10-years of



he Behaviorist



Animal Behavior Society



The Conservation Behaviorist, an electronic news-update, informs ABS members about the Conservation Committee's activities, research trends in behavior and conservation, and relevant scientific news in conservation research where behavior plays an important role.

www.animalbehavior.org/ABSConservation

The ABS Conservation Committee

Created in 1997, the Conservation Committee aims to encourage ABS members to participate in research programs addressing the interface between animal behavior and conservation science. By identifying and evaluating the areas in which behavioral research has contributed to conservation, as well as the fields that need development, the Committee seeks to generate discussion and promote studies in behavior and conservation.

Excerpts from Vol. 10 No. 1

- "...Three major outcomes resulted from our collective effort ([ABS Conservation Committee] 2003-2006): The E. O. Wilson Conservation Award..., The Conservation Behaviorists..., and significant data bases... we all founded conservation behavior..." (Guillermo Paz-y-Miño-C., page 2).
- "...We want to identify behavioral areas that require more study in order to apply them for solving conservation problems. Furthermore, we hope to determine how the application of behavioral theory to conservation can inform us about the theory itself..." (Bruce A. Schulte, page 3).

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"...Whether or not it is explicitly recognized in a given program, animal behavior is the foundation of all endangered species work. In fact, studying a population's genetic or demographic make-up cannot be done without understanding the behavior that shaped these patterns —mating system, type of parental care, dispersal, habitat choice..." (Elsbeth 'Misty' McPhee, page 6).

ABS Conservation Committee Members

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Past Chairs: Ronald R. Swaisgood Zoological Society of San Diego, Colleen Cassady St. Clair University of Alberta, Guillermo Paz-y-Miño-C. University of Massachusetts Dartmouth, Richard Buchholz University of Mississippi, James Ha University of Washington Seattle

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Mark L. Wildhaber

Columbia Environmental Research Center

Interact with The Conservation Behaviorist

Send letters, announcements, comments and contributions to The Conservation Behaviorist <code>dshier@sandiegozoo.org</code> Deadlines for articles are the 15th of the month preceding the next news update. The next deadline is <code>October 15th</code>. Contributions submitted by members of the Animal Behavior Society and judged by the Conservation Committee to be appropriate will be published in The Conservation Behaviorist. The publication of such material does not imply ABS or Conservation Committee endorsement of the opinions expressed by contributors.

Editor **Guillermo Paz-y-Miño-C.** Associate Editor **Debra M. Shier**

Editing and Producing TCB ...a team effort



2012 marks a decade in the production of *The Conservation Behaviorist* (TCB) under the edition of *Guillermo Pazy-Miño-C.* and *Debra M. Shier* (left). Debra has been instrumental in co-editing and co-producing TCB.

10-years of TCB

Vol. 10, No. 1, 2012

By Guillermo Paz-y-Miño-C., Editor

In 1997, as a graduate student, I lobbied to become member of the Animal Behavior Society Conservation Committee which, at that time, was an *ad-hoc* instance in the structure of ABS. Since conservation was perceived as a theme mainly for youthful enthusiasts, I had the credentials –youth and enthusiasm— to swiftly be added to the committee still short in members.

After *Jim Ha* and *Richard Buchholz*, I became Chair of the Committee in 2003. Three major outcomes resulted from our collective effort (2003-2006): The E. O. Wilson Conservation **Award** (today one of the most prestigious awards offered by ABS and to which most graduatestudent applicants submit their proposals), *The* **Conservation Behaviorist** (launched to outreach ABS members and the public, and to communicate both our interest in studying conservationapplied behavior and to raise awareness about the fragmentation and loss of habitats worldwide), and significant data bases (one with the most relevant scientific publications in the interface conservation-behavior, the other on funding agencies willing to sponsor behavioral research meaningful to conservation, and the last on graduate programs and potential advisors immersed in the field -which we all founded—of conservation behavior). The data bases were initiated prior to 2003 by Richard Buchholz.

My thanks to the members of the Conservation Committee for sponsoring, over a decade, my role as editor of *The Conservation Behaviorist*: *Debra M. Shier* (my special appreciation for her role as associate editor), *Richard Buchholz*, *Daniel T. Blumstein*, *Ronald R. Swaisgood*, *Bruce A. Schulte*, *Colleen Cassady St. Clair*, *Mark L. Wildhaber*, *Esteban Fernández-Juricic*, *Allison C. Alberts*, *James Ha*, *J. Cully Nordby*, *Elizabeth V. Lonsdorf*, *John Eadie*, *M. Elsbeth* (*Misty*) *McPhee*, and *Jessica Ward* ■

A decade of The Conservation Behaviorist and a 15-year perspective on the ABS Conservation Committee

By Bruce A. Schulte, Chair ABS Conservation Committee

The July issue of *The Conservation Behaviorist* (TCB) marks its tenth anniversary. All of us who have been involved in ABS-CC over the years owe a huge, heartfelt THANK YOU to *Guillermo Paz-y-Miño-C*. (Editor from issue one), *Allison C. Alberts* (Associate Editor vol. 1-4(1)) and *Debra Shier* (Associate Editor, vol. 4(2)-10). Their efforts have made the work of conservation behaviorists visible to the world!

I am honored to be representing the ABS-CC as Chair as the list of former chairs is a who's who of conservation behavior: James Ha, Rich Buchholz, Guillermo Paz-y-Miño-C., Colleen Cassady St. Clair and Ron Swaisgood. After its formation (a success in itself), one of the early achievements of ABS-CC was the creation of the E.O. Wilson Conservation Award in Animal Behavior. In 2002, Dr. Wilson received the Animal Behavior Society Distinguished Animal Behavior Award and shortly thereafter a student award was named in his honor. The recipients of this prestigious award are listed in this volume (see page 4). Each continues to conduct research in biology and most are very active in conservation behavior work.

ABS-CC cannot take credit for the creation of the book by members *Daniel Blumstein* and *Esteban Fernández-Juricic* (*A Primer of Conservation Behavior*, Sinauer, 2010), but perhaps the "*Conservation Tips*" section in the early volumes of TCB by Dan and the many enjoyable conversations of the ABS-CC at meetings with Dan and Esteban contributed to the product. Last year in a graduate seminar on Conservation Behavior, my students and I had members of the ABS-CC as invited speakers (in person and via SKYPE) on topics in each chapter of the Primer. We also published a review of the book (Wisniewska et al. 2012). The Primer provides an approachable tool for scientists and managers to consider and incorporate behavioral approaches to facilitate the solution of conservation problems.

The ABS-CC has created a list of interested individuals in addition to those formally serving on the committee after our gathering during the 2011 ABS meeting at Indiana University. We had submitted proposals for a workshop at the 2012 meeting and we were preparing a symposium

proposal as well. The Executive Committee suggested we couple these for the 2013 meeting so we are moving forward with these endeavors.

We are proposing a one-day workshop aimed at applying behavioral theory and approaches to solving specific conservation problems. Speakers representing three different groups (e.g., Federal or state agency, NGO) will explain a conservation problem for which a behavioral approach could be advantageous in finding a solution. The organizers will pre-screen these topics to verify the applicability of a behavioral approach. Before the workshop information will be disseminated to participants on the issue. After the presentations we will break into workgroups with each focusing on a particular problem. We will culminate the workshop with presentations of the potential solutions to the whole group and an open forum for discussion. We envision the workshop as just the starting point for future collaborations as well as providing an example of how additional collaborations could be forged.

The symposium will focus on the future of conservation behavior. We are proposing a half-day set of talks from early and mid-career scientists who will talk about new or revamped conceptual frameworks that can facilitate the application of behavior to conservation issues. We want to identify behavioral areas that require more study in order to apply them for solving conservation problems. Furthermore, we hope to determine how the application of behavioral theory to conservation can inform us about the theory itself.

Rockström et al. (2009) reconfigured what many consider as the top ten major environmental and conservation problems facing Earth (e.g., climate change, biodiversity loss) into planetary boundaries or acceptable limits that would maintain the stability of the Holocene during which human societies thrived. These issues are global in scale and thus often deemed unapproachable by the average person, even the typical scientist or wildlife manager. Behavior often provides an accessible touchstone to both assess problems and measure progress. The ABS-CC remains committed to facilitating the use of behavioral theory and approaches to conservation problems while also aiding the continued conceptual, theoretical and empirical development of animal behavior as a scientific field of study. We hope to see you at the ABS-CC events during the 2013 ABS meeting at the University of Colorado at Boulder!

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The E.O. Wilson Conservation Award

The Edward O. Wilson ABS Student Research Grant for Conservation seeks to encourage graduate students of animal behavior to participate in meaningful conservation-related research. The award is part of the ABS Student Research Grant Program and it supports a proposal considered meritorious for its science and conservation component.

E. O. Wilson, professor at Harvard University, who in 2002 received the ABS Distinguished Animal Behaviorist Award, is one of the world's most eminent scientists and pioneers in biodiversity conservation.

Award Recipients

2012: Jenny Tennessen

Pennsylvania State University

2011: Saloni Bhatia

University of Oxford

2010: Robert Found

University of Alberta

2009: Julie Rushmore

University of Georgia

2008: Julie Jedlicka

University of California Santa Cruz

2007: Jordan Thomson

Simon Fraser University

2006: Alysa Remsburg

University of Wisconsin

2005: Heidi Fisher

Boston University

2004: Jason Munshi-South

University of Maryland College Park

For additional information on this award visit www.animalbehavior.org/ABSGrants or contact the **Conservation Committee**

bruce.schulte@wku.edu

Where are they? Recipients of the E. O. Wilson Award

...the impact of a visionary award...

Jason Munshi-South (award 2004) is an Assistant Professor at Baruch College, where his lab examines the impacts of human disturbance –created by the oil and logging industries— on wild mammal populations using molecular techniques.

Heidi Fisher (award 2005) is a postdoctoral scientist in the Hoekstra lab at Harvard, studying sexual selection.

Alysa Remsburg (award 2006) is an Assistant Professor of Ecology at Unity College in Maine. She continues to study dragonflies and also is investigating land management options for hemlock trees in the face of a deadly invasive pest, the hemlock woolly adelgid.

Jordan Thomson (award 2007) completed his doctoral thesis on loggerhead turtles in 2011 and now is a postdoctoral scientist with Dr. Mike Heithaus at FIU and doing most of his research in Australia.

Julie Jedlicka (award 2008) is a postdoctoral scientist at UC Berkeley, examining avian predator – arthropod prey systems in an agricultural setting, using math, modeling and molecular techniques to facilitate "bird-friendly agroecosystems."

Julie Rushmore (award 2009) is working on her doctorate and DVM at the University of Georgia. She is studying sexually transmitted diseases in wild apes; she has a strong interest in conservation medicine, behavior and disease ecology.

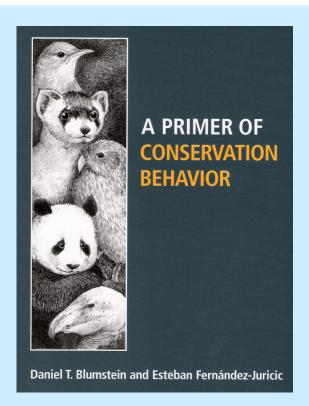
Robert Found (award 2010) is a doctoral candidate at the University of Alberta, where he is investigating behavioral syndromes in elk to facilitate their management. He happens to be mentored by past ABS-CC chair Dr. Colleen Cassady-St. Clair.

Saloni Bhatia (award 2011) is an associate of research and policy at the Nature Conservancy Foundation.

The most recent recipient, *Jenny Tennessen* (award 2012), is working on her PhD at the Pennsylvania State University, where she has multiple projects on the influence of noise from various sources (anthropogenic, environmental, invasive competitors) on the behavior of animals such as whales and frogs.







A Primer of Conservation Behavior By Daniel T. Blumstein & Esteban Fernández-Juricic Sinauer 2010

"...This Primer shall have immediate impact: great for college education and for school teachers; very good as conceptual reference for conservationists; intriguing for graduate students; and important for scholars who understand the context in which conservation behavior is required for broad(er) conservation..." (Guillermo Paz-y-Miño-C).

"This is an excellent book and a must read for all those interested in the intersection of animal behavior and conservation biology. The authors are experts in the field and I learned a lot from reading this forward looking book. Conservation behavior is sure to be an incredibly important field in the years to come" (Marc Bekoff).

"...While there are a number of excellent reviews and edited volumes that discuss the integration of behavior and conservation biology, there has been no practical guide fostering integration and showing how to apply these methodologies to issues that would benefit from an animal behavior perspective..." (Sinauer).

About the Authors

DANIEL T. BLUMSTEIN is a Professor and Chair of the Department of Ecology and Evolutionary Biology at the University of California, Los Angeles, USA. He received his undergraduate degrees in Environmental, Population, and



Organismic Biology, and in Environmental Conservation, at the University of Colorado, Boulder. He received his Ph.D. in Animal Behavior at the University of California Davis, and was a postdoctoral fellow at the University of Marburg (Germany), the University of Kansas, and Macquarie University (Australia). He has studied behavior and conservation in Australia, Canada, the Caribbean, Germany,

Kenya, New Zealand, Pakistan, Russia, and the United States. He has served on endangered species recovery teams, and is a member of the IUCN Reintroduction Specialist Group and the Conservation Behavior Committee of the Animal Behavior Society. He is a co-author of Quantifying Behavior the JWatcher Way (published by Sinauer) and An Ecotourist's Guide to Khunjerab National Park (published by the World Wide Fund for Nature--Pakistan). He is a past editor of the journal Animal Behaviour, and is presently an Associate Editor of The Quarterly Review of Biology. He is on the editorial boards of Behavioral Ecology and Biology Letters. He spends his summers studying marmot behavior and ecology at the Rocky Mountain Biological Laboratory, Gothic, Colorado.

ESTEBAN FERNÁNDEZ-JURICIC is an Associate Professor of Biological Sciences at Purdue University, USA. He got his undergraduate degree at Universidad Nacional de Cordoba, Argentina. He received his Ph.D. in Animal Ecology at



Universidad Complutense de Madrid, Spain. He was a Postdoctoral Fellow at the University of Oxford (UK), and the University of Minnesota (USA). Before his current position, he was an Assistant Professor at California State University, Long Beach for almost six years. He has studied behavior and conservation in Argentina, Spain, the United

Kingdom, and the United States. He is an Associate Editor of the Journal of Applied Ecology and Behavioral Ecology and Sociobiology. He is a member of the Conservation Behavior Committee of the Animal Behavior Society. He is currently interested in the integration of sensory ecology, behavioral ecology, and conservation biology.

Coming up... Workshop on Conservation Behavior at ABS Boulder 2013

By Elsbeth 'Misty' McPhee

Since the publication of *Behavioral Approaches to Conservation in the Wild* (Clemmons and Buchholz 1997), there has been lively debate about the *potential* contributions and role of animal behavior in conservation biology. After 15 years, however, we are well past a discussion about *potential*. Instead, we need to focus on the current, ongoing successes that integrate these two fields.

Whether or not it is explicitly recognized in a given program, animal behavior is the foundation of all endangered species work. In fact, studying a population's genetic or demographic make-up cannot be done without understanding the behavior that shaped these patterns—mating system, type of parental care, dispersal, habitat choice.

Historically, these behavioral foundations have not been explicitly recognized by conservation biologists working in the field. Recent work, however, has elegantly and explicitly asked questions about those behavioral foundations and their answers directly inform the conservation of dwindling populations.

For example, Bremner-Harrison and collaborators (2004) examined the role of boldness in the success of a swift fox (*Vulpes velos*) reintroduction and found that bold animals were less likely to survive beyond six months than their less bold counterparts. Shier (2006) found that with black-tailed prairie dogs (*Cynomys ludovicianus*) translocated in family groups were five times more likely to survive and had significantly higher reproductive success than those translocated without families. Working with oldfield mice, McPhee (2003) compared responses to a predator across wild-caught and three populations of captive-bred (F₂, F₁₄, and F₃₅) oldfield mice. McPhee found that behavioral responses get much more variable the longer a population has

been in captivity. The results and methods used in this research were used to assess predator response behaviors in captive-bred Perdido Key Beach mice prior to their reintroduction (McPhee, Gore and collaborators *in prep*).

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To build on these successes and strengthen the connections between on-the-ground conservation efforts and behavioral theory, at the 2013 Animal Behavior Society conference in Boulder, Colorado, the ABS Conservation Committee will host a Conservation Behavior workshop. The workshop will feature biologists who work directly on the conservation of a threatened or endangered species. They will present a specific problem they are having with their program for which a behavioral approach is likely to facilitate solutions. After which, presenters and participants will break out into workgroups that will focus on the presented problem. We envision this as just the beginning of potential collaborations on these particular problems.

This workshop format will provide a unique and valuable opportunity for the practitioners (speakers) to learn from behavioral experts and for behavioral experts to learn about the challenges and rewards of applying behavioral biology in the field. Ideally, this two-way interaction will inspire future research and solutions for the practitioners and academics beyond the specific problems presented at the workshop.

For workshop information contact: mcpheem@uwosh.edu bruce.schulte@wku.edu

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Student Exchange and Conservation Behavior in a Little Nugget of the Great Frontier

By **Deborah Boege-Tobin**

Scientists, faculty, and now –hopefully— exchange students are drawn to Homer, a small town on Kachemak Bay in South-central Alaska, for its natural splendor, outdoor recreation and opportunities to observe wildlife. All of these factors, combined with an amazing job offer at a small, student-centric university with incredible undergraduate research opportunities (including coastal river otters!), drew me here six years ago.

The Kachemak Bay Campus (KBC) of Kenai Peninsula College – University of Alaska Anchorage (UAA) offers degrees and a semester away program emphasizing marine/estuarine biology and Alaskan experiences, most with integrated behavioral, conservation, cultural and environmental platforms. The Semester by the Bay program (SBB) is a Fall-term immersion experience with incredible hands-on offerings for college sophomores through seniors.

KBC faculty work with fellow associate scientists to provide students with unique research, internship and volunteer opportunities where conservation-behavior questions are addressed; UAA is part of the National Student Exchange, therefore course credit and financial aid transfer are possible. Plus, with 10-20 hours/week volunteer or internship service, students can reside in apartments affiliated with local community partners for greatly reduced or waived housing fees.

In most upper-division courses such as Ichthyology, Invertebrate Zoology, Marine Biology, Marine Mammal Biology, Ornithology, as well as Cetaceans, Stream Ecology, Biological Anthropology, and Geology of Kachemak Bay, students engage with community partners in applied mini-research projects, including:

- Olfactory, prey assessment and play behavior in coastal river otters (*Lontra canadensis*) both on site and via remote camera from the NOAA/UAF Kasitsna Bay Lab. Much research is focused on conserving otters in areas that overlap with humans, attempting to find ways to deter otters from using boats, docks, and cabins for consuming prey and sprainting.
- Marine mammal rescues, releases, necropsies, data/sample collections, decomposition, and skeletal articulations as part of the Marine Biology and/or Marine Mammal Biology courses in conjunction with the Homer

Marine Mammal Stranding Network, the ASLC, NOAA, USFWS, and community museum partners.

- Identification of area killer whales (*Orcinus orca*) based on photo ID and acoustics. Researchers have worked on the behavioral ecology and conservation of three ecotypes of killer whales for almost 30 years with studies including habitat use, social structure and organization, prey identification, and fisheries interactions. The Alaska killer whale project was initiated five years prior to the Exxon Valdez Oil Spill.
- Identification of regional humpback whales (*Megaptera novaeangliae*); select students may have opportunities during the following Summer (2013) to assist in the field at von Ziegesar's whale camp.
- Sea otter research (*Enhydra lutris*) in conjunction with the Kachemak Bay Research Reserve (prey identification via foraging behavioral assessments and scatology) and the USFWS (population estimates, dead otter retrieval and data/sample collections for Unusual Mortality Event).



Photo D. Boege-Tobin

- Students assist the Center for Alaskan Coastal Studies in their Coast Walk program, a part of the Ocean Conservancy's International Coastal Cleanup, which has been cataloging beach debris, coastal erosion, invasive species, intertidal zone communities and other observable coastal wildlife for more than 20 years.
- Recently some students began studying beluga whales (*Delphinapterus leucas*) in Upper Cook Inlet in conjunction with NOAA and the Beluga Observers monitoring project to conserve this endangered species.
- Finally, numerous other citizen science monitoring projects, including those in area saltmarshes, streams, intertidal zones and on invasive species are conducted throughout the year.

For information about the Student Exchange and Conservation Behavior Program at UAA contact dtobin@uaa.alaska.edu









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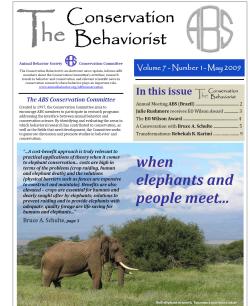
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