



NEWSLETTER Animal Behavior Society

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A quarterly publication

Susan A. Foster, Secretary

Cristin Hulslander, Editorial Assistant
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RESULTS OF THE 1995 ABS ELECTIONS

155 ballots were cast in the 1995 election. This is less than 5% of the membership. The following officers were elected:

Second President-Elect: Meredith West
Secretary: Susan A. Foster
Member-At-Large: Ken Yasukawa

Representative, USECC, and delegate, IEC Council: Deborah M. Gordon
Representative, USECC, and alternate, IEC Council: Jerry F. Downhower

Congratulations to the new officers and representatives and thanks to all who ran for office. The new officers will begin their terms at the end of the Annual Meeting in August 1996.

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 15 May. Submitted resolutions will be voted on at the annual business meeting in Flagstaff. Approved resolutions reflect the views of the Animal Behavior Society membership and are sent to appropriate external agencies, organizations, or to the general public. Written resolutions should be sent to Dr. Linda Rayor, Chair of the ABS Public Affairs Committee, Dept. of Entomology, Cornell University, Ithaca, NY 14853. Email: lsl1@cornell.edu.

DO YOU KNOW SCIENCE WRITERS?

The ABS Public Affairs Committee is interested in making contacts with science writers, reporters, or editors in the national or local news media (NPR, Science News, Discovery, NY Times, etc.) who we can invite to Animal Behavior meetings and send press releases of exciting research in animal behavior. The Committee promises to treat all contacts with the utmost respect and will not abuse the relationship. Please forward names, addresses, and other pertinent information, including special areas of interest to the writer to:

Dr. Linda S. Rayor, Dept. Entomology, Cornell University, Ithaca, NY 14853, email: lsl1@cornell.edu.

SYMPOSIA AND INVITED PAPER SESSION PROPOSALS 1997 ANNUAL MEETING

Proposals for symposia and invited paper sessions to be held at the 1997 annual ABS meeting in College Park, Maryland are invited. The deadline for proposals is April 30, 1996. For additional information and guidelines, contact Anne B. Clark, ABS Program Officer, Dept. Biological Sciences, Binghamton University, Binghamton, NY 13902, USA (email: aclark@binghamsun.cc.binghamton.edu)

IN SEARCH OF MEETING SITES

Sites for future ABS meetings are needed. Anyone wishing to host one of our meetings should contact Susan Riechert 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.

VENDORS FOR ABS MEETINGS

Have you written or participated in writing a book in animal behavior recently? Do you know of any company that sells equipment pertinent to the study of animal behavior (tracking equipment, video systems, event recorders), or artists whose work focuses on animals? If you know of any publishers or other vendors who might be interested in displaying materials at the annual ABS meetings, please contact Emilia Martins, Department of Biology, University of Oregon, Eugene OR 97403, phone: 503-346-4562, email: emartins@oregon.uoregon.edu.

PLEASE RENEW MEMBERSHIPS ON TIME. Late renewals are expensive. In an effort to compensate for the cost, those who have not yet renewed will not receive newsletters during the period of lapse and they must pay a \$10.00 late fee.

ETHICS CASES

Case #2: A member of the ABS was accused, by four members, of sexual misconduct and professional blacklisting in connection with events at a field study course. Because the events in question predated the Society's Code of Ethics, the Executive Committee decided, on the advice of counsel, not to pursue the case further, and sent a letter to the accused indicating that such behavior was unacceptable.

Case #3: A member of the Society accused a colleague of unethical practices regarding a manuscript submitted to *Animal Behaviour*. In response to reviewers' comments on a manuscript, data gathered by the complainant during a postdoctoral fellowship with the respondent were subsequently reanalyzed by another individual in the lab. This resulted in submission of a revised manuscript that was reportedly submitted without the complainant's knowledge or input, albeit with the complainant listed as first author. The Ethics Committee decided not to pursue this case further, on the grounds that the complainant could not identify any section of our Code of Ethics that covered the complaint, and members of the Ethics Committee could not agree to any specific section of the Code being violated. The Executive Committee concurred with this decision. To attempt to avoid similar problems in the future, *Animal Behaviour*, now requires a statement when a manuscript is submitted, indicating that all authors have seen the manuscript and agreed to its submission.

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, 1996.

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.

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.

ABS OFFICERS

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

First President-elect: Susan Riechert, Dept. of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN, 37996-1610, USA. E-mail: pa34628@utkvm1.utk.edu.

Second President-elect: David Duvall, Zoology Department, Oklahoma State University, Stillwater, OK 74074, USA. E-mail: duvalld@okway.okstate.edu.

Past President: Hugh Dingle, Dept. of Entomology, University of California, Davis, CA, 95616, USA. E-mail: rdhdingle@ucdavis.edu.

Treasurer: Randall Breitwisch, Dept. of Biology, University of Dayton, 300 College Park, Dayton, OH 45469, USA. E-mail: breitwis@udavxb.oca.udayton.edu.

Secretary: Susan Foster, Dept. of Biology, Clark University, 950 Main St., Worcester, MA 01610-1477, USA. E-mail: sfoster@vax.clarku.edu.

Program Officer: Anne Clark, Department of Biological Sciences, Binghamton University, Binghamton, NY 13901, USA. E-mail: aclark@bingsons.cc.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, Dept. of Psychology NI-25, University of Washington, Seattle, WA 98195, USA. E-mail: journal@u.washington.edu.

Members-at-Large: Christine Boake, Dept. of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN, 37996-1610, USA. E-mail: boake@utkvx.utk.edu.
 Katherine Wynne-Edwards, Dept of Biology, Queen's University, Kingston, 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.
Historian: Donald Dewsbury, Dept. of Psychology, University of Florida, Gainesville, FL, 32611, USA. E-mail: dewsbury@webb.psych.ufl.edu.

ABS COMMITTEES

Following is a list of ABS committee chairs and members with the dates their appointments end. If you are interested in serving on an ABS committee, contact ABS President Lee Drickamer.

Membership

Diane Chepko-Sade (1996), Chair
 Eduardo Fernandez-Duque (1996)
 Penny Bernstein (1996)
 Roy Scudder-Davis (1996)
 Nancy Pratt (1996)
 Steve Kolmes (1996)
 Stacey Lance (1997)
 Sean O'Donnell (1997)
 David Westmoreland (1997)

Policy

Michael Renner (1997), Chair
 Hugh Dingle (PP)
 Dave Duvall (PE2)
 Kim Sullivan (PLM)
 Hugh Drummond (1996)
 James Benedix (1997)
 Bernadette Marriot (1997)
 Paul Verrell (1997)
 Jill Mateo (1998)

Education

Ted Burk (1996), Chair
 Hugh Dingle (PP)
 Dave Duvall (PE2)
 Sylvia Halkin (1996)
 Anson Gong (1996)
 Monica Raveret-Richter (1996)
 Michael Ferkin (1997)
 Christy Kimpo (1997)
 Steve Trumbo (1997)
 Cheryl Logan (1998)
 Tom Sproat (1998)
 Kathleen Morgan (1998)

Organization and Bylaws

Kim Sullivan (PLM), Chair
 Joseph Benz (1996)

Jo Manning (1997)
 Jennifer Mather (1998)

Nomination

Hugh Dingle (PP), Chair
 Gail Michener (1996)
 Zuleyma Tang-Martinez (1997)

Animal Care

Joy Mench (1996), Chair
 Abby Schwarz (1996)
 Anne Marie de Pasille (1996)
 Stephen Zawistowski (1996)
 Sylvia Taylor (1996)
 Scott Knight (1997)
 Larry Williams (1997)
 Martin Kavaliers (1998)
 Janette Wallis (1998)
 Robert Sikes (1998)
 Merle Krause (1998)

Public Affairs

Linda Rayor (1998), Chair
 Linden Higgins (1998)
 Kim Sawrey (1998)
 Laura Higgins (1998)

Film

Neil Mercado (1997), Chair
 Kaci Thompson (1996)
 Stan Bursten (1996)
 Lee Davis (1997)
 Lauren Wentz (1997)
 Bob Woll (1998)
 Randall Wolfe (1998)

Research Grants

Chris Boake (ML1), Chair
 Katherine Wynne-Edwards (ML2)
 Jean-guy Godin (1998) (ML3)
 W. John Smith (1996)
 Anne Bekoff (1996)
 Mike Baker (1996)
 Kay Holekamp (1996)
 Scott Carroll (1977)
 Don Jensen (1997)
 Bethea King (1997)
 Chris Mahar (1998)
 Marsha Chaiken (1998)
 Beth Jakob (1998)

Ethics

Stuart Altmann (1996), Chair
 Emilia Martins (1996)
 Janis Driscoll (1996)
 Deborah Gordon (1996)
 Mark Bekoff (1997)
 Jerry Hogan (1997)
 Charles Blaich (1998)
 Jeffery Walters (1998)
 Barbara Turpin (1998)
Applied Animal Behavior
 Patricia McConnell (1997), Chair
 Desmond Maynard (1997)

Kathleen Morgan (1997)
Randall Wolf (1997)
Marianne Feaver (1998)
(plus members of the BPC below)

Board of Professional Certification

Suzanne Hetts (1997), Chair
Susan Riechert (PE1)
Peter Borchelt (1996)
Debra Forthman (1996)
Sharon Crowell-Davis (1997)
Phil Lehner (1997)

Career Awards

Hugh Dingle (PP), Chair
Chris Boake (ML1)
Katherine Wynne-Edwards (ML2)
Jean-Guy Godin (ML3)
Anne Hedrick (1996)
Bridget Stutchbury (1997)
Sid Gauthreaux (1998)

Endowments

Ira Perelle (1997), Chair
Will Gergits (1995)
Janice Moore (1996)
Carey Yeager (1996)
Geoffrey Gerstner (1997)
Laurie Hiestend (1998)

Liasons

ASZ: Dave Duvall (1996)
AAAS (Sec.G): Jerry Hirsch (1996)
AIBS: Eugene Morton (1996)
APA: Donald Dewsbury (1998)
APS: Kathleen Morgon (1998)
AAALAC: Joy Mench (1996)

Permanent Central Office (ad hoc)

Meredith West (1996), Chair
Lee Drickamer (1996)
Susan Foster (1996)
Robert Matthews (1996)
Joy Mench (1996)
George Waring (1996)

Holding and Investing Unexpended Funds (ad hoc)

Robert Matthews (1996), Chair
Randall Breitwisch (1996)
Jane Brockmann (1996)
Patricia DeCoursey (1996)
Jeff Galef (1996)

Latin American Affairs (ad hoc)

Zuleyma Tang-Martinez, (1996) Chair
Linden Higgins (1996)
Peter Narins (1996)

Chuck Snowdon (1996)

Guillermo Pazy Miño (1996)

Legislative Liason (ad hoc)

Irene Pepperberg, Chair

Conservation (ad hoc)

Jim Ha (1996), Chair

Allison Alberts (1996)

Jeff French (1996)
David Chiszar (1996)
Cheryl Asa (1996)
Janine Clemmons (1996)
Richard Bucholz (1996)
Guillermo Pazy Miño (1996)
Stephanie Bestelmeyer (1996)

1996 ABS ANNUAL MEETING

All ABS members should soon receive an invitation to the ABS annual meeting to be held at Northern Arizona University, 3-8 August 1996. Registration materials were published in the November ABS Newsletter. Deadline for submission of abstracts is 1 March, 1996. You must register for the meeting at the time you submit your abstract. All materials should be sent to the local host. For information, contact Dr. Con Slobodchikoff, Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ 86011 USA.

PROFESSIONAL ETHICS

9. ON AUTHORSHIP AND INTELLECTUAL PROPERTY RIGHTS

by Stuart Altmann

Chair, ABS Ethics Committee

"Authorship of original research reports is an important indicator of accomplishments, priority, and prestige within the scientific community. Questions of authorship in science are intimately connected with issues of credit and responsibility." So begins a discussion of the ethics of scientific authorship, by a panel of the National Academy of Sciences (1). "Publication is the hard currency of science--it is the primary yardstick for establishing priority, the chief source of recognition from one's peers, and the standard on which advancement of science is based" (2).

Scientific publications benefit both society as a whole, by increasing our understanding of the natural world, and the authors, who receive credit for the research and, where appropriate, the benefits of copyright and patent protection. At the same time, authors assume responsibility for the veracity and originality of what they publish. That is, publishing a scientific report is an implicit claim that the research has not been fabricated, falsified, or plagiarized, and that any data or concepts not accredited to others are the authors'. Beyond that, the

act of publishing is an implicit claim to the right to publish the information that is presented.

In an earlier column in this series (4), I discussed the order of authors and other problems of multiple authorship. Here I take up other aspects of authorship, including the basic question of who is entitled to be an author. The scenarios that follow caricature some common problems. Several are based on actual events.

Scenario 1 *J. Proofrock, while a postdoctoral fellow in Professor W. Jabberwock's lab, successfully carries out research under Jabberwock's guidance that leads Jabberwock and several others in the lab to design follow-up studies. However, after leaving Jabberwock's lab, Proofrock moves on to other things and never publishes the work he did in Jabberwock's lab, despite Jabberwock's repeated urging. Two years later, Jabberwock realizes that none of his follow-up studies can be published without reference to the results of Proofrock's research. When Proofrock still shows no inclination to analyze and publish his data, Jabberwock assigns this task to his new postdoc. The resulting manuscript is submitted for publication, with the new postdoc, Jabberwock, and Proofrock as authors, in that order. Proofrock protests that they have no right to publish his research, that he intended to publish it as soon as he could get the time, that he owns the data, and that he disagrees with the way the data were analyzed and how they were interpreted. He writes to the editor of the journal to block publication.*

That scenario illustrates the problem of intellectual property, of who owns data and ideas and who has the right to publish them (5). It also shows how readily misunderstandings can occur when a lab has no explicit and agreed upon policy regarding the handling of intellectual property. The dispute between Proofrock and Jabberwock could have been avoided if, from the outset, Proofrock had been told that the lab had a two-year 'statute of limitations' on research results: that publication rights to any research not submitted for publication within that period revert to the laboratory director, at his discretion. While policies on intellectual property may vary from lab to lab, one organization, the Society of Professional Archaeologists, promulgates a general policy among its members. It declares that after ten years, the researcher waives "the right of primacy with respect to analysis and publication of the data," which should then "be made fully accessible for analysis and publication by other[s]." (2)

Closely related is the question of who is entitled to be included among the authors of a paper, as the following scenario illustrates.

Scenario 2 *Dr. Entre Preneur runs a large research lab with about a dozen graduate students and half a dozen postdocs. Dr. Preneur sees to it that the lab is well funded, well staffed, and well publicized, but he*

no longer participates in the research, and even his grant applications are based on the research plans of his postdocs. Ima Ningrate, one of Preneur's postdocs, objects to his practice of putting his name on all publications that come out of the lab, particularly hers, since he does not actively participate in the research. Preneur points out to her that without his contributions--the lab, its staff and equipment, finances, and so on, her work could not have been done. Nonetheless, Ningrate submits a manuscript that does not list Entre Preneur as co-author. All hell breaks loose.

The case of Preneur vs. Ningrate raises the question of whether administrators and lab directors that do not actively participate in research, either intellectually or physically, are entitled to co-authorship. "Since authorship implies responsibility, one simple guideline could be that all authors should be capable of participation in a discussion or defense of their paper. This requirement would eliminate most support people such as technicians, data gatherers, computer programmers and administrators who presumably would not be able to deal with the concepts and scientific implications of the work. It might also eliminate the senior scientist, in charge of a large group, who has not maintained close enough contact with the laboratory to be familiar with the latest experimental methodology" (3)

To earn the right to authorship of a scientific paper, one must be sufficiently involved in the research to take public responsibility for it. Conversely, the ordinary contributions of secretaries and research technician do not, by this criterion, warrant coauthorship, the former because they are not scientific contributions (though they are welcome contributions to science), the latter if they are solely the products of routine tasks selected by others. By this criterion, administrators, financial supporters, electricians, and janitors are like secretaries in that ordinarily they contribute to science but they do not make scientific contributions, and so they merit our thanks but not coauthorship (4).

Dr. Preneur is a caricature of the lab director whose function is entirely administrative, yet expects honorary authorships. In real life, the extent to which lab directors and faculty mentors make scientific contributions to the projects being done under their supervision is highly variable across labs and even within them. Add that to ambiguity about criteria for authorship and you have situations ripe for misunderstandings.

Although we usually think of authorship and the credit that it carries as the primary rewards of basic research, the rewards can be more substantial in some cases, as the following scenario illustrates.

Scenario 3 *Graduate student Ivan Offalich goes to the Congo to study mountain gorillas for his doctoral research. His faculty sponsor, Prof. Noncompos*

Mentis, provides him with a cine camera and film, to document his study. Subsequently, a commercial film producer who is making a National Geographic special sees some of Ivan's amazing footage when Prof. Mentis shows it at a scientific meeting, and pays Mentis a large fee for its use in a television program. Ivan claims that since he did the photography, the fee should be his. Mentis claims that Ivan will get credit as the photographer and is entitled to use the information in the film for his dissertation, but that the film itself is not Ivan's, since he did not pay for it. Student sues faculty member for monetary damages.

Scenario 4 *Rhonda Bout has developed a method for analyzing certain kinds of data from sequences of behavior. Bout writes to Ima Voyeur, who for years has collected just such data, and asks whether she can use Voyeur's data to try out the new method. Voyeur sends Bout her tabulated data. Bout analyzes Voyeur's data and then publishes an article about the method, using Voyeur's' data to illustrate it and acknowledging Voyeur as the source of the data. Subsequently, Voyeur submits a paper, presenting her results. Her paper is rejected because, as one of the reviewers notes, the data along with an analysis have already been published. Voyeur is furious at Bout.*

Like most of the cases illustrated here, the problems in this one could have been avoided if the participants had an explicit understanding ahead of time of how the material would be published. Perhaps the single most important thing that those involved in research can do to forestall future disputes with their mentors, their students, and other colleagues is to agree on explicit policies regarding the conduct of research, including intellectual property rights and publication. The earlier these policies are discussed, the better. Mentors and students should each take responsibility for assuring that these issues are discussed. If they are not brought up by a student's mentor, the student should approach the mentor about them.

The Bout/Voyeur case illustrates the "borrowing" of data. The following illustrates the "borrowing" of ideas.

Scenario 5 *At an interdisciplinary conference, an economist listens to two days of arguing among the ethologists about whether bird song is innate or acquired. She then remarks, "They're orthogonal." Most of the ethologists are baffled by this comment, and so the economist explains. After the conference, one of the participants publishes an article that expounds the economist's idea, but gives her neither coauthorship nor acknowledgment.*

According to international copyright law, one can not copyright a scientific idea--a law of nature, if you will--but only its mode of expression. Yet, within science, theft of an idea is considered reprehensible.

The set of actions that are unethical is broader than the set of actions that are illegal.

Many issues about the ethics of authorship go beyond the brief mention of these topics in the current ABS Code of Ethics.* The Ethics Committee is currently considering an addition to the ABS Code of Ethics on the subject of authorship, and to this end, welcomes comments from members about issues that should be addressed in revising the code. Send your comments to me at the address given at the bottom of this article.

As a springboard for discussion, consider the following rough draft of an alternative to item 4 in the code:

4. Members of ABS and others who present their research in the Society's publications or at its meetings shall be guided by the following:

(a) Authorship should be limited to those who have made significant scientific contributions to the concept, design, execution and/or interpretation of the research study, and who share public responsibility for it. All those who have made significant scientific contributions should be offered the opportunity to be listed as authors. Conversely, no one shall be listed as an author without their consent. Others who have contributed to the study should be acknowledged, but not included as authors.

(b) Authors should strive to avoid presenting or publishing material that is fabricated, falsified, plagiarized, biased, exaggerated, or otherwise unwarranted.

(c) Because material not attributed to others is assumed to be original, proper acknowledgment of the work of others used in a research publication should always be given. (An obvious exception is material, such as the Pythagorean theorem, that is so widely known that citing the original source would be pedantic.)

(d) Intellectual property rights should be respected. Unpublished data or concepts of others should not be included in a publication except as stipulated in an agreed-upon policy or by mutual consent.

(e) In supervised, mentored, or other collaborative research arrangements, participants are urged to arrive at mutually agreeable policies regarding publication of the results, including responsibility for data analysis, manuscript preparation, authorship, and disposition of records. This should be done at the earliest opportunity, and all parties involved should take responsibility for informing their collaborators of these policies or becoming informed, as appropriate.

*Item 1 of our Code concludes, [ABS members] "will cooperate with one another to assure the rapid and accurate interchange and dissemination of knowledge about animal behavior." Item 4 say that members "will avoid and discourage plagiarism and

dissemination of false, biased, exaggerated or otherwise unwarranted statements and data concerning animal behavior."

Acknowledgments For very helpful comments on earlier drafts of this column, I am grateful to Jeanne Altmann, Charles Blaich, Emilia Martins, Marc Bekoff, Janis Driscoll, Deborah Gordon, Barbara Turpin, and Jeffrey Walters.

References (1) Panel on Scientific Responsibility and the Conduct of Research, National Academy of Sciences. 1992. *Responsible Science*, vol. 1. National Academy Press. (2) Frankel, M.S. 1993. Ch. 2 in *Responsible Science*, vol. II. National Academy Press. (3) Bishop, C.T. 1984. How to Edit a Science Journal. Philadelphia, ISI Press. (4) Altmann, S.A. 1994. Professional ethics. 3. The problem of multiple authorship. *ABS Newsletter*, 39(2). (5) Weil, V. & J. W. Snapper, eds. 1989. *Owning Scientific and Technical Information*. Rutgers University Press.

This is one in a series of columns devoted to issues of professional ethics that affect members of the Animal Behavior Society. Your comments and questions about these issues are welcome, and will be answered. Address them to Stuart Altmann, University of Chicago, 1507 E. 56 St., Chicago IL 60637; tel. 312-702-8919; fax 312-702-0988; e-mail alts@midway.uchicago.edu.

MEETINGS

The 1996 Midwest Regional Animal Behavior Conference will be sponsored by the departments of Psychology and Zoology and the Center for the Integrative Study of Animal Behavior at Indiana University during the fall semester of 1996. The dates will be announced in a later issue of the ABS newsletter. Conference organizers are Ellen Ketterson and Bill Timberlake, co-directors of the Center. Questions regarding the conference may be directed to Linda Summers at Indiana University, CISAB, 402 N. Park, Bloomington, IN 47405; e-mail: lisummer@ucs.indiana.edu; phone: 812-855-9663.

1996 Annual Meetings of the American Arachnology Society will be held in Tucson, AZ on the 28-31 July, before the ABS National meetings in Flagstaff. For information contact Dr. Wayne Maddison (wmaddisn@ccit.arizona.edu) or see <http://spiders.biosci.arizona.edu/tucson96/tucson96.html>.

Ecology and behaviour of birds: Insights from long term studies, a festschrift meeting for Professor Jiro Kikkawa, will be held at the University of Queensland, Brisbane, Australia, September 23 & 24, 1996 (the week before the International Behavioral Ecology Congress in Canberra). The invited speakers will focus on findings from long-term studies of birds. Poster presentations are also encouraged. Contact Ian Owens or Anne Goldizen, Dept. of Zoology, Univ. of Queensland, Brisbane QLD 4072, Australia or e-mail: i.owens@mailbox.uq.oz.au or a.goldizen@mailbox.uq.oz.au.

The 4th Annual Invertebrates in Captivity Conference will be held in Tucson, AZ, August 1-4, 1996. Sonoran Arthropod Studies Institute (SASI) hosts the conference bringing together zoo, aquarium, museum, exhibit design and education professionals, and interested public. Topics include husbandry and display methods, and the use of invertebrates in educational and conservation programs. The Sonoran Arthropod Studies Institute is a private not-for-profit environmental and science education organization that promotes public awareness and teaches appreciation of insects and other arthropods. Registration materials and call for papers will be available in February and can be received by contacting the Sonoran Arthropod Studies Institute, P.O. Box 5624, Tucson, AZ 85703-0624; phone: 520-883-3945; fax: 520 883-2578; e-mail ArthroStud@aol.com or sasi@mail.azstarnet.com.

1997 Meeting of the American Society of Primatologists will be in San Diego CA, June 27-30, 1997. Contact Dr. Nancy Caine, Dept of Psychology, California State University, San Marcos, CA 92096, for information. Email: nancy_caine@csusm.edu.

Conference on Integrative Neurobiology of Affiliation, sponsored by the New York Academy of Sciences, will be held at the Georgetown University Conference Center, Washington D.C., March 14-17, 1996. The conference will examine the physiological and neural substrates of affiliation and social behavior. Conference chairs are C. Sue Carter, Brian Kirkpatrick and I. Izja Lederhendler. For information contact: Conference Department, New York Academy of Sciences, 2 East 63rd Street, New York, NY 10021, (212) 838-0230, Ext. 324, Fax: (212) 838-5640. E-mail: conference@nyas.org.

Forum on wildlife telemetry at which research biologists and telemetry engineers can discuss new technology, field evaluations of equipment and techniques and directions for future developments. The forum will feature discussion sessions and demonstrations; it will include topic overviews by

invited speakers and submitted presentations. It will be held 21-23 Sept. 1997 at Snowmass, Colorado, in association with the 1997 Annual Conference of the Wildlife Society. For information: Jane Austin (jane_austin@nbs.gov) or Pamela Pietz (pam_pietz@nbs.gov), National Biological Service, Northern Prairie Science Center, Jamestown, ND 58401; phone (701)252-5363, fax (701)252-4217.

ANNOUNCEMENTS

Travel Awards for the International Society for Behavioral Ecology, Canberra, Australia, 29 September to 4 October 1996. The ISBE American Committee is applying for a grant from NSF for partial support of travel for younger scientists to attend the VIth ISBE meeting. If successful, funds will be used to support younger U.S. scientists, defined as those who received their Ph.D. between 1991 and 1995 or who will complete their Ph.D. in 1996. To apply for a travel award, submit (1) 4 copies of a 1-2 page curriculum vitae, (2) 4 copies of the abstract you plan on submitting for consideration to the ISBE program, (3) a budget for the meeting, including additional sources of travel support, and (4) 4 copies of two letters of recommendation sent separately by the recommendors to Dr. Walter Koenig, Hastings Reservation, 38601 E. Carmel Valley Rd., Carmel Valley, CA 93924. Application deadline is 1 April 1996. For those who have not completed their Ph.D., please include a letter from the major professor assuring completion in 1996. We hope to notify successful applicants by 15 June 1996. For additional information, please contact Walt Koenig at the above address (phone 408-659-5981; e-mail wicker@uclink.berkeley.edu).

Tropical Ecology & Conservation Course is offered by the University of Florida and the Makerere University of Uganda. The 5 week course will be held in June and July in the Kibale Forest National Park of western Uganda at the Makerere University Biological Field Station. It will be taught by Drs. Lauren Chapman, Colin Chapman, and Tom Crisman who provide expertise in limnology and in fish, primate, wetlands, restoration, and conservation ecology. The course has two parts: a series of introductory lectures and field trips designed to orient students to tropical ecology and a period in which students conduct independent research projects. For applications contact Overseas Studies, 123 Tigert Hall, Univ. of Florida, Gainesville, FL 32611. Phone (904) 392-5206, e-mail jellis@nervm.nerdc.ufl.edu or Colin or Lauren Chapman, Dept. of Zoology, Univ. of Florida, Gainesville, FL 32611. Phone (904) 392-1196 or 392-7474; e-mail cachapman@zoo.ufl.edu or ljchapman@zoo.ufl.edu.

Animal Behavior Course will be offered by the Argentinian Primate Center (CAPrim). The two-week course will be held in May and will be conducted in Spanish. The course will include lectures, seminars, and behavioral observation of the primate populations available at the center. Students will have access to captive populations of capuchins (*Cebus apella*) and squirrel monkeys (*Samiri boliviensis*) and free-ranging troops of howler monkeys (*Alouatta carya*). Instructors: Eduardo Fernandez-Duque and Claudia R. Valeggia. Participation is limited to a maximum of ten trainees. Contact Dr. Julio C. Ruiz, Casilla Correo 145, Corrientes (3400), Argentina. Phone/fax: 54-1-783-27790; e-mail: ruiz@caprim.edu.ar. Until mid-March contact Eduardo Fernandez-Duque or Claudia Valeggia in the USA. Phone: 916-752-1988; e-mail: efernandezduque@ucdavis.edu.

Workshop in Plant-Animal Interactions: Flowers and Pollinators. NSF funded workshop designed for faculty in the United States who teach undergraduate students and who are interested in learning research techniques that they can then incorporate in classes and laboratory exercises at their home institutions. This workshop will use flowers and pollinators to investigate a variety of perspectives on plant-animal interactions. The workshop will be taught 9-23 August at the Rocky Mountain Biological Laboratory in Gothic, CO, by Drs. David Inouye, Carol Kearns, James Thomson, and Nick Waser, with assistance from other researchers in pollination biology who work at the Laboratory. All workshop expenses except travel will be paid for participants. Contact David Inouye, Dept. of Zoology, Univ. of Maryland, College Park, MD 20742. Phone 301-405-6946; e-mail: di5@uemail.umd.edu. Women, minorities and persons with disabilities that are not incompatible with field research are encouraged to apply.

OPPORTUNITIES

The Secretary would like to remind those applying for the opportunities listed below that although I try to avoid listing situations that are already filled, the time lag between submission and arrival of the Newsletter at your address sometime causes this to occur. Please contact those offering the opportunities before applying, if this is a problem for you.

Postdoctoral Position available immediately to study social behavior in domestic fowl. Experience in collection and analysis of behavioral data essential. Curriculum vitae and names of three references to: Dr. Joy Mench, Department of Animal Science, University of California, Davis, CA 95616. FAX: 916-752-0175, Email: JAMENCH@ucdavis.edu. The University of California, Davis is an Equal Opportunity/Affirmative Action Employer.

Volunteer Field Assistants in Alaska needed for ongoing studies of reproductive ecology of emperor geese. Work will be conducted in western Alaska on the Yukon-Kuskokwim Delta. We will study a local population of marked individuals to examine behavior, movements, and survival of parental geese and their young. Data collecting may involve telemetry, focal and scan sampling behavioral observations, nest searching, blood sampling, and plant collections. One position may be available 15 April - 1 August. Several positions available 1 June - 1 August. Exact dates are presently uncertain. Depending upon time of season, work will entail great amounts of snowmachine use, hiking tundra in hip boots, using 16' skiffs, and sitting for long, overnight periods in observation blinds. Camp location is remote, but comfortable. Roundtrip airfare to Alaska is provided as well as all field expenses and travel within Alaska. Please send a resume and names and phone numbers of 3 references to Joel Schmutz, National Biological Service, Alaska Science Center, 1011 East Tudor Road, Anchorage, AK 99503, (907) 786-3518, (907) 786-3636 FAX, joel_schmutz@nbs.gov.

Field Research Assistants (3-4) needed 1 April-1 Aug 1996 for breeding bird community research in longleaf pine forests at Ft. Bragg, NC. Preference given to applicants that possess knowledge of bird identification by sight and song, a valid driver's license and a willingness to work in adverse weather with various insects. Additional experience with point counts, nest searching, vegetation sampling and map orientation helpful. Salary: approx. \$1000-

1200/month + housing. Send resume and names and phone numbers of three references postmarked by March 10 to Jeff Walters, Bragg Breeding Bird Project, Dept. of Biology, Virginia Tech, Blacksburg, VA 24061-0406.

Field Research Assistants: (5) needed, 1 April-31 July 1996, for population dynamics and bird-habitat research of breeding birds in bottomland hardwood forests of the Roanoke River, NC. Duties include censusing songbirds, finding and monitoring nests, surveying vegetation and recording behavioral observations. Skills needed: bird identification by sight and sound, ability to work long hours under adverse conditions. Point-count, nest finding, and small boat experience helpful. Salary dependent on funding (ca. \$1200/mo.); housing provided. Please send resume and names/addresses of three references to Jeff Walters, Roanoke River Project, Dept. of Biology, Virginia Tech University, Blacksburg, VA, 24061-0406.

Berryman Graduate Fellowships. The Berryman Institute at Utah State University announces the availability of a Berryman Fellowship to start Fall 1996. This fellowship will be awarded to a USU graduate student with an interest in the broadly-defined area of wildlife damage management (i.e., management of problems caused by animals, exotic species management, wildlife-agriculture interactions, improving of human-wildlife relationships, etc.). The fellowship includes a \$12,000 stipend, \$1,200 for tuition, and \$1,800 for research support. The fellowship is for two years (\$30,000 total), with the second year contingent upon satisfactory progress during the first. Form more information, contact Dr. Michael Conover, Berryman Institute, Department of Fisheries and Wildlife, Utah State University, Logan, UT 84322-5210.

Research Support. The Andrew W. Mellon Foundation has awarded the Smithsonian Tropical Research Institute (STRI) and the Organization for Tropical Studies (OTS) a three year grant to foster comparative studies at the La Selva Biological Station in Costa Rica, and at sites under the auspices of STRI in the Republic of Panama. Research exploration grants will be awarded by a joint STRI-OTS committee for each of three years. Awards are open to all levels and nationalities. Fewer senior-level awards for three years of summer salary are also available. Contact: Office of Education, Smithsonian Tropical Research Institute, Unit 0948, APO AA 34002-0948 or STRI, Apdo. 2072, Balboa, Republic of Panama, email; stri.tivoli.dealbag@ic.si.edu or Mellon Comparative Research Grants, La Selva Biological Station, Interlink 341, P.O. Box 02-5635, Miami FL 33152, e-mail: laselva@ns.ots.ac.cr.

Field Assistants needed for research on the behavior, life history and ecology of threespine stickleback in the Cook Inlet region of Alaska from 15 May - 15 July, 1996. Tasks include long hours of snorkelling in lakes, collection of specimens, data entry and analysis. For additional information on the research see: *Natural History* 11/90:52-61.

Applicants should have a strong interest in field biology. Travel, food and lodging will be covered. Send a resume, statement of interest, transcript and three references to Susan A. Foster, Dept. of Biology, Clark University, 950 Main St., Worcester MA 01610-1477. e-mail: sfoster@vax.clarku.edu; phone: 508-793-7204.

Volunteers for field research on the evolution of behavioral and morphological characters in dragonflies from 1 May to 1 August 1996. Duties include collecting and dissecting adult dragonflies, collecting behavioral observations and morphometric data, transferring data to a computer and sharing of driving to field sites. Candidates must be willing to travel to field sites in Florida, Utah, and Ontario. Experience with collection of insects and of behavioral data are assets but not required. Send letter of interest, names and phone numbers of two references, a resume, and photocopies of transcripts to Thomas Artiss, Dept. of Biology, Clark University, 950 Main St., Worcester MA 01610-1477. e-mail: tartiss@vax.clarku.edu; phone: 508-793-7204.

Volunteers - approximately 30 volunteer positions are open in 1996 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 November 1. Appointments are for part of this period, with a minimum of six weeks. Applicants for spring (March-May) should submit applications by February 15, summer volunteers (June-August) by April 1 and fall volunteers (September - November) may apply any time. Dr. Wade C. Sherbrooke, Director, Southwestern Research Station, American Museum of Natural History, Portal AZ 85632, USA. Phone (520) 558-2396.

Surveillance of Griffon Vultures in Northern Israel. Volunteers are needed to assist the Israel Nature Reserves Authority in a continuous surveillance project of nesting strategies of Griffon vulture (*Gyps fulvus*), the largest raptors in Israel, and an endangered species. Nesting pairs (some of which have radio transmitters) will be observed and tracked during their nesting and incubation period. The nests occur in crevices along the walls of a deep canyon in the beautiful Gamla Nature Reserve in northern Israel. The project will run from February through August 1996. Volunteers will have free room and board, and transportation within Israel. A commitment of at least eight weeks is preferable. There is much opportunity to combine this with independent research projects. Write: Gamla Nature Reserve, P.O. Box 70, Katzrin, Israel. Fax: 972-6-921733.

Tenure-track faculty position in Poultry Science. The Department of Poultry Science, University of Maryland, seeks a 12-month, tenure-track faculty (70% research, 30% extension) based in College Park to conduct basic and applied research in behavior, stress, and management related to commercial broiler production. The appointee will develop extramural funding for the research, which will be conducted at both on- and off-campus poultry research facilities. The extension program will provide educational programs for the broiler and layer industries concerning poultry well-being, behavior, and management. There will be an opportunity to participate in the graduate and undergraduate teaching program. An earned doctorate in an appropriate poultry/avian science discipline (e.g., avian ethology and poultry management, or closely related disciplines) is required. Knowledge of the physiological aspects of behavior and stress and post-doctoral training are desired. Evidence of potential to obtain external funding, appropriate publication record, and communication skills (both scientific and poultry industry) are expected. The successful candidate will be hired at the rank of Assistant or Associate Professor. Salary is negotiable and commensurate with experience and training. Applications (letter of application, *curriculum vitae*, official transcripts, and independent submission of four letters of reference) accepted until May 20, 1996 or until the position is filled. Women and minority candidates are strongly encouraged to apply. Apply to: John A. Doerr, Ph.D.; Chair, Search Committee; Department of Poultry Science; Room 3113 Animal Science Center; University of Maryland; College Park, Maryland, 20742-2315. Phone: (301) 405-5775. The University of Maryland is an equal opportunity affirmative action employer.

Chair in Animal Welfare. The Chair in Animal Welfare is to be established under the Natural Sciences and Engineering Research Council of Canada (NSERC)/Industry University Research Chair Program. The industrial partners are the Society for the Prevention of Cruelty to Animals, the B.C. Veterinary Medical Association and several animal industries. The incumbent will be expected to provide strong leadership in education and research concerning animal welfare; establish a research team to study behaviour and stress physiology in animals; and promote improvements in animal well being. The Chair will develop co-ordination, focus and interaction among research scientists in related areas and direct dissemination of information both within and outside the university. The successful candidate will have a Ph.D., and be an established scientist and educator who is an acknowledged leader in the field of animal welfare with a background in relevant areas of animal science, veterinary medicine, or zoology. Appointment is expected to be at the rank of full professor.

The University of British Columbia welcomes all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. This position is subject to final budgetary approval and receipt of support from NSERC. Applicants should submit a curriculum vitae, names and addresses of at least three referees, copies of representative publications and a description of current scholarly interests to: Dr. J.R. Thompson, Head, Department of Animal Science, Faculty of Agricultural Sciences, The University of British Columbia, #248-2357 Main Mall, Vancouver, B.C. V6T 1Z4, Canada. Phone: 604-882-2794; FAX: 604-882-4400; email: jrthomp@unixg.ubc.ca. The closing date for receipt of applications is February 15, 1996, or until position is filled. Appointment will take effect July 1, 1996, or as soon thereafter as possible.

The Secretary requests that all submissions of more than a few lines be made electronically. Uncoded e-mail 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@vax.clarku.edu. Please enclose hard copy with the diskette, or send hard copy separately from the e-mail submission to increase the probability that the submission is received. Thanks in advance!

APPLICATION / RENEWAL for ANIMAL BEHAVIOR SOCIETY MEMBERSHIP

This is a (please check one):

- RENEWAL - make any corrections beside mailing label at bottom of page.
- NEW MEMBERSHIP. Print or type full name and mailing address at bottom of page.
- Begin my membership for current year (send back issues). Begin my membership next January.

Phone: _____ Fax: _____ E-Mail: _____

MEMBERSHIP CLASS	VOLUNTARY CONTRIBUTIONS	TOTAL PAID																									
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