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NEWSLETTER

ANIMAL BEHAVIOR SOCIETY

SECTION (DIVISION) ANIMAL BEHAVIOR AND SOCIOBIOLOGY

Benjamin Dane, Editor
Department of Biology
Tufts University
Medford, Mass. 02155

Ecological Society of America
American Society of Zoology

1969 AAAS Meeting: The Animal Behavior Society will not be sponsoring the normal Society lunch. Instead of a lunch, there will be a "Social Hour" (i.e., a cocktail party) at 9:00 p.m. on December 29th at the Statler Hilton Hotel, Parlor A.

On Sunday, December 28th, there will be a symposium on "Animal Communication" organized by Peter Marler. The program for the symposium and an evening of open discussion is as follows:

2:00 p.m. Chairman: PETER MARLER (Rockefeller University)

1 Chemical Communication in Mammals.
KATHERINE RALLS (Rockefeller University)

2 Sensory Mechanisms in Communication.
MARK KONISHI (Biology Department, Princeton University)

3 Auditory Communication: Responses to playback of Natural and Artificial Signals.
STEPHEN EMLEN (Cornell University)

4 Social Communication in Wild Chimpanzees.
PETER MARLER

8:00 p.m. Open Discussion on Animal Communication.
Chairman: STEPHEN EMLEN (Cornell University)

ZOOS AND AQUARIUMS IN TEACHING ANIMAL BEHAVIOR: Printed proceedings of the symposium "The Use of Zoos and Aquariums in Teaching Animal Behavior" are now available from A. W. Stokes, Department of Wildlife Resources, Utah State University, Logan, Utah, 84321, and from Margaret A. Dankworth, Executive Secretary, American Association of Zoological Parks and Aquariums, Oglebay Park, Wheeling, West Virginia, 26003. The symposium, presented at the annual meeting of AAZPA in December, 1967, was financed in part by the Animal Behavior Society and CUEBS. Participants were: H. Hediger, John F. Eisenberg, Richard L. Penny, D. Muller-Scjwarze, George B. Rabb, Warren J. Wisby, and A. W. Stokes, chairman.

UNDERGRADUATE INTERDISCIPLINARY MAJOR IN PSYCHOBIOLOGY AT THE UNIVERSITY OF LETHBRIDGE: The currently offered curriculum involves courses in such areas as genetics, ecology, evolution, physiological psychology, comparative behaviour and the social behaviour of animals. Independent study and research are stressed at all levels of the program. Information can be obtained from either Dr. Luke Stebbins or Dr. Lloyd Delude, University of Lethbridge, Lethbridge, Alberta, Canada.

GRADUATE STUDY IN ANIMAL BEHAVIOR AT OKLAHOMA STATE UNIVERSITY: Opportunities exist for graduate study (M.S., Ph.D.) in animal behavior at Oklahoma State under the direction of Professors Rudolph H. Miller and John A. Morrison. Studies on fishes have dealt with gross morphology and histology of the brain and sensory apparatus as correlated with behavior and habitat; description and analysis of the courtship and reproductive behavior of anabantoid fishes; and the experimental analysis of social organization in centrarchid and anabantoid fishes. Avian studies have dealt with reproduction and social behavior in waterfowl and certain upland bird species Students have been supported by departmental teaching assistantships and research and training grant funds from the N.S.F., F.W.P.C.A., U.S.D.I., and O.S.U. Research Foundation. Introductory and advanced courses and seminars in Ethology are taught by Dr. Miller in the Zoology Department, while comparative and physiological psychology courses are offered in the psychology department. Students interested in advanced work in these areas should contact Dr. Rudolph J. Miller at: Department of Zoology, Oklahoma State University, Stillwater, Oklahoma 74074.

CIRCULAR ON ANIMAL BEHAVIOR: At the request of the Executive Committee, Allen Stokes has prepared the following circular on animal behavior. This material is to be printed and sent to the many people (mostly high school students) who ask for general material on this area of biology. I am printing the circular in the newsletter so that members of the society may comment on it and suggest revisions. Keep in mind that David Davis is preparing a brochure on "Careers in Animal Behavior" which will be aimed at a more professional audience, and can therefore be sent to people who request more detailed information. The present circular is a purposefully "low key" presentation, which can be sent out in large numbers to the many young people who are essentially asking what the field is all about, and how they may obtain more information about it.

ANIMAL BEHAVIOR

The Scope of Animal Behavior

The study of animal behavior is an important segment of biology. Ethology , the scientific study of animal behavior, draws no lines between the behavior of humans and that of lower animals. However, for the most part the study of human behavior is undertaken by psychologists. The ethologist seeks the cause, the function, and the origin of behavior. The causes of behavior include all of the stimuli from both outside and within the animal that affect its behavior. Physiology forms an essential part determining internal mechanisms of behavior. The functions include the immediate effects of certain behavior upon an animal or other nearby animals, and also the long-term effect of behavior on its physical and biotic environment. The origin of behavior includes evolution--the adaptive changes in behavior in response to environmental pressures during the history (phylogeny) of a species; ontogeny--the development of behavior as the individual animal matures; and learning--the modification of behavior through experience.

Animal behavior cuts across numerous other biological disciplines. For example, the physiologist is interested in the nervous system and how hormones mediate behavior; the ecologist may study how an animal's behavior adapts it to live in a particular environment; and the geneticist in how behavior may be changed through selective breeding or hybridization. Many people study the behavior of free-living animals outdoors. However, more and more it is necessary to study animals under

restriction with control over the environmental conditions and the stimuli to which an animal is subjected. In addition we must often know about the history of an animal before experimentation.

All animals, regardless of size, have proven to be valuable subjects in behavioral studies. A study of the cyclic periods of activity of blood parasites has revealed how the activity periods of parasite and mosquito are synchronized with that of man to facilitate transmission of disease organisms from one person to another.

Careers in Animal Behavior

Many opportunities for a career in animal behavior lie in teaching. The number of colleges offering courses in animal behavior is increasing by leaps and bounds. Formerly animal behavior was taught largely to graduate students. Today animal behavior has become a cultural course designed to give people a better understanding of the animal world around them and through experience with animals to gain an appreciation of their own behavior. Today there is a growing effort to introduce living animals into biology courses at all academic levels, especially in grade schools. Biology teachers will increasingly be taking courses in animal behavior so that they can make more effective use of living animals in their teaching.

Perhaps the second most important career lies in health-related, agricultural, and conservation organizations. Animals transmit disease and damage crops, trees, buildings, and other animals. Hopefully we can discover means of reducing the extent of such damage by behavioral means. In addition we need to understand animal behavior to assess and minimize the damage to wildlife from pesticides and the many forms of air and water pollution. Studies of the effects of separating young animals from the parent, of crowding and of drugs upon behavior serve as models for study of human behavioral diseases.

Training and Understanding

You may just wish to gain a better understanding of animal behavior for your own enjoyment. Some of the books listed below will give you an excellent introduction. However, should you seek a career in animal behavior a solid background in biology and psychology is essential. You will also want training in chemistry and enough mathematics to understand the quantitative aspects of behavior. For a listing of colleges that offer training in animal behavior write to Dr. Charles D. Howell, Dept. of Biology, University of Redlands, Redlands, California, 92373, and request a copy of "Catalogue of Graduate Schools with Programs in Animal Behavior."

Suggested Reading

The Animal Behavior Society has published a comprehensive list of books and journals about animal behavior--some popular, others specialized. This is available for twenty-five cents from the author, Dr. N. M. Jessop, Dept. of Biology, California Western University, 1600 Lomaland Drive, San Diego, Calif., 92106. The following paperbacks will give you an introduction to certain aspects of animal behavior--especially those of free-living animals.

K. Z. Lorenz. 1952. King Solomon's Ring. Apollo. $1.95. One of the great ethologists describes his pioneering studies with animals.

N. Tinbergen. 1968. Curious Naturalists (Natural History Library), Anchor Books, Doubleday. $1.75. A behind the scenes look at how many of the great European ethologists have gone about their field studies.

Manning, A. An introduction to Animal Behavior. Addison-Wesley.

V. G. Dethier. 1962. To Know a Fly. Holden-Day $2.75. An American ethologist relates his ingenious experiments to unravel how a fly responds to its surroundings. A literary gem.

K. Von Frisch. 1953. The Dancing Bees. Harvest Book, Harcourt-brace-World. $1.95. The author describes his classic studies on orientation and communication in honeybees.

A. W. Stokes, Editor. 1968. Animal Behavior in Laboratory and Field. W. H. Freeman and Co. $4.95. If you wish to do some experimenting on your own, this book has over 40 exercises most of which can be carried out with simple equipment. These could serve as starting point for your independent investigation.

PLEASE SEND ANY CHANGES OF ADDRESS DIRECTLY TO THE ABS TREASURER: DR. PAUL B. SIEGEL, DEPARTMENT OF POULTRY SCIENCE, VIRGINIA POLYTECHNIC INSTITUTE, BLACKSBURG, VIRGINIA 24061

BALLOT

ANIMAL BEHAVIOR SOCIETY

ELECTION OF OFFICERS FOR 1970

Vote for one for each office

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Dr. Nancy Jessop
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Dr. Rudolph Miller
Oklahoma State University
Stillwater, Oklahoma _____

Please return this ballot no later than December 20, 1969 to:

Dr. Benjamin Dane
Animal Behavior Society
Department of Biology
Tufts University
Medford, Massachusetts 02155