

# THE BRODIE CLUB



ROYAL ONTARIO  
MUSEUM OF ZOOLOGY

## THE 986<sup>th</sup> MEETING OF THE BRODIE CLUB

The 986<sup>th</sup> meeting of The Brodie Club was held on Sept. 21 at 7:30 pm in Room 432 of the Ramsay Wright Zoological Laboratories of the University of Toronto.

Chairman: Bruce Falls

Secretary: Oliver Bertin

There were 23 members and one guest

Dorothy Andrews, guest of Fred Bodsworth

The minutes of the previous meeting were approved as written.

### NEW BUSINESS:

Secretary Oliver Bertin no longer has access to low-cost paper, envelopes and reproduction equipment, giving costs of between 60 cents and \$2 per member per mailing. Most members said they would be happy with e-mailed minutes. About 10 members prefer mail delivered by post. Ron Tasker offered to reproduce minutes if the club supplied the paper. Ellen Larsen offered the use of a scanner. Ken Reading offered a generous donation to “guarantee uninterrupted mailing of club meeting reports for some time.” His letter to the club is reproduced below.

John Riley asked whether Brodie Club membership lists could — or should — be used for pertinent and timely announcements, particularly for events that happen before the next meeting. One example was the last-minute offer of a tour of the Windmill Ranch at Carden Alvar on Sept. 19. There were no objections from the members present.

Bertin pointed out that e-mail addresses tend to go out of date. He asked members to inform him of any changes at his new address — [oliver.bertin@utoronto.ca](mailto:oliver.bertin@utoronto.ca) or 416-588-8520.

Riley invited members to a lecture on the Monarch Butterfly hosted by his organization, The Nature Conservancy of Canada. Lincoln Brower, research professor of Biology at Sweet Briar College, Va., and Jose Luis Alvarez of the Michoacan Reforestation Fund/La Cruz Habitat Protection Project in Mexico, will talk on *The Grand Saga of the Monarch Butterfly: Migratory biology and conservation issues*. The lecture will be held Oct. 21 on the 54<sup>th</sup> floor of the TD Bank starting at 6 pm. Members are requested to RSVP to Charity Landon at 416-932-0050 ext. 260.

**PHOTO REMOVED. IT WAS TOO LARGE TO E-MAIL**

Jean Iron displayed a photograph of The Brodie Club members in about 1930. Half of them were recognized.

Treasurer Aarne Juhola reminded members that their dues are due. The cost is cheap — \$10 for individuals and \$15 for members. Bruce Falls asked members to contribute some change to defray the cost of coffee and cookies.

Ellen Larsen is in Austria until December. She wrote to the club to say that she had found two plastic containers at her cottage following the field day in June.

**MEMBERS' NIGHT:**

Jean Iron showed slides of the June field day at Carden Alvar. Members saw 84 species of birds including several Loggerhead Shrikes, a snapping turtle, numerous cattle and some very interesting alvar plant species.

Jock McAndrews gave a short talk on Passenger Pigeon gizzard stones found in archaeological digs. The stones are a good indicator for Passenger Pigeons because they last far longer than the bones themselves.

There were an estimated three to five billion Passenger Pigeons across North America in 1850, centred in the Great Lakes Basin in southern Ontario and Ohio. They were a victim of over-hunting and habitat destruction and went extinct in 1914. These birds had large stones in their gizzard so they could macerate their food, large nuts, including acorns, beechnuts and small chestnuts.

Passenger Pigeon gizzard stones have been found in many archaeological digs in Ontario, according to late member Howard Savage who co-authored a book on archaeological animal finds. Stones that are 9,000 years old have been found in the Buffalo Science Museum Hiscock palaeontological site in upstate New York and at a Neutral Indian site near Grimsby that goes back to the 1640s. At the Grimsby site, the stones were found inside a clay vessel.

Jim Bendell suggested that some of the stones may have been too large for Passenger Pigeons based on his observations of grouse stones.

Bendell has studied population cycles in Snowshoe Hares in four forest types near Gogama. His studies appear to rule out predators as a cause of the famous population cycles in this species.

In the youngest ecotype, burn to 20 years, the hares took six years to appear and then increased in number at a fairly rapid rate. Most interesting, there were two population peaks, about 10 years apart.

In the next forest zone, medium-age pines, there was a moderate abundance of hares but no cycle. In a mixed forest that dates back to about 1910, there was a moderate hare population but no cycles. In the old pine environment, there was an exceedingly low hare abundance and no cycles.

Bendell has co-authored a book on grouse with Fred Zwickel. *Blue Grouse: Their biology and natural history* is published by the National Research Council of Canada and sells for \$64.

Tasker has studied bird populations in three study squares on Manitoulin Island for more than 40 years. There has been a steady and dramatic decline in the number of birds and the number of species over that time. However, several species have increased in number, including Bald Eagles, Wild Turkeys and House Finches. One of his sites, on the Lake Huron side of Manitoulin Island, has 136 species. It has been the square with the fifth-largest number of species in Ontario. The habitat has not changed markedly over the study period, but Spruce Budworm are slowly knocking out the Balsams, leaving room for maples to come in.

Falls has also found a decreasing number of species at two study squares near Apsley, north of Peterborough, and in Muskoka. Most field species have disappeared, perhaps because fields are getting smaller and more isolated. Species such as the Eastern Meadowlark, Bobolink and Savannah Sparrow are harder to find.

Fred Bodsworth has been writing a literature review on climate change. He noted that sulphate aerosols, produced by the burning of fossil fuels, are a significant part of the story because they block sunlight and have a cooling influence on climate. This is concealing and delaying the warming caused by CO<sub>2</sub>, and lulling us into a false confidence. However, the CO<sub>2</sub> we are putting in the air today will remain in the atmosphere and continue building up for a century whereas sulphates and other pollution particles drop out in days or a few weeks. This and the fact that we are slowly reducing sulphate emissions along with other air pollution will mean that the CO<sub>2</sub> warming effect will catch up and overcome the sulphate cooling that is presently offsetting it in industrial regions of the northern hemisphere, which is expected to produce more rapid climate warming in the decades ahead. Global warming, Bodsworth said, was a serious and costly threat we are leaving for our children and grandchildren.

Bendell saw 14 Wild Turkeys at the end of his driveway in the Ottawa Valley. He has also heard of a Grey Fox in the Ottawa Valley, a very rare sighting and the first in about 20 years. They are common south of the Great Lakes as far as Mexico, but are sparse in Southern Ontario.

Glenn Coady and several others visited the lower Shamattawa and Winisk Rivers on Hudson Bay on a trip for the Ontario Breeding Bird Atlas. It was a very cold spring, but they found more than 100 species of birds, and nests that included a Golden Eagle eyrie with two downy young; a Solitary Sandpiper nest with 3 eggs, a Sharp-tailed Grouse nest with 7 eggs, two Whimbrel nests with 4 egg clutches, as well as nests of Fox Sparrow, Lincoln's Sparrow, Wilson's Snipe, Merlin, Sharp-shinned Hawk (very northern occurrence) and an American Kestrel nest that was several hundred kilometres north of the atlas' previous nesting record.

Helen Juhola recommended *Geology and Landforms of Grey and Bruce Counties* because of its description of alvars. The book is published by the Owen Sound Field Naturalists.

Jennifer Young heard a Nightingale sing in downtown Berlin.

Hugh Currie said he had two atlas squares at Stoney Lake, NE of Peterborough. This year for the first time in the Peterborough region, there was a small colony of Caspian Terns numbering 16+ adults and there was one chick which successfully fledged.

Marc Johnson has noticed a huge kill-off of Eastern Hemlock in Killarney. There is no obvious pathogen.

#### NEXT MEETING:

The next meeting will be held on Oct. 19 at 7:30 pm. Diego Garcia-Bellido, a visiting scholar of the Royal Ontario Museum, will talk on exciting new developments of the Burgess Shale.

#### **Letter from member Ken Reading:**

Thornhill: 21/09/04

The Brodie Club:

Attached hereto is a contribution which it is hoped will guarantee uninterrupted mailing of club meeting reports for some time.

Though E-mail is currently popular as a means of communicating reports such as Brodie Club meeting transcripts I fail to see the means providing a reliable historical record.

I remember with fondness drawing a map of the then-known range of the Pilot Blacksnake in southeastern Ontario; the map was for use by Bob Lindsay during his talk about this reptile to The Brodie Club in, I think, the late 1940s. I still have the original map! It may be the only existing historical record of Bob's personal observations of a snake which is likely now even rarer in that area.

I personally believe that Brodie Club meeting transcripts deserve preservation upon paper for those who may follow us down the road of life to judge.

The Brodie Club is a unique organization, one providing a broad democratic forum – rare nowadays – in matters of truly scientific interest.

Sincerely,  
Ken Reading

**Brodie Club Outing to the Carden Alvar**  
**13 June 2004**

List of 84 species of birds seen or heard compiled by Jean Iron and Ron Pittaway.

Our tour began at the Cameron Ranch. After walking on the ranch where we saw many alvar plants and birds including the endangered Loggerhead Shrike, we drove to Ellie Larsen's for lunch. After lunch we walked on Ellie's

property, which has a variety of old fields and mixed forest habitats. We saw two adult Red-shouldered Hawks and nest with at least one juvenile. Later we went to Wylie Road to check the Sedge Wren Marsh but no wrens sang. On our way home, we stopped at Prospect Road marsh.

Highlights:

1. Great Blue Heron
2. Green Heron
3. Turkey Vulture
4. Canada Goose
5. Mallard
6. Osprey
7. Northern Harrier
8. Cooper's Hawk
9. Red-shouldered Hawk
10. American Kestrel
11. Wild Turkey
12. Killdeer
13. Upland Sandpiper
14. Wilson's Snipe
15. Ring-billed Gull
16. Caspian Tern
17. Rock Pigeon
18. Mourning Dove
19. Black-billed Cuckoo
20. Ruby-throated Hummingbird
21. Belted Kingfisher
22. Yellow-bellied Sapsucker
23. Downy Woodpecker
24. Northern Flicker
25. Eastern Wood-Pewee
26. Traill's Flycatcher (Alder or Willow)
27. Least Flycatcher
28. Eastern Phoebe
29. Great Crested Flycatcher
30. Eastern Kingbird
31. Loggerhead Shrike
32. Warbling Vireo
33. Red-eyed Vireo
34. Blue Jay
35. American Crow
36. Horned Lark
37. Tree Swallow
38. Barn Swallow
39. Black-capped Chickadee
40. Red-breasted Nuthatch
41. White-breasted Nuthatch
42. House Wren
43. Marsh Wren
44. Eastern Bluebird
45. Veery
46. Wood Thrush
47. American Robin
48. Gray Catbird
49. Brown Thrasher
50. European Starling
51. Cedar Waxwing
52. Yellow Warbler
53. Chestnut-sided Warbler
54. Magnolia Warbler
55. Black-throated Blue Warbler
56. Black-throated Green Warbler
57. Blackburnian Warbler
58. Black-and-white Warbler
59. American Redstart
60. Ovenbird
61. Common Yellowthroat
62. Canada Warbler
63. Scarlet Tanager
64. Eastern Towhee
65. Chipping Sparrow
66. Field Sparrow
67. Vesper Sparrow
68. Savannah Sparrow
69. Grasshopper Sparrow
70. Song Sparrow
71. Swamp Sparrow
72. White-throated Sparrow
73. Northern Cardinal
74. Rose-breasted Grosbeak
75. Indigo Bunting
76. Bobolink
77. Red-winged Blackbird
78. Eastern Meadowlark
79. Common Grackle
80. Brown-headed Cowbird
81. Baltimore Oriole
82. Purple Finch
83. American Goldfinch
84. House Sparrow