



QUEEN'S
UNIVERSITY

Ontario Ecology and Ethology Colloquium April 17 - 18, 1978

Dear Colleague:

Please find enclosed the program of the OEEC, a map of Queen's campus, and the program of the Technical Workshop on Sound Production and Analysis. The Workshop will be in Earl Hall beginning at 2:00 PM Sunday. Anyone interested in sound production or analysis is welcome to attend. The OEEC paper sessions will be in Stirling Hall on Monday and Tuesday. Papers have been allotted 20 minutes each, allowing for a 15 minute presentation and 5 minute question period. Speakers will be held on schedule to allow switching between the two concurrent sections.

A registration desk will be in Earl Hall for Sunday arrivals, and in Stirling Hall for Monday arrivals. Information regarding the banquet, reception, student billeting arrangements, late registration, and abstracts of all papers will be available at the registration desk. Parking is available at \$2.50 per day in the underground lot on Stuart St. or at \$1.00 per day in the lot behind Dupuis Hall. For the latter, permits must be obtained at the OEEC registration desk.

We are looking forward to a profitable and enjoyable Colloquium.

Yours truly,

Patrick Colgan
Associate Professor

Raleigh J. Robertson
Associate Professor

O E E C

Technical Workshop on Sound Recording and Analysis

14:00-17:00 Sunday, 16 April 1978

Earl Hall

Falls, J.B. and V. Thiel. A frequency to voltage converter with rapid unit continuous paper tape output.

Falls, J.B. A zero crossing analyzer with output to a storage scope.

Shiovitz, K., and R. Lemon. Fast Fourier transform analysis.

Fenton, M.B. Ultrasonic sound.

BREAK

Miller, E.G. Approaches to description and quantification of calls of least sandpipers.

Cade, W.H. An artificial lek.

Berrill, M. Sounds from spiny lobsters.

Everyone interested in animal sounds is invited to attend and contribute. Most of the workshop will be devoted to technical problems of the analysis of sound. Data will be discussed as time permits.

O E E C PROGRAM
17-18 April 1978
Queen's University
Kingston, Ontario

Monday, April 17

Stirling Hall Room C

- 9:00
- 9:20 GROSS, H.P. Sexual selection in a territorial fish (Gasterosteus aculeatus): behavioural determinants of male reproductive success.
- 9:40 EMERY, A.R. Some simple observations and conclusions about the behavioural meaning of sounds produced by fishes.
- 10:00 NOWELL, W.A. Neighbour Recognition and Rim Circling in the Bluegill Sunfish (Lepomis gibbosus).
- 10:20 BIETZ, B.F. Nest site selection by the longear sunfish (Lepomis megalotis peltastes) in relation to habitat availability.
- 10:40 BREAK
- 11:00 DODSON, J.J. Behavioral toxicology in fish: The modification of rheotropism by subtoxic doses of aquatic herbicides.
- 11:20 EMANUEL, M.F. The Modification of the Rheotropic response of Rainbow trout, Salmo gairdneri, by ovarian fluid and conspecific odor.
- 11:40 MACLEAN, N.G. Ultrasonic telemetry studies in the vicinity of Nanticoke Generating Station, Lake Erie.
- 12:00 OBBARD, M.E. Nesting migrations in the common snapping turtle, Chelydra serpentina.
- 12:20 LUNCH

Stirling Hall Room D

- 9:00 Welcome
- 9:20 HEBERT, P.D. The insect-host plant relationship: a numerical study.
- 9:40 M'CLOSKEY, R.T. Diversity and Assembly of Desert Rodent Communities.
- 10:00 COOLEY, W.M. Morphological variations as an insight into faunal structure.
- 10:20 FENTON, M.B. Partitioning of food resources by sympatric insectivorous bats: optimal foraging or competitive exclusion?
- 10:40 BREAK
- 11:00 SUFFLING, R. A demographic approach to ecosystem management.
- 11:20 DONNELLY, R.E. Forest Fire History Map of Ontario.
- 11:40 GIZYN, W.I. Influence of an arctic bituminous shale fire on air and soil chemistry.
- 12:00 AARSSSEN, L.W. Stability and flux of Neighbour Relationships in Grass-Legume Communities.
- 12:20 LUNCH

Monday, April 17

Stirling Hall Room C

- 14:00 MCQUEEN, D.J. Interactions between the burrowing wolf spider Geolycosa domifex and a predaceous Pompilid wasp.
- 14:20 VOIGHT, D.R. Movements of Foxes, skunks, coyote and raccoon in southern Ontario.
- 14:40 STEELE, R.W. Behavioural responses of Microtus pennsylvanicus to changes in habitat structure.
- 15:00 HARLAND, R.M. Changes in activity patterns in Peromyscus leucopus in response to the demands of lactation and meteorological conditions.
- 15:20 BREAK
- 15:40 THOMAS, D.W. Dry season foraging behaviour of two African fruit bat species.
- 16:00 BARCLAY, R.M. Two Aspects of Vocal Communication in the Little Brown Bat, Myotis lucifugus.
- 16:20 FULLARD, J.H. Moth Ears and Bat Cries: Some Relationships
- 16:40 SILVERMAN, H.B. The narwhal tusk: The point of the matter.
- 17:00

Stirling Hall Room D

- 14:00 TAYLOR, G. Factors affecting the distribution of Maianthemum canadense Desf. in the St. Lawrence Islands.
- 14:20 PRUDHOMME, T.I. A Comparison of the Seasonal Patterns of Relative Carbon Allocation to Secondary Compounds in the Leaves of Two Subarctic Shrub Spp.
- 14:40 WEIS, I.M. Competition involving multiple resource dimensions: field data and its implications for the study of guilds.
- 15:00 KELIMAN, M. Nutrient accumulation by savanna trees as a mechanism for rainforest invasions of savannas.
- 15:20 BREAK
- 15:40 FREEDMAN, W. Studies of Sympatric Snake Species at a Site near Amherstburg, Ontario.
- 16:00 BOUSFIELD, M.A. The effects of age and experience on the clutch size of the lesser snow goose (Anser caerulescens caerulescens).
- 16:20 SMITH, J.A. Measurements of fitness differences between the blue and the white morphs of the lesser snow goose, Anser caerulescens caerulescens.
- 16:40 GIBBS, H.L. A dispersion pattern amongst nesting tree swallows (Iridoprocne bicolor).
- 17:00 Business Meeting

18:00 RECEPTION SKYLIGHT DINING ROOM -

20:00 BANQUET

Tuesday, April 18

Stirling Hall Room C

- 9:00 KERR, G.E. Preliminary report on parental investment and mating system of two meadow-katydid.
- 9:20 SOKOLOWSKI, M. Feeding-locomotive behaviour in Drosophila melanogaster larvae: Are foraging strategies important in larval competition?
- 9:40 AUBE, C.A. Feeding range, feeding strategy and energy maximization of the feral pigeon, Columba livia during the winter.
- 10:00 KRAMER, H.G. Dialect vocalizations of the Northern Blue Jay, Cyanocitta cristata bromia.
- 10:20 SHIOVITZ, K.A. Subtle Sound Patterns Involved in Display Release by Territorial Buntings, Passerina.
- 10:40 BREAK
- 11:00 LASENBY, D.C. Predation and feeding of Mysis relicta.
- 11:20 BAKER, J.A. Numerical and aggregative responses of raptors to abundance of the meadow vole, Microtus pennsylvanicus.
- 11:40 ^{HAMILTON} CROSSMAN, E.J. Predator-prey relationship of the muskellunge in Nogies Creek, Ontario.
- 12:00 BERRILL, M. Competition and co-evolution: predatory strategies of bass and antipredatory strategies of crayfish.
- 12:20 LUNCH

Stirling Hall Room D

- 9:00 JOHANSEN, P.H. The temperature selection behaviour of the mummichog (Fundulus heteroclitus) under various temperature/salinity regimens.
- 9:20 KRAMER, D.L. Ecological and ethological implications of surface skimming as a respiratory strategy in the common guppy.
- 9:40 GIBSON, A.R. The evolutionary significance of melanism in the common garter snake, Thamnophis sirtalis (L.).
- 10:00 ANKNEY, C.D. Is wing molt a nutritional stress for Lesser Snow Geese?
- 10:20 WYPKEMA, R.C. Significance of protein and fat changes of migrating Lesser Snow Geese at James Bay, Ontario.
- 10:40 BREAK
- 11:00 GIBO, D.L. The role of soaring flight in the fall migration of the Monarch butterfly, Danaus plexippus.
- 11:20 SANDEMAN, I.M. Respiration rates and vertical migration in Mysis relicta.
- 11:40 HALL, T.M. Nickel accumulation in Daphnia magna, or where in the Daphnia is it.
- 12:00 WALLEN, D.G. Nutrient limiting factors in ice covered Lake St. Clair.
- 12:20 LUNCH

Tuesday, April 18

Stirling Hall Room C

- 14:00 INNES, D.G. The reproductive tactics of two sympatric microtine species.
- 14:20 BURLEY, N. Clutch overlap: An Alternative Reproductive Tactic.
- 14:40 CAVALCANTI, R.B. Adaptive aspects of nest desertion in birds.
- 15:00 LEGGETT, W.C. Latitudinal variation in reproductive characteristics of shad: Evidence in support of prevailing life-history strategy theory.
- 15:20 BREAK
- 15:40 TAYLOR, K. Population dynamics of undisturbed pure stands of Portulaca oleracea L. (common purslane).
- 16:00 TAYLOR D.G. Comparative population biology of Peromyscus in an isolated and a non-isolated woodlot.
- 16:20 RIDDELL, B.E. Geographic variation in Juvenile Atlantic Salmon (Salmo salar L.): Growth and Body Morphology.
- 16:40 MCNICOL, D.K. Temporal and habitat patterns of food utilization in Redwinged Blackbirds (Agelaius phoeniceus).

Stirling Hall Room D

- 14:00 SCHOENERT, R.A. Population dynamics and production estimates of cladoceran zooplankton along a nutrient gradient in Lake Memphremagog, Quebec.
- 14:20 ^{SPURLES} ~~BOYD~~, S. The wax and wane of planktonic diatom communities.
- 14:40 SMOL, J.P. Fossil diatoms and chrysophytes of Found Lake.
- 15:00 DICKMAN, M.D. Some consequence of a mass mortality of photosynthetic bacteria in the Black Sea.
- 15:20 BREAK
- 15:40 GLADISH, D.W. The primary productivity and phytoplankton composition of four Arctic ponds, August 1977.
- 16:00 GRIFFITHS, R.W. Benthic communities as indicators of water quality in the St. Clair River.
- 16:20 HOLTBY, B. The size structure of zooplankton communities as a predictor of limnological conditions.
- 16:40 SPRULES, W.G. A contribution to the life history of Daphnia cf. cavivervix Ekman, a woodland pond cladoceran newly reported from North America.