

Minutes of the 842nd meeting of THE BRODIE CLUB, held September 20th, 1988, in the Faunal Lab, University of Toronto

Bruce Falls was chairman, Norm Martin was recording secretary.

Fifteen members were present and four guests: Gail Worth and Ann O'Sullivan guests of Savage, Margaret Bodsworth guest of Fred Bodsworth, and Mark Taylor guest of the club.

Minutes of the previous meeting were read by Bodsworth and approved.

The nominating Committee presented the slate of past officers for consideration as officers for the coming year and nominations were opened to the floor:

- Corresponding Secretary - Savage
 - Treasurer - Speakman
 - F.O.N. Rep. - Norm Martin
- All agreed to act for another year.

- Membership Committee - Carrick nominated as chairman by Savage,
Riley nominated by Bodsworth,
Young nominated by Bodsworth,

- Programme Committee - Bruce Falls nominated by Bodsworth,
McKay-Kuja nominated by Bendell,
Aird, Bendell, Savage, Tasker
nominated by Bodsworth,
Bodsworth nominated by Reading,

Moved by Riley, seconded by Bodsworth, that nominations be closed. Carried.

Announcements

Norm Martin reported on F.O.N. request for feedback regarding proposed changes to the F.O.N. constitution relating to the composition of the Board of Directors. It was the feeling of the Club that no change should be made, and Martin was asked to pass this on to the F.O.N.

Introduction of Speaker

In introducing Dr. Mark Taylor, Howard Savage referred to his wide experience in mammalian research in Africa and elsewhere since receiving his Ph.D. from the University of Toronto in 1971. He is presently a member of the faculty of the Department of Zoology, U. of T.

Speaker

Dr. Taylor spoke on "Biology and Conservation of Mammalian Carnivores", drawing on the experience gained from various studies throughout his career. Families studied include Canidae, Felidae, Mustelidae, Vivaridae and Ursidae.

Most carnivores are small, eat meat, and have carnassial teeth (upper fourth premolar and lower first molar blade-like as sheers to cut meat and tendons).

Adaptations of carnivores are for capturing prey, for aquatic life as in the otters, for speed as in the cheetah, and for killing prey as in the mongoose which captures snakes.

Mongoosees have been of particular interest to the speaker. These carnivores are referred to in early Egyptian lore and legends, controlling crocodiles and other unwanted animals. The mongoose enters the mouth of the much larger crocodile and eats its way out. In Ceylon there are drawings of mongooses on walls dating 3000 years ago. In Indian lore of similar antiquity the carnivores are mentioned in the control of snakes. Small carnivores have for long played a role in human culture. This continues today in Canada and elsewhere in the commerce of furs - both wild and domestic. In Ethiopia today people keep wild civets and collect musk from their scent glands, 20 gm at a time. In three years 7000 tons of musk may be exported to France as a base for expensive perfumes.

Other small carnivores such as ferrets and weasels impact directly on man as marauders of captive animals held in game farms and similar enterprises.

Jackals are significant scavengers of carcasses.

Biological Aspects of Small Carnivores

Small mongooses in East Africa have been studied intensively. They show a high degree of social development. One had tried to help a sick member by feeding it and staying around it protectively. Some species live in termite mounds. Dominant females in a band tend to suppress breeding in other females. Eucleres (?) in Madagascar specializes on insects and earthworms.

The speaker referred to the study of the Liberian Mongoose discovered in the mid-1960's and described in 1974. It is 1.5 - 2.0 Kgm in size, and inhabits the high rain-forest in Liberia. It specializes on earthworms two feet long. Three social species are located here and their evolution is still to be uncovered.

Territory in Carnivores

Studies were conducted in Algonquin Park using radio-telemetry. Marten were found to wander over about 1 sq. km, hunting chiefly in pure coniferous or mixed coniferous-deciduous forests. They had certain corridors of use, such as ponds and marshes. Territories differed from bird territories in that they were not necessarily mutually exclusive or held for long periods.

Conservation of Carnivores

Much more work needs to be done on the taxonomy of many groups before conservation policy can be spelled out in detail. This is especially true in relatively undeveloped areas such as much of Africa. The question of whether conservation should be based on species or subspecies must be worked out and we need to know more about the role of small carnivores in ecosystems before we can think of management. In the meantime small carnivore numbers are being rapidly reduced in places like West Africa where they are hunted by man for food.

Questions:

Savage: The dentition seems unusual in some of those described.

Speaker: Dentition varies greatly and could be useful in understanding taxonomy and evolution

Bendell: Why do we not have mongooses here?

Speaker: We have introduced certain species to control other species, e.g. in Antigua, and some of them have become pests. The group originated in the old world and has not spread out naturally to this hemisphere as yet.

Bruce Falls: Why are species more important than subspecies in conservation?

Speaker: Governments are more interested in species than subspecies. But as we establish conservation regulations for carnivores we automatically conserve all the other biota, since carnivores are at a high trophic level.

Norma Martin: How to accomplish conservation in a third world country like Liberia?

Speaker: By making it profitable for communities to participate.

Bendell: Are young mongooses mongosslings?

Speaker: It's a free country.

Bendell then thanked the speaker.

Members' Notes and Observations

Speakman - showed slides of pictographs on rocks on the Missinabi, and of a feeding bull moose encountered there.

Reading - found many musk-oxen at Artillery Lake, near Great Slave Lake, where they were stripping spruce trees. This extends the usual range. He also saw extensive destruction of forests in Northern Ontario by the clearcutting of logging companies. Sand is drifting in some areas that have been cut.

Carrick - The new park for the Rouge may work against having a dump imposed on the area. A mink killed all Carrick's Sandhill Cranes, and replacements suffered other kinds of fatalities. He found Sandhill Cranes interesting to work with. They imprint easily.

Mark Taylor - found an Oven Bird in his back yard in East York this year.

Savage - showed an isopod, Saduria entomon, from the Anderson River. Such specimens may indicate a refugium there during the last glaciation.

Bendell - has found considerable remains of fungi in the crops of ruffed grouse recently.

Auger - A red fox near his cottage showed rabies-like behaviour. A black bear was seen near there in the middle of the road. A small heron was seen at Haliburton Lake, nearly struck by a car.

The meeting adjourned at 10.15 p.m.

N.D.M.