



NEWSLETTER

Animal Behavior Society

Vol. 44, No. 2
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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

ANIMAL BEHAVIOR SOCIETY RESEARCH GRANT WINNERS

The Animal Behavior Society Research Grants Committee is pleased to congratulate the following 18 recipients of ABS Student Research Grants for 1999. The Committee had US\$15,000 to award this year. The award winners listed below were selected from a highly competitive field of **101** meritorious proposals, representing a success rate of **18%**.

Downes, Sharon. "Geographic variation in prey antipredator behaviours: fixed traits or learning to avoid a specialist predator?" \$500.

Kruper, Jill. "The effects of food restriction on hormone levels and mate choice". \$500.

Welch, Allison. "An investigation of mechanisms mediating 'good genes' selection in gray tree frogs". \$1,000.

Gillette, Jennifer. "Long-term intersexual associations in *Plethodon cinereus*, the red-backed salamander". \$1,000.

Mennill, Daniel. "Female choice of extra-pair partners in the black-capped chickadee; do females eavesdrop on the songs of neighbours?" \$1,000.

Tarpy, David. "Effect of brood viability on honey bee colony fitness: evidence for an evolutionary mechanism of polyandry". \$500.

Aspbury, Andrea. "Cryptic selection in poeciliid fishes". \$500.

Blackledge, Todd. "Sensory drive and cryptic spider webs". \$500.

Etterson, Matthew. "Hidden leks in a declining songbird". \$900.

Hankison, Shala. "Sexual selection and multiple cues use in *Xiphophorus*". \$1,000.

Hebets, Eileen. "Chemical signal evolution in *Phrynus parvulus* (Arachnida, Amblypygi)". \$950.

Mack, Paul. "The evolutionary genetics of female preference and sperm competition". \$950.

Peacock, Elizabeth. "Variation of anti-predator behavior across a range heterogeneous, temporally and spatially, in predation pressure". \$1,000.

Thusius, Kevin. "Sexual selection and extra-pair paternity in the common yellowthroat (*Geothlypis trichas*)". \$850.

Van Roo, Brandi. "The hormonal basis for differences in avian parental care". \$1,000.

Wente, Wendy. "Background color matching behavior in the Pacific treefrog, *Hyla regilla*: implications for the evolution of assortative mating in an interbreeding population." \$900.

Davis, Ellen. "The roles of testosterone and pair status in forced copulation attempts in mallards". \$1,000.

Stallman, Elizabeth. "Social effects on female fertility in yellow-bellied marmots (*Marmota flaviventris*)". \$950.

LATIN AMERICAN TRAVEL AWARDS

Awards to support travel to the 1999 annual meeting were made to **Carlos Carvalho** and **Regina H.F. Macedo**.

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 July 15, 1999.

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 Behavior Society Web Site:

<http://www.cisab.indiana.edu/ABS>

Animal Behaviour: manuscripts and editorial matters: Animal Behavior Office, 2611 East 10th St., Office 170, Indiana University, Bloomington, IN 47408-2603, USA. Phone (812) 856-5541. Fax (812) 856-5542. Email: aboffice@indiana.edu.

Change of Address: missing or defective issues of *Animal Behaviour*: Animal Behavior Office, 2611 East 10th St., Office 170, Indiana University, Bloomington, IN 47408-2603, USA. Phone (812) 856-5541. Fax (812) 856-5542. Email: aboffice@indiana.edu.

ABS OFFICERS

President: Meredith West, Departments of Biology and Psychology, Indiana University, Bloomington, IN, 47405, USA. E-mail: mewest@bio.indiana.edu.

First President-elect: Andrew Sih, Center for Ecology, Evolution and Behavior, University of Kentucky, Lexington, KY, 40506-0225, USA., E-mail: andy@darwin.ceeb.uky.edu.

Second President-elect: Patricia Gowaty, Institute of Ecology, University of Georgia, Athens, GA, 30602-2602, USA. E-mail: gowaty@ecology.uga.edu.

Past President: David Duvall, Dept. of Zoology, Oklahoma State University, Stillwater, OK, 74078, USA. E-mail: duvalld@okway.okstate.edu.

Treasurer: Marlene Zuk, Dept. of Biology, University of California, Riverside, CA, 92521, USA. E-mail: mzuk@citrus.ucr.edu.

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

Program Officer: Emilia Martins, Department of Biology, University of Oregon, Eugene, OR, 97403, USA. E-mail: emartins@evolution.uoregon.edu.

Parliamentarian: Kimberly Sullivan, Department of Biology, Utah State University, Logan, UT, 84322-5305, USA. E-mail: yejunco@cc.usu.edu.

Editor: Bennett G. Galef, Jr., Dept. of Psychology, McMaster University, Hamilton, ON, L8S 4K1, Canada. E-mail: galef@mcmaster.ca.

Members-at-Large: Ken Yasukawa, Department of Biology, Beloit College, Beloit WI, 53511, USA. E-mail: yasukawa@beloit.edu.

Michelle P. Scott, Dept. of Zoology, University of New Hampshire, Durham, NH, 03824, USA. E-mail: mps@christa.unh.edu.

James Ha, Regional Primate Research Center, University of Washington, Seattle, WA, 98195-7330, USA. E-mail: jcha@u.washington.edu.

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

ABS COMMITTEE MEMBERS

Membership

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Suzette Tardif (1999)

Carol A. Skinner (1999)

Peter D. Smallwood (2000)

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George H. Waring (1999)

David Duvall (1999)

Patricia A. Gowaty (1999)

Linden E. Higgins (2000)

Matthew S. Grober (2000)

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Mary L. Crowe (1999)

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Lauren E. Wentz (1999)

James J. Krupa (2000)

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Sylvia L. Halkin (2000)

Tom Sproat (2001)

Becky Talyn (2001)

Kathleen N. Morgan (2001)

Erika L. Barthelmess (2001)

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Kimberly Sullivan (2001), Chair
Maggie Hodge (1999)
Jennifer A. Clarke (2000)

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Lee C. Drickamer (1999)
Susan E. Riechert (2001)

Animal Care

Debra Forthman (1999), Chair
Dan R. Salden (1999)
Randall C. Kyes (1999)
Jennifer W. Weeks (2000)
Martin Kavaliers (2001)
Robert S. Sikes (2001)

Public Affairs

Linda S. Rayor (2000), Chair
Marta Hersek (2000)
Jill Marie Mateo (2001)
Todd Blackledge (2001)

Film

Neil A. Mercado (2000), Chair
David Duvall (ad hoc)
Anne E. Storey (1999)
Renee L. Robinette (2000)
George H. Waring (2001)
Marthaleah Chaiken (2001)
Todd M. Freeberg (2001)
Dan Albrecht (2001)
Stan Braude (2001)
D. Kim Sawrey (2001)

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Donald A. Dewsbury (2001), Chair

Research Grants

Ken Yasukawa (1999), Chair
Thomas A. Jenssen (1999)
Michelle Pellissier Scott (2000)
Robert G. Jaeger (2000)
James C. Ha (2001)
Astrid Kodric-Brown (2001)
Susan Alberts (2001)

Ethics

Deborah M. Gordon (1999), Chair
Sara M. Lewis Tufts (1999)
Daniel A. Cristol (2000)
Gordon W. Schuett (2000)
Stephen Nowicki (2001)
Joan M. Herbers (2001)

Issues in Applied Animal Behavior

John C. Wright (2000), Chair
Kathryn Ann Bayne (1999)
Sue M. McDonnell (1999)
Andrew Sih (1999)
Pamela J. Reid (1999)
Daniel Q. Estep (2000)
C. N. Slobodchikoff (2000)
Suzanne Hetts (2000)
Stephen L. Zawistowski (2001)
Edward O. Price (2001)

Board Prof. Cert. Subcommittee

Stephen L. Zawistowski (2001), Chair
Kathryn Ann Bayne (1999)
Andrew Sih (1999)
Pamela J. Reid (1999)
Sue M. McDonnell (1999)
Daniel Q. Estep (2000)

Career Awards

David Duvall (1999), Chair
Stuart Altmann (1999)
Ken Yasukawa (1999)
Marthaleah Chaiken (1999)
Thomas A. Jenssen (2000)
Michelle Pellissier Scott (2000)
James C. Ha (2001)
Ellen D. Ketterson (2001)

Development

Ira B. Perelle (2002), Chair
Stephen L. Zawistowski (1999)
Laurie Hiestand (1999)

Conservation

Richard Buchholz (2001), Chair
James C. Ha (1999)
Guillermo Pazymino C. (1999)
Cheryl S. Asa (1999)
Melissa A. Fleming (2000)
Margaret E. Halloran (2001)
Frank Arthur Von Hippel (2001)

Joseph Muriuki Wahome (2001)

Investments (ad hoc)

Randall Breitwisch (1999), Chair
Bennett G. Galef (1999)
Robert W. Matthews (1999)
Patricia J. DeCoursey (1999)
H. Jane Brockmann (1999)

Developing Nations Research Grants (ad hoc)

Ken Yasukawa (1999), Chair
Hugh M. Drummond (1999)
Brian K. Sullivan (1999)
Michelle Pellissier Scott (2000)
James C. Ha (2001)

ABS-ASAB Liaison (ad hoc)

Bennett G. Galef (1999), Chair
Lee C. Drickamer (1999)
Meredith J. West (1999)
Michael D. Beecher (1999)
Susan E. Riechert (1999)

Legislative Liaison (ad hoc)

Irene M. Pepperberg (1999), Chair

Latin American Affairs (ad hoc)

Zuleyma Tang-Martinez (1999), Chair
Regina Helena F. Macedo (1999)
Peter M. Narins (1999)
Charles T. Snowdon (1999)
Hugh M. Drummond (1999)
Gabriel Francescoli (1999)

Liaisons (ad hoc)

Joy A. Mench (1999)
Kathleen N. Morgan (1999)
Stephen Nowicki (1999)
Marthaleah Chaiken (1999)
Meredith J. West (1999)
Donald A. Dewsbury (1999)
Patricia A. Gowaty (1999)

Webmasters (ad hoc)

Shan Duncan (1999), Chair
James C. Ha (1999)

Project Director ABS Central Office (ad hoc)

Meredith J. West (1999), Chair

DEVELOPING NATIONS RESEARCH GRANTS

The Developing Nations Research Grants Award Committee is pleased to congratulate the following two recipients of these grants.

Ortiz, Patricia G. -"Physical, chemical and behavioral mechanisms of sleeping aggregations of solitary male bees, *Centris adani*, (Anthophoridae), in dry forests of Costra Rica". \$700.

Macedo, Regina H.F. "Female preference and reproductive strategies in the blue-black grassquit, *Volatinia jacarina*". \$700.

SEEKING EXERCISES FOR AN ANIMAL BEHAVIOR LAB MANUAL.

Academic Press has committed to publishing a lab manual of exercises developed and tested by ABS members, including exercises presented at the Education Workshops at the ABS meetings in 1994 and 1995 and/or tested by ABS members in their courses. This manual, edited by Bonnie Ploger and Ken Yasukawa, will be titled Exploring Animal Behavior in Laboratory and Field. We are currently soliciting exercises to be considered for publication in this manual.

The lab manual will be organized around Tinbergen's four questions. Therefore, the manual will be divided into the following sections: Mechanisms, Development, Functions and Evolution of Behavior, as well as an introductory section called Descriptions of Behavior. We are seeking a good mix of field and laboratory exercises that are appropriate for each of these sections. We particularly need additional exercises for the Development and the Evolution sections, but will consider exercises in any area of behavior.

Submissions must be received by Bonnie Ploger by Wednesday, Sept. 15, 1999. For a copy of the Instructions for Authors, please contact (preferably by e-mail): Bonnie Ploger, Department of Biology, Hamline University, 1536 Hewitt Ave., St. Paul, MN 55104, phone: 651-523-2587, fax: 651-523-2620. bjploger@piper.hamline.edu (or bploger@gw.hamline.edu).

Martin Warren Schein
23 December 1925 - 10 April 1998

The Animal Behavior Society lost a stalwart member with the death last year of Marty Schein. Marty had a gift for school and by the age of 15 (1940) had found his way to the University of Iowa. This must have been a cultural shock for a printer's son from Brooklyn. However, before Marty could complete college, World War II broke out and, at 18, he was drafted. The Army was impressed with Marty's math skills and assigned him to the field artillery in time to participate in the Battle of Bulge. The war provided Marty with a French bride and an inclination to travel that was apparent throughout his career.

After completing his undergraduate degree in 1949, Marty moved back to Brooklyn. Animal behavior was not a serious discipline in postwar America, but catching rats was. Marty was starting a family (Lonnie and later Mickey) and needed work. The City of New York needed rat catchers, and a match was made. However, Marty was too academic to remain in pest control. The Baltimore harbor was swarming with rats, and these had become a source of both disease and science. David E. Davis (1913- 1999) drew Marty to the Graduate School of Public Health at The Johns Hopkins University and he completed a Doctor of Science degree in vertebrate ecology in 1954. In those practical times behavior was being studied by very practical people and Marty was a perfect recruit to this new field. David E. Davis was a charismatic advisor, well matched to Marty by both his motivation and insight.

In 1955 Marty moved to the Pennsylvania State University, where he remained until 1968. In 1959 Marty was joined at Penn State by his old mentor Dave Davis. Marty, Davis, and E. B. Hale built a major animal program at Penn State. This group also played a central role in the creation of the Animal Behavior Society, of which Marty was a charter member.

The work for which Marty is best known in that period focused on reproductive behaviors in domestic animals, including especially cattle and turkeys. In perhaps his most memorable study Marty literally dissected the problem of imprinting into its elements, showing that the head of a female turkey was an adequate stimulus to begin the cascade of behaviors necessary for mating. The "turkey on a stick" experiment became an instant classic in the new field of animal behavior. He also showed that although sexual imprinting produced lasting preferences, imprinted turkeys would attempt to mate with non-preferred species when no choice was available.

The Animal Behavior Society was founded in 1964; it emerged from its predecessors, the Section of Animal Behavior and Sociobiology of the Ecological Society of America and the Division of Animal Behavior of the American Society of Zoologists, founded in 1956 and 1958 respectively. Marty served as the founding secretary of the Section/Division during 1956-1962 and as its Vice Chairman during 1964-65. He became the third president of the ABS itself. Marty was the Society's first historian, serving from 1974-1987. He also served on the Policy and Planning Committee, the Publications Committee, the Nominating Committee, the Public Policy Committee, and as a Local Representative. He was elected an ABS Fellow in 1973.

Marty's most spectacular talent and perpetual love was for teaching. Fortunately few of us can remember the miserable state of the art associated with teaching biology prior to the 1960s. Biology education was revolutionized by the efforts of the office for Curriculum Education in Biology (CUEBES), sponsored by NSF. The concept of the experiment became the organizing theme for understanding and teaching biology. Marty served the CUEBES at George Washington University from 1962-1968, functioning as vice-chairman during 1964-65 and director during 1965-68 and, for the remainder of his academic career, he continued to play an important role in biology education throughout the world.

In 1968 Marty began the last academic phase of his career. Although he was a Chaired (Centennial) Professor, the promised resources for an institute in animal behavior that were used to lure Marty to West Virginia University did not materialize. When Marty arrived in Morgantown it was a colorful place - especially the air (sometimes brown) and water (often red). The university solved its space problems by assigning Marty and two other animal behaviorists to a basement, formerly used as a garage. A job at West Virginia University was an exercise in survival. Although, Marty did survive and later even accepted the Chairmanship of Biology, he never saw himself as anything but a visitor in the mountains that were his home for two decades.

Marty and his second wife Maxine and their son Josh were serious travelers. The Schein's particularly loved India and the Orient. Working on science education at a global level offered an outlet for Marty's many skills. He was a Fulbright Fellow and a Visiting Professor of Biology at the Banaras Hindu University in Varanasi, India during 1982-83. When Marty retired in 1988 he and Maxine went to Japan. Intending to be tourists, instead they found themselves teaching English. This new profession, allowed an inside view of a culture they both admired.

Marty was a wonderful editor, and eventually became a resource to a variety of Japanese scientists who discovered his exceptional ability to make their science understood in the West. Originally intending only an extended visit, the Schein's lived in Tokyo for three years, and thereafter returned often. During this period Marty also served as a Consultant to the National Defense Medical College in Saitama, Japan and as a teacher at the Tokyo Metropolitan Kokusai High School.

Washington, DC was Marty's favorite resting spot, and a place where he always seemed to fit. Even after he discovered that he had pancreatic cancer, and during the heroic period of illness and treatment that followed, Marty continued to work as a docent and archivist at the Smithsonian Institution. Marty recognized the importance of history, and in the last few decades of his career assembled materials to help us understand our discipline in the context of history. In 1976 he collaborated with A. M. Guhl to write an extremely useful monograph, "The Animal Behavior Society: Its Early History and Activities." Marty was personally well organized and quietly spent many years structuring the archives of the Animal Behavior Society at the Smithsonian.

In 1974 Marty co-edited a book, BIRDS: BRAIN AND BEHAVIOR, based on a Lashley Memorial Conference at West Virginia University. He also edited a book on SOCIAL HIERARCHY AND DOMINANCE in 1975. He edited a series of books that brought together Landmark Papers in the History of Animal Behavior (Hutchinson Ross Publishing Company).

Those of you who entered this field too late to meet Marty missed a remarkable character. Imagine Hemingway in looks and in his direct, nonsentimental style, yet generous and kind to a fault. Always full of ideas and opinions - always willing to help. We will miss him.

Sue Carter and Don Dewsbury

THE ONLINE MEMBERSHIP DIRECTORY

The membership directory is now available to current ABS members at the ABS membership web page:

<http://www.animalbehavior.org/ABS/Members/index.html>

The Directory information is name/password restricted. Enter this URL into your browser (Netscape or Internet Explorer Ver. 3.0 or above) Click on any of the links below "ABS Membership Restricted Site". At the user/password prompt, enter:

USER:*

PASSWORD:*

* this information available to current ABS members only

Please report questions and problems to the Webmaster, Shan Duncan at sdduncan@indiana.edu.

1999 ANIMAL BEHAVIOR SOCIETY MEETING

**BUCKNELL UNIVERSITY
LEWISBURG, PA**

The 1999 Annual Animal Behavior Society Meeting will be held at Bucknell University, Lewisburg PA from **June 26-30, 1999**. Information concerning the meeting is available on the World Wide Web at the ABS web site:

<http://www.cisab.indiana.edu/ABS>

ANIMAL BEHAVIOR SOCIETY, INC.

**STATEMENT OF REVENUES, EXPENSES, AND
OTHER CHANGES IN NET ASSETS-CASH
BASIS FOR THE YEAR ENDED JUNE 30, 1998**

BEGINNING NET ASSETS:

CASH:	\$
Certificate of Deposits	126,830
Checking Accounts	35,679
Savings Account - Ethnic Diversity	7,690
Editor's Fund	4023
Secretary's Fund	1,315
Membership Fund	1,082

**TOTAL BEGINNING NET ASSETS,
JULY 1,1997 176,619**

REVENUE RECEIVED:

	\$
Membership Dues – Dev. Nation	2,210
Membership Dues – Dev. Nation Student	285
Membership Dues - Emeritus	1,285
Membership Dues - Joint/ Spouse	1,162
Membership Dues - Regular	79,791
Membership Dues - Student	22,076
ABS Certificate	200
Certificate Renewal	360
Credit Card Refunds	450
Graduate Programs	821
Label List	1,905
Late Fees	5,398
Member Credits	367
Miscellaneous Income	138
Program Income	2,498
Subscriptions	320
Donations - Ethnic Diversity Fund	840
Donations - David Tuber Award Fund	942
Donations - Research Awards	10,719
Donations - Unrestricted	4,343
ASAB Journal Profit Sharing	80,087
Investment Income:	
Interest	3,198
Dividends	649

TOTAL REVENUE RECEIVED 220,044

LESS EXPENDITURES:

Accounting	750
Animal Care	100
Bank Fees	742
Central Office Expense	90,727
Certification Committee	166
Development Committee	2,462
Dues	250
Editor's Expenses	15,532

Education Expenses	22
Equipment Purchased	7,582
Ethnic Diversity Awards	420
Executive Editor Expenses	6,622
Film Committee	363
First President-Elect	120
Insurance	2,856
Latin America Committee	263
Membership Committee	705
Past-President	139
President's Expenses	908
Program Committee	966
Public Affairs Committee	40
Research Grants	14,915
Secretary's Expenses	10,328

TOTAL EXPENDITURES 156,978

CHANGE IN NET ASSETS 63,066
NET ASSETS AT BEGINNING OF YEAR 176,619
NET ASSETS AT END OF YEAR 239,685

ENDING NET ASSETS:

CASH:	\$
Certificate of Deposits	76,689
Checking Accounts	69,499
Investment Account (Marketable Securities)	72,649
Savings Account - Ethnic Diversity	7,813
Savings Account - David Tuber	6,398
Book Review Editor's Fund	1,682
Secretary's Fund	695
Membership Fund	377
Executive Editors Fund	878
Central Office Fund	3,005

**TOTAL ENDING NET ASSETS,
JUNE 30, 1998 239,685**

**NOTES TO
STATEMENT OF CASH RECEIPTS AND
DISBURSEMENTS
AND CHANGES IN NET ASSETS
JUNE 30, 1998**

**NOTE A — SUMMARY OF SIGNIFICANT
ACCOUNTING POLICIES**

BASIS OF ACCOUNTING

The accompanying financial statement has been prepared on the cash receipts and disbursements basis of accounting. Under that basis, the only asset recognized is cash, and no liabilities are recognized. All transactions are recognized as either cash receipts or disbursements, and noncash transactions are not

recognized. The cash basis differs from generally accepted accounting principles primarily because the effects of outstanding promises to give and obligations for expenses unpaid at the date of the financial statement are not included in the financial statement.

DEPRECIATION

Capital expenditures are being expensed in the year of acquisition. For the year ended June 30, 1998, \$10,285 of equipment was purchased.

INCOME TAX STATUS

The Organization is exempt from federal income tax under Section 501 (c)(3) of the Internal Revenue Code.

DONATED SERVICES

No amounts have been reflected in the financial statements for donated services. The Organization pays for most services requiring specific expertise. However, many individuals volunteer their time and perform a variety of tasks that assist the Organization in many ways.

DONATED GOODS

No amounts have been reflected in the financial statements for goods donated by various members and/or institutions during the year. Approximately \$1,789 in goods were donated.

NOTE B — RESTRICTIONS ON NET ASSETS

RESTRICTED AND UNRESTRICTED REVENUE

Contributions received are recorded as increases in unrestricted or restricted net assets, depending on the existence of any donor restrictions. As of June 30, 1998, the following restricted assets were being held:

Ethnic Diversity Fund	\$8,233
David Tuber Award Fund	\$6,625

The monies from the Ethnic Diversity Fund are used to promote ethnically diverse participation in Organization activities. The David Tuber Award Funds are used to support research in applied animal behavior. The executive committee must approve expenditures from these funds.

Monies were also received for Research Awards which are given to persons doing research in animal behavior. For the year ended June 30, 1998, \$10,719 was received, and \$14,915 was paid out in grants.

NOTE C — INVESTMENTS

CERTIFICATES OF DEPOSIT

Certificates of deposit totaling \$76,689 are included in cash in the accompanying financial statements. The certificates bear interest ranging from 4.0% to 5.54% and have maturities from seven days to three months, with penalties for early withdrawal. Any penalties for early withdrawal would not have a material effect on the financial statements.

MARKETABLE SECURITIES

The Society currently carries investments in marketable securities with readily determinable fair values. The current value of those investments is \$80,880, and is determined as follows:

Investment Purchases	\$72,000
Dividends Reinvested	\$ 649
Increase in Value as of	
June 30,	\$80,880

NOTE D — SUBSEQUENT EVENTS

A permanent central office has been established at Indiana University, to be funded by an annual renewable grant from the organization for at least six additional years. For the year ended June 30, 1999, an amount of \$124,280 will be paid to Indiana University to maintain this office. This amount will be set each year by the organization executive committee.

MEETINGS

XXVI International Ethological Conference

will be held in Bangalore, India, 2-9 August 1999. Bangalore is the garden city of India, and is the fifth largest metropolis of India. It has well-laid gardens, avenues and architecture. The main announcement has been mailed and should have been received by all ABS members. If you did not receive this information or have questions regarding the meeting, contact Dr.(Mrs) Shakunthala Sridhara, Secretary General, XXVI International Ethological Conference, Univ. of Agricultural Sciences, G.K.V.K., Bangalore-560 065, India.

First Meeting of Association Francophone d'Éthologie, d'Écologie et d'Évolution

will be held in Rennes, France, from August 31th to September 3rd 1999. English is definitively the primary international language to communicate and do science, and will remain so for a long time. However, we do believe that other international languages can provide a stimulating alternative for scientific communication in some contexts. That is why we warmly invite those of you who wish to use or practice their French in a scientific context to join us in an international exchange of scientific ideas in behaviour, evolution and ecology at the very first meeting of l' AFÉÉÉ. The organizers will make sure that all facilities are provided to ease communication in French. So, don't worry about your rusty French, just come along. For more information contact: Dr. Michel Vancassel UMR 1853, CNRS, Université de Rennes 1, Campus de Beaulieu, 35042 Rennes, France, or consult the AFÉÉÉ web site at <http://www.er.uqam.ca/nobel/afeee/>

Littlejohn Symposium. Evolutionary Diversification: Insights from Studies of Geographical Variation and Hybrid Zones. To be held at the University of Missouri, Columbia from 19 June (arrival date)-21 June. Invited speakers (20 June): Michael Arnold, Roger Butlin, Dan Howard, Richard Harrison, Carl Gerhardt, Murray Littlejohn, Stanley Rand, Michael Ryan, Michael Ritchie, Kerry Shaw and Jacek Szymura. Contributed papers on 21 June. Abstract deadline: 1 March; Registration deadline (without penalty): 1 May. For further information see: www.missouri.edu/~bioscwww/littlejohn or email Carl Gerhardt at bioscarl@showme.missouri.edu.

Primate Socioecology: The Role of Life Histories.

The German Primate Center (DPZ) will host an international conference on primate socioecology from 14 to 17 December 1999. The focus of this meeting ("2. Göttinger Freilandtage") will be on life history variation among primates. Invited speakers will examine causes of variation in life history traits and explore the consequences of this variation for behavioral and reproductive strategies. An additional goal is to better characterize unique aspects of primate life histories and illuminate general principles through comparison with other mammals. Submission for relevant oral (15 min) and poster contributions are invited. The conference is also open to guests without presentations. The deadline for submission of abstracts wishing to be considered for spoken papers or posters is August 1, 1999. Guests must also register in advance by October 1, 1999. Additional details available from Peter Kappeler (pkappel@gwdg.de) or the conference secretariat (gft@www.dpz.gwdg.de) and the conference web site: <http://www.dpz.gwdg.de/freiland.htm>

Fourth European Meeting of Experimental Analysis of Behavior,

July 9-13, 2000, Amiens, France. The general topic will be "Ecological and economical approaches to behaviour" although other topics are welcome- especially related to (1) behavioural pharmacology (including drug and substance abuse), (2) developmental disabilities and autism, (3) classical and operant conditioning in animals and human, and (4) behavioural therapies, behavioural medicine. Invited Speakers will include W. Baum, S. Hursch, A. Kacelnik, M. Richelle & T. Sagvolden. For additional information contact Michel Sokolowski, Université de Picardie - Jules Verne Faculté de Philosophie, Sciences Humaines et Sociales, Chemin du Thil, 80025, Amiens Cedex 1, France. E-mail: msokolowski@nordnet.fr

The Waterbird Society (a.k.a. Colonial Waterbird Society) will hold its annual meeting, 8-12 November, 1999, at the Congress Center located in Grado, Italy. These dates have been changed from the October dates previously announced. Grado is a small town located on the Mediterranean Ocean between Venice and the ex-Yugoslavian border, and preliminary information concerning this meeting can be obtained from the Electronic Information Page <http://www.mp2-pwrc.usgs.gov/cws/italmeet.htm>. One symposium has been scheduled: Monitoring Waterbirds in the Mediterranean. Other symposia and workshops will be announced shortly. Questions concerning the scientific program should be addressed to: Dr. Rob Butler, Canadian Wildlife Service, Pacific Wildlife Research Centre, 5421 Robertson Road, RR #1, Delta, BC, Canada V4K 3N2 phone: (604) 940-4672 e-mail: rob.butler@ec.gc.ca

ANNOUNCEMENTS

Evolutionary game theory website. The URL of this site is: <http://science.holycross.edu/webteaching/ess.html> or http://science.holycross.edu/departments/biology/kprestwi/behavior/ESS/ESS_ind_ex_frmset.html. Features include (1) JAVA simulations in which students can control parameters for the following games: a. "Hawks and Doves", b. "Hawks, Doves and Bourgeois" and, c. "War of Attrition". These simulations work best using Internet Explorer 4 or Netscape 4 or later. Later this year another simulation will be added to the site in which the student will be able to define up to four strategies of her/his own choosing. (2) Extensive HYPERTEXT MATERIALS explaining game theory and evolutionarily stable strategies. There is also hypertext accompanying each game. It tells how to use each simulation and suggests things to try. All of the hypertext is peppered with study questions and answers. (3) PDF versions of the entire hypertext. There is also additional material dealing with the basics of integration and probability density. These files are readable with Adobe Acrobat (free) and are most useful when printed. Printouts of these files have the advantage of portability. They are written as a true text, not simply as printed versions of webpages. These materials were prepared by Dr. Kevin Mitchell of the Mathematics Department at Hobart and William Smith Colleges.

STUDENT LEVEL: I have tried to construct the site so that all parts will be useful to undergraduates. I suspect that it also has value to graduate students.

ACCESS to all materials on the site is free. By late summer I hope to be able to offer an option that will allow the entire site to be easily downloaded to a local computer. This option will also be free. However, I must emphasize that the materials are all copyrighted. Please see notices at the website.

COLLABORATIONS: I strongly encourage anyone who is interested in providing additional materials to get in touch with me. I am particularly interested in short essays pertaining to research, bibliographies, etc.

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.

Research Position in behavioural sciences. PhD and pertinent professional experience needed in behavioural ecology, behavioural physiology or ethology. The Konrad Lorenz-Institut für Vergleichende Verhaltensforschung (KLIVV) is part of the Austrian Academy of Sciences and investigates mainly reproductive systems (co-operation, brood parasitism, sexual selection and sperm competition), foraging and habitat use (sensory ecology, ecomorphology), and cognitive behaviour (exploration, tool use). Applicants should be experienced in either of these or in closely related fields. Practice and good working knowledge of molecular methods are particularly welcome. The job is offered for 4 years starting October 1999, tenure possible. Send CV, statement of current research interests, copies of significant publications and at least two letters of recommendation before July 1, 1999 to Prof. Dr. H. Winkler, KLIVV, Savoyenstr. 1a, A-1160 Wien, Austria. Email: h.winkler@klivv.oeaw.ac.at

Postdoctoral Fellowship in behavioural sciences. Applicants should have a strong background in either behavioural ecology or behavioural physiology or ethology. The Konrad Lorenz-Institut für Vergleichende Verhaltensforschung (KLIVV) is part of the Austrian Academy of Sciences and investigates mainly reproductive systems (co-operation, brood parasitism, sexual selection and sperm competition), foraging and habitat use (sensory ecology, ecomorphology), and cognitive behaviour (exploration, tool use). Applicants should be experienced in either of these or in closely related fields. The job is offered for 1 year starting October 1999. Send CV, statement of current research interests, copies of significant publications and at least two letters of recommendation before July 1, 1999 to Prof. Dr. H. Winkler, KLIVV, Savoyenstr. 1a, A-1160 Wien, Austria. Email: h.winkler@klivv.oeaw.ac.at

Assistants needed for the study of satin bowerbirds. Volunteer field assistants are needed for the study of mate choice in satin bowerbirds. Assistants will primarily help to band birds and to observe behavior at bowers. The study site is in Northern New South Wales, Australia. This is a renewal of a study of mate choice which began 16 years ago in which we will follow the success of the offspring of male bower holders we studied earlier. The field season will run from mid-September through late December. Assistants must arrange for travel to the field site; we will provide food and lodging at the site. Tasks assistants will perform include assisting in the capture, banding and blood sampling of birds, locating bower sites and clearing trails, monitoring the behavior of birds at bowers with infrared sensing equipment and camcorders and by direct observation. The work is very physically demanding and assistants must be focused on this project and flexible in their requirements. Contact: Gail Patricelli or Gerry Borgia, Department of Biology, Biology-Psychology Building University of Maryland, College Park, Maryland 20742-4415 e-mail: gp50@umail.umd.edu Telephone: (301) 405-6943, eve. (301)572-6990

Post-doctoral position: We are seeking a postdoctoral fellow to work on an NSF-funded project on the coevolution of genes and song dialects in the white-crowned sparrow, in collaboration with Doug Nelson (song dialects and learning) and Patty Parker (molecular markers and behavior) at The Ohio State University. The project involves field work along the Oregon and Washington coasts in the Spring, and analysis of genetic variation at microsatellite loci during the rest of the year. Field work involves capturing and bleeding birds, tape-recording songs, and performing playback experiments. There will also be the opportunity to participate in song learning experiments using hand-reared birds. The ideal candidate will have strong interests/experience in animal communication and in molecular methods for the analysis of genetic variation. The 2 1/2 year position will begin in Autumn or Winter of 1999/2000. Starting salary is \$24K including full benefits. The Ph.D. degree is required before the position begins. Please send a letter summarizing research experience along with a curriculum vitae (include the names and addresses (including e-mail) of three references) to: Dr. Douglas A. Nelson, Department of Evolution, Ecology and Organismal Biology, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210-1293.

Volunteers - Approximately 30 volunteer positions are open in 1999 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 scientists doing field research. Food and lodging are provided to volunteers in exchange for twenty-four hours per week of routine chores, with the remaining time available for research activities. The program is open to both undergraduate and graduate students; the latter may pursue their own research projects. Faculty knowing of promising students should alert them to this opportunity for professional experience toward, development of, and evaluation of their career goals. Volunteers are needed between March 14 and November 1. Appointments are for part of this period, with a minimum appointment of six weeks. Applicants for spring positions (March-May) should submit applications by February 15, summer volunteers (June-August) by April 1, and fall volunteers (September-November) may apply any time. For applications, write: Dr. Wade C. Sherbrooke, Director, Southwestern Research Station, American Museum of Natural History, Portal, AZ 85632 USA; telephone 520-558-2396; e-mail: swrs@amnh.org.