

February 1980

NEWSLETTER
ANIMAL BEHAVIOR SOCIETY
SECTION (DIVISION) ANIMAL BEHAVIOR AND SOCIOBIOLOGY

Devra G. Kleiman, Secretary
National Zoological Park
Washington, D. C. 20008

American Society of Zoologists
Ecological Society of America

LAST CALL FOR PAPERS - 1980 ABS MEETING: Members of the Animal Behavior Society are invited to contribute papers for the Annual Meeting to be held on 9-13 June 1980 at Colorado State University, Fort Collins, CO. Transmittal forms, instruction for the preparation of abstracts, and other pertinent information were included in the November 1979 Newsletter. Housing and registration information are included in this Newsletter. Questions relating to the program should be addressed to the Program Officer, Joan Lockard, RI-20, University of Washington, Seattle, WA 98195 (206-543-3494). Deadline for the receipt of abstracts is 7 March 1980.

INVITED PAPER SESSIONS INCLUDE:

- (1) Female social strategies; organized by Sam Wasser, Univ. Washington (one day).
- (2) Structure and Evolution of Carnivore Social Systems; organized by Marc Bekoff and Michael Wells, University of Colorado ($\frac{1}{2}$ day).

KEYNOTE SPEAKER: R. A. Hinde (Cambridge), "Ethology and the Social Sciences" (Wed., 11 June, 9 A.M.).

BANQUET SPEAKER: Valerius Geist (Calgary). (No topic as yet).

ALLEE AWARD: Students interested in competing for the outstanding student paper at the 1980 ABS Annual Meeting must apply to the Program Officer for a place on the program, following the same procedures as for other papers, but with "Allee Award" marked on the Transmittal Form. In addition, the applicant must submit 4 copies of a written manuscript, not to exceed 7 pages of double-spaced text (details of full application procedures may be found in the November 1979 Newsletter), to Jack Hailman, Department of Zoology, Birge Hall, University of Wisconsin, Madison, WI 53706, by 7 March 1980.

MIDWESTERN REGIONAL MEETING: A Midwest Animal Behavior Meeting will be held 11-13 April 1980 at the Student Union, University of Wisconsin-Milwaukee. Keynote speaker will be Vincent G. Dethier. April 11, Poster Session; April 12 and 13 (morning), Plenary sessions and Round tables; April 12 (evening), Banquet. Post-conference trips are planned. For Conference housing, contact: Kathy Gauke, Astor Hotel, 924 E. Juneau Ave., Milwaukee, WI 53201 (414-271-4220). For further Conference information contact: Jonathan Copeland, Department of Zoology, University of Wisconsin-Milwaukee, Milwaukee, WI 53201 (414-963-4214). A mailing will follow to members of ABS.

USECC ELECTIONS: In the recent election for the U. S. Ethological Conference Committee delegates, William Keeton, Devra Kleiman, and Frank McKinney were elected. A total of 162 ballots was cast. Other current members of the USECC include Marc Bekoff (Secretary), Colin Beer, John King, Gilbert Gottlieb, Ed Banks, and Jerry Hirsch.

ANIMAL BEHAVIOUR: New "Instructions to Authors" will appear in the February 1980 issue of Animal Behaviour. Major changes include a requirement that three copies of manuscripts be submitted and a discontinuation of the use of raised decimal points.

SPONSORS FOR THE 1983 ABS MEETINGS: ABS is presently accepting bids for a meeting site in 1983. Address correspondence to the President, George Barlow, Dept. of Zoology, University of California, Berkeley, CA. 94720.

DEADLINE FOR RECEIPT OF MATERIALS FOR THE MAY NEWSLETTER IS 15 APRIL 1980.

ONTARIO ECOLOGY AND ETHOLOGY COLLOQUIUM: The 1980 meeting of OEEC will be held at Brock University, St. Catharines, Ontario, 28-30 April. The conference will consist of concurrent sessions, and keynote lectures by R. K. Selander and L. E. Gilbert. Dennis Chitty will give a concluding lecture. For further information contact: W. H. Cade or R. D. Morris, Biology Department, Brock University, St. Catharines, Ontario, L2S 3A1.

SYMPOSIUM ON ANIMAL CONSCIOUSNESS: The Departments of Zoology and Philosophy and the Museum, Michigan State University will host a symposium on The Question of Animal Consciousness: Philosophical and Biological Perspectives on April 5, 1980 at Michigan State University. The participants will be Donald Griffin (Animal Behavior, Rockefeller), Terre Levy (Behavioral Sciences, Chicago), David Premack (Psychology, Pennsylvania), Martin Benjamin (Philosophy, Michigan State), Jonathan Bennett (Philosophy, Syracuse) and Joseph Margolis (Philosophy, Temple). The significance of recent research in the behavioral sciences and neurophysiology will be examined together with perspectives from the philosophy of language, mind, and ethics. Discussion among the participants, and with the audience, will be encouraged. For further information, contact: Dr. Richard Hall, Department of Philosophy, Michigan State University, East Lansing, MI 48824.

SYMPOSIUM ON CORAL REEFS: The Fourth International Coral Reef Symposium will be hosted by the University of the Philippines in Manila on 18-22 May 1981. Topics to be covered include biology and geology of coral reefs, man's relationship to the reef, coral reef fisheries, and coral reef management. For further information, contact: Marine Sciences Center, IVCRS, University of the Philippines, P. O. Box 1, Diliman, Quezon City, 3004, Philippines.

A.B.L.E. ANNUAL MEETING: The Association for Biology Laboratory Education, A.B.L.E., will hold its annual meeting/workshop June 2-6, 1980 at the University of Illinois, Urbana. The purpose of this meeting is to exchange ideas on creative, innovative techniques used in the teaching laboratory. Scheduled workshops will accompany the meeting. For more information, contact: Don Fritsch, Biology Department, Virginia Commonwealth University, Richmond, VA 23284.

EVOLUTIONARY MONOGRAPHS is a new series, sponsored by the Society for the Study of Evolution, which will publish monographs in the area of evolutionary biology on an irregular basis. For information on the subscription cost, format, refereeing policies, subject matter, and submission policies contact: Leigh van Valen, editor, Evolutionary Monographs, 915 E. 57th Street, University of Chicago, Chicago, IL 60637.

HUMAN ETHOLOGY NEWSLETTER: The International Society for Human Ethology publishes a newsletter which carries reports on meetings, publications of interest and reports of recent and as yet unpublished work. The Society includes zoologists, psychologists, sociologists, anthropologists, etc. who are interested in human behavior from an evolutionary perspective. The newsletter, edited by Cheryl Travis, is distributed at cost. To join the Society and subscribe to the newsletter for one year, send a check for \$5.00 payable to "Human Ethology Newsletter", to Cheryl Travis, Department of Psychology, College of Liberal Arts, University of Tennessee, Knoxville, TN 37916.

GRADUATE PROGRAM IN ANIMAL BEHAVIOR: University of Missouri-St. Louis: Department of Biology, M.A. Zuleyma T. Halpin, behav. ecol. verts.; chem. communication. James H. Hunt, soc. evol. and ecol. Hymenoptera. Victoria Sork, plant pop. biol. and behav. ecol. mammal. seed dispersers. Department of Psychology, M.A. and Ph.D. George T. Taylor, ontogeny soc. behav. rodents.

HOUSING AND REGISTRATION INFORMATION

1980 ABS MEETING, COLORADO STATE UNIVERSITY, FORT COLLINS, COLORADO

June 8-14, 1980

LOCATION: The host institution, Colorado State University, is located in Fort Collins, Colorado, approximately 65 miles north of Denver and 45 miles south of Cheyenne, Wyoming on north-south Interstate highway 25.

PRE-REGISTRATION: You are urged to preregister. Only prepaid preregistration will guarantee participation. Registration fees are \$22.00 for regular members and \$11.00 for student members. Registration fees include use of campus facilities, two coffee breaks daily, and a copy of the abstracts.

TRANSPORTATION: It is suggested that persons flying to the conference book passage to Denver-Stapleton Airport where a wide variety of ground transportation is available. Although Cheyenne, Wyoming is closer, transportation from Cheyenne to Fort Collins is difficult to arrange. Continental Trailways buses depart the airport for Fort Collins via the Denver Bus Terminal daily. Fare: one-way \$5.95; round-trip \$11.50. *
Front Range Limousine Service offers transportation direct from Stapleton Airport 12.10
to several Fort Collins locations. Reservations must be made 24 hours in advance.
Call (303) 568-7555 or write Front Range Limousine, 4640 E. County Road 66, Wellington, Colorado 80549. There is no taxi service in Fort Collins.

Bus Depot
1055 12th St
Denver
Airport

11:30-7:15 PM 7:30-9:55 Denver-10 PM-11:45, 8:00-9:55

REGISTRATION: The registration desk will be located in the upper lobby of the Lory Student Center from noon until 9:00 p.m. Sunday, June 8, from 9 a.m. to 6 p.m. on Monday, June 9, and from 9:00 a.m. to noon on Tuesday and Wednesday June 10th and 11th.

PARKING: If necessary, parking stickers will be furnished at registration.

HOUSING: Housing is in the Parmelee-Corbett complex, a summer adult education facility. Rooms are available as singles, doubles, or family suites. Adjoining bedrooms share a bathroom. Linen, soap, and towels are provided. Maid service is part of the room rate. Each room has a phone for local service. Pets are not allowed. Daily rates: single: \$16.50; double: \$11.75 per person per night; suites: \$32.00. Only prepaid preregistration will guarantee housing space.

OFF-CAMPUS HOUSING: A list of Fort Collins area motels willing to accommodate C.S.U. conference participants will be sent with registration confirmation if requested. Reservations at off-campus facilities are the responsibility of the participant.

MEALS: Meals are available in the Lory Student Center cafeteria. A fifteen meal package is available for \$43.50. Partial packages are not available. Persons not taking the meal package will be on a pay-as-you-go basis.

BANQUET: A Wednesday evening banquet will feature traditional and local cuisine. Tickets are available at registration for \$9.00. Please indicate on the registration form the number of banquet tickets you wish.

SESSIONS: Sessions will meet in the Lory Student Center, a short walk from the housing area.

RECEPTION: A welcoming reception/steak fry will be held Sunday evening June 8. Cost of the steak fry will be \$10.00 per person. Please indicate on the registration form the number of tickets you desire.

FIELD TRIPS: A trip to the Rocky Mountain National Park with dinner and an evening of western entertainment is planned for Thursday, June 12. Cost of the trip is estimated

at \$23.50 per person. Minimum of 125 required. Please indicate the number of tickets you desire on the registration form. A field trip to the Pingree Park mountain campus of CSU is scheduled for Friday, June 13. Cost of the tour is estimated at \$12.50 per person. Minimum of 65.

LATE FEES/REFUNDS: A late fee of \$5.00 will be assessed for all registrations post-marked after May 27, 1980. Full refund will be given if cancellation is received before 5:00 p.m. (MDT), June 4, 1980.

PAYMENT: Participation is guaranteed through prepaid registration. Confirmation will be sent for all registrations received by May 27, 1980. Make all checks payable to Colorado State University. Credit cards can not be accepted for payment of conference related fees, housing, or field trips.

MISCELLANEOUS: Colorado experiences mild days and cool nights during June. It is suggested that you bring a sweater or light jacket if you plan to be outdoors during the evening hours. Occupation of recreational vehicles within the Fort Collins city limits is prohibited. Ample space will be provided for parking recreational vehicles. Campus police strictly enforce the city ordinance.

COORDINATION: Questions and/or problems should be directed to:

ANIMAL BEHAVIOR CONFERENCE
Conferences and Institutes
Rockwell Hall
Colorado State University
Fort Collins, Colorado 80523
Phone: (303) 491-6222 or 491-7501

REQUEST FOR RECORDINGS OF RAPTOR VOCALIZATIONS: A technique for censusing diurnal and nocturnal raptors is being developed and tested, based on responses to recorded raptor vocalizations. We are interested in access to recordings of all North American Woodland hawks and owls for which the following information is available: location and behavioral context within which the recording was made and, if possible, age and sex. Any inquiries and correspondence from others involved in related work would be welcome. Direct correspondence to: Dr. James A. Mosher, Appalachian Environmental Laboratory, University of Maryland, Frostburg State College Campus, Frostburg, MD 21532.

AMERICAN MUSEUM: In March 1980 the Board of Trustees of the American Museum of Natural History plans to consider a proposal to dissolve the Department of Animal Behavior. There appears to be a very strong probability that the proposal will be adopted, and further, that the Board has not been made aware of the opinion of the scientific community on the matter. If you are interested in expressing your views to the Board, write to Mr. Robert G. Goelet, President, The American Museum of Natural History, Central Park West at 79th Street, New York, New York 10024, and ask him to bring your views to the attention of the Board.

VOLUNTARY CONTRIBUTIONS: The Animal Behavior Society welcomes voluntary contributions from its members. Members should be aware that they can make the Animal Behavior Society a beneficiary of an estate or named in a will.

(Photocopy this form if additional copies are needed)

REGISTRATION FORM
1980 ANIMAL BEHAVIOR SOCIETY MEETING
June 8-14, 1980
Colorado State University

Please register:

NAME Dr Steve Rebach Phone 301-742-5711
ADDRESS 104 Southwood Terrace CITY Salisbury STATE Maryland ZIP 21801
AFFILIATION Univ. of Maryland Eastern Shore

I plan to arrive on campus:

Day Sat June 7 Time 2130

I plan to depart campus:

Day Fri June 13 Time 1200

Register me as:

- 1. Regular member participant @ \$22.00 \$ 22.00.
- 2. Student member participant @ \$11.00 \$ _____.

For:

- 1. 6 nights lodging - single occupancy @ \$16.50/night \$ 99.00.
- 2. _____ nights lodging - double occupancy @ \$11.75/person/night . \$ _____.
 roommate preference, if any _____
- 3. _____ nights lodging - family suite @ \$32.00/night \$ _____.

I choose:

- 1. 1 meal packages @ \$43.50/package \$ 43.50.
- 2. Not to participate in a meal package plan \$ _____.

I would like:

- 1. 1 tickets for the reception/steak fry @ \$10.00/ticket . . . \$ 10.00.
- 2. 1 tickets for the banquet @ \$9.00/ticket \$ 9.00.

I would like:

- 1. _____ tickets for the Rocky Mtn./Lazy B tour @ \$23.50/ticket . \$ _____.
- 2. _____ tickets for the Pingree Park tour @ \$12.50/ticket \$ _____.

Late fee . . . \$5.00 if after May 27, 1980 \$ _____.

TOTAL ENCLOSED \$ 183.50

Make all checks payable to Colorado State University.
Only prepaid preregistration can guarantee housing and participation.
Full refund will be made if cancellation is received by 5:00 p.m. (MDT), June 4, 1980.

Return to: ANIMAL BEHAVIOR MEETING
Conferences and Institutes
Colorado State University
Fort Collins, Colorado 80523

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ABS ANIMAL CARE COMMITTEE: At the 1979 ABS Annual Meeting in New Orleans, the ABS By-Laws were amended to set up a standing Animal Care Committee (ACC). This committee will be responsible for: 1) maintaining a file on federal and international legislation on animal welfare, endangered species, and related areas; 2) providing advice to members who seek counsel regarding treatment of animals in proposed research and providing for consultation by the Editor of Animal Behaviour; 3) informing the membership of new legislation and other events relevant to the care and treatment of research animals. The members of the committee and their areas of responsibility are: Patty Gowaty - legislation on use and importation of birds, including migratory bird laws (Dept. of Zoology, Clemson University, Clemson, S. C. 29631; 803-656-2416); J. B. Mulder - legislation on use, treatment and importation of primates (Dept. of Animal Science, Univ. of Kansas, Lawrence, KA; 913-864-5171); Carol Diakow - legislation and guidelines on care of laboratory animals (Dept. of Biology, Adelphi Univ., Garden City, N. Y.; 516-294-8700); Chris Thoms - liaison with animal welfare organizations (Dept. of Biology, Mount Mercy College, Cedar Rapids, IA 62402; 319-363-8213); Everett Wyers - monitoring of pending federal legislation and other events of interest (Dept. of Psychology, S.U.N.Y., Stony Brook, N. Y. 11794; 516-246-6714); Jack Hailman - liaison with ABS Executive Committee (Dept. of Zoology, Univ. of Wisconsin, Madison, WI 53706); Zuleyma Halpin - Chairperson, endangered species (Dept. of Biology, Univ. of Missouri-St. Louis, St. Louis, MO 63121; 314-453-5811).

The ACC has now compiled a packet containing copies of the following legislation: Animal Welfare Act, Lacey Act, Endangered Species Act, Migratory Bird Treaty Act, 62 Statute 686. Anyone wishing to receive this packet should send a large, self-addressed, stamped (60 cents first class), manila envelope to Zuleyma Halpin at the above address.

The members of the standing ACC wish to thank the members of the ad-hoc ACC for their many valuable suggestions and contributions. Special thanks are due to Peter Borchelt, who co-chaired the ad-hoc committee and was responsible for drafting the original version of the Animal Care Guidelines.

* * * * *

The following are proposed "ABS Guidelines for Animal Care" prepared by the ad-hoc ACC and approved by the new standing ACC and the ABS Executive Committee. ABS members are requested to vote on these Guidelines; if approved, they will become official ABS policy. Please complete the ballot in this Newsletter and return it to Zuleyma Halpin, Dept. of Biology, Univ. of Missouri-St. Louis, St. Louis, MO 63121 by 1 April 1980.

ABS GUIDELINES FOR ANIMAL CARE

PREFACE

A. Research activities of members of the Animal Behavior Society (ABS), and their students, have the general goal of understanding animal behavior. Research activities are an important part of the training of competent and responsible behavioral scientists. Furthermore, research in the area of animal behavior is important for improving conditions of animals in captivity and promoting conservation of natural populations.

B. The purpose of the following guidelines is to promote the continuing interest of the ABS in furthering of scientific knowledge and conscientious awareness of human responsibility toward animal life.

C. These guidelines should not be considered an imposition upon the scientific freedom of individual researchers, but rather as helping to provide an ethical framework to which each member may respond in making decisions related to animal welfare.

I. FEDERAL, STATE, AND LOCAL REGULATIONS

Members, their students, and research associates have an obligation to become thoroughly familiar with, and comply with the provisions of the Animal Welfare Act (1970), the Endangered Species Act (1973), 62 Statute 686 (1948), and the Migratory Bird Treaty Act (1918), all subsequent amendments, rules, and regulations pursuant to these Acts, and other applicable federal, state, and local statutes and regulations to which the researcher may be subject. In the case of animals trapped in foreign countries, researchers have an obligation to become familiar with, and comply with the relevant regulations of those countries.

II. STANDARDS OF RELATED ORGANIZATIONS

Members and their affiliates should attempt to become familiar with standards of organizations, other than the ABS, which relate to the care, treatment, and use of animals in behavioral research.

III. ABS GUIDELINES FOR ANIMAL CARE

A. Choice of Animals:

1. Species: The species chosen for study should be well-suited to answer the questions posed. When the research involves the use of procedures which are likely to cause unavoidable pain or discomfort to the animal, and when alternate species can be used, the researcher should employ the species which, in his/her opinion, is least likely to suffer.

2. Number of individuals: In the case of (a) laboratory experiments involving non-optimal conditions (e.g. pain or discomfort), or (b) field studies involving manipulations potentially detrimental to the population, the researcher should utilize the smallest number of animals necessary to accomplish the research goals.

3. Status of natural populations: If the taxon or population is endangered or threatened, individuals should not be collected except in cooperation with a serious conservation endeavor and in compliance with the Endangered Species Act (1973) and other pertinent legislation. The researcher is responsible for ascertaining the status of the taxon or population in question and should uphold not only the letter but also the spirit of those laws dealing with endangered species both in the U.S.A. and in the foreign countries where the animals originate.

B. Procurement of Animals:

Researchers should obtain animals only from reliable and legal sources. As much as possible, the researcher should ensure that those responsible for handling of the animals en route to the research facility provide adequate food, water, ventilation, and space, and do not impose undue stress. If animals are field-trapped this should be done legally and in a manner which is as painless and humane as possible.

C. Housing and Animal Care:

Unless contraindicated by research protocol, animals should be maintained and cared for in such a manner as to meet their species-typical and individual needs. Minimal standards are specified in Guide for the Care and Use of Laboratory Animals, DHEW Publication No. (NIH) 74-23.

D. Pain or Discomfort:

Since the traumatic effects of experimental procedures are likely to vary from species to species, the researcher should attempt to ascertain how much his/her research species is likely to suffer as a result of the procedures employed. In general, researchers are urged to consider the use of alternative procedures before employing techniques which are likely to cause physical or psychological discomfort to the animal. In accordance with existing animal welfare laws, pain or discomfort, even when unavoidable, should be minimized to the greatest extent possible under the requirements of the experimental

design. Attention should be given to proper pre- and post-operative care in order to minimize preparatory stress and residual effects. Unless specifically contraindicated by the experimental design, procedures which are likely to cause pain or discomfort should be performed only on animals which have been adequately anesthetized.

E. Final Disposition of Animals:

Whenever practical or feasible, researchers should attempt to distribute their animals to colleagues for further study. Except as prohibited or prescribed by federal, state, or local laws, researchers may release field-trapped animals if this is practical and feasible, and if it is critical to conservation efforts. However, the researcher should consider that releases into the wild may be injurious or detrimental to existing populations in the area, and releases should be made only after the researcher has determined that the negative impact is likely to be minimal. As a general guideline, field-trapped animals should be released only within the same area where they were trapped (unless conservation efforts dictate otherwise), and only when their ability to survive in nature has not been impaired, and when they do not constitute a health or ecological hazard to existing populations. If animals must be destroyed subsequent to the study, this should be done by euthanization in as humane and painless a way as possible, and death of the animals should be confirmed before bodies are discarded.

IV. SOCIETY ACTION

A. Animal Care Committee:

An Animal Care Committee (ACC) is to be established to aid ABS members in complying with existing federal and international legislation on animal welfare and on endangered species. The function of ACC is primarily educational. It will provide a forum for dialogue among ABS members regarding what constitutes proper care and use of animals in behavioral research. Members will maintain a file on current legislation and, if possible, on pending legislation. Furthermore, they will be responsible for becoming well-informed in the area of animal care and welfare.

B. Membership of the ACC:

The ACC will be composed of six members who will be appointed by the President of ABS and confirmed by the ABS Executive Committee for terms of three years. To insure an adequate representation of interest areas, the ACC membership should include individuals with experience in diverse areas of animal behavior, such as ethology, comparative psychology, field biology, behavioral physiology, veterinary science, and animal welfare. ACC members will meet annually at ABS meetings, but may also conduct their work at other times.

C. Functions of the ACC:

1. Education: The ACC will be responsible for informing ABS members of important events (e.g. legislation) relevant to the care and treatment of animals. In addition, members of ABS who seek counsel concerning treatment of animals in proposed research may contact the ACC in writing, or ask the ACC to review a written proposal. However, any counsel provided by the ACC is to be considered only advisory and not binding upon the researcher. Furthermore, the ABS in general, and the ACC members in particular, cannot take responsibility for insuring that any individual ABS member is adequately informed of, or complies with, relevant legislation. This is ultimately the responsibility of each individual member.

2. Public and Professional Interests: One or more members of the ACC will act as a liaison with national and local welfare organizations and other interested bodies on matters related to the care, treatment, and use of animals. If the need should arise, ACC members may answer questions or make statements to the general news media. However, such statements should be of an informational nature only, and the ACC member(s) must state that the views expressed do not necessarily represent the official positions or policies of the ABS. Official policy statements may be made only with the approval of the ACC and of the ABS Executive Committee.

V. PUBLICATION OF ABS GUIDELINES

The ABS guidelines (sections I, II, and III of this report) will be published annually in the ABS Newsletter. The entire report (Preface, Sections I through V) will be distributed to all current and new ABS members.

POSITIONS AVAILABLE:

Animal behavior: A tenure-track, Assistant Professor position is available in the Animal Behavior Program, Dept. of Psych., Univ. of Washington, Seattle. We are looking for the best possible scientist with interests in one or more of the following areas: computer modeling and quantitative analysis of ethological or sociobiological processes; socio-biology; laboratory ethology; neuroethology; or behavior genetics. Advanced degree need not be in psychology, but candidates must be capable of teaching basic level courses such as statistics. Send brief statement of research interests, vita, reprints and three letters of recommendation to: Dr. David P. Barash, Dept. of Psychol., Univ. of Washington, Seattle, WA 98195, before March 1, 1980. Equal Opportunity/Affirmative Action Employer.

Insect physiologist: A tenure-track faculty appointment at the assistant professor level (\$17,000-19,000, 9-months) is now anticipated for fall, 1980. Applicants must have a Ph.D. and qualifications to carry out independent research in insect physiology. The candidate must be capable of (1) developing an active research program and guiding graduate research in physiological approaches to growth & development or behavior, and (2) teaching appropriate graduate and undergraduate courses. Applications must include a current curriculum vitae and a statement of professional goals, with inclusion of reprints recommended. Deadline for applications, including letters of reference, is March 1, 1980. Send materials to: Dr. William J. Bell, Chairperson, Insect Physiologist Search Committee, Dept. of Entomology, Univ. of Kansas, Lawrence, Kansas 66045. Equal Opportunity/Affirmative Action Employer.

Graduate student: A graduate student is needed to work as a one-half time research assistant (\$480/month) while proceeding toward the Ph.D. degree, beginning early Summer 1980. Research will focus on the ontogeny of social behavior in several species of Arctic microtine rodents with emphasis on ultrasonic vocalizations in infants and adults. A strong background in biology, biological psychology and computer science acquired at the Bachelor's or Master's level is required; the successful candidate must present credentials qualifying him/her for acceptance in the department's graduate program. For further information contact: Dr. E. M. Banks, Dept. of Ecology, Ethology, and Evolution, 515 Morrill Hall, Univ. of Illinois, Urbana, IL 61801.

Senior Project Leaders: Ph.D.s needed for OCCASIONAL consulting in Animal Behavior. New ideas are encouraged. Qualified women and minorities are urged to register. ACTION ANALYSIS, 8922 Linden N., Seattle, WA 98103.

Post-doctoral Fellowships: The University of Chicago is now considering applications for post-doctoral fellowships in behavioral biology. For a description of the program and application instructions, contact: Prof. Stuart Altmann, Allee Laboratory of Animal Behavior, 5712 South Ingleside Ave., Chicago, Illinois 60637 (phone 312/753-2793). Equal Opportunity/Affirmative Action Employer.

Summer traineeships: The U. S. National Zoological Park has available a limited number of traineeships for student research in animal behavior funded by the Friends of the National Zoo. Participants may be based at the Zoo in Washington, D.C. or the Conservation and Research Center, Front Royal, VA. Stipends are \$1,200. Send a resume, statement of interest, transcripts, and three letters of recommendation to Mary Sawyer, FONZ, National Zoological Park, Washington, D. C. 20008, by 15 March 1980. Equal Opportunity Employer.

APPLICATIONS FOR INVITATIONS, XVIIth INTERNATIONAL ETHOLOGICAL CONFERENCE:

Canadian Ethologists: Individuals interested in being considered for an invitation should write for an application form to: Dr. Jacques Bovet, Département de Biologie, Université Laval, Québec, Qué., Canada G1K 7P4. Invitations will not be issued to individuals who do not apply. Deadline for submitting applications is September 1, 1980.

U. S. Ethologists: The U. S. Committee of the International Ethological Conference welcomes you to submit an application for an invitation to the XVIIth meeting to be held from September 1-9, 1981, at the University of Oxford, Oxford, England. There is a selection process since each country has a limited number of slots assigned. Please follow the instructions. Application packets must reach M. Bekoff by August 1, 1980.

The following materials must be included in your packet:

- (1) Ten (10) copies of your application form (below). (All committee members vote.)
- (2) Two (2) self-addressed, stamped postcards (or envelopes), one to notify you that your application has been received, the other to inform you of the disposition of your application (whether you were on the first list of invitees sent to Oxford, your place on the waiting list, etc.). This information will be available after October 10, 1980. If you wish to supplement your application you may include a brief resume (less than 1 page), a letter of reference or introduction, a brief abstract of your thesis, etc., but you must send 10 copies of any supplementary materials.

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U. S. Ethologists Application Form for the XVIIth International Ethological Conference, Oxford, England

Name: _____ Ph.D. (where, when, expected): _____

Complete Address and Telephone Number: _____

General fields of interest: _____

Supplementary information attached? Yes _____ No _____

Application and supplementary material should be sent to: M. Bekoff (USECC Secretary), Univ. of Colorado, Dept. EPO Biology, Box 334, Boulder, CO 80309 by 1 August 1980.

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BALLOT

ABS GUIDELINES FOR ANIMAL CARE

I do do not approve adoption of the proposed "Guidelines for Animal Care".
(Please state specific objections if you disapprove.)

This ballot should be mailed in an envelope bearing the voting member's name by 1 April 1980 to: Zuleyma Halpin, Dept. of Biology, Univ. of Missouri-St. Louis, St. Louis, MO. 63121.

D. G. Kleiman, Secretary
Animal Behavior Society
National Zoological Park
Washington, D. C. 20008

Non-Profit Org
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Permit No. 609

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