

## Minutes of the 879th Meeting of the Brodie Club

The meeting was a combined one of the Medical Archaeology and Anthropology Section, Academy of Medicine, Tor. and Brodie Club, on Tuesday, October 20, 1992. It was held in the Faculty Club, 41 Willcocks Street, (W.D. Foulds Room), with a social time and dinner preceding the meeting which was called to order at 8:00 p.m.

Present were 16 members and 8 guests. Bodsworth sent regrets. Savage acted as chairman, and Young was secretary. The guests and accompanied members were: Yvonne Bendell (Bendell), Jewel MacDonald (Bertin), Barbara Simpson (Carrick), David Fowle (Falls), Pam Grayson (Savage), Maudie Reynolds (Reynolds), Betty Speakman (Speakman), and Jennifer Young (Young).

The minutes of the 878th meeting of the Brodie Club held on September 15, were previously circulated. No amendments were suggested other than the spelling of the name of Rajelio García in a reference made by Martin McNicholl. The minutes were approved by the Chairman.

### Announcements

Falls noted the autumn meeting of the Long Point Observatory members at the Royal Botanical Gardens Centre at 7:00 pm. October 23rd, to be addressed by Dr. George Finney.

Speakman happily announced that Brodie Club members had paid \$200.00 in fees.

### Speaker of the Meeting

Savage introduced Dr. John Grayson. Department of Physiology. Faculty of Medicine, University of Toronto, the title of whose

address was "Darwin's Last Fling". The speaker was born in Huddersfield, Lancashire, where he spent a year in surgery before going to Greece in 1946. Here he spent some time in becoming instrumental in the successful control of malaria with the virtual wipe-out of *Anopheles*. He later spent some twelve years in Nigeria where he helped to build a much-needed medical school and also taught in the same school. In 1967 he moved to Canada where he was invited to participate in a military exercise named "Northern Lancer".

The exercise was carried out at Resolute Bay, Cornwallis Island, November 20-29 1971, by 450 members of the Canadian Airborne Regiment. The group was divided into two. One of them established an 'enemy lodgement', near Resolute. The other group was a parachute unit which was required to make an airhead by paradrop at Resolute. Then a combined paratroop and ground assault was made.

The speaker was in the first group which was part of a government research unit called Defence and Civil Institute for Environmental Medicine. This unit was the advisory panel on Arctic Medicine and Climatic Physiology in attendance as observers. Some of this group stayed in tents and others lived in the 'hotel', a simple hut-like structure.

Resolute has a long winter of total absence of sun between November 8th to February 4th. There is some brightness, borrowed sunset, and sunrise between 11.00 am and 2.00 pm. The average air temperature during the time there was  $-30^{\circ}$  with strong winds. The windchill factor varied from  $-70^{\circ}$  to  $-110^{\circ}$ .

One of the features of man's evolution is that he has a constant temperature. His main way of controlling internal temperature is to control outside temperature by means of clothing, shelter, and heating fires-all of which require the use of hands. In extreme cold, even given ordinary clothing, you still can't use your hands because of constriction in blood vessels.

How did the Inuit develop the means to survive the cold? The survival might seem to lie through genetic adaptation. "The survival of the fittest" in the Inuit has enabled them to resist frostbite and to use their hands to provide housing, find food, start fire, and make clothing. Genetically, their receptors did not constrict blood vessels in the cold, or cause frostbite, or deprive their body tissues of blood necessary for life.

A complete explanation of the physical differences in the Inuit that have enabled them to survive would seem to have to be found very far back in their history, perhaps in the mammalian development, or even in the cell itself.

The many questions of the club members showed their interest in the topic and the effectiveness of the slides. Thanks were tendered by Bruce Falls, and preceded a hearty round of applause.

#### Members' Observations.

Bruce Falls described a Pelagic Bird Trip of the Ontario Field Ornithologists on Sunday, October 18, 1992, from 8:00a.m. to 4:00 p.m. The boat travelled across Lake Ontario to view the southern

shore of the lake and the mouth of the Niagara River. Steady rain throughout the afternoon, as well as chilly weather limited the species count to about 20, but a Red-throated Loon and three Parasitic Jaegers were among the 20.

Bendell spent some holiday time in the Gogama area taking a census of Spruce Grouse and found the numbers plentiful. This seems to be true for quite a number of migrants.

Bertin observed a Magnolia shrub blooming a short time ago in his area. Is such late flowering common?

McNicholl visited Mississippi in October and saw large numbers of Cormorants around catfish farms. He noted many migrants that he had seen a short time before in Ontario, although the weather was as cold as at home.

In a trip to the Lake of the Woods Rapley saw numbers of late-nesting birds in the latter part of July, such as Double-crested Cormorants, Bald Eagles, Ospreys (7500), White Pelicans and Common Terns. He also noticed a small cactus in the area.

The meeting adjourned at 9:45 p.m.