MINUTES OF THE 846TH MEETING OF THE BRODIE CLUB, JANUARY 17th, 1989 IN THE FAUNAL LAB, UNIVERSITY OF TORONTO.

Don Young chaired the meeting which was attended by 14 members and two guests Margaret Bodsworth and Jennifer Young. Speakman acted as Recording Secretary.

The minutes of the previous meeting were read and adopted.

## **ANNOUNCEMENTS**

Norm Martin brought to our attention a search for a Wye Marsh development officer and he distributed material relating to travel to Trinidad and Tobago for birding, and plans for an FON young naturalists camp. He also referred to expanded facilities for visitors at the Long Point Banding Station.

Savage read a letter from Peninsula Field Naturalists requesting financial support for reptile breeding - a Surinam toad can be adopted for \$30.00 or a Madagascar Boa constrictor for \$300.00

## **SPEAKER**

Our speaker, Gordon Edmund, curator of vertebrate paleontology at the ROM summarized his experience of thirty years study of fossil giant Armadillos. These creatures appeared in a well differentiated form about 10 million years ago, although suggestions of earlier forms have been found in the Eocene period. They became extinct 8-10 thousand years ago and there is some doubt as to whether or not they were in contact with man.

The Armadillos are unique to the new world and the speakers experience has been based on a study of specimens removed from the tar pits, bogs, and excavations which are in museum collections world wide.

The animals were up to three meters in length and a unique feature was a "skin" of bony "osteoderms" consisting of tough plates, roughly rectangular or octagonal in shape, about the size of a silver doller. (examples were passed around for inspection) These formed a protective armour-like covering over the head, trunk, limbs, and tail. Three encircling imbricating bands surrounded the middle of the trunk.

The skull of the animals had a loosely articulated lower jaw which enabled the powerful masseter and pterygoid muscles to lock the upper and lower jaws in such a position that a side to side grinding of the teeth could be performed. This produced cross striations on the cylindrical (anterior) and bilobed (posterior) teeth. The spinal column was fused except for several midthoracic vertebral bodies which displayed extremely complex articular facets. They provided stability and movement in the region of the imbricating bands of osteoderms. Illustrations of well preserved fore and hind feet were shown.

## DISTRIBUTION

The group designated pampatherium is found in Argentina, Brazil, and Peru and the Holmesinas characterized by more elaborate osteoderms are found in Florida, Texas, Kansas, and North Carolina. A south to north migration is suspected and over a period of time the northern members grew larger than their ancestors but did not become more differentiated.

A later southern movement of Holmesinas explains late specimens in Ecuador and Peru. No specimens have been found in Central America.

Giant Armadillos became extinct 10 thousand years ago but smaller species survive in Florida, Louisiana, and South America. Recently it has been found that Armadillos can be infected with the leprosy bacillus - perhaps because of their lower body temperature, and infected tissue from these animals has been used to prepare a diagnostic skin test.

A vigorous discussion took place following the presentation which reflected the interest of the members. The speaker was thanked by Churcher.

NOTES AND OBSERVATIONS

Savage plans to ask Dick Saunders to try and identify members in old photographs provided by Mary Devitt.

Carrick reported continued contacts with his weasels which would appear to be least weasles. He also commented on the confiscation of pole traps at the Kortright waterfowl reserve and mentioned he had never found it necessary to use these traps when managing the reserve.

Falls reported Glaucous and Iceland gulls at Sunnyside in various plumages. The Meeting adjourned at 10:00 p.m.