
INTERNATIONAL SOCIETY FOR BEHAVIORAL ECOLOGY
ISBE NEWSLETTER

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FROM THE PRESIDENT

I am pleased to announce the results of the election for the new ISBE Executive:

President-elect	Tim Birkhead (Sheffield)
Secretary	Patricia Parker (Ohio State)
Treasurer	Carl Gerhardt (U. Missouri, Columbia)
Councillors	Rauno Alatalo (J. Jyväskylä)
	Mark Elgar (Melbourne)

They join Anders Møller and Gunilla Rosenqvist as Councillors whose term runs to 1996, and Nancy Burley, who becomes Society President at the Nottingham meeting. Congratulations to those elected, and thanks to everyone who let their name stand.

Looking back, I suppose the major accomplishments during the 2-year term of the outgoing Executive have been finding three very competent replacements for the Editors of our journal, and initiating the process for the '96 meetings, to be held in Canberra, Australia. Our journal continues to excel, and our Society is a healthy one (1150 members at last count). Personally, I have very much enjoyed serving as President, and thank you for the opportunity to serve the Society and our discipline.

I feel confident that the Society is in good hands with its new Executive, and will continue to grow and flourish. Please remember to give them your support, and your time and energy when needed, including your participation at the Business Meeting in Nottingham (Thursday, August 18 @ 20:30 h; bar and disco follows!). I'm looking forward to seeing many of you there; it promises to be a great Conference. Cheers!



Larry Dill

THE CURRENT EXECUTIVE

- President** Larry Dill
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Members of the Council are asked to check this listing, and provide any corrections or additional information to the Newsletter editor.

SOCIETY NEWS

The big news of course is that the Vth International Behavioural Ecology Congress will be held next month. The advance material indicates that Chris Barnard and his colleagues at the University of Nottingham have prepared a meeting that will more than live up to the high standards set at our Society's previous congresses. Latecomers can obtain information about attendance from:

ISBE 94
Conference Nottingham
The Business Information Centre
309 Haydn Road
Nottingham NG5 1DG
UK

PROGRAMME HIGHLIGHTS

Sunday August 14
Registration and Welcoming Reception

Monday August 15
09:00 Plenary Session
Genetic and non-genetic approaches to questions in behavioural ecology
Linda Partridge
(University College, London)

18:30 Civic Reception with the Sheriff of Nottingham

Tuesday August 16

09:00 Plenary Session

Why are adolescents helpful at times and how do parents control their help in a stressed environment?

Jan Komdeur

(National Environmental Research Institute, Ronde, Denmark)

20:30 Business Meeting for ISBE Executive

Wednesday August 17

09:00 Plenary Session

Back to basics: why behavioural ecology contributes less to animal welfare and conservation than it should do.

Mariam Stamp Dawkins

(University of Oxford)

13:00 Excursions

Thursday August 18

09:00 Plenary Session

Psychology and behavioural ecology: strange attractors or just chaos?

Alan C. Kamil

(University of Nebraska, Lincoln)

20:30 General Meeting of the Society

Friday August 19

09:00 Plenary Session

The place of behavioural ecology anthropology in evolutionary social science.

Monique Borgerhoff Mulder

(University of California, Davis)

19:30 Final party

In addition, contributed paper sessions run every day. Delegates are reminded that it is **STRONGLY ADVISED** to book accommodation and meals at the conference centre, as commercial bed-and-breakfast and pubs and restaurants are not conveniently situated to the Conference Centre. We're all looking forward to an excellent conference. Hope to see you there!

**VITH INTERNATIONAL BEHAVIOURAL
ECOLOGY CONGRESS**

Canberra, Sept. 29 - Oct. 4, 1996

The Sixth International Behavioural Ecology Congress will be hosted by the Division of Botany and Zoology of the Australian National University.

We promise everybody a good time. The scientific sessions of the congress will run from Monday 30 September to Friday 4 October 1996, with an opening reception on 29 September. For people who want to spend more time in this part of the world, we will organize a full range of tours with a biological flavour both before and after the congress. Canberra itself is an excellent venue for bird-watching and seeing some of the common Australian mammals.

Correspondence about scientific aspects of the conference can be directed to isbe6@anu.edu.au, or to:

ISBE6

Attention: Andrew Cockburn
Division of Botany and Zoology
Australian National University
Canberra ACT 0200 Australia

DONATED SUBSCRIPTION PROGRAMME

Please help colleagues in need. Every donation will help increase scientific contacts across the world. In a time when nationalism is again raising its ugly head, this is more important than ever. For details, see the newest issues of our journal *Behavioral Ecology*.

SPOUSAL MEMBERSHIP

For \$5 per year spouses of full members can become members of ISBE. Spousal members receive the annual newsletter and information concerning biannual meetings, but do not receive a subscription to the journal. Please see information in any issue of *Behavioral Ecology*.

ISBE ARCHIVES

Good news! The ISBE now has an official Archivist:

Wendy King
Département de Biologie
Université de Sherbrooke
Sherbrooke, Québec
Canada J1K 2R1

Ex-members of Council are kindly requested to

turn over to Wendy any material dealing with the early years of the Society (oh, so long ago), including the meeting at Albany which led to the Society's formation. The Archives should also contain a complete set of Conference Programs and Abstracts. Perhaps the organizers of past meetings could oblige by sending these to Wendy. And if anyone would like to donate a complete set of Newsletters, they would also be gratefully received.

Computer Programs for Genetic Relatedness, Paternity, and Maternity Analysis.

David Queller (Queller@pop.rice.edu) and Keith Goodnight (Keithg@whittaker.rice.edu).

Dept. of Ecology and Evolutionary Biology, Rice University, P.O. Box 1892, Houston, TX 77251 U.S.A.).

We plan to write two user-friendly computer programs for people doing molecular studies of kinship. If you have any interest in these, we would like to hear from you because (1) we need input about features you would like to see, (2) our chances to get funding will be enhanced if we can document the need in the research community, (3) we can notify you when programs are available. A version of program 1 is already available at no charge; send a Macintosh diskette; (current users - have you registered?).

Program 1. Relatedness. The current version of the program calculates relatedness based on codominant single-locus genetic data (e.g. allozymes, microsatellites, single-locus minisatellites, RFLP's) in either diploid or haplodiploid systems. It allows the user to estimate relatedness within sets of putative relatives defined by up to six variables (deme, group, sex, and 3 user-defined sub-group variables). Relatedness estimates can be obtained for the whole data or for specific groups, with standard errors estimated by jackknifing. F-statistics can also be calculated. The program was originally designed for allozyme work in social insects, but we plan a major upgrade to meet broader needs. To take advantage of new molecular markers, we need to allow for much larger numbers of loci and alleles and to add code for dominant markers (e.g. RAPD's, fingerprints). In addition, many researchers need a less colony-structured program, including the ability to estimate pairwise relatedness throughout the data set, not just within colonies.

Program 2. Paternity and maternity analysis. This program will use genetic data to exclude putative parents, to assign parentage among finite sets of putative parents, and to calculate maximum

likelihood estimates of paternity or maternity for specified offspring-putative parent sets. It will work for diploid and haplodiploid genetic systems, and will take either codominant or dominant genetic data. It will accommodate a number of kinds of prior information, including (1) mothers known, fathers not (or vice versa) (2) both parents unknown, but both scored (3) both parents unknown, one type not scored (e.g. fathers absent), (4) both parents unknown, but mating pairs are known, (5) maternal and paternal offspring alleles distinguishable (e.g. if the maternal gametophyte is scored in gymnosperms). We also plan a statistical power feature; you input the kind of information you have (genetic and social) and the program estimates the probability of exclusion or assignment. This would be useful in both forecasting (is it worth doing the study? How many loci will I need?) and in interpreting negative results (did I really have a chance to get a positive result?).

If you have any interest in either of these programs, please let us know. As many of the following as you like.

1. Which program(s) are you interested in?
2. Would you like to be notified if and when we write it?
3. What is your name, address, e-mail address?
4. What organisms do you work on?
5. What kinds of genetic markers do you use or plan to use?
6. Are you currently using a computer program to do your analysis? If so, what program? Is it adequate?
7. Are there any special features you would like implemented?
8. Have you used earlier versions of Relatedness? Liked it? Published results from it?

Any other comments are welcome. Pass this on to a colleague.

David Queller
Dept. of Ecology and Evolution, Rice University,
P.O. Box 1892, Houston, Texas 77251 U.S.A.
phone: 713-285-5220 fax: 713-285-5232

CONFERENCES

The American Society of Zoologists is pleased to announce two important symposia that will be held at its forthcoming annual meeting from 5-8 January 1995 in St. Louis, Missouri, U.S.A.

Risk Sensitivity in Behavior

This one day symposium focuses on empirical tests of risk-sensitive models, as approached from the perspective of both behavioral ecology and animal psychology. Risk-sensitive models have been applied to a wide range of ecological issues (choice of prey items or feeding sites, movement patterns, search images, etc.) in a diverse array of taxa. Risk-sensitive models often make predictions that are very different from those obtained from more traditional models of behavior. Application and empirical tests of these models have not yet offered an integrated understanding about how risk shapes behavioral decisions, in part because of the different approaches being used and the different perspectives from which tests have been conducted. The speakers will attempt to integrate the results from this work, particularly in light of the emerging synthesis of psychology and behavioral ecology. The participants will specifically address the psychological aspects of risk-sensitive behavior, the roles of learning and cognition in risk-sensitive behavior, the impact of risk-sensitivity on social and solitary foraging behavior, and the development and tests of models of risk-sensitive behavior.

Details about this symposium can be obtained by contacting the organizers, Peter Smallwood [Telephone: (215) 526-5091; FAX: (215) 526-5086; E-MAIL: psmallwo@cc.brynmawr.edu] or Ralph Cartar [Telephone: (403) 220-7622; FAX: (403) 289-9311; E-MAIL: rcartar@acs.ucalgary.ca].

The State of Experimental Ecology: Questions, Levels, and Approaches.

This two day symposium will focus broadly on the field-experimental approach to the analysis of problems in animal evolutionary ecology. Experimentation has become an integral part of ecological investigation in only the last few decades, and it has forged the entire field into a more rigorous and critical discipline. The goal of the symposium is to synthesize the diverse approaches that are being used to experimentally address ecological issues into a cogent statement

about the role of experiments as an analytical paradigm for ecology. The symposium brings together 23 speakers whose research spans major habitats, taxa, questions, and levels of analysis. It is hoped that this diversity, coupled with discussion sessions, panel discussions, and workshops targeted at graduate students, will identify promising future directions for experimentation in ecology. The meeting will explicitly tackle issues such as the realism-power tradeoff, statistical power and experimental design, identifying the context and questions that motivate experiments, the issue of realism of scale in experiments, and the statistical and interpretive issues relating to manipulations of individuals in complex systems.

Details about this symposium, including a list of speakers and topics, can be obtained by contacting the organizers, Joe Bernardo [Telephone: (919) 684-2567; FAX: (919) 684-6168; E-MAIL: jb@mendel.zoo.duke.edu] or Bill Resetarits [Telephone: (314) 553-6221; FAX: (314) 553-6223; E-MAIL: swjrese@umslvma.umsl.edu].

Generous student support is available to partially defray costs of travel, or housing at the meeting. Information about registration, joining the society, or student support for the meeting can be obtained from the American Society of Zoologists, 401 N. Michigan Avenue, Chicago, Illinois 60611-4267, U.S.A. [Telephone: (312) 527-6697; FAX: (312) 527-6640].

Third International Conference on Simulation of Adaptive Behavior (SAB94) Brighton, UK, August 8-12, 1994 FROM ANIMALS TO ANIMATS

The object of the conference is to bring together researchers in ethology, psychology, ecology, cybernetics, artificial intelligence, robotics, and related fields so as to further our understanding of the behaviors and underlying mechanisms that allow animals and, potentially, robots to adapt and survive in uncertain environments.

The conference will focus particularly on well-defined models, computer simulations, and built robots in order to help characterize and compare various organizational principles or architectures capable of inducing adaptive behavior in real or artificial animals.

Conference Chair

Philip Husbands
 School of Cognitive and Computing Sciences
 University of Sussex
 Brighton BN1 9QN
 UK

e-mail: philh@cogs.susx.ac.uk

Program Chair

David Cliff
 School of Cognitive and Computing Sciences
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 UK

e-mail: davec@cogs.susx.ac.uk

**"Preservation of our World in the Wake of
 Change"**

The Israel Society for Ecology and Environmental Quality Sciences will hold its 6th International Conference in Jerusalem in June 1995. The Conference will include symposia, contributed poster and paper sessions, workshops, field trips, social events, and business meetings. The theme of the conference will be "Preservation of Our World in the Wake of Change".

The aim of the Society's international conferences is to assemble ecologists, environmentalists and other professionals from various countries for a multi-disciplinary review of the state of the environment. The conferences include discussions of structural, functional and process oriented topics, new approaches, methodologies and policies. The conference program will include subjects under the broad heading of Ecology, Environmental Quality, Social, Political, Legal, Economic Aspects and Environmental Health.

We would like to invite scientists and other professionals interested in presenting papers and/or participating in the Sixth International Conference.

For further details please contact:

Prof. Yosef Steinberger
 Chairman of the International Conference
 Department of Life Sciences
 Bar-Ilan University
 RAMAT-GAN, 52900
 ISRAEL

Telephone: (972-3)-5318571

Fax: (972-3)-771088

Email: F61116@BARILAN

The 24th International Ethological Conference will be held in Honolulu, Hawaii, from August 10-17, 1995. The conference is open to all who are interested in Ethology and allied fields and is sponsored by the University of Hawaii. Organization of the scientific content of the conference is undertaken by the Local Organizing Committee with help from the Science Committee. Travel, hotel and logistic arrangements are made by the professional conference organizers, Travel Planners, Inc. (TPI).

LOCAL ORGANIZING COMMITTEE

George S. Losey	Ernst S. Reese
Dept. Zoology & HIMB	Dept. of Zoology
Univ. of Hawaii	Univ. of Hawaii
Co-Chair	Co-Chair
E-Mail to IEC@ZOOGATE.ZOO.HAWAII.EDU	

CONFERENCE SECRETARIAT

Travel Planners, Inc.
 Suite 150, GPM Building
 San Antonio, Texas 78216-5674
 Phone: (210) 341-8131 Fax: (210) 341-5252

**SOUTHWESTERN RESEARCH STATION
 STUDENT SUPPORT FUND** - The American Museum of Natural History awards several grants each year of approximately \$400-\$800 to graduate students or postdoctoral students pursuing research at its Southwestern Research Station in the Chiricahua Mountains, Portal, Arizona. Information and application forms for this program and other Museum grant programs can be obtained by writing:

Office of Grants and Fellowships,
 American Museum of Natural History,
 Central Park West at 79th Street,
 New York, N.Y. 10024-5192

Application due date: February 15, 1995

Address questions concerning the Station to:

Dr. Wade C. Sherbrooke,
 Director, Southwestern Research Station,
 Portal, AZ 85632 USA;
 telephone 602-558-2396

VOLUNTEERS - Approximately 30 volunteer positions are open in 1995 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 15 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 602-558-2396

SEASONAL OFFICE ASSISTANT - Assist in operations of biological research station office and nature shop: taking reservations, answering phones, greeting guests, supervising volunteers, etc. Begin March 15, 1995, through September 1995. Five-day week; salary \$190/wk, plus room (shared) and board. Applicant must be punctual, organized, enjoy people, and be interested in living in a remote setting (Chiricahua Mountains) and working with biological researchers. Biological training an asset. Call and send résumé to: Dr. Wade C. Sherbrooke, Director, Southwestern Research Station, American Museum of Natural History, Portal, AZ 85632. Phone and fax: 602-558-2396.

NEW FEATURE - MEMBER'S NEWS

One of the Newsletter's several functions is to foster the sense of community spirit and friendship that members of the ISBE enjoy. News of its members, outside of the direct scientific contact we have with one another, is an important part in this. As Newsletter editor I'd be pleased to make space to announce important events - births, deaths, marriage, a move, a new job. Sadly, the first item in this new feature is news of the untimely death of Gerry Fitzgerald. The following obituary by Fred Whoriskey is being carried at the request of several of our members.

Dr. Gerry (Gerard) Fitzgerald

Gerry Fitzgerald died Monday March 15 1994, after a 9 month struggle with cancer. He was 44 years old. Gerry was born in Newfoundland, and was as tough as "The Rock". He did his Bachelors degree at Memorial University, his M.Sc. at the Macdonald campus of McGill University (with Dr. Roger Bider), and his Ph.D. at the University of Western Ontario (with Dr. Miles Keenleyside). He joined Laval University's biology department as an Assistant Professor in 1976, and much to his amusement spent the first months of his career learning a unique form of French walking the picket lines in the first general faculty strike at the University. He was quickly promoted to Associate (1981) and Full Professor (1985).

I had the pleasure and "experience" of being one of his early graduate students, and later a colleague. Being around Gerry was like being in a hurricane. He exuded aggression and raw energy, and woe to those who were not prepared for the storm.

Gerry loved evolutionary ecology, and all elements of behavioral ecology although he had a special fondness for aggressive behaviour. He was absolutely, positively fascinated by aggression and was one of the most aggressive people I have ever known. He was stocky and relatively short, and had a round face, a fair complexion, sandy hair and a strong temper. When he got angry his face turned beet red. This earned him the nickname of "la grosse tomate rouge" (the big red tomato) among the undergraduate students. He loved kickboxing and once invited me to work through a series of knife-fighting exercises he had discovered in a Special Forces manual (I declined: I boxed with him but drew the line at knife fighting).

Gerry was a firm believer in the art of the possible.

He was intensely focused and organized. Deadlines were set early and met, preferably yesterday. If a new methodology was interesting and could help his work, he found ways to get it into his laboratory. When the timetable was not being met, his aggression program kicked in. Then it was remarkable to behold how things suddenly got done.

He was one of the fairest people I have known, and ruthlessly honest. You knew exactly where you stood and what was right or wrong. He would also fight long and hard to right things he perceived to be injustices. Editors of journals which had rejected his or his students papers were by definition unjust, and were a particular target. I also remember one instance when an undergraduate student entered his office and made a series of false accusations. He hated falsehoods. The aggression program kicked in, but the student did not notice the colour change. Gerry opened his window, and gave the student the choice of leaving of his own volition via the door, or involuntarily by the window (a very long drop down). Mind you, once the aggression program kicked in, things got prioritized. The most important thing was winning. Reflection and sober second thought about whether he was overstating his case could wait for after the victory. He always apologized later if he thought he had been wrong.

Gerry discovered the ideal organism for his research work in the threespine stickleback. He was originally introduced to the fish and his study site by Jean Bédard, a colleague at Laval University. His relations at most times with Dr. Bédard could be described as "strained", but Gerry always credited Jean for the introduction. The species had the colour and the aggression to match Gerry's own character. The rest, as they say, is history. His research group was unbelievably successful and productive. They investigated the species aggressiveness, cannibalism, kin recognition abilities, alternate reproductive strategies (early use of fingerprint DNA methodologies), and the "femme fatale" effect whereby female sticklebacks could "charm" the aggressive males to death. Gerry maintained a long standing collaboration with physiologist Helga Guderley of Laval University's biology department. The high quality and general interest of the work was evidenced by write ups in the News and Views section of *Nature*, *New Scientist*, and the *Manchester Guardian*. Though pleased by the recognition, none of these successes went to his head. Gerry was immune to the vanities of the scientific ego. He was open and approachable,

providing you were civil and prepared to spend hours talking sticklebacks.

Gerry's single minded focus on his work was initially done at the expense of other "life experiences". This was beginning to gnaw at him, and came to a head just as I was terminating my Ph.D. in 1984. In typical Gerry fashion, he focused himself and set out to correct the "problem". In short order, he married his lovely wife Anna Lisa, and soon they had a daughter Chéron. I noted big changes in the man. A gentler, loving side to his character became evident. He looked for opportunities to help others. He began to serve on editorial boards for journals, and committees for the professional societies to which he belonged. These duties were now viewed as investments in a better future for all, rather than distractions from his ongoing research work.

Gerry fought the illness as best as he could. There was no bitterness at a cruel fate which had sent him a rotten card. Death snuck in to take him while he was sleeping. It was the only way to avoid a bruising fight. He died at home with his family, and in typical Gerry style cremation and memorials were handled immediately. While there is always a tendency to look to the future and wonder what might have been if only he had survived, I'm pretty sure Gerry himself would not have indulged in this. He had done so much already. He had superbly prepared a cohort of graduate students for their futures. A colleague of his at Laval University told me that Gerry had infected the entire Biology Department with his art-of-the-possible. He shook up a feudal system, demanded higher and fairer standards, and proved that graduate students could finish in a timely fashion. He had earned the respect of the scientific community, and the love of my family.

Gerry did where others talked, and the world ended up better.

Fred Whoriskey
21 March 1994