with an observation tower right at the top of the canopy, provided incredible birding opportunities: Guayaquil Woodpecker and White-tailed Trogon were highlights. Also seen was a small Fer-de-lance, a venomous pit viper.

Bill praised a privately owned area, Refugio Paz de las Aves, as a “fantastic place for birds”... and if Bill is this enthusiastic, it must be! The owners have been able to habituate some birds to come out to worms at feeding stations. Andean Cock-of-the-Rock at a lek, Chestnut-crowned Antpitta and hummingbirds with the wonderful names of Velvet-purple Coronet and Violet-tailed Sylph were just a few of many birds observed here.

The height of land was crossed from west to east above the tree line at the Papallacta Pass (4,000+ m) and accomodation was at the San Isidro Lodge, an old hacienda in the cloudforest. White-bellied Antpitta, many hummingbirds (including the Chestnut-breasted Coronet and Black Inca) and a large rodent, the Black Agouti, were in this area.

A private 5000 acre refuge in the Amazon rainforest along the Napo river, the Sacha Lodge is known for three towers with a 200 m long elevated walkway through the forest canopy which provided more excellent viewing opportunities. The pheasant-sized Hoatzin was the highlight of this area. Squirrel Monkeys were feeding on tree fruits.

Flocks of Yellow-crowned and Mealy parrots were gathered along outcrops of the river for the magnesium and calcium available in the eroded cut.

A canopy tower at the National park, afforded excellent viewing opportunities. As well as a total of 559 bird species, Bill observed cicadas, skinks, geckos, lizards, black marmosets and one of several monkey species.



Birds at Refugio Paz de las Aves: Violet-tailed Sylph (upper left), Andean Cock-of-the-Rock (upper right), Rufous-breasted Anthrush (lower left) and Giant Antpitta



A sample of insects

Bob Curry – Observations of Summer Ramblings

Curry described his summer of pursuit of rare Ontario flora, fauna and what is purportedly the prettist waterfall in Ontario, Inglis Falls, which is at the south end of Owen Sound. Bob went to Ottawa on four different occasions, each time hoping to see a Little Egret. It wasn't until he was in seaching for *Platanthera grandiflora* (Large Purple-fringed Orchid), and *P. psycodes* (Small Purple-fringed Orchid), that he came across the elusive egret by chance. Another item on Bob's list was Pinedrops, *Pterospora andromedea*, also known as Giant Bird's Nest. This is an ectoparasite connected to the roots of pines by a mycorrhizal fungus, which he observed in mid July at Braeside near Renfrew. Another rarity was *Platanthera flava* var. *herbiola*, a tubercled orchid. It is classified as S3-vulnerable and was seen at Eels Creek, Peterborough.

Several rare dragonflies were found, including Stygian Shadowdragon (July 16), Broad-tailed Shadowdragon (July 18) and Tiger Spiketail. Only two colonies are known for the Oak Hairstreak (photo below).

Curry had seen a Hog-nosed Snake near Lake Erie many years ago and found a second this summer.



Maine Snaketail (*Ophiogomphus mainensis*)
Known only as larvae until a year or two ago



Oak Hairstreak (*Satyrrium favorius*)
NE of Sarnia, Lambton



Dragonfly expedition (Bill Lamond, Curry, Daniels – photo by Bryant)
Opeongo dock at sunset

Sandra Eadie- Macquarie Island and the sub Antarctic islands of New Zealand

Eadie visited several sub-Antarctic Islands on the fifty-passenger ship The Spirit of Enderby. The vegetation of Enderby Island in the Auklands was of note: tussock grasses gave cover to many seals, windswept trees known as ratti are reminiscent of a haunted forest, and a species of daisy with amazing large purple flowers was one of the megaherbs characteristic of these islands (see photo).

Albatross, penguins (Snares, Yellow-eyed, King, Gentoo, Erect-crested and Royal), flightless teal and cormorants were a few of the birds seen. Kiwis, looking like little furry animals scurrying in the darkness, were seen on the sand beaches of Stewart Island.

Macquarie Island was the only island with snow-capped mountains. The island had just been declared rodent-free after a programme to remove rats, cats and rabbits. They are now working on South Georgia.

Sandra commented on the beauty of Campbell Island where a boardwalk provides good footing, whereas the Bounty Islands have no permanent vegetation as they are so windswept and buffeted by the ocean.



A megaherb: Campbell Island Daisy
(*Pleurophyllum speciosum*)



One of the Bounty Islands

Jean Iron- Wildlife of Iceland, James Bay and Arctic Canada in 2015

During the summer of 2015, Jean travelled to Iceland and the Canadian Arctic as a naturalist leader with Quest Nature Tours and Worldwide Quest. She also volunteered to survey shorebirds on James Bay. Her presentation summarized highlights from these three destinations.

Iceland from 30 June to 10 July. Iceland's seacoasts have spectacular bird cliffs suitable for nesting alcids: Thick-billed Murres, Common Murres comprising both the regular morph and the "bridled" morph, Razorbills, and Atlantic Puffins with a population of about 3 million in Iceland. However, a recent population decline in puffins may be related to a reduction in sand eels in the waters around Iceland. Also nesting on the cliffs were Black-legged Kittiwakes and Northern Fulmars. Iceland's specialty ducks and breeding European shorebirds were a big attraction. The Gyrfalcon is Iceland's national bird. Seeing two Gyrfalcon nest sites was a thrill; one had an adult feeding a fluffy white juvenile, and the other had four gray morph juveniles.

James Bay from 31 July to 14 August. For the seventh consecutive year, Jean volunteered with Canadian Wildlife Service to survey shorebirds for the James Bay Shorebird Project along Ontario's southwestern coast of James Bay, a venture that documents the international importance of this subarctic stopover site to shorebirds. At North Point camp she tallied the daily total numbers of shorebirds and species, while other crew members banded shorebirds and sampled for invertebrates. Motus tracking devices were placed on these five species: Semipalmated Sandpiper, Hudsonian Godwit, White-rumped Sandpiper, the endangered *rufa* Red Knot, and Dunlin.

Researchers are gaining new knowledge about stopover timing of arrival and departure, length-of-stay, and migration routes and timing. 2014 tracking results are shown in the links below:

1. White-rumped and Semipalmated Sandpipers during their fall migration between James Bay stopover sites and the East Coast, after which most fly out over the Atlantic to South America ([see map here](#)).

2. Red Knots in spring migration 2014 moving from the East Coast to Hudson Bay coast and Nunavut and coming back during the fall migration, shown [here](#). Note they stopover on James Bay. More information about Motus Tracking [here](#).

Nunavut and the Northwest Passage from 24 August to 5 September. This expedition voyage through the Northwest Passage was organized for the Canadian Universities Alumni by Worldwide Quest. Ron Pittaway accompanied Jean Iron on this tour, which sailed 2077 nautical miles (3846 km) from Cambridge Bay to Iqaluit aboard the Akademik Ioffe, a Russian ship built for polar exploration and research. Arctic mammal highlights included Polar Bears eating beached Beluga Whales, a male Polar Bear eating a cub, Bearded Seal, Walruses, Arctic Fox, Narwhals, Orcas, Bowhead Whales, and Northern Bottlenose Whales, a rare sighting at any time and a first even for the experienced expedition crew. Birds of note: a very approachable flock of nine Rock Ptarmigan, Nunavut's territorial bird; juvenile white morph Gyrfalcons on an historic monument on Beechey Island; hundreds of Dovekies, most of which originated from breeding colonies in Greenland; and large numbers of Thick-billed Murres. Magnificent bird cliffs at Prince Leopold Island Migratory Bird Sanctuary in Lancaster Sound and Akpait National Wildlife Refuge on the east coast of Baffin Island are of national importance to several species of breeding seabirds.

Prince Leopold: 100,000 pairs Thick-billed Murres, 29,000 pairs Black-legged Kittiwakes, 22,000 pairs Northern Fulmars, 4,000 pairs Black Guillemots

Akpait: 133,000 pairs Thick-billed Murres, 20,000 pairs Northern Fulmars, 1200 pairs Black-legged Kittiwakes



Akpait NWR (Baffin Island), with 915 m cliffs and ca. 133,000 pairs of Thick-billed Murres. "Akpait" is Inuktitut for murres.



Thick-billed Murres



Bearded Seal, largest Arctic seal



Juvenile white-morph Gyr Falcon on Beechey Island, perched on memorial to French explorer J.R. Bellot, a searcher for the lost Franklin expedition

Sid Daniels- Red Admirals in my Garden

Over the years, Daniels has planted diverse species in his garden in an endeavor to enhance its attractiveness to numbers and species of butterflies. His list of “butterfly magnets” include

- Thistles- the single most attractive plant to butterflies, bar none
- Turtlehead – arrived in Sid’s garden in a clump of Pickerel Weed planted in a hand-dug small backyard pond about 30 years ago. A bubbler keeps the water open in winter.
- Currants – along with Turtlehead, a good food source for Baltimore Butterflies
- Yarrow – both red and yellow cultivars
- Butterfly Bush – a tender shrub in cultivation
- Lantana – annual in various colours
- Butterfly Weed – orange flowered native with a lot of nectar
- Nettles – food and shelter for Red Admirals



Sid has now narrowed his focus and is actively managing his garden to attract and support one kind of butterfly – the Red Admiral (photo at left). For many years he has watered and fertilized a patch of Wood Nettle, the preferred food of the Red Admiral.

Migrating Red Admirals arrive in Toronto in April and May. Sid brings stalks of nettle on which eggs have been laid indoors. After hatching each young larva folds a nettle leaf in half along the midline and “sutures” it almost

closed where it lives and eats protected. Once the larvae metamorphose into adults, Sid releases them into his garden, where on most days of the summer, the friendly, attractive Red Admiral adults can be seen feeding on sap. Sid notes that the success of eggs laid early in the summer is greater than those laid after mid-July, when many of them are parasitized by mites. (This also occurs in about 80% of Monarch eggs.)

For the second year, no monarch caterpillars were seen in Sid’s garden.



Sid and his garden



Chris Zoladeski- Invasive plants

Chris summarized how we see invasive plants in the field every day and lament their presence; many people have resigned themselves to this. We have approximately 3300 vascular plant species of which 37% are exotic, and of those, 440 species are considered invasive.

Chris reviewed numerous invasive species and some techniques that have been used in attempts to control them. While many, if not all of these species, including Yellow Iris, Purple Loosestrife, Common Buckthorn, Garlic Mustard, Dog Strangling Vine, Japanese Knotweed, etc., have many negative effects, it is important to ask if attempts at control are effective and worthwhile. It is also undeniable that although some invasive species reduce the occurrence of native species, the presence of invasives does increase species biodiversity.

Can some of these exotic species have useful functions within our ecosystems? If blame for the presence of exotics is to be assigned, do we “blame” the exotics or ourselves? These are all useful questions to address. Regardless, alien plant species are here to stay and we need to think within the context of longer temporal periods when addressing when, if, and how to control exotic plant species.

EDITING SECRETARY’S NOTE

Common names of birds have always been capitalized (e.g. Blue Jay), whereas plants normally are not (garlic mustard). Increasingly, caps seem to be applied to other groups of organisms (e.g. fish, butterflies), at least in non-scientific literature. It bothers me to have a mix of conventions in our newsletters, so here I have capitalized all common names, and I propose to continue unless the Club decides officially to adopt some other convention. (E. Dunn)

CORRESPONDENCE

Mary Boswell expresses her regret that she will be unable to attend Brodie meetings for the next several months. Mary has some mobility constraints and is preparing to move to a new location as the elevator in her building is to be replaced and will be out of service during that time.

Ken Abraham sent a paper by Frei et al. (2015) which reports that the strongest factor influencing success (negative) of breeding Red-headed Woodpeckers was the presence and frequency of European Starling, and hypothesized direct interference competition as the primary mechanism for the effect.

OBSERVATIONS

Observations were postponed to the next meeting, due to lateness of the evening.

NEXT MEETING

The next meeting will be on 20 October, 2015. Bill's topic is Natural Heritage Systems of Ontario: The Essential Components.

The meeting was adjourned at 9:37 pm.

TREASURER'S REPORT : 2014-15

Balance 1 Sept. 2014		\$1,674.22
Add: Memberships	375.00	
Less: F.O.N.	83.00	
Speakers	170.00	
Secretarial	<u>295.32</u>	
	548.32	
		<u>(173.32)</u>
Balance 1 Sept. 2015		<u>\$1500.90</u>

Aarne Juhola, Treasurer