

THE BRODIE CLUB



ROYAL ONTARIO
MUSEUM OF ZOOLOGY

THE 1,032th MEETING OF THE BRODIE CLUB

The 1,032th meeting of the Brodie Club was held at 7:30 pm on October 20, 2009 in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Chairman: Bruce Falls
Secretary: Enid Machin

The meeting was attended by 18 members and one guest, Erin Hannah, granddaughter of Fred Bodwsorth.

Several members sent regrets including Ed and Rosemary Addison, Ron Tasker, Hugh Currie, George Bryant went to Brazil, Jim and Trudy Rising to Turkey, Ellie Larsen on a field trip, Bob Curry and Glenda Slessor were learning Spanish, and Kevin Seymour and Jock McAndrews were attending the ROM's annual 25-year dinner. Kevin will be in India next month. Paul Aird had to attend a meeting in Forestry but came to the Faculty Club to meet the speaker.

The minutes were approved as written. There was no business arising from the minutes.

Bruce Falls offered information on meetings for the rest of the year:

Nov 17	Justina Ray	Caribou
Dec 15	Dan Stickland	Moose-deer-wolf interaction in Algonquin Park
Jan 19	Dan Paleczny	World Nature Reserves
Feb 16	Nick Eyles	Geology of rocks of Toronto On. and further afield
Mar 16	David Evans	Limnology of Lake Simcoe
Apr 20	Bridget Stutchbarry	Migration of birds
May 4 or 11	To be announced	
June ?		Annual field trip

ELECTIONS

The current officers remain the same as reported in the September minutes except for the position of secretary. Oliver resigned so a number of us will take turns to fill his huge shoes. So far Enid Machin, Ann Falls, Rosemary Addison, Erica Dunn, Kevin

Seymour and Paul Aird have volunteered. Erica Dunn will take notes on the Nov 17th meeting.

Jennifer Young made a motion to thank Oliver for his long term of service that he cheerfully carried out with fortitude and skill.

SPEAKER:

The speaker was Martin Daly of McMaster University, an evolutionary psychologist whose topic was The Social Ecology of Lethal Competition in *Homo sapiens*. He was introduced by Bruce Falls.

“The Brodie Club is a natural history club. It occurred to me that, although we have had speakers on archeology and exploration, we have not explored the biology of human behaviour. Farley Mowat said we should celebrate our “animalness” and a sign in a recent Margaret Atwood performance said “Animals R us”, so why not!

Our speaker tonight, Dr. Martin Daly from McMaster University, is an evolutionary psychologist. To quote him “we can study the social behaviour of human beings within the same framework as studying the social behaviour of any other animal.” He and his late wife Margo Wilson collaborated on just such studies.

Martin did his Ph.D. research in psychology at the University of Toronto and I met him when he took one of my courses. Besides his work on humans he has conducted field work on desert rodents in Africa and America. That’s another story.

His topic tonight is “Social ecology of lethal competition in Homo sapiens”. Sounds like a murder mystery!”

Martin originally did most of his research in the laboratory but found field studies to be more interesting, getting to know the social universe of the subjects. He graduated from studying desert rats of the Sahara and California to human behavior. He and Margo Wilson collaborated on the topic at hand. They found that 90% of homicides were committed by men, 10% by women. The proportions remained constant from the lowest numbers of 4 per million of population in Iceland to 306 per million in Russia. Developed countries have the lower numbers, except for the USA, where they are much higher. Although cases involving women are over-reported everywhere, men do cause most homicides. Therefore the focus of the research was on men. Data were found to be really good in Detroit where more homicides occur than for the whole of Canada. National data were available for Great Britain and Canada but not for the USA except for good sustained data from Chicago. Although the numbers differ, the same pattern emerged that young men around 18 to 25 years of age cause the greatest number of homicides, and that homicides fall off by 50 years and stay low from 50 to 80 years. Men also killed mostly unrelated men.

There are 2 main questions:

1. Why do men kill?

Primarily it is due to social rivalry, e.g. rivalry over a woman or to save face in an argument. Secondly, it is due to material competition often associated with robbery or with business rivalry.

2. Why men not women in these disputes?

It may be innate involving testosterone levels that determine paternity and dominance. Prizes for winning or losing are greater for men than women. A parallel for women would be a contest for maternity.

Much of the answer seems to hinge on men feeling there is nothing to lose but perhaps they perceive they will gain. They are undeterred by danger so take risks. They are usually young, unemployed and single. Numbers of homicides decline with age and are lowest for married men but increase again if the man divorces or is widowed. Life expectancy is not included in the study.

Martin used the Gini Coefficient which shows the difference between equality of household incomes and inequitable ones. Using a graph from 0 to 1 where 0 is the poorest and 1 is the wealthiest household there would be a straight line between the two if at every point along the graph the income level were equitable. Homicides would be evenly distributed. In reality incomes differ, meaning inequity exists, so the graph dips and the area between them is called the Lorenz effect. Martin used the Gini Coefficient to plot the ten Canadian provinces against the USA states. There was much less inequality in income levels in Canada than in most states. Mississippi had the greatest disparity between rich and poor and has the greatest level of homicides. Atlantic provinces had the least difference between rich and poor, so there must be less friction. A greater disparity is seen in the poorer neighbourhoods of large cities and homicides numbers are up. Corresponding lower numbers are found in the best neighbourhoods. However, numbers of homicides in Montreal are far less than in comparable sites for size in the USA. Speculation is that this depends on the health system. Health researchers are now looking at this.

Questions and comments were interspersed within the talk causing lively discussion. Examples were: birds that lose a mate or nest start singing again and, as in widowers and divorcees, the testosterone levels increase. Fathers that take part in caring for their babies have very low testosterone levels. Polygamy inequitably takes resources away from other men or from other males especially when it occurs in mammals e.g. seals. Often the single males are killed, probably for the privilege of passing on the dominant male's genes. High suicide rates usually go hand in hand with low homicide rates and visa-versa. The Chinese instituted a policy of one child per family some years ago which meant female fetuses were aborted or female babies were killed. Now the population is predominately male. They are importing women now. Other ethnic groups prefer males so some populations are skewed as well. Genetics may be used and females aborted. The behavior of insects changes as the temperature drops or light levels change. They aren't so choosy about a mate but humans aren't affected in this way.

Sandra Eadie thanked Martin Daly for a very interesting talk. We were grateful that Martin found himself able to come under the circumstances. We offer condolences to him for the loss of his wife and colleague whom he lost only 3 weeks ago.

NOTES & OBSERVATIONS

Sandra Eadie brought up the debate of whether individuals publishing online could get naming rights for biological entities.

Martin Daly observed an osprey tearing flesh from what might have been a duck in a pasture which seemed unusual.

Enid Machin noted that this year the number of crows at her farm had significantly increased.

David Hussell heard a Kingfisher calling and observed it flying upstream on the Lynn River then back then upstream again etc. pursued by a Cooper's Hawk.

Jeremy Hussell observed many ladybugs on the roof outside his bedroom window.

Paul Aird told us that summer was non-existent this year in the Arctic which we heard about in September but he noted that the Little Gull was badly affected and breeding didn't take place just as with many others.

Jim Bendell has been placing chicken eggs on the forest floor to measure moisture levels. The eggs act like hygrometers and can be weighed. Some lost weight, some gained, so it is natural that forest birds with mossy nests, especially if sphagnum moss, would gain and certainly not lose. The pores are important but Jim wondered if the shells would lose calcium in contact with acidic sphagnum moss.

The meeting was adjourned at 9:30 pm.

NEXT MEETING

The next meeting will be held on Nov 17th, 2009 at 7:30 pm in Room 432 as usual. Justina Ray will talk about caribou. Ricky Dunn will act as meeting recorder.