

THE BRODIE CLUB

MINUTES OF THE 890TH MEETING

Dec. 14, 1993

CHAIR: Boissoneau

GUESTS: Raen Kilsitiel, Jord Cooper, Brian Hoisir, guests of Savage
Yvonne Bendell, guest of Jim Bendell, Jennifer Young, guest
of Don Young, Mary Tasker, guest of Ron Tasker

The minutes of the previous meeting were perused and after a few corrections, were approved.

ANNOUNCEMENTS:

NORM MARTIN reported a Tanager Symposium to be held at Cornell University.

CARRICK: referred to an application to the C.R.T.C. for a nature channel. The applicant is seeking support for this channel; the decision to be announced by spring '94. Dr. Savage suggested sending a letter from the club for support.

Dr. Savage related Fred Bodsworth's proposal for the next three club meetings: JANUARY speaker will be Dr. Bridget Stutchbury on Hooded Warblers.

FEBRUARY meeting will deal with crayfish from "Ontario to Tasmania" featuring Dr. Premik Hamr.

The MARCH meeting's guest speaker will be Christine Bishop on the topic of Snapping Turtles.

Also - the APRIL meeting's topic is to be on Gorillas, presented by member Bill Rapley.

SPEAKER OF THE EVENING

Bruce Falls introduced the speaker of the evening TONY LANG.

Mr. Lang started his undergraduate work at the University of Saskatchewan and later did some work for Ducks Unlimited. He became involved as a student at the R.O.M. with Dr. Jon Barlow of Ornithology. Tony learned of the Brodie Club through local Naturalists Clubs.

Travelling to Churchill as a teaching assistant, he became interested in Fox Sparrows and their song. His conversations with Chris Naugler led him to investigate the Sparrows song repertoire further.

Given that there is a wide morphological variation between the four recognized subspecies of this bird Mr. Lang wondered if they could be considered distinct species based on song repertoire.

Song in songbirds is a sexual signal, polygamous species having a larger repertoire than monogamous birds. It was found that females react more to males with a large repertoire in terms of copulative frequency. Greater male to male aggressive behaviour is also evident in birds with a large song repertoire. The information source for the Fox Sparrows song came from the Breeding Birds Survey started in the mid sixties. The ranges studied included Eastern Canada, the Pacific Coast and the Southwestern States. With reference to geographical variation it was found that birds of the Boreal Zone sing single songs whereas across the Western Cordillera multiple song types existed. The Western Cordillera - Boreal Forest split, represents a general east-west schism in many songbirds: Flickers, Juncos, Orioles, Warblers etc.

Robert Mengel suggested Pleistocene Glaciation might be responsible for the east-west forms in species. Based on song the eastern and western forms of the Marsh Wren may be distinct species; but the biological principle for classification of species states that if the birds interbreed, they are one species. The popular phylogenetic concept now is that the smallest group of individuals that all have identical characteristics constitutes a species. Interbreeding is not a prerequisite for species delineation. The taxonomy of the Fox Sparrow is currently based on plumage characteristics.

Zink's unpublished findings revealed four mitochondrial groups of the Fox Sparrow.

- (i) The rusty coloured birds of the Boreal Forest
- (ii) The large billed S. Californian birds
- (iii) The small billed birds of the Great Basin
- (iv) The sooty plumaged Alaskan birds

Whether the four groups are distinct species is questionable. It is also unclear why there is a difference in the eastern and western Fox Sparrow song repertoire.

QUESTIONS AND COMMENTS

BRUCE FALLS asked if there was a graduation in song repertoire from east to west. Tony Lang said there was not.

DR. SAVAGE asked if the four subspecies can be distinguished by plumage alone. Yes they can.

The difference in Song among the four groups was raised by TASKER, The northern birds produce a melodic clear whistle, the southern birds utter more of a harsh chatter.

BRUCE FALLS noted there is a great individual variation of song in the same population.

BENDELL drew attention to the possibility that environmental acoustics might play a role in song variation.

TASKER thanked Tony Lang for his interesting talk whereafter followed hearty applause.

NOTES AND OBSERVATIONS

HARRY LUMSDEN said that the Trumpeter Swan brood reared at the Wye Marsh was seen at the mouth of Bronte Creek. There are presently twenty-nine free-flying in Ontario. He asked everyone for sight records.

BENDELL saw a grackle, Carolina Wren and White-throated Sparrows at his feeder.

BRUCE FALLS reported ten species of gulls including a California gull and numerous ducks, were seen by the recent ABA meeting at Niagara.

RILEY commented on tree cutting at High Park. High Park has been classified as A.N.S.A. The maintenance of Oak Savannah involves periodic removal of shrubbery. Populations of lupines have returned as well as certain prairie grasses.

deMATTEIS saw a Golden Eagle near Owen Sound in mid-November.

The meeting adjourned at 9:45 P.M.

Members in attendance: 15 *Guests*

Frank deMatteis
Recording Secretary