

## THE BRODIE CLUB

### Minutes of the 877th Meeting

Held 19 May 1992 in the Faunal Lab South Borden Bldg.

Young was Chairman, Savage acted as Secretary.

Meeting was called to order at 8.05 p.m.. The roll was called, and guests noted. Present were 16 members and 6 guests, Margaret Bodsworth guest of Fred Bodsworth, Margery Ritchie guest of Bob Ritchie, George Rason guest of Rapley, and Grant McLeod, Kathie and David Mason guests of Savage. Bendell, Churcher and Anne and Bruce Falls, and Tasker sent regrets.

### Minutes of the Previous Meeting

The minutes of the 876th meeting of the Brodie Club on 21 April 1992 had been pre-circulated. No amendments were suggested, and acceptance of the Minutes was approved by the Chairman.

### Announcements

In response to an enquiry by Carrick re the annual Brodie Club field outing, Rapley suggested an area in the old Jackson estate, adjacent to the Metro Zoo, with picnic facilities and building cover in the event of wet weather. on Sunday 21 June '92. Brodie Club members and their guests might assemble about noon, lunch, and then observe bird and other wildlife. This suggestion met with general approval. A map and directions will be mailed to Brodie Club members.

### Speaker of the Evening

Dr. Howard Savage, of the Department of Anthropology, Univ. of Toronto, had as his subject "Prehistoric Fauna of the Niagara Escarpment", as a paper given on 7 May '92 at the Canadian Archaeological Assoc. Meeting at London, Ontario.

Savage commented on the increasing use of faunal bone and shell material excavated from archaeological sites world-wide during the past half-century, and from Ontario sites during the past quarter-century. A more recent development has been the recovery of faunal material from caves and its subsequent dating by radio-carbon and Accelerator Mass Spectrometry techniques (Isotope at U. of T.). The employment of this technique at the Elba Cave in the Niagara Escarpment in Mono Mills Provincial Park in Dufferin County, Ontario, was made possible by the relatively even humidity, temperatures above freezing, freedom from disturbance by air or water movements in the cave, a lack of disturbing or harmful influences in the cave, and the proximity of calcium carbonate calcite surfaces in the immediate vicinity of the faunal material.

Descents into the cave to the 75 foot level in June and September 1990 by Riley and Savage of the Brodie Club, David Mason and two expert spelunkers or cavers, produced a considerable number of well preserved bone and snail shell specimens from the surfaces of ledges and rockfills. No evidence of human presence in the cave was found.

Examination of the faunal material in the sample showed the presence of 625 bones from vertebrate species, 44 snail shells and a crinoid ring. Represented were 20 mammal species or genera, ruffed grouse, garter snake and numerous toad or frog bones. The mammal

species included the expected moles, shrews, bats, snowshoe hares, cottontails, chipmunks, squirrels, mice, porcupines and raccoons, a portion of a white-tailed deer, and two unexpected species, the martens and a pika.

The Marten is well known in archaeological sites in southern Ontario from 1300 to 1650 A.D., its present range is limited to central and northern Ontario. Isotope dating of a female marten skull showed it to have lived in the vicinity of  $510 \pm 60$  years B.P., i.e. between 1380 to 1500 A.D. The Pika has been previously known in Ontario only from a specimen identified by Churcher of the Brodie Club in 1979 and of late Pleistocene or early Illinoian dating, although identified from Appalachian Mountain caves of late Pleistocene dating. The Elba Cave pika dated from approximately 8,670 years B.P., as the first well dated Pika bone in eastern North America.

The single Pika bone in the Elba Cave suggests that the pikas were there only as a relict population or at the limit of their range at that time.

Present Pika habitat in Canada is in mountain country in Alberta, British Columbia and the Yukon Territory, at altitudes above 5,000 feet in rocky talus slopes from tree line to limit of vegetation.

Extrapolation of a similar landscape with scattered coniferous growth to the Niagara Escarpment of Dufferin County 8,000 to 9,000 years ago is probably well based, since mammalian species in North America have shown little evidence of change in habitat preference since post-glacial times.

Further exploration and faunal surveys in the Elba Cave is planned.

After lengthy discussion, Young thanked Savage for a very interesting and informative paper.

#### Members' Notes and Observations

Rapley commented that the Massasauga Rattlesnake is now considered by the U. S. Dept. of the Interior to be an endangered species. Telemetry devices installed in the abdominal cavity of rattlesnakes have been used to obtain information re their travels.

David Mason reported seeing an immature Bald Eagle flying over Huron Street, Toronto 10 days ago.

De Matteis reported a yellow-throated vireo feeding on tent caterpillars in a sugar maple recently.

Bodsworth had seen at Point Pelee 23 species of warblers and 5 vireo species on a recent week-end, and a pine warbler near Bala 2 days ago.

Young had heard a Swainson's thrush singing at his cottage last night.

Carrick had 45 trumpeter swan eggs in his incubators at present.

Adjournment at 10.15 p.m. was moved by Carrick and seconded by Riley.