

## Program Event Summaries

ABS PRESIDENTIAL SYMPOSIUM:  
ADAPTIVE VARIATION IN FEMALE MATING PREFERENCES  
Monday, July 27, 2:00 pm – 5:30 pm

**Symposium Organizer:** Molly Morris, Ohio University

Adaptive variation in male mating behaviors, both across and within individuals of a species, is well accepted and has generated extensive research on alternative male mating strategies/tactics and the mechanisms that produce and maintain them. Studies of adaptive variation in female mating behaviors, however, have lagged far behind. Not all females prefer the same male or have the same strength of preference, nor do their preferences remain inflexible to environmental influences. The goal of this symposium is to highlight some of the current research on variation in female mate preference, addressing how these studies are providing us with a better understanding of the evolution of female preference as well as the role of female preference in selecting for male traits.

**Presenters:**

Eileen Hebets, University of Nebraska, USA: “Plasticity of female mate choice in *Schizocosa wolf* spiders”

Molly Morris, Ohio University, USA: “Variation in female mating preferences and the myth of the superior male”

Andrew Pomiankowski, University College London, UK: “Female condition-dependent sexual selection”

Steven Gangestad, University of New Mexico, USA: “Variation in female mate preference in humans”

**Summaries of individual presentations are in the Abstract section.**

## Program Event Summaries

SYMPOSIUM:  
SIGNALING IN MULTIPLE MODALITIES  
Wednesday, July 28, 2:00 pm – 6:00 pm

**Symposium Organizer:** James P. Higham, University of Chicago

The last decade has seen a growing realization that animal signaling systems feature numerous signal modalities, including visual signals that vary in multiple-aspects such as size, color, shape and pattern, behavioral signals, olfactory signals, auditory signals, and so on. Animals receive and process the information provided from such signals with every available sensory system. Our understanding of how the different signals that are expressed are received and interpreted, and how the information from such signals is integrated when behavioral decisions are made, is growing in a few specific cases, but is still poor for most systems. Theoretical frameworks for classifying and considering multi-modal signaling systems have been proposed, which include a separation between redundant (further separated into equivalent and enhancement) and non-redundant (usually separated into independent, dominant, modulation and emergent) elements of signaling systems. It is possible to describe signaling systems within these theoretical frameworks, including those cases studied before such frameworks were developed. This symposium brings together researchers from a wide variety of taxa, who have studied multi-modal aspects of signaling systems, including theoretical and modeling aspects of such systems, as well as specific case studies. The overall aim is to elucidate some of the general principles of how such signaling systems really work, and to improve our understanding of how they might best be understood.

### **Presenters:**

K-Lynn Smith, Chris Evans, Macquarie University, Australia: “Should I repeat that? Examining the costs and benefits of redundant signals”

Sarah Partan, Hampshire College, USA: “Experimental approaches and the use of animal robots to study multimodal communication”

Ryan C. Taylor, Salisbury University, USA: “Anuran courtship, what can a fixed signal tell us about multimodal signaling?”

George W. Uetz, University of Cincinnati, USA: “Active space of multimodal signaling in a complex environment”

J. Andrew Roberts, The Ohio State University at Newark, USA: “Multimodal signaling in a communication network”

James P. Higham, University of Chicago, USA: “Multi-modal reproductive signaling and social knowledge in primates”

**Summaries of individual presentations are in the Abstract section.**

## Program Event Summaries

SYMPOSIUM:  
COLLECTIVE ANIMAL BEHAVIOR: DECISION-MAKING OF GROUPS  
Thursday, July 28, 2:00 pm – 6:00 pm

**Symposium Organizers:** Noa Pinter-Wollman & Deborah Gordon, Stanford University

Social animals use collective behavior to make decisions that affect the fitness of all group members. Movement patterns of fish shoals, bird flocks, and ungulate herds are collective behaviors resulting from the coordinated movements of individuals. Where the flock flies and how fast a shoal escapes from a predator can influence the fitness of all group members. In eusocial insects, group-level decisions determine the reproductive success of the colony. Where to live and when and where to forage are decisions reached collectively by the colony, through local interactions among individuals. Research on collective behavior is beginning to reveal common principles across systems. Variation among group members in information about the environment, and in their needs, will influence whether decisions are made democratically or despotically. Thresholds in interaction rates are important in the decision-making processes of social insects. When a certain number of interactions are detected, a threshold or quorum is reached which leads to a change in colony behavior. Interactions may also determine spatial patterns of behavior, such as foraging trails or nest construction. By following simple, individual-based local rules, the group collectively performs a behavior. Our symposium brings together researchers interested in collective decision-making, and seeks both common principles and discrepancies across systems. We hope to consolidate new theoretical approaches to understanding collective behavior with recent empirical studies, and possibly identify new explanations for the processes that produce collective behaviors.

### **Presenters:**

Noa Pinter-Wollman, Stanford University, USA: “Collective animal behavior: Decision-making of groups”

Reginald B. Cocroft, K. Ramaswamy, A. Mohan, M. Catanho, S. Nair, University of Missouri, USA: “Collective antipredator signaling in treehopper broods”

Julia K. Parrish, Daniel Grunbaüm, Kristi Morgansen, University of Washington, USA: “Are fish schools an appropriate model of a decentralized intelligence?”

Jean-Louis Deneubourg, Aurélie Buffin, Université Libre de Bruxelles, Belgium: “Ant colony: a micro chemical factory”

Dhruba Naug, Colorado State University, USA: “Organizational structure and disease dynamics in a social group”

Stephan Pratt, Arizona State University, USA: “Behavioral mechanisms for collective movement by ant colonies”

Deborah M. Gordon, Stanford University, USA: “Interaction networks and foraging ecology in harvester ants”

**Summaries of individual presentations are in the Abstract section.**

## Program Event Summaries

### CAREERS IN ANIMAL BEHAVIOR WORKSHOP III “THRIVING AS A BEGINNING ASSISTANT PROFESSOR”

Monday, July 26

8:30 – 10:00 PM, Room Chesapeake B/C

**Workshop Organizer:** Jennifer Mather, University of Lethbridge

Becoming an Assistant Professor at a college or university is the goal of many people who begin a career in animal behavior. This accomplishment brings many challenges with it, however: adapting to the local situation, taking on a full course load and continuing the research component of one's work. This panel of senior scientists will present advice about coping strategies in several aspects, including finding a balance, managing one's teaching, planning a research career and some special advice for Latin American members.

**Presenters:**

Jennifer Mather, University of Lethbridge, Canada: “Finding a Balance”

Kaci Thompson, University of Maryland, USA: “Teaching Strategies”

Gail Patricelli, University of Washington, USA: “Building a Research Career”

Gabriel Francescoli, Facultad de Ciencias, Uruguay: “Latin American Careers”

Jennifer Penner, Hendrix College, USA “When teaching is the main focus”

### TEACHING ANIMAL BEHAVIOR WORKSHOP

Thursday, July 29

8:30 – 10:00 AM, Room Chesapeake B/C

**Workshop Organizers:** Penny Bernstein (Kent State University) & Mike Noonan (Canisius College)

**Presenters\*:**

Steve Nowicki, Duke University, USA: “Making behavior part of introductory biology, in college and in high school”

Douglas Mock, University of Oklahoma, USA: “Parent-offspring conflict: evolutionary thinking for a rote clientele”

Jennifer Penner, Hendrix College, USA: “Teaching animal behavior in the field and abroad”

\*Abstracts of these presentations are included in the abstract section.

## Program Event Summaries

### 2010 ABS FILM FESTIVAL

Tuesday, July 27, 8:30-10:30 pm, Commonwealth Auditorium  
Wednesday, July 28, 8:30 -10:30 pm, Commonwealth Auditorium

#### Jack Ward Non-Commercial Film Competition

##### **Angels in the Forest**

Film producers: Sharon Pieczenik, Erik Patel, Steve Pieczenik, & Roberta Pieczenik

Film topic: Angels in the Forest is a documentary on the behavior and conservation of Silkie Sifaka lemurs in Madagascar.

##### **Signals for Survival**

Film producers: Marc Dantzker & David O Brown

Film topic: Signals for Survival is a documentary on the communication systems used by Great Black-backed Gulls and Herring gulls.

Following the screening of the two Jack Ward Award Finalists, there will be an open group sharing session. Please bring your favorite non-copyrighted animal images and videos to share with fellow researchers, educators, and applied practitioners.

#### Commercial Films

##### **CLASH: Encounters of Bears and Wolves**

Film producers: Bob Landis and Janet Hess

Film topic: CLASH: Encounters of Bears and Wolves is a documentary on the encounters of bears in wolves in Yellowstone National Park and the ecological pressures they face.

*For more information about the Animal Behavior Society Film Festival or if you would like to join the ABS Film Committee, please contact Jill Villareal at the meeting or by email at [jillavillarreal@yahoo.com](mailto:jillavillarreal@yahoo.com)*