

THE BRODIE CLUB



Established 1921

THE 1,069th MEETING OF THE BRODIE CLUB

The 1,069th meeting of the Brodie Club was held on Tuesday, 19 November, 2013 in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Chair: David Dunham

Secretary: George Bryant

The meeting was called to order at 7:30 pm and was attended by 35; 29 members and 6 guests.

Roll Call:

Present: Abraham, E. Addison, R. Addison, Aird, Bryant, Currie, Curry, Daniels, Dunham, Dunn, Eadie, A. Falls, B. Falls, D. Hussell, J. Hussell, Iron, A. Juhola, H. Juhola, Lumsden, Machin, McAndrews, Obbard, Pittaway, Reading, Riley, Seymour, Sutherland, Tasker, Zoladeski

Guests: Hernàn Lopez-Fernindez, Karen Alofs (guests of Dunn), Linda Pim (Aird), Rod Brook (Abraham), Sharon Hicks (McAndrews), Veronica Chavez (Tasker)

Minutes: Minutes of the October meeting were unanimously approved.

Committee Reports:

- Upcoming programs:
 - 17 December: *A celebration of Bruce Falls' natural history and science career, on the occasion of his 90th birthday* (E. Addison, Dunn and Bryant).
 - 21 January: Darryl Gwynne will speak on *Six-legged sex* (Brodie members doubtless realize this talk is about insects, and not ménages à trois.)
 - 18 February: A presentation on *Bhutan*, by Slessor and Curry
- Ontario Nature Representatives Slessor and Curry received a lovely thank-you for the Club's sponsorship of this year's Youth Summit. Overall, 104 youth from 49 Ontario communities attended. Several pages of photos and quotes from participants clearly illustrated the enthusiasm and excitement this event generated. For information on the 2014 summit, see www.ontarionature.org/youthsummit.

Announcements and communications:

- Iron announced that member Abraham is retiring from the Ontario Ministry of Natural Resources. A gala retirement party will be held 18 January 2014 in Peterborough, and an invitation (sent with this newsletter) has been extended to all Brodie members.
- The book: *Road Rocks: Ontario: Over 250 Geological Wonders to Discover* (Nick Eyles) was recommended by H. Juhola. In her words: "This is a book I'm really glad I bought! It's large (570 pages) with full colour photographs, lots of maps, a glossary and an index. All sites are described including their GPS locations-I've seen many of them. Now that I have bought and read the book, I know a lot more about the geology and history of Ontario. And

best of all, the author with his usual sense of humour, suggests that if you study the book and visit all the sites illustrated, you are on your way to being a geologist.”

- Sent with this newsletter is a recently published article by Lumsden: Trumpeter Swan (*Cygnus buccinator*) behaviour, interactions with Snapping Turtles (*Chelydra serpentina*), and their Pleistocene history. *Can. Field-Nat.*127(2):138-145.



SPEAKER: Falls introduced the speaker, Brodie member John Riley. Falls noted that Riley had read the entire English translation of *The Jesuit Relations and Allied Documents* (73 volumes) – an amazing feat of endurance – to gather information on Great Lakes ecology and ethnography during early European contact. John’s recently published book was the subject of his talk.

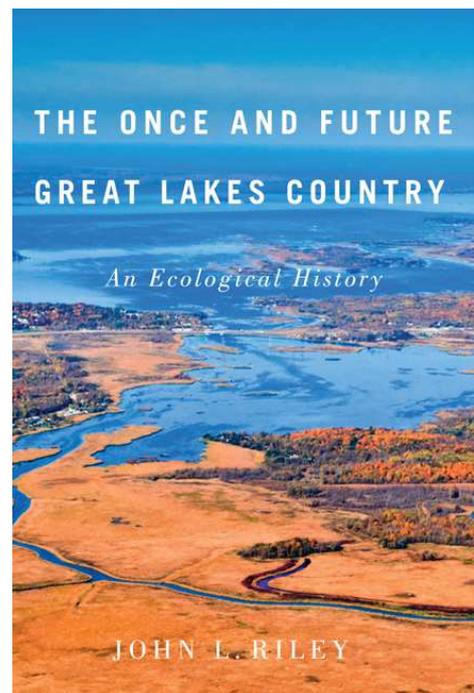
The Once and Future Great Lakes Country

Riley began by acknowledging support from the Metcalfe Foundation that permitted him to take a sabbatical to write this book, which he had been

contemplating for decades.

E. O. Wilson has stated that an ecologist should use the cool and dispassionate tone of a scientific observer rather than an activist while quantifying matters similar to a historian—true to their subject. Riley tried to take this tone while addressing the question “What was the Great Lakes country like before present?” Unlike Riley’s many scientific publications, the text uses story lines and first person narration, sometimes in the style of “literary non-fiction.” He begins and ends the book with descriptions of Mono, northwest of Toronto, an area very familiar to the author.

The Great Lakes represent the largest freshwater drainage in the world. There have been 25 glaciations in past two million years, filling and flushing this region like a toilet bowl. Riley discussed the discovery of Giant Pika bones in the Niagara Escarpment dated to 9000 years BP. Several Brodie members were involved in this discovery, and 10 members are mentioned in his book overall.



Blocked by geographic barriers except to the east, the Great Lakes region was a natural crossroads for native transportation, and the old lake plains on which most of us now live is well suited for agriculture. Until disrupted by Europeans, natives were in full occupation of the area. They employed poly-culture, cultivating many varieties of corn and apples. They encouraged wildlife such as elk and turkeys—a model of mutualism in land care. The target landscape of the natives was open grassland that was beneficial both for people and wildlife.

The key difference between Europeans and native Americans was immunological. Smallpox, influenza, and other fatal contagions arrived in the 1500's, and an estimated 95% of natives died at this contact. Following this there were 200 year of warfare between French and English and 200 years of peace.

The second half of the book discusses natural areas with an emphasis on grasslands. There is a myth that the first task imposed on European newcomers was to clear forests. In truth, new arrivals gravitated first to existing grasslands. As much as 20% of Ontario could have been grassland at the time of contact. Forests grew up after the demise of the natives.

The book presents many examples of ecological change since European settlement. For example, High Park was grassland until it was “nuked” with herbicides in 1926, eradicating many prairie species. In 1883, the Gooderham Distillery in Toronto fed 10,000 cattle! The Grand Trunk railroad began the cycle of infilling of Lake Ontario in the mid 1800's. Quotes from Elisabeth Simcoe and John Goldie describe the huge flocks of Passenger Pigeon, the “bison” of eastern North America. It is estimated that in the 1860's there were 3.6 billion pigeons—yet next September will mark the 100th anniversary of the death of Martha, the last of her entire species.

We now complain about an over-abundance of certain species that have become pests, such as Canada Geese and White-tailed Deer. Yet simultaneously, we are losing much of our natural biodiversity and abundance. American Beech is being affected with bark blight, and by the time the ash succumbs to emerald ash borer, we will have lost 1/4 of our tree species.

Another chapter of John's book is devoted to ancient forests. Mono was the site of heroic land clearing, and by 1910 it was a bald, overgrazed, true wasteland. Since 1920, forest cover has come back by 15% —an impressive story of re-wilding and restoration. Nonetheless, what we now have is a facsimile of European landscapes.

A century ago, when deforestation was at a peak, 80% of us lived in the country. Now 80% are in the cities and the Great Lakes population totals 45 million (with “Torbuffchester” being the biggest city state in the region). Most people's understanding of their role in nature is much less now than formerly. At the same time, wildlife is much more abundant now than it was 100 years ago, and we have had some spectacular results with re-wilding. But if we look at our area from outer space and see all the light pollution caused by human development; it should give us pause to wonder.

Riley concluded by reminding us that Darwin observed that nature is an impartial arbiter while natural selection is the engine of unavoidable change.

RESPONSES TO QUESTIONS:

- The Jesuits were a lot like the Taliban in their fervor and attitudes to other cultures, and were vanguards of French imperialism. While reading the “Jesuit Relations,” John had to read an awful lot of boring material to find the occasional nuggets of information useful for his book. These annual accounts were basically fund-raising documents, much doctored and “spun” as they were passed up the levels of French bureaucracy before reaching the king. Accounts by Brébois, a far more senior official, were much less adulterated. Writings by Champlain are even more interesting and useful, and John recommended the book “Champlain's Dream” (David Hackett Fischer, 2008). A new translation of Champlain's writing (first in a century) is coming out soon.

- Obbard asked whether John had read Joseph Boyden's new novel, "The Orenda," which concerns interactions among the Iroquois, Huron and Jesuits. John said not yet, and that he had been advised not to, as it emphasizes Jesuit torture in the name of religion. He observed that slant and propaganda is present in the writings from all points of view, and basically suggested taking everything you read with a grain of salt.
- The Giant Pika was probably about 50% bigger than extant North American pikas.
- Eadie said she had read accounts of dense woodland in Pennsylvania and other parts of the Northeast, whereas John's book documents more open habitat and extensive native agriculture. John indicated that certain areas were wooded but others were not, and also that much forest re-growth occurred between the peak of native land occupancy and European settlement.
- Zolodewski suggested "Paradise Found" (Steve Nicholls, 2009), which describes the U.S. and Caribbean at the time of European discovery, as a nice compliment to John's book.

The speaker was eloquently thanked by Don Sutherland.

Note: The 10 books John brought were quickly purchased, but they can be ordered online (<http://www.mqup.ca/once-and-future-great-lakes-country--the-products-9780773541771.php>). Up to 1 May, 2014, you can get a break by using the discount code RILEYJ13. (See order form sent with this newsletter.)

OBSERVATIONS

- Bryant noted that Comet Ison brightened materially last week, but is now (Nov. 25) probably too close to the sun for morning viewing. The big question is whether it will reappear in the evening sky or approach the sun too closely and be caught in its gravitational field.
- B. Falls indicated that hawk migration was slowing down, but reported a Golden Eagle seen about a week ago.

NEXT MEETING

The next meeting will be held Tuesday, December 17th at 7:30 pm in Room 432 of the Ramsay Wright Zoological Laboratories. The speakers will be Ed Addison and Ricky Dunn,

25 years ago – nuggets from past minutes

Nov. 1988:

Bendell found a crushed painted turtle on a road near his home, from which 8 eggs were extruded. Being so late in the year, he speculated the turtle was a liberated pet.

Savage reported that a 6-month old, 430 lb bison from the Rattlesnake Point Conservation Area was gored to death by another bison.

The meeting was adjourned at 8:47 and was followed by refreshments and informal discussion.

