

NEWSLETTER Animal Behavior Society

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A quarterly publication

Susan A. Foster, Secretary

Cristin Hulslander, Editorial Assistant
Department of Biology, Clark University, 950 Main St., Worcester, MA 01610 USA

RESULTS 1996 ABS ELECTIONS

Four hundred and ninety-seven ballots were cast in the 1996 election. This is approximately one sixth of the membership. All proposed changes in the Constitution of the Society passed. The following officers were elected:

Second President Elect: Andrew Sih

Treasurer: Marlene Zuk Editor: Bennett G. Galef, Jr.

Member-at-Large: Michelle Pellissier Scott

Congratulations to the new officers, and thanks to all who ran for office. The new officers will begin their terms at the end of the annual meeting in June, 1997.

A MESSAGE FROM THE PRESIDENT SUSAN RIECHERT

My state of the Society address is an easy one this year, as I am happy to report that we are both prospering and entering an era of new and exciting changes and activities. Some of the recent developments that were initiated by my predecessors include consideration of the formation of a centralized office and the shift of the position of editor from an elected officer to one appointed by the Executive Committee of ABS. These changes, when implemented, will provide for greater time and cost efficiency, so that we can spend our money on more important things (e.g. our research grants program). We are further pursuing the increased use of modern communication tools with particular reference to the internet. Shan Duncan and Jim Ha are busy developing the ABS web-site such that it can soon become the official organ of our society.

In recent years, presidents of our society have emphasized areas of particular interest to them.

Because of Zuleyma Tang Martinez's efforts, for instance, we now have means of fostering ethnic diversity in ABS. We have established an Ethnic Diversity Fund and made policy decisions that offer membership fee concessions to individuals from underdevelped countries. You too can reach out to our colleagues in Latin America and other areas through your monetary support of the Ethnics Diversity Fund and through acceptance of young scholars from these countries into your graduate programs. Hugh Dingle and Lee Drickamer have been instrumental in identifying our role as animal behaviorists in solving the earth's biodiversity problem. We have established an ad hoc committee on conservation ecology that, among other duties, is considering the extent to which the maintenance of biodiversity is requisite to our unraveling of the general laws of behavior. Just as our society, itself, needs and benefits from a diverse membership, so does our earth. It is important that ABS become an active contributor in this area.

While I recognize the importance of these recent initiatives and the fact that we cannot let our support of these areas lapse. I have my own 'pet' project that I wish ABS to become involved with. From frequent editorials in Science and Nature and in reports from numerous federal workshops, it is apparent to educators and even our federal government that the US has a science naive public. How then can such individuals make informed decisions about all of the environmental problems impinging on them in this modern world, biodiversity losses, environmental degradation, and global warming to mention only a few? There is a general concensus as to how to remedy this problem and that is to start science education early and through a subject that children can relate to, nature. What makes nature so exciting to children? It is animal behavior, of course! During my tenure as President of ABS, I would like to disseminate simple behavioral exercises and activities that K-12 teachers and nature centers might use in teaching animal behavior principles. I am working closely with Sam Ha and his Education Committee, Linda Rayor and her Publicity Committe and James

Ha and Shan Duncan , the 'web-site committee of two' in opening avenues of communication between ABS and our public. We need your help. Please take a few minutes now or while sitting in that plane you are traveling on in the near future to outline one or more exercises or demonstrations that might be used in educating our children and future public about behavioral principles. You can direct these to my attention or to Sam Ha at Roddy Science Center, Millersville University, Millersville PA, 17551. Do not worry about fine-tuning these for particular grade levels. The education committee will be charged with this task. Let me take this opportunity to thank you in advance for any efforts that you might make in this regard.

1998 ABS ANNUAL MEETING

The 1998 ABS annual meeting will be held 18-23 July at Southern Illinois University, Carbondale, IL. For information contact Lee Drickamer, Department of Zoology, Southern Illinois University, Carbondale, IL 62901, USA.

DIRECTION OF CORRESPONDENCE

ABS Newsletter and general correspondence concerning the Society: Susan Foster, Dept. of Biology, Clark University, 950 Main St., Worcester MA 01610-1477, USA. Deadlines are the 15th of the month preceding each Newsletter. The next deadline is April 15, 1997.

Articles submitted by members of the Society and judged by the Secretary to be appropriate are occasionally published in the ABS newsletter. The publication of such material does not imply endorsement by the ABS of the opinions expressed.

Animal Behaviour: manuscripts and editorial matters: Animal Behaviour Editorial Office, University of Washington, 119 Guthrie Hall, Box 351525, Seattle, WA 98195-1525, USA. Phone: (206) 616-1527; Fax: (206) 616-1528; E-mail: journal@u.washington.edu.

Change of Address: missing or defective issues of Animal Behaviour: Randall Breitwisch, Dept. of Biology, University of Dayton, 300 College Park, Dayton, OH, 45469-2320, USA or Steve Ramey, Assistant to the Treasurer, svrsul@aol.com.

ABS OFFICERS

President: Susan Riechert, Dept. of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN, 37996-1610, USA. E-mail: sriecher@utk.edu.

First President-elect: David Duvall, Dept. of Zoology, Oklahoma State University, Stillwater, OK 74078, USA. E-mail: duvalld@okway. okstate.edu Second President-elect: Meredith West, Departments of Biology and Psychology, Indiana University, Bloomington, IN, 47405, USA. E-mail: mewest@bio.indiana.edu.

Past President: Lee Drickamer, Dept. of Zoology, Southern Illinois University, Carbondale, IL, 62901, USA. E-mail: drickamer@zoology.siu.edu.

Treasurer: Randall Breitwisch, Dept. of Biology, University of Dayton, 300 College Park, Dayton, OH, 45469, USA. E-mail: breit@ncelix.udayton.edu. Secretary: Susan Foster, Dept. of Biology, Clark University, 950 Main St., Worcester, MA, 01610-1477, USA. E-mail: sfoster@black.clarku.edu. Program Officer: Anne Clark, Department of Biological Sciences, Binghamton University, Binghamton, NY, 13902, USA. E-mail: aclark@binghamton.edu.

Parliamentarian: Kimberly Sullivan, Department of Biology, Utah State University, Logan, UT, 84322-5305, USA. E-mail: yejunco@cc.usu.edu. Editor: Michael Beecher, Animal Behavior Program, University of Washington, 119 Guthrie Hall, Box 351525, Seattle, WA, 98195-1525, USA. E-mail: journal@u.washington.edu.

Members-at-Large: Katherine Wynne-Edwards, Dept of Biology, Queen's University, Kingston, ON, Canada, K7L 3N6. E-mail: wynneedw @qucdn.queensu.ca.

Jean-Guy Godin, Department of Biology, Mount Allison University, Sackville, N.B., E0A 3C0, Canada. E-mail: jgodin@mta.ca.
Ken Yasukawa, Department of Biology, Beloit

College, Beloit WI, 53511, USA. E-mail: vasukawa@beloit.edu.

Historian: Donald Dewsbury, Dept. of Psychology, University of Florida, Gainesville, FL, 32611, USA. E-mail: dewsbury@webb.psych.ufl.edu.

IN SEARCH OF MEETING SITES

Sites for future ABS meetings are needed. Anyone wishing to host one of our meetings should contact David Duvall to discuss requirements and to receive further information. We are especially interested in meeting sites in the eastern USA and in Canada given the recent geographic locations of our meetings.

YOUR INPUT IS REQUESTED

An adhoc committee has been established to consider various problems related to our association with the European society ASAB in the publication of Animal Behaviour. For reasons explained in a letter recently sent to the membership via email, and via standard mail when we had no email address on record, the committee is looking for advice from the ABS membership. If you are a member and did not receive a copy of the letter (usually because of problems with an email address or late renewal), please contact the ABS Secretary, Susan Foster and she will get one to you. You may contact her by standard mail (see direction of correspondence) or by sending a request to the following email address: abs@black.clarku.edu.

PLEASE SEND OR CORRECT YOUR EMAIL ADDRESS

The Society is trying to increase the level of email correspondance in an effort to reduce mailing costs and paper waste. If you did not receive an email copy of the member letter described above, and feel that you should have and would like to have done so, please send a message to Steve Ramey, Assistant to the Treasurer, indicating address change in the subject line. He will check your email listing for accuracy. He can be reached at svrsl@aol.com.

SYMPOSIA AND INVITED PAPER SESSION PROPOSALS 1998 ANNUAL MEETING

Proposals for symposia and invited paper sessions to be held at the 1998 annual ABS meeting are invited. The deadline for proposals is May 1, 1997. For additional information and guidelines, contact Anne B. Clark, ABS Program Officer, Dept. Biological Sciences, Binghamton University, Binghamton, NY 13902, USA (aclark@bingsuns.cc.binghamton.edu).

FREE CAREERS GUIDEBOOK AVAILABLE

Our affiliate, AIBS, under agreement with the National Academy of Sciences is providing free of charge a career guidebook for students planning for grad school and beyond in the sciences and engineering. This book is available free of charge to all who agree to make it widely available. Requests to receive the book should be sent to: Careers Guidebook, AIBS, 1444 Eye Street NW, Washington DC 20005. The full text of the book is also available on the NAS web-site (http://www2.nas.edu/cpc).

CALL FOR RESOLUTIONS

Resolutions which deal with important and timely political or social issues that members wish to submit for the consideration of the ABS membership are requested by 10 May. Submitted resolutions will be voted on at the annual business meeting in Maryland. Approved resolutions reflect the views of the Animal Behavior Society membership and are sent to the appropriate external agencies, organizations, or to the general public. Written resolutions should be sent to Dr. Linda S. Rayor, Chair of the ABS Public Affairs Committee, Dept. Entomology, Cornell University, Ithaca, NY 14853 or email: lsr1@cornell.edu.

CALL FOR APPLICATIONS: ABS DEVELOPING NATIONS RESEARCH GRANT

The ABS Research Awards Committee announces the inaugural (1997) ABS Developing Nations Research Grant competition to support faculty/ postdoc/ student research. Only members of ABS outside of the United States and Canada are eligible to apply (please note that student members of ABS are also eligible to apply for the Student Research Grants Competition). Funds are available to support one award of approximately \$700 US in 1997. The DEADLINE FOR RECEIPT of completed applications is 14 APRIL 1997. Please allow at least 14 days for international mail to reach Canada. All applications must be submitted in English. No late applications will be accepted. Applications will be reviewed by two or three referees and judged on the basis of conceptual significance, intellectual merit, originality and feasability as appropriate for the career stage of the applicant. Results will be announced by June 1, 1997. A final report will be required within 15 months of the date of award.

Application materials are available upon request from Dr. Katherine E. Wynne-Edwards, Department of Biology, Queen's University, Kingston, Ontario, Canada K7L 3N6 or wynneedw@biology.queensu.ca Mark the envelope or subject line "ABS Developing Nations Grant". Please note that the guidelines, application materials and award value apply only to the 1997 competition. Guidelines for the 1988 competition will not be available until fall 1997 after confirmation by the ABS Executive Committee.

The following are not considered developing nations: The United States, Canada, Israel, Japan, Australia, New Zealand, Iceland, Norway, Sweden, Finland, Denmark, Germany, The Netherlands, Belgium, Luxembourg, France, The United Kingdom, Ireland, Switzerland, Austria, Italy, Spain, and Portugal.

REPORT FROM LATIN AMERICAN AFFAIRS COMMITTEE (LAAC)

By Zuleyma Tang-Martinez, Chair

Several important recommendations of the LAAC were approved by the ABS Executive Committee at the 1996 annual meeting.

- (1) Membership dues for persons from all developing countries, including all of Latin America. have been reduced to \$25 for regular members. ABS will reconsider student dues at the next annual meeting. In the interim, students from developing countries may pay a \$20 fee rather than the standard \$23. ABS will cover the \$3 difference from a special fund. Only those from developing countries, currently living in developing countries are eligible for the reduced membership dues. This reduction is particularly welcome because the Executive Committee also voted to increase the costs of regular and student memberships fees for the developed countries, while simultaneously recognizing the hardship imposed by the current membership dues for persons in developing countries.
- (2) A new, research grant for developing countries, in the amount of \$700 was approved. This grant is open only to faculty and graduate student applicants who are both nationals and residents of developing countries. At present, only one proposal can be funded each year. The LAAC encourages Latin American members to apply. For application instructions, see page 3.
- (3) ABS is investigating the possibility of publishing the Newsletter on email to avoid delays in regular mail addressed to Latin America. This will allow members to receive their Newsletters in time to respond to deadlines. We also sent out e-mail ballots this year, which should make it easier for members to meet voting deadlines. If you did not receive a ballot and feel you should have, please follow instructions on page 3 for correcting or adding your email address. This will allow Latin American members to be more active and involved in the ABS.
- (4) ABS and the LAAC are considering the possibility of organizing a symposium on "Animal Behavior in Latin America", to be presented at one of the ABS annual meetings. All invited speakers would be Latin Americans who work on Latin American species. We are still in the early stages of planning and we will keep you informed. (5) The ad hoc Latin American Affairs Committee was charged to continue its work for, at least, an additional 3 years.

Based on the responses we received to the letter I mailed to Latin American ABS members last year, it is clear that there are some confusions and misunderstandings on the ways that the ABS functions. I will now clarify some of these issues:

(1) The ABS research grants for graduate students competition is open to ALL graduate students, including those in Latin America. Latin American students are encouraged to apply and they should follow the instructions given in the ABS Newsletter when these grants are announced each year. (2) The "Ethnic Diversity Fund" is open to all Latin American students, whether they live in Latin America or in North America. This fund pays the registration costs for Latin American, "minority" North American, and African students to attend annual Animal Behavior Society meetings. So far, ABS has been able to subsidize registration fees for all students that have applied, including several students from Latin America. Latin American students are encouraged to apply. Unfortunately, at present, we can only afford to cover the registration fee and cannot cover travel or housing costs. Additional details are published every year in the Newsletter. (3) Committee members are appointed by the new President each year; they are NOT elected by the members. Anyone wishing to serve on an ABS committee should immediately contact the First President-Elect and let him or her know that they are interested in serving and which committee they would prefer. Not everyone who volunteers can be immediately appointed to a committee, but a list of volunteers will be maintained and, as openings on committees become available, the President will appoint volunteers to fill these openings.

The Latin American Affairs Committee has attempted to meet some of the concerns expressed by our members in Latin America and we are pleased to report the decisions made by the Executive Committee. However, our work is not finished and we will continue to recommend additional changes that will benefit our colleagues in Latin America. The increased visibility of Latin Americans at ABS meetings was apparent at the 1996 meeting, where there were representatives from Brazil, Chile, Ecuador, Argentina, Uruguay, Mexico, Venezuela, and Puerto Rico. At the ABS banquet, President Lee Drickamer officially welcomed the record number of Latin American representatives, and reiterated that ABS is committed to finding ways to better serve our Latin American members.

The LAAC has also prepared ABS membership brochures in Spanish and Portuguese. Anyone wishing to receive copies of these brochures for distribution to colleagues, should request them from LAAC Chair, Zuleyma Tang-Martinez, Department of Biology, University of Missouri-St. Louis, 8001 Natural Bridge Rd., St. Louis, MO 63121; Phone # 314-516-6498; Fax # 314-516-6233; e-mail: szthalp@umslvma.umsl.edu. The LAAC welcomes feedback from members.

YOUNG SCIENTIST TRAVEL AWARDS FOR THE XXV INTERNATIONAL ETHOLOGICAL CONFERENCE, VIENNA, AUSTRIA, 20 - 27 AUGUST, 1997

NSF has funded a travel grant to the U.S. Ethological Conference Committee to provide travel funds for younger scientists to attend the XXV IEC. This grant was advertised last fall in various newsletters (including the August and November issues of the newsletter of the Animal Behavior Society), and originally the USECC asked potential candidates to submit their applications for a travel grant by December 15, 1996. The USECC is currently evaluating this first set of applications, but given the generous level of funding provided by NSF, it seems likely that funds may be available to support additional candidates. Thus, the USECC is inviting young scientists who have not already applied for a travel grant for this meeting to submit an application.

Candidates should consult the November issue of the ABS newsletter for details on the submission of applications. Particularly note that the committee requires 7 copies of all materials, including the letters of recommendation. The next deadline for submission of applications for a travel grant is March 28, 1997.

This year's IEC promises to be even more highly synthetic than is usually the case, with 12 plenary talks on topics ranging from behavioral genetics, immunology & behavior, and the physiological bases of seasonality to conservation biology, comparative methods, and relationships between signal design and sexual selection. There are also 12 symposium on the program, covering an equally wide range of topics, including recent neuroscientific insights on motivation, conflict resolution in animals, the morphological and physiological bases of sperm utilization and their implications for mating behavior, and new approaches to lekking behavior.

Additional information about the meeting can be obtained by contacting the conference organizers, at Medacad@via.at, or by checking the IEC Website, at http://evolution.humb.univie.ac.at/events/iec.html and in the Meeting Announcement section of this Newsletter.

BAD NEWS FROM GERMANY

The Max-Planck-Society plans to close Seewiesen as part of a campaign to eliminate positions in former West Germany and make room for new institutes that are to be established in Germany's recently added states. Because both of the central figures at Seewiesen are retiring, this institute has been targeted for closure. Unfortunately no new institute with a concentration in animal behavior is planned for the new German states. This decision coincides with the loss of chairs in animal behavior at two German universities, Hamburg and Bochum, Germany was an early pioneer in our field: the independent actions of the respective universities and the Max-Planck Society will go far towards eroding its future contributions. Seewiesen, in particular, will be missed because of its emphasis on long term studies of vertebrates that require secured funding. This is an area of study that is difficult to pursue in a university setting. Such studies provide the basis for species management in our current climate of major losses in biodiversity.

ABS has voiced its concern over the proposed closure through an official letter from the Society written by our President, Susan Riechert, and Past President, Chuck Snowdon. If you wish to independently express your views on the matter, address your message to: Professor, Dr. Hubert Markl, Praesident der Max-Planck-Gesellschaft, Postfach 10 10 62, D-80084 Muenchen.

FROM THE TREASURER'S ASSISTANT

Apologies to the handful of members who were asked to "see the explanation" on the back of the renewal form only to find a blank page. I was unable to automate the process this year and had to catch each form individually. Unfortunately, I missed a few.

A big THANKS to everyone who was able to get their dues mailed on time. It really helps us to keep delivery problems to a minimum and me, personally, to keep my sanity.

Internet savvy members may obtain information about their membership or report journal delivery problems at svrsul@aol.com.

ABS TREASURER'S RI	EPORT	Film Committee	250			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Prof. Certification Committee	250			
STATEMENT OF CASH RECEIPTS AND		Second President Elect (Allee Award)	250			
DISBURSEMENTS		First President Elect (Founder's Award)	100			
1 JULY 1995 TO 30 JUNE	E 1996	Parliamentarian				
Beginning Balance:		Total Expenditures 11	17,111			
Certificates of Deposit		Ending Balance:				
Society National Bank, Dayton (NH 121 020	Ending Dalance:				
Checking Account	J11 121,029	Certificates of Deposit				
Society National Bank, Dayton C	OH 42,189		120,000			
Savings Account (Ethnic Diversity Fund)		Checking Account	120,000			
Society National Bank, Dayton OH 4,996		Key Bank, Dayton OH				
Editor's Fund	4,955	Savings Account (Ethnic Diversity Fund)				
Secretary's Fund	- 28	Key Bank, Dayton OH	6,448			
		Editor's Fund	5,107			
Total Beginning Balance	173,141	Secretary's Fund	955			
Revenue Received:		Total Ending Balance 17	77,101			
Revenue Received.		Total Enumg Dalance	7,101			
Membership Dues		A				
Regular	77,408	Approximately \$5,320 in goods and servi				
Student	21,193	donated by members and institutions duri				
Multiple / Joint / Spouse	1,176		fiscal year ending 30 June 1996. These items are			
Emeritus	1,020	not reflected in the above accounting.	not reflected in the above accounting.			
Interest	5,421					
Late Fees	4,803					
Contributions to Unrestricted Fund	1,754	MEETINGS				
Contributions to Research Award Fun						
Contributions to Ethnic Diversity Fund 1,628		First Meeting of the Society for Behavioral				
Miscellaneous Income	1,445		Neuroendocrinology will be held in conjunction			
Label List Sales	1,144		with the 29th Annual Conference on Reproductive			
Graduate Program in Behavior Bookle		Behavior in Baltimore, Maryland, 28-31 May, 1997. This meeting will bring together scientists with a				
Contribution to Offset Credit Cards 548						
Contribution - David Tuber Award Fund 521		research focus on hormonal regulation of c				
Newsletter Only Subscriptions	432 195	behaviors including aggression, affiliation, ingestion, learning, anxiety and reproduction related. Abstracts				
Professional Certification Fees	62	are due 15 MARCH 1997. Please contact Dr. Gregory				
Shortages and Overages	02	Ball, Dept of Psychology, Johns Hopkins				
Total Revenue Received	121,071	Baltimore, MD 21218, phone (410) 516-7				
Total Revenue Received	121,071	preliminary program and registration mate				
Total Funds Available	294,212	gball@jhuvms.hcf.jhu.edu) or see the mee				
		website at www.psy.jhu.edu/~sbn.html.				
Expenditures:		• • •				
Editor of Animal Behaviour	66,411	Chemical Signals in Vertebrates 8	. The			
Secretary	11,058	eighth international symposium on chemi				
Treasurer	10,517	in vertebrates will meet at Cornell Univer	-			
Member-at-Large (Research Grants)	7,489	Ithaca, NY, July 20-25, 1997, hosted by E				
Membership Committee (Directory)	5,510		Johnston. This meeting occurs every three years and			
Program Committee	4,544	brings together chemists, molecular biolo				
Endowment Committee	3,025	physiologists, anatomists, psychologists,				
President	2,560		ethologists/behavioral ecologists. Symposia will			
Ethics Committee	2,200	encompass a variety of topics and taxonor				
AIBS Membership Dues	900		For information contact: Robert E. Johnston, Dept.			
Past President	794	of Psychology, Uris Hall, Cornell University, Ithaca,				
Accounting	750	NY 14853 (attn: Chemical Signals in Vertebrates).				
Ethnic Diversity Awards	425	Fax: 607-255-8433; email: csvrts97 @cor	nell.edu.			

FORAGING/97, Santa Cruz. California. An international conference on foraging behavior is being organized. The conference will be held in late 1997 on the campus of the University of California at Santa Cruz. The organizers encourage interested parties to preregister by visiting http://eric.unl.edu/foraging. Additional information (topics, possible dates and speakers) is available on the web-page. Those without web-access may contact the organizers at the address below. Organizing Committee: Dave Stephens and James Anderson (Univ. of Nebraska, Lincoln), Marc Mangel (Univ of California, Santa Cruz), Don Kramer (McGill Univ.) Address: FORAGING/97. c/o David Stephens, School of Biological Sciences, University of Nebraska, Lincoln, Nebraska 68588 USA.

The Society for Conservation Biology Annual Meeting. June 6 to 9, 1997, Victoria, BC, Canada. The SCB Annual Meeting offers an opportunity to present papers and posters on a variety of topics, with a major theme this year on Marine Conservation Biology. Invited and contributed special sessions will be held concurrently with other nonmarine sessions, but the special emphasis in a number of symposium sessions will be similarities and differences between conservation biology in the marine setting and in other realms. Oral and poster sessions will be scheduled over three days, with evening times available for roundtables and discussion groups. Single and multi-day field trips are planned for the June 10 - 14 period, and will include topics and destinations such as: Forests and Forestry in the Carmanah Valley, Gray Whales of Clayoquot Sound, Marine Biota of the Strait of Georgia, and Ethnobotany of British Columbia Aboriginal People. Call for Papers and Posters deadline is January 15, 1997. For information on abstract submissions, please refer to the conference web site at http:// geography.geog.uvic.ca/dept/announce/scb_page.html Program Information: Dr. David Duffus, Dept of Geography, University of Victoria, PO Box 3050, Victoria, BC, Canada, V8W 3P5. Phone (250) 721-7344, FAX (250) 721-6216, Email dduffus@ office.geog.uvic.ca. Conference Coordination: Pat McGuire, Conference Management, University of Victoria, PO Box 3030, Victoria, BC, Canada, V8W 3N6. Phone (250)721-8746, FAX (250)721-8774, Email pmcguire@uvaix.uvic.ca.

The XXVth International Ethological Conference at Vienna will be held from 20th to 27th August, 1997. This conference will celebrate nearly 50 years of international ethological meetings an excellent opportunity to present a general view of the field. Therefore, the selection of major topics of this conference aims at representing the broad divergence of this vastly expanding field. The

interactions between the highly successful subdisciplines of ethology will be especially emphasized, as well as their linkage with other, specialized branches of modern biology.

Plenary talks will be given on adaptive value, signal design, behavioural genetics, development, behavioural and physiological mechanisms, immunocompetence and disease resistance, neural wiring, comparative analyses, population dynamics, applied aspects, cognitive mechanims, and evolutionary psychology. Speakers include Jan Bolhuis, Frank Bronson, Leda Cosmides, John Endler, Cecilia Heyes, Emilia Martins, Manfred Milinski, Robert Page, Wayne Potts, Edmund Rolls, Bill Sutherland and John Webster. There will be Symposia on sensory ecology (Barth), conflict resolution (Aureli), vocal displays in birds (Groothuis/ten Cate), conflict of interest between the sexes (Halliday/Magurran), neuromodulators and behaviour (Huber), perceptual processes and evolution (Klump), physiological evidence for ethological concepts (Leonard), Darwinian aesthetics (Grammer/Møller), long-range communication (Naguib/McGregor), sperm competition (Peschke), broadening the view of lekking (Wikelski/Taborsky) and, motivation: from brain to behaviour (Zupanc/Lamprecht), Roundtable Discussions will complement the program, for example on mating systems and parental care, hermaphrodite courtship, early hormonal influences on behavioural differentiation, teaching ethology, parasite mediated sexual selection, olfactory communication in mammals, and others. A special event will be a podium discussion with invited participants on "The proximate/ultimate crux: split or synthesis?", chaired and introduced by John Krebs. Five satellite symposia on specific themes take place in Hungary and Austria before and after the conference.

Call for papers. Three possibilities are offered for contributing papers; spoken papers, poster papers and poster talks. The latter includes a brief introduction of posters in a plenary session, at prime time. In the evenings, activities will include film sessions, a special guest lecture, receptions at the conference venue and town hall, and a conference dinner party (admission free for all registered participants). The deadline for especially reduced registration fees, grant applications and for the submission of abstracts will be 28th February, 1997. The final announcement containing the preliminary program, registration forms and booking details for accomodation and excursions may be obtained on request from Wiener Medizinische Akademie (WMA), "XXV IEC", Alserstr. 4, A-1090 Wien, Austria; or by E-mail: medacad@via.at; Fax: +43-1-405-1383-23; Phone: +43-1-405-1383; Home page: http://evolution.humb.univie.ac.at/events/iec.html.

Behavioral and Neural Mechanisms of Communication: A Symposium in honor of Peter Marler. March 22-23, 1997. UC Davis, Alumni Center. This symposium aims to integrate different causal explanations into a coherent framework that will shed new light on the design features of natural communication systems. The program is organized according to four levels of analysis and explanation; neural mechanisms, ontogenetic processes, adaptive significance, and communication and cognitive processes. To capture the causes underlying different communicative systems, and their evolutionary origins, researchers working on a variety of sensory systems and animal groups will discuss their ideas and most recent findings. This symposium is open to the public and no registration fee is charged. About hotels and transportation, see web sites on Davis. We may have to limit the number of participants. Please respond to konishim@starbase1.caltech.edu or hauser@wjh.harvard.edu so that we may know how many want to attend. Organizers are Mark Konishi and Marc Hauser.

Seventy-seventh Annual Meeting of the American Society of Mammalogists. This year's annual meeting will be held from 14 to 18 June, 1997, at Oklahoma State University, Stillwater, OK. The program includes a keynote address entitled "Carnivore Conservation: Reflections on a Decade of Research and Management Recommendations" by Dr. Katherine Ralls (Department of Zoological Research, National Zoological Park, Smithsonian Institution), recipient of the C. Hart Merriam Award. Also included will be a symposium on Social Structure and Deme Dynamics, chaired by Dr. Stephen Dobson of Auburn University and the usual ASM socials, ideal for professional interaction. Contributed papers will address all aspects of mammalian biology. For information: Karen McBee, Department of Zoology, LSW 430, Oklahoma State University, Stillwater, OK 74078-3052, USA. Phone 405-744-9680, email mcbee@okway.okstate.edu.

ANNOUNCEMENTS

Workshop on Computer Intensive Statistics in Biology. Feb. 18-21, Laramie WY. Instructors: Dr. Bryan F.J. Manly and Dr. Trent L. McDonald (WEST, Inc., Phone: 307-634-1756, E-Mail: west @west-inc.com, or visit www.west-inc.com on the Internet). For information on registration, cost, travel, and accommodations, contact the Office of Conferences and Institutes at Phone: 307-766-2124, 800-448-7801, ext. 2, or FAX: 307-766-3914.

Workshop on Resource Selection Functions from Spatially Correlated GIS Field Data. Feb. 24-28, Laramie, Wyoming. Instructors: Dr. Lyman L. McDonald, Dr. Bryan F.J. Manly, and Dr. John W. Kern (WEST, Inc., Phone: 307-634-1756, E-Mail: west @west-inc.com, or visit www.west-inc.com on the Internet). For information on registration, cost, travel, and accommodations, contact the Office of Conferences and Institutes at Phone: 307-766-2124, 800-448-7801, ext. 2, or FAX: 307-766-3914.

Workshop on Design and Analysis of Capture-Recapture Studies for Estimation of Population Parameters. Mar. 24-27. Instructors: Dr. Kenneth H. Pollock, Dr. Trent L. McDonald, and Mr. Russell Alpizar-Jara (WEST, Inc., Phone: 307-634-1756, E-Mail: west @west-inc.com, or visit www.west-inc.com on the Internet). For information on registration, cost, travel, and accommodations, contact the Office of Conferences and Institutes at Phone: 307-766-2124, 800-448-7801, ext. 2, or FAX: 307-766-3914.

OPPORTUNITIES

The Secretary would like to remind you although I try to avoid listing situations that are already filled, the time lag between submission and arrival of the Newsletter can cause this to occur. Please contact those offering the opportunities before applying.

Field Research Assistants (3-4) needed April 1-Aug 1, 1997 and (1) person needed from March 15-Aug 1 to work on breeding bird community research in a longleaf pine system at Fort Bragg, NC. Preference given to applicants that possess bird identification skills by sight and song, hear high and low frequencies, have a valid drivers license, and are willing to work in adverse weather conditions with various insects. Additional experience with point counts, vegetation sampling and map orienteering helpful. Duties include study area set-up, bird count surveys, habitat measurement, general vehicle maintenance, and data entry. Salary: \$1200/month + housing. Send resume and names and phone numbers of three references by March 10 to Jennifer Allen, Dept. of Biology, Virginia Tech, Blacksburg, VA 24061-0406 (540-231-3769; jeallen3@vt.edu). Applicants are encouraged to send information earlier than deadline since at least one position will be filled before deadline.

Volunteers - Approximately 30 volunteer positions are open in 1997 at the American Museum of Natural History's Southwestern Research Station in Portal, Arizona. The volunteer program is run annually and offers students in biological sciences outstanding opportunities to observe and become involved with field research. Food and lodging are provided in exchange for 24 hr per week of routine chores, with the remaining time available for research. The program is open to undergraduate and graduate students; the latter may pursue their own research. Volunteers are needed between March 15 and Nov. 1. Appointments are for part of this period, with a minimum of six weeks. Applicants for spring (March-May) should submit applications by Feb. 15, summer volunteers (June-August) by April 1 and fall volunteers (Sept. - Nov.) any time. Dr. Wade C. Sherbrooke, Director, Southwestern Research Station, American Museum of Natural History, Portal, AZ 85632, USA. Phone (520) 558-2396.

Graduate Research Opportunity. Funds are available to support a graduate student with interests in population biology at Clark University. The successful candidate will pursue a Ph.D. in Biology, and will participate in an investigation of variable egg hatch delay and its relation to environmental uncertainty in container-breeding mosquitoes. A combination of research assistant and teaching assistant appointments will provide full calendar-year support for at least three years, beginning in the summer of 1997. Potential areas for dissertation research are flexible, but should focus on aspects of life-history evolution, behavioral ecology, population ecology, or ecological genetics. Qualifications include a broad undergraduate background in ecology and evolution, strong quantitative skills, and an interest in experimental approaches to theoretical problems. The graduate program has a growing emphasis on ecology and evolution, stressing close interactions between graduate students and faculty. For further information, contact: Todd Livdahl, Department of Biology, Clark University, Worcester, MA 01610 (tlivdahl@black.clarku.edu).

Research Volunteers needed: Hawk Mountain Sanctuary, the world's first refuge for birds of prey, needs your help. Volunteers skilled in word processing and data entry are needed to help the Sanctuary's research staff maintain its unique and growing collection of library resources and field data. Volunteers should be willing to donate at least 8 hours a month to the effort. All work must be done at the Sanctuary, which is located near Kempton, Pennsylvania, approximately 25 miles north of Reading, 30 miles northwest of Allentown, and 85 miles northwest of Philadelphia, Pennsylvania. For more information on the Sanctuary's science-based

conservation efforts and volunteer opportunities, write or call Keith L. Bildstein, Director of Research, Hawk Mountain Sanctuary, 1700 Hawk Mountain Road, Kempton, PA. (610)756-6961; Bildstein@say.acnatsci.org.

National Zoological Park, Smithsonian Institution Fellowships in Animal Cognition. Cognition pre-and post-doctoral fellowships are available for research on animal cognition in the Zoo's new Think Tank, an exhibit on animal thinking. Think Tank has an age-graded group of five orangutans, a stable age-graded group of Sulawesi black macaques, a colony of leaf-cutter ants. and a colony of terrestrial hermit crabs. Ongoing primate studies include acquisition of a computerized symbolic language, self-awareness, tool use, object permanence, and innovation and social transmission. Proposed research must focus on cognition, be noninvasive, and must incorporate animal care and public education. Other species are available in the Zoo's collection for comparative studies. Stipends are \$25,000 per year for post-doctoral fellows and \$14,000 per year for pre-doctoral fellows, plus a research and travel allowance. Stipends are prorated for periods of less than 12 months. Applications should include a 3-page research proposal, a CV, and three letters of recommendation (including one from thesis supervisor for pre-doctoral applicants). Send to Lisa Stevens; Curator, Think Tank; National Zoological Park; Washington, D.C. 20008 by March 15, 1997. Direct questions to Lisa Stevens (202.673.4888) NZPDOM06@SIVM.SI.EDU or to Benjamin Beck (202.673.4787) NZPEM009@SIVM.SI.EDU.

Undergraduate Summer Research

Internships - The Center for the Integrative Study of Animal Behavior (CISAB) at Indiana University invites applications to our NSF-supported Research Experiences for Undergraduates Program in Animal Behavior. A total of 10 REU internships will be awarded to students to participate in this program from 2 June to 9 August 1997. Each internship provides a \$2500 stipend, room & board, and transportation costs to and from Indiana University or the study site. Undergraduates of racial/ethnic minorities, first generation college or low income families are especially encouraged to apply, but all applicants will be considered. Applications will be accepted until all positions are filled. For further information and application forms contact Linda Summers, Administrative Assistant for REU/CISAB at (812) 855-9663 or lisummer@indiana.edu.

Graduate Opportunities in Animal Behavior at Indiana University. The NSF-supported Center for the Integrative Study of Animal Behavior (CISAB) at Indiana University seeks outstanding candidates for training that combines approaches to the study of animal behavior from biology, neuroscience, and psychology. Research areas include mate choice and sexual behavior, ecology of learning, neural plasticity, communication, orientation and migration, and parental behavior and development. Predoctoral research assistantships, research support, and travel funds are available, in addition to departmental support. Candidates should request applications from the Psychology or Biology Departments or the Program in Neural Science. For more information about these departments, contact: Gretchen Clearwater, Department of Biology, Indiana University, Jordan Hall 138, Bloomington, IN 47405, (812)855-1861; Cynthia McCorkle-Welch, Department of Psychology, Indiana University, Psychology Building, Bloomington, IN 47405, (812)855-2014; Faye Caylor, Program in Neural Science, Indiana University, Psychology Building, Bloomington, IN 47405, (812)855-7756; or CISAB, 402 N. Park, Indiana University, Bloomington, IN 47405; (812)855-9663, Fax; (812)855-4011. E-mail: lisummer@indiana.edu. Additional information via the internet: http://www.cisab.indiana.edu. Applications by minorities and women are actively encouraged.

Graduate fellowships are available to pursue doctoral studies with the following faculty at the University of Kentucky: Edmund Brodie III: Evolutionary quantitative genetics; Phil Crowley: Life-history strategies and community ecology; Scott Gleeson: Plant community ecology; Ken Haynes: Insect chemical communication; Nicholas McLetchie: Sex ratio in plants; Allen Moore: Insect behavioral genetics; Craig Sargent: Behavioral ecology of fish; Andy Sih: Ecology of stream organisms; David Wagner: Population genetics of forest trees; David Westneat: Behavioral ecology of birds; David Wise: Community ecology of spiders. See our WWW site at http://darwin.ceeb.uky.edu/ceeb/grt.html. Students who are interested in this NSF-sponsored Graduate Research Training program should contact one of the listed faculty at the Center for Ecology, Evolution and Behavior, 101 Morgan Building, University of Kentucky, Lexington, KY 40506-0225. Because of the source of funding, only US citizens and permanent residents can be considered for these positions. Women and minorities are especially encouraged to apply. The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.

NIMH Training Grant in Behavioral Ecology and Comparative Neurobiology. An energetic faculty and a flexible curriculum are directed toward providing graduate students and postdoctoral scholars an environment where integrative cuttingedge research is performed. Graduate and postdoctoral fellowships are available with the following faculty at the University of Kentucky: Michael T. Bardo (Psychology) - Neurobiology of reward seeking behavior; Brian M. Davis (Anatomy and Neurobiology) - Developmental neural plasticity; Elizabeth A. Debski (Bio logical Sciences) -Plasticity in the visual system; Marilyn J. Duncan (Anatomy and Neurobiology) - Neural regulation of biological rhythms; Thomas V. Getchell (Physiology) - Physiology of chemoreception; Kenneth Haynes (Entomology) - Insect chemical com munication; Timothy McClintock (Physiology) -Molecular biology of olfaction; Douglas G. McMahon (Physiology) - Signal transduction in retina; Allen Moore (Entomology) - Insect behavioral genetics; Bertram Peretz (Physiology) - Maintenance of neuronal fu nctions in mollusks; R. Craig Sargent (Biological Sciences) - Behavioral ecology of fish; Andy Sih (Biological Sciences) - Behavioral ecology of stream organisms; David Westneat (Biological Sciences) - Behavioral ecology of birds; Hong Yan (Biological Sciences) - Neurobiology of acoustic communication. See our WWW site at http://darwin.ceeb.uky.edu/ceeb/beacon.html for more information about the program. Potential postdoctoral fellows and doctoral students who are interested in this NIMH-sponsored training program should contact Dr. Bertram Peretz, Department of Physiology, University of Kentucky, Lexington, KY 40506. Because of the source of funding, only US citizens and permanent residents can be considered for these positions. Women and minorities are especially encouraged to apply. The University of Kentucky is an Equal Opportunity/AffirmativeAction Employer

Graduate Science Fellowships at the Lincoln Park Zoo. The Lincoln Park Zoo offers graduate research fellowships to conduct research in zoology and conservation biology. Fellowship tenure may begin anytime after 1 May, 1997 but all work must be completed prior to 15 April 1998. Fellowship stipends are \$2,500-5,000. For additional information, write to Graduate Science Fellowships, Director of Conservation and Science, Lincoln Park Zoological Gardens, 2310 North Cannon Drive, Chicago, IL 60614-3895 or email your name and complete mailing address to steveed@ix.netcom.com. Deadline for receipt of all application materials is 21 March, 1997.

Ed Almandarz Science Fellowship in Herpetology. The Lincoln Park Zoo offers a 12 week research fellowship to conduct research in herpetology. Projects are to be conducted at the Lincoln Park Zoo. Fellowships are restricted to college undergraduates in good academic standing, recent college graduates, and graduate/professional students. Fellowship tenure may begin anytime after 1 May 1997 but all work must be completed prior to 15 April 1998. Fellowship stipends are \$2,500. All living and other expenses are the responsibility of the individual fellow. Potential projects exist in the disciplines of animal behavior, nutrition, reproduction, physiology, population biology, conservation and veterinary medicine. Projects are supervised by zoo staff but input from academic advisors is encourged. For additional information, write to Ed Almandarz Fellowship, Director of Conservation and Science, Lincoln Park Zoological Gardens, 2310 North Cannon Drive, Chicago IL 60614-3895, or email your name and complete mailing address to steveed@ix.netcom.com. Deadline for receipt of all application materials is 14 March, 1997.

The Secretary requests that all submissions of more than a few lines be made electronically. Uncoded email files are preferable, but submissions may also be made on disk. ASCII and most common word processing system files are acceptable. They may be either MAC or DOS based. The diskettes will not be returned unless a self addressed mailer is included. The e-mail address for submissions is sfoster@black.clarku.edu. Please enclose a hard copy with the diskette, or send a hard copy in addition to email.

APPLICATION / RENEWAL for ANIMAL BEHAVIOR SOCIETY MEMBERSHIP

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