

ISBE Newsletter

International Society for Behavioral Ecology

www.behavecol.com

Supplement to *Behavioral Ecology*

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2012

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ISBE 2012

ISBE 2012 Lund, Sweden

The preparations for the 14th Behavioral Ecology Congress are proceeding according to plans. The abstract submission closed 15 March when we had around 750 submissions. We are very pleased that the Hamilton lecture will be given by John Krebs who was instrumental in the establishment of the ISBE and the journal *Behavioral Ecology*. We are also very proud of the list of plenary speakers; Anna Qvarnström from Uppsala University, Lars Chittka from Queen Mary University, London, Rüdiger Wehner, Zurich University, Craig Packer, University of Minnesota, Rosemary Gillespie, University of California at Berkeley, and, Cynthia Moss, University of Maryland. You can read more about the plenary speakers at: www.isbe2012lund.org/plenary-speakers.

The day after the congress there will be six post-conference symposia, all independently organized with a number of specially invited speakers. The titles of these are 1. Behavioural responses to a changing world: mechanisms and consequences. 2. Oxidative stress as evolutionary and behavioural constraints – where are we now? 3. Recent developments in sexual selection research: history, trends and new horizons. 4. The behavioural ecology of animal movement. 5. The evolution of mechanisms for avoiding predation. 6. The role of behaviour in non-ecological and non-adaptive speciation. Check the congress webpage if you want to register for one of these. We in the organization committee are all looking forward to see you all here in Lund in August.

For the committee, Anders Brodin



2012 ISBE photo competition

Many thanks to everyone who sent in their photographs. We have received over 30 entries in three categories (Student Prize; Behavioral Ecology in Action; Behavior & Interaction). I am very pleased to announce the winners for all three categories, as judged by our panel consisting of the ISBE executive.

Student Prize: Zoe Squires

Dumpling squid (*Euprymna tasmanica*) mating pair.



Behavioral Ecology in Action: Thaddeus McRae

A juvenile eastern gray squirrel (*Sciurus carolinensis*) descended a tree and inspected me during an experimental field study of gray squirrels' antipredator behavior.



Behavior and Interaction: Chris Friesen

Female Red-sided garter snake (*Thamnophis sirtalis parietalis*) struggling to move within a mating-ball of 15-20 males. Manitoba Canada.



ISBE conference review

The 2012 ISBE conference is upon us and I am looking for a team of attendees who are interested in providing a review of the conference for the next (November 2012) ISBE newsletter. Please email me (marie.herberstein@mq.edu.au) to register your interest!

You can find out more about the conference program and various activities here: <http://www.isbe2012lund.org/>. It looks like a fabulous event with a stellar line up of plenary speakers. Registration closes July 1st 2012, don't miss out.

We completed the second ISBE photo-competition. Many thanks to everyone who submitted their photos. There was an increase in submission from last year, which is hopefully an indication that this society activity will continue to grow in popularity.

In the last newsletter I asked about moving the newsletter into a more sustainable form. I am sure many members agreed, although not many actually contacted me. It may be worthwhile to survey members during the upcoming conference in Lund. Once I have a better estimate of member opinion, I can then propose some more sustainable newsletter mechanisms.

The ISBE website (www.behavecol.com) has been very busy over the year with many requests to post jobs and volunteer positions. It is a free service to the members of the society, so please do use it to advertise for jobs, scholarships or volunteers.

Finally, a huge thank you to Richard Peters, webmaster extraordinaire, who manages the ISBE website

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I S B E E L E C T I O N 2 0 1 2

The ISBE elections for a new president-elect and two new council members will be held from April 9-23 2012. All society members are invited to vote. Oxford University Press will coordinate an electronic voting system and will contact members directly via email. The election outcome will be announced at the 2012 ISBE Conference in Lund.

Interspecific Competition in Birds

André A. Dhondt. Oxford University Press, 2012. 282 pp.
ISBN 978-0-19-958902-9 (paperback)

I had the pleasure of previewing and commenting on some of the draft chapters for this book, so I was looking forward to seeing the completed work. I knew from those early chapters that this was going to be a major work, as André Dhondt began summing what has been a career-long pursuit. The final product does not disappoint - this book synthesizes research on interspecific interactions among birds (and other species) from the infancy of the theories originating with Lack and others, through to research right up to the present.

The book starts with an introduction into the concepts of interspecific competition, either through interference competition (active exclusion of others from resources) or through exploitation competition (utilization of resources and thus making them unavailable to others). Early researchers felt that interspecific competition was less likely to be an active, persistent force among species as compared to intraspecific competition. Interspecific competition was considered somewhat short-term, when the ranges of two species that utilized similar resources overlapped. Competition between these heterospecifics would result in one of two outcomes: the elimination of one species through direct competition with a superior heterospecific, or sufficient character/niche divergence between species so as to allow co-existence with minimal continued competition. André Dhondt's book focuses primarily on re-examining the concept that competition between species would be a short-lived past event. Rather, Dhondt focuses on evidence, primarily from his own work and that of others on the Family Paridae (titmice and chickadees) but also from other species, that interspecific competition is a persistent selective force among co-existing species that influences both morphological and behavioral evolution.

Chapter 2 outlines some of the theoretics of the models of population growth rates and dynamics necessary to understand how one would quantify the existence of both intra and interspecific competition. The chapter starts with a rather daunting (forgive the pun) statement that equations are more useful than verbal models as a means of demonstrating the existence of competition, but Dhondt never-the-less provides a solid synopsis of the main theories of population growth in relation to competition without the math being cumbersome or intractable. It is thorough but brief shorthand for those familiar with the topic, but not so onerous as to put off the uninitiated. The final pages of the chapter (for those who want to brush through the equations) provides the three key conditions necessary to document before one can even consider the occurrence of interspecific competition: *1. one or more resources must be limiting; 2. intraspecific competition must occur; and 3. resource use between potential competitors must overlap.* Following this, interspecific competition may exist if one can show: *1. resource use of one species affects the availability of the resource to another species; 2. fitness of individuals of one*

species is reduced in the presence of heterospecifics; and finally, 3. distribution or abundance of one species is reduced in the presence of the competitor. The remainder of the book is essentially an exploration of these six points.

Chapters 3-5 focus on exploring evidence for the existence of intraspecific competition, and draw heavily on work in titmice, but also in other species that have been the focus of extensive long-term studies. This is summarized in Chapter 6 before Chapter 7 & 8 explore whether these also affect interspecific competition, whereby the use of a resource by one species directly affects its availability to other species. Chapter 9 focuses exclusively on 20 years of studies that Dhondt and his colleagues conducted on interspecific interactions among blue (*Cyanistes caeruleus*) and great tits (*Parus major*) in Belgium. Chapter 10 discusses the potential of interspecific competition to be a major evolutionary driving force among co-existing species.

Dhondt reviews evidence from removal studies that "space" is a limiting resource (Chapter 3). This is an interesting chapter, as working on resident species such as titmice has allowed researchers to determine that some species are more likely to be summer limited (excess individuals survive the winter, competition is primarily for summer breeding territories) and others are winter limited (competition and survival is limited by the ability to join territorial winter flocks and floaters are not common in the spring). He also points out that variation in survival rates between harsh and less harsh areas within species' ranges may lead to variation in intensity of competition over space as a resource. Chapter 4 focuses on food as a resource, and is an extensive chapter reviewing studies that manipulate food through both supplemental feeding and experimental reduction in wild populations. The chapter ends with an interesting exploration of studies where supplementation led to complex interaction effects with other variables, such as habitat quality and immune response. There are many avenues explored, but a general pattern emerges that initiation of such fecundity measures as clutch initiation dates, clutch size and fledging success appear to be food limited across a broad array of taxa. Chapter 5 addresses limitation of nest sites, which covers not only the cavity nesting species but also reviews evidence of this in open nesters. Much of the chapter focuses on the effects on population density and growth rates with the experimental manipulation of cavity availability through the provisioning of artificial nestboxes, but also has a large discussion about variation in natural cavity availability as a function of habitat type.

Chapter 6 demonstrates that intraspecific competition can lead to density-dependent changes in per-capita growth rate. To detect this, Dhondt reinforces the need to consider and study populations throughout the year, including immigration/emigration that could be the result of density-dependence. He explores in detail case studies such as Jamie Smith and colleagues' work on Mandarte song sparrows, Jan Ekman's year-round studies on willow tits and Dick Holmes' studies on black-throated blue warblers. This is followed by major sections on density-dependence in introduced species; these initially show little effect of resources limiting population growth, but evidence of

competition begins to show as population growth rates themselves decline as these populations reach their equilibrium point. This chapter convincingly demonstrates that intraspecific competition has heavily influenced the life cycle of birds through both interference and exploitation competition, although the relative contribution of these two may depend on the individual species' life history.

Chapter 7 is the first chapter that focuses exclusively on interspecific competition. Early focus is on the history of viewing foraging niche shifts in sympatric species as evidence of past competition. Evidence for ongoing interactions mounts as removal studies demonstrate adjustments to foraging niches of the subordinate species in the absence of the dominant species. Some studies also demonstrate this release also results in increased food intake within the subordinate species, suggesting that competitive interference/exploitation was a previously limiting factor. The chapter ends with a caution against using non-experimental evidence to infer the existence of competition, which leads to Chapter 8, the largest chapter of the book. This chapter spans almost a quarter of the main text, and is an exhaustive review of over 100 studies using experimental manipulation to demonstrate the existence of persistent interspecific interactions and competition among co-existing species. The chapter is split into sections covering a variety of circumstances under which competition has been demonstrated - from competition over cavities through competition between birds and other taxonomic groups. With each section, Dhondt provides a table summing the kind of manipulation, effect on either species, and the type of competition (interference/exploitation) demonstrated with each and every study investigated. As with other chapters, the studies under review cover more than a 50 year time span seamlessly interwoven into a narrative to demonstrate the evidence for persistent competition among co-existing species.

This is followed by a chapter that summates the more than twenty years that Dhondt and his colleagues manipulated

the availability of nestboxes to blue/great tits in his Belgian populations by modifying the entrance hole sizes to exclude great tits. Rotating the proportion of "blue tit-only" boxes available within several study sites of varying habitat quality on a five-year cycle, Dhondt and his colleagues found that blue tit populations appear to be limited by competition with great tits over nestboxes as winter roost sites; provision of boxes that exclude the bigger species influences not only local recruitment of male blue tits, but also increases emigration from outside the study site. These effects of interspecific competition are compounded in poor-habitat conditions, which may explain some of the conflicting ability to demonstrate effects between studies of the same species in varying habitats. Finally, chapter 10 investigates the potential for interspecific competition to lead to evolutionary change in both morphology and life-history traits. Using examples from coal tits to fish and salamanders, Dhondt reviews evidence that changes in body and beak size, jaw morphology, age of attaining sexual maturity and clutch size can all be influenced by interspecific interactions. The chapter concludes that interspecific competition is not only evident following either the loss of a subordinate species or character displacement that allows for "peaceful co-existence", but may be a persistent selective force driving evolution of both morphology and behavior in coexisting species.

This book is an essential synopsis of the historical foundations of this subject dating back to the 1950s, as well as a review of the strong recent experimental work in this field within the last two decades, from one of the key researchers in this area. It would easily serve as a text for graduate courses, or as an essential piece of literature for those conducting research in the field.

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Principles of Animal Communication 2nd ed.

Jack W. Bradbury & Sandra L. Vehrencamp. Sinauer Associates, Inc., 2011. 697 Pp.

ISBN 978-0-87893-045-6 (hardcover)

Jack Bradbury and Sandra Vehrencamp's *Principles of Animal Communication*, 2nd edition, as the authors state in the preface of the book, was updated in response to the dramatic advances in the field of animal communication research over the last decade. This edition differs in a number of important ways from the first edition. First and foremost, is the change in format, from a small, black and white text to a larger, full color format. This improves the overall read of the textbook and likely will make it much more appealing to an undergraduate audience. In addition to the change in format, the authors have done an incredibly thorough job updating the material in the book to cover the advances in the field, citing that over 90% of the references contained within the text were published since the First Edition was printed. This is most notably reflected in the inclusion of an entire chapter on social network theory and animal communication networks, topics of study that barely existed in 1998. Besides these two most obvious changes, the authors have also incorporated feedback from faculty using the First Edition of this text in their courses to make this new edition as assessable as possible, adding more coverage of a variety of taxa and reducing the more mathematically-based aspects of animal communication that may intimidate undergraduates.

Overall, the textbook is well laid out and the chapters follow a logical sequence. The format of all the chapters typically involves introducing a concept and then giving multiple supporting examples. Chapters are divided into logical sub-sections. Important terminology is bolded throughout although there is no glossary at the end of the book. The full color photographs and figures are a real asset. They go a long way in making complex material assessable. Figures are plentiful throughout the book, and are well-drawn and captioned with an appropriate amount of detail. Perhaps my favorite example of this is in Chapter 3 where several great figures depict how the environment affects sound refraction. In addition, the authors start each chapter with an overview and end each chapter with summary statements, which will help to orient undergraduates to the main points and make even the weighty material in some chapters more understandable. Another addition that will appeal to undergraduates is the inclusion within the chapters of boxes containing references to various web topics, referring to a website the reader can visit to learn more about particular topics. I would have liked to have had questions at the end of each chapter that related to the material as this would be useful for course instructors. I was disappointed to see that no reference section was provided, either at the end of the chapters or the end of the book. Instead, the reader is referred to a website that contains all of the citations referred to in the text. I feel this is a disservice, as I could see very few readers making this extra effort.

There are 16 chapters total, starting with an introduction to animal communication, focusing on what signals are and providing a quick refresher to evolutionary biology theory which is important as the text is firmly grounded in evolution, and ending with a broader view of communication, discussing how microbes, plants and even humans communicate. I found this final chapter to be a bit disjointed and out of place in an otherwise very strong text. After the introductory chapter, the authors discuss communication using different sensory modalities from both a signaler and receiver perspective. I especially appreciated the thorough job the authors did discussing sensory modalities that often do not receive much coverage or attention. There is a chapter (Ch. 6) on chemical signals and another (Ch. 7) that discusses the generation and reception of tactile, hydrodynamic and electrical stimuli. After these chapters (Ch. 2-7) that provide the framework for the more mechanistic aspects of communication, in other words, properties of signals and their generation and reception, are chapters that discuss how animals decide when and what to communicate, the costs of communication, and the evolution of communication. Finally, there are chapters on the specific behavioral contexts in which communication occurs, in other words the functions of communication, and on communication within a network setting.

Chapters 2-7 form the meat of the textbook, introducing how various communication signals are produced and received, and are organized similarly, beginning with a discussion of signal properties, how the signal is generated and received, and how the environment influences the nature of the signal. Acoustical and visual communication are each awarded two chapters, one for the signaler perspective and the other for the receiver, given the complexity and widespread nature of these types of communication. Examples from a wide range of taxa are provided and the authors do an excellent job of conveying the similarities and differences of signaling events across sensory modalities.

Chapter 8, "Decisions, Signals, and Information," discusses how animals make choices, putting this within the context of optimality theory. Whereas the last edition contained a thorough explanation of game theory, this edition does not. Special attention is paid to the types of biases that might affect decision making as well as to different types of coding schemes. I felt this chapter could have benefited from additional, more concrete examples.

Chapter 9, "Economics of Communication," and Chapter 10, "Signal Evolution," address the costs of communication and signal evolution. I found these chapters to be especially well executed. The authors handle everything from the introduction to basic genetic concepts and quantitative genetics to game theory and honest signaling theory with ease. It is made obvious that the nature of a given signal is dependent on a complex set of variables including the sort of information given, the environment the signal is produced in, and the costs of signal production. It is also made obvious to the reader that the potential for dishonest signaling differs among signals and signal contexts. I feel these chapters would be beneficial to the widest audience and would even be appropriate in a general undergraduate behavioral ecology class.

Chapters 11-14 discuss specific functions of communication: aggression, courtship, social cohesion, and signaling about the environment. Each of these chapters is further subdivided to highlight different types of behaviors within these categories. For example, Chapter 13 on social integration is further broken up into sub-sections on the evolution of cooperation, principles of recognition, and male-female, parent-offspring, and group integration. All of these chapters are couched in evolutionary theory and provide multiple examples of each type of communication event.

The final two chapters place communication into a broader context, focusing on communication events in networks of individuals (Ch. 15) and in organisms that we do not typically think of when we think about animal communication (Ch. 16). Chapter 15 steps outside of the signaler-receiver dyad to examine how communication occurs in the arguably more realistic paradigm of multiple individuals within a network. The chapter first discusses the usefulness of analyzing communication within a network, summarizes social network theory and network properties, explains the utility of social networks for modeling evolutionary processes, and ends with a discussion of animal communication networks. I found the inclusion of dominance and personality at the end of this chapter under the heading 'Other self-organized patterns' a little confusing and unnecessary. While I liked the inclusion of these areas of study in this textbook as I feel that they provide an excellent example of how the study of

communication is growing and developing, I thought the chapter could have benefited from some editing. As I mentioned above, I found the final chapter on the "broader view" out of place and unnecessary.

This book would be appropriate as a text for an upper-division undergraduate or graduate level course specialized on its subject matter. I do feel that it is only appropriate for undergraduates if they have already had some coursework in evolution and animal behavior although the authors do attempt to provide some background in both of these areas. Not all chapters may be appropriate in an undergraduate class, for example, the detailed discussion of social network theory may be too complex, but individual chapters could easily be selected at the discretion of the instructor. In addition to its usefulness as a textbook, this updated edition is an excellent addition to the bookshelf of any behavioral ecologist who is interested in animal communication. In sum, the changes made in this updated text have made an already good source a great one.

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Honeybee Democracy

Thomas D. Seeley. Princeton University Press, Princeton, Oxford, 2010. 280 pp.
ISBN-13: 978-0691147215 cloth

This is a book about honeybees (who would have guessed that?), to a lesser extent about democracy (surprise!), and to a greater extent about the scientific process, the people doing science, their failures and pleasures, and how this all relates to a mass of some ten thousand homeless insects on the move. In his most personal book to date, Thomas D. Seeley, professor at the Department of Neurobiology and Behavior at Cornell University (Ithaca, NY, USA), summarizes what is known about how exactly swarming honeybees manage to find the best among dozens of potential new home-sites within an area of some 70 km². While a social insect, the Western honeybee *Apis mellifera*, stands central in this volume, its readership will not be restricted to beekeepers and entomologists. Rather, the house searching behavior of honeybees may serve as a model for group decision making in general, and Seeley points to the striking analogy in the process of decision making in primate brains. Furthermore, Seeley finds that what works for honeybee democracies should work in human groups, too, and he has been applying the lessons, which he has distilled from observing bees for decades, to the monthly faculty meetings in his department.

For humans, this does not involve the famous waggle dance (which bees use to indicate the direction and distance of a food source, or, as we shall see, the location of a potential dwelling place), nor any other dancing or buzzing, although I would love to see this happen at Cornell. Instead, five relatively simple rules shaped by evolutionary forces over millions of years are applied, namely the minimalization of the group leader's influence, the search for solutions which are as diverse as possible, the aggregation of the group's knowledge by means of a frank and critical debate, and the usage of quorum responses to shortcut lengthy debates. For instance, if the leader's position is too strong, other team members will favor solutions which they believe that the leader wants to hear, thereby neglecting potentially better options, as was arguably the case with the decision to invade Iraq in 2003. The fifth rule however is the necessary (but not sufficient) prerequisite for the other rules: if groups were to apply the honeybee way of democracy, their members have to share interests and show mutual respect. Whereas the latter may be expected for many groups, the former is often not the case, which undermines the basis of this democratic exercise. Having said that, similar forms of democratic practice are in place in many communities, e.g. in many a town meeting, and reminding the group of their common goals and their responsibilities seems to foster good group decisions.

Honeybees by contrast don't need that reminder: for these "little six-legged beauties", making the best possible decision is of pivotal importance, for if they choose too small a

dwelling (usually in a hollow tree), the chances are they won't survive the winter due to an insufficient store of honey. At the same time, they have to come to a decision as fast as possible, since without any shelter, adverse weather conditions might be the end for the brave bunch of bees that bivouac with their mother queen on a branch. It has long been known that bee colonies have a tendency to produce swarms in spring and early summer, a process in which the colony splits, with roughly two thirds of the workers leaving the hive at once, together with the mother queen, to found a new colony, leaving behind brood, food storage and about a dozen young virgin queens. However it was only in the late 1940s and early 1950s that a scientist in Germany, Martin Lindauer, made the first observations and experiments that would lead to the unraveling of the complex phenomenon of swarming.

Throughout the book, the scientists who advanced our knowledge are acknowledged, and often the circumstances that helped (or delayed) further discoveries are outlined. For instance, Lindauer at first was not allowed to continue his studies on swarms, simply because the laboratory of Karl von Frisch could not afford to lose bee colonies in the first years after World War II. These accounts shed a warm light on the human beings trying to understand nature's mysteries. Sometimes this is an all too human business, and mistakes and failures are part of this endeavor. But Seeley does not shy away from admitting where he was wrong, for instance when he introduced inadvertently a sample bias in an early publication about the nesting preferences of honeybees (bees actually prefer nest entrances high above the ground in hollow trees, but these nests went unnoticed due to their hidden location). Moreover, on a photograph of an artificial nest box, we still see the traces of errors in numbering some grids. Likewise, not all "failed" experiments are a failure, for often more is learned from an unexpected outcome.

Seeley advocates the "watching and wondering" approach that he learned during his graduate studies at Harvard by his mentor Bert Hölldobler, and one of these close observations "turned out to be a milestone" in his life, when, at the start of his PhD, he could observe scout bees dancing on the surface of swarms, indicating that they had found the artificial nest box that Seeley had been using for many an experiment. With great clarity, Seeley explains how he and his fellow scientists have been carrying out their experiments; moreover, he unravels the origin of the idea, the influence of previous experiments, the development of alternative hypotheses, and how they are scrutinized. Thereby, the general reader will gain insight in the scientific method of strong interference, without having the feeling of studying a dry text book. They will also learn how teaching duties sometimes can delay scientific progress (when Seeley had to stop an experiment because he had to give a lecture), but at the same time how some undergraduate students can be of invaluable help in doing research.

Many of the studies took place on Appledore Island, an island off the coast of Maine, and most of the experiments are admirably simple and yet elegant. In this location Seeley

benefited not only from the absence of nesting sites other than his experimental nest boxes, but also from “many hours of the purest joy of discovery”. I am sure this applies equally to the bees as to his wife Robin whom he met on Appledore Island. Seeley’s engaging writing style makes for an enjoyable read, and his fascination for bees is felt on every page. He succeeds in telling not only, with scientific rigor, the story of how swarming bees find several new potential dwelling places and agree on the best one, but also who the scientists behind are and how these discoveries

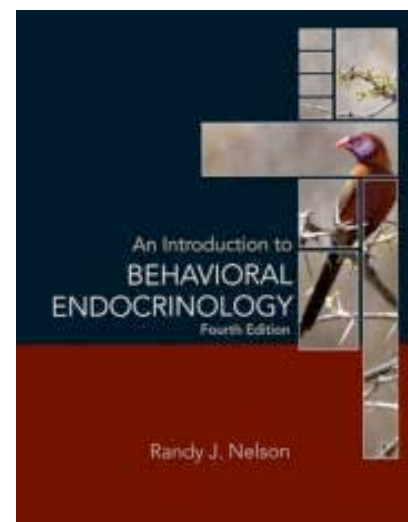
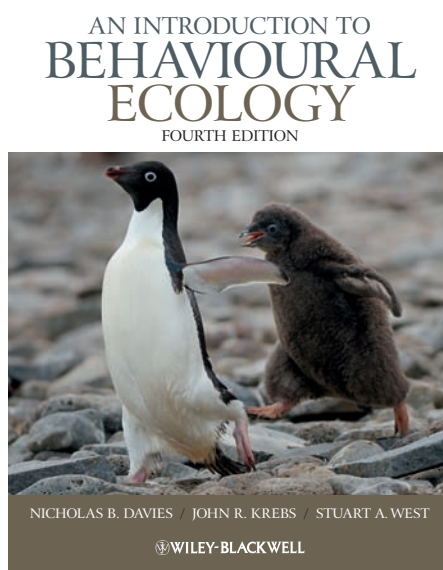
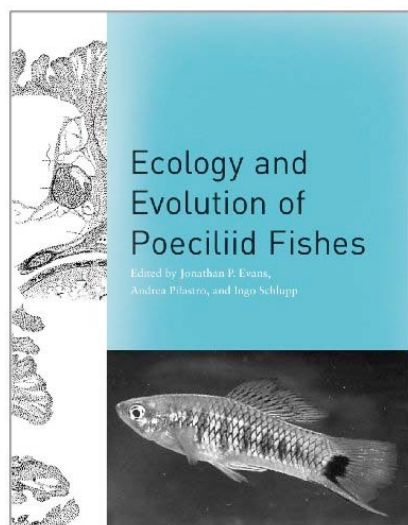
came about. It is hard to imagine how anybody who reads (if only parts of) this book will not be mesmerized by the bees’ intriguing behaviors.

Ulrich R. Ernst

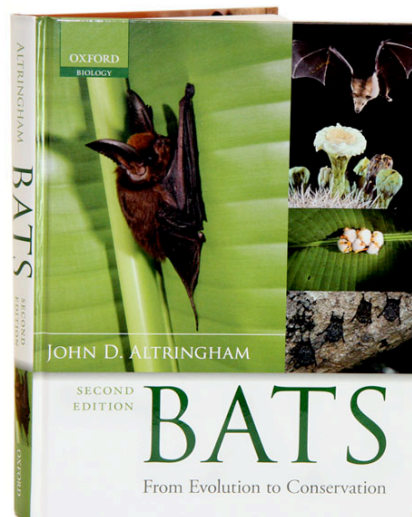
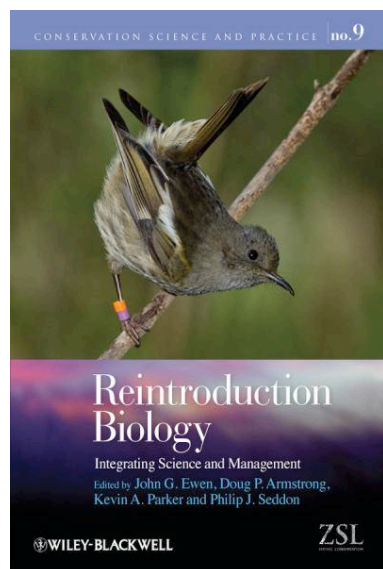
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B O O K S F O R R E V I E W



E-Book only



If you are interested in receiving AND reviewing these books, please email me (marie.herberstein@mq.edu.au). The due date for the review is September 2012.

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Selected Papers:

Igit B, Cassey P, Grim T, Greenwood DR, Moskat C, Rutila J, Hauber ME 2011. A shared chemical basis of avian host-parasite egg colour mimicry. *Proc R Soc Lond B*. 279: 1068-1076.

Igit B, Braganza K., Hyland MM, Silyn-Roberts H, Cassey P, Grim T, Rutila J, Moskat C, Hauber ME. 2011. Alternative mechanisms of increased eggshell hardness of avian brood parasites relative to host species. *J R Soc Interface* 8: 1654-1664.

Igit B, Hauber ME, Hyland M, Galbraith JA, Grim T, Dearborn DC, Brennan PR, Moskat C, Choudhary PK, Cassey P. 2010. Comparing micrometer and scanning electron microscope based methods of eggshell thickness. *J Field Ornithol.* 81:402-410.

Igit B, Greenwood DR, Palmer DJ, Cassey P, Gill BJ, Grim T, Brennan PR, Basset SM, Battley PF, Hauber ME. 2010. Detecting pigments from the colourful eggshells of extinct birds. *Chemoecology* 20: 43-48.

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Selected Papers:

Heap S, Byrne P, Stuart-Fox D. 2012. The adoption of landmarks for territorial boundaries. *Anim Behav.* In press

Heap S, Stuart-Fox D, Byrne P. 2011. Variation in the effect of repeated intrusions on calling behavior in a territorial toadlet. *Behav Ecol.* 23: 93-100

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Selected Papers:

Wignall AE, Taylor PW. 2011. Assassin bug uses aggressive mimicry to lure spider prey. *P R Soc Lond B*. 278: 1427-1433.

Wignall AE, Jackson RR, Wilcox RS, Taylor PW. 2011. Exploitation of environmental noise by an araneophagic assassin bug. *Anim Behav.* 82: 1037-1042.

Wignall AE, Taylor PW (2009). Alternative predatory strategies in an araneophagic assassin bug (*Stenolemus bituberus*). *Acta Ethol.* 12: 23-27.

Wignall AE, Heiling AM, Cheng K, Herberstein ME. 2006. Flower symmetry preferences in honeybees and their crab spider predators. *Ethology* 112:510-518.

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Research Interests: Parental investment strategies of cooperatively breeding bird (long-tailed tits) and colonial seabird (Streaked shearwaters)

Selected Papers:

Nam K-B, Mead J, Hatchwell BJ. 2011. Do parents and helpers adjust their investment in relation to nestling sex in a cooperatively breeding bird? *Anim Behav.* 82: 303-309.

Nam K-B, Meade J, Hatchwell BJ. 2011. Brood sex ratio variation in a cooperatively breeding bird. *J Evol Biol.* 24: 904-913.

Nam K-B, Simeoni M, Sharp SP, Hatchwell BJ. 2010. Kinship affects investment by helpers in a cooperatively breeding bird. *P Roy Soc Lond B*. 277: 3299-3306.

Nam K-B, Kwon IK, Yoo JC. 2008. Incubation routine and sex role of Streaked shearwaters at Sasudo Island, South Korea. *Ocean Polar Res.* 30: 11-19.

8th European Ornithological Union Congress

Riga, Latvia 27-30 August 2011

The European Ornithological Union Congress is a relatively young idea so we are very happy to have an opportunity to promote this interesting event. Because of its rather short existence we would like to give a short summary of the history of this meeting, before reviewing the congress itself.

The European Ornithological Congress Union is held by the European Ornithological Union (EOU), which was established in 1997. The EOU unites hundreds of researchers involved in a wide variety of studies of avian life, carried out mostly (but not exclusively) in Europe. EOU conferences are organized at different locations in Europe and function as the main forum for the exchange of the most recent findings and ideas in birds biology. Conferences are organized every second year; previous locations include Bologna (Italy), Gdansk (Poland), Groningen (Netherlands), Chemnitz (Germany), Strasbourg (France), Vienna (Austria), Zurich (Switzerland) and - this year - in Riga (Latvia).

It was our first visit to both Latvia and the European Ornithologists' Union Conference. As newcomers, we were impressed by the scale of the event and the excellent organization with attention paid to the details. Plenary lectures, several concurrent symposia and poster sessions were held at the University of Latvia situated next to the Old Town of Riga. Most hotels, as well as pubs and other key facilities, were conveniently located nearby. The EOU staff at the information desk did their best to make things run smoothly. On arrival, each participant was equipped with a full set of conference materials, including a handy "smart programme" with all necessary information and a small map of Riga, designed to fit into the conference badge. This was particularly useful, since - as usual during such events - the majority of the audience prefer to move between sessions. What was also very useful, was the flags that were printed on the badge and indicated which languages the owner could communicate in. The compact program listed all parallel sessions alongside each other so that they could be viewed in one glance, allowing a quick decision where to go next. Furthermore, the electronic version of the abstract book was available before the conference what giving us the possibilities to tick the most interesting symposia or topics long before the event.

In general, topics on bird ecoimmunology, behavior, stress and hormones, conservation and monitoring, modeling, migration and reproduction predominated. All oral sessions, starting already on Saturday morning, were divided into thematic blocks. The most interesting symposia for us were: *Bayesian analysis in avian population ecology*, *Evolution*, *New insights in population dynamics from multi-state mark-*

recapture models, *Conservation* and *Immunology*. These symposia were very well attended. During the symposium on multi-state models, after a gentle introduction to the MR modeling by Henk van der Jeugd and Jean-Dominique Lebreton, the speakers presented a variety of approaches to the modeling of demographic processes with recent advances in this field. In subsequent talks, we heard what to do when birds live longer than their rings (J.-B. Mihoub with the study on vultures; perhaps the best is to choose a short-living study species...), how we can try to infer on migratory connectivity (i.e. do the populations have their specific wintering areas, F. Korner-Nievergelt, with nightingales traveling to tropical Africa) or about traps related to spatial heterogeneity in recapture probability (P. Le Gouar, who proposed preliminary solutions). Surprisingly, at the *Evolution* symposium just seven topics were presented. The potential reason of that is the EOU congress is very often almost at the same time as the Congress of the European Society for Evolutionary Biology, which probably created a difficult decision for ornithologist with evolutionary interests. The *Conservation* symposium included issues on ecology and conservation of various forest birds species as well as several farmland and coastal breeders. Topics covered a very wide geographic range, from Latvia to Kenya. There was also a symposium entitled *Africa matters! A sub-Saharan perspective of life history and ecology of Palearctic migrant birds*, which smoothly connect European and African, breeding and wintering, aspects of bird ecology and behavior. During that day we attended two plenary lectures. Sussane Jenni-Eiermann gave very interesting talk on the glucocorticoid stress response and its application in conservation biology. At the end of the day, Rob Bijlsma presented a look into the past about the breeding ecology of European Honey Buzzard. The evening finished with the EOU General Meeting, followed by the overview of the history of Latvia, after which we took the advantage of being in the very heart of Riga and continued our studies on Latvian culture in a less formal way.

The next day started with a plenary lecture by Michaela Hau with her excellent talk *Hormone-behavior relationships: from ecology to evolutionary physiology*. During that day some of us were very busy trying to divide our attention between several sessions including *Predictive modeling in ornithology*, and *Conservation* and *Bird collisions*. However some of us faithfully attended the whole symposia: *Ecological immunology in birds* and *Stress*. It was a great pleasure to listen to Peeter Hõrak and Alexandre Roulin. Peter L. Pap presented a very interesting talk on the influence of coccidia on immune function. *Movement ecology* symposium offered a variety of studies performed with the use of telemetry and geolocators. For instance, Nikita Chernetsov and colleagues have reported results of their elegant experiment on migrant thrushes designed to test whether songbirds calibrate their magnetic compass from twilight cues. In yet another talk,

Volker Salewski told us about identifying migration routes of the Aquatic Warbler – a globally threatened passerine – with the use of geolocators. Finally, we gained much insight from a study that successfully joined stable isotope analysis and geocator data to conclude that reproductive success and moult can heavily affect migration strategy in songbirds (E. A. McKinnon). In the evening Round Table Discussions took place. Discussions concentrated on 'charismatic species' as the white stork, the black stork and birds in agriculture landscapes. There was also a Panel Discussion aimed to debate the *Bad practice in field biology- what should be done?* (T. Wesolowski, R. Bijlsma and A. Gosler). Those kinds of discussions are always needed as 'good practice' in science should be guarded and guided.

On Monday, various social activities took more a organized form, starting with several parallel excursions. It was on excursion to the Gauja National Park, where we spent several hours walking along the Gauja River valley, famous for its natural meanders, red sandstone cliffs and medieval castles. Other excursions were to Ramsar sites: Kanieris Lake, Engure Lake, and Kemer National Parks. It was also possible to visit Lesser Spotted Eagle "country" and Black Stork habitats. All these places are very beautiful with a unique character and wonderfully preserved natural habitats. It is worth to highlight the Kemer NP excursion. That excursion required gumboots (according to the organizers' information) as quite a long walk across huge bogs was in the program. Surprisingly we noticed that most of participants got stuck in the bog, including those who had the "required equipment", although we were given instructions on how to walk safely and were doing our best. Interestingly, women did much better than men. In our opinion, Latvia has much to offer in terms of nature, probably being one of the most beautiful, but least well known places in Europe.

At the end of the day we were all brought to the congress reception, held at the Riga Railway Museum, which turned into a wonderful event with live Latvian music and folk dancers who helped to keep the dance floor crowded and hopping until the late evening. As we were full of field experience and very hungry we appreciated delicious food very much.

The last day of conference was filled with several different topics in ornithology. We listened to some talks in the symposia: *Why are hormone concentrations so variable within and between species?*, *The application and usefulness of bio-logging for terrestrial ornithological studies*, *Population ecology*, *Behavior*, *Lifelong individual development as an important component of life history*. Kalev Rattiste presented an impressive amount of data on colonial species (common gull), investigating how many factors co-shape variation of reproductive success with age. Very interesting was also talk given by Jon Brommer who analyzed genotype-environment interaction and genotype-age interaction for longitudinal data

on reproduction. Sandra Bouwhuis presented individual variation in rates of senescence. It is also worth to mention Simon Verhulst's talk on the link between telomeres and life history. The conference closed with the excellent plenary lecture by William Sutherland who presented a bit of an alarming parallel between bird conservation and the Titanic disaster.

In summary, the EOU conference was an event worth attending. It was organized very well, although there were some details that could be improved. For example most of symposia rooms suffered from inferior sound; there was too much overhead light and presentations were poorly visible. Poster sessions were located in very narrow corridors and it was hard to both read and to breath. Also not all symposia were synchronized, which created some problems with audience movement between sessions.

Conference of EOU seems to be very good determinant of the 'condition' of European ornithology. So what are other interesting conclusions of the conference? Based on the Abstract Book we found 384 topics for oral presentation or poster session. Oral presentation constituted 57% of all presentations. Abstract authors originated from 48 countries. The most abundant affiliations were Germany (46), Poland (39), Russia (38), Finland (33), France (32), The Netherlands (30), and Switzerland (26). Very 'exotic' for the EOU conference were authors with affiliations from Australia, USA, Canada, Ghana, Kenya, Algeria or Israel. We look also into international cooperation: 75% of abstracts had affiliation from one country, 20% of abstracts include authors from 2 countries, and just 4% from 3 countries. Exceptions were two abstracts that included authors from 13 countries. Interesting was also the sex-ratio' of presenting authors. We found a significant male bias (1: 1,8) among presenting authors. The abstracts were listed 168 species by name. The most popular subject of research is still the great tit. Also popular are warblers (*Acrocephalus*, *Sylvia*), storks (*Ciconia*), flycatchers (*Ficedula*), blue tit (*Cyanistes caeruleus*) and gulls (*Larus*).

The conference program, not only from the Riga conference, is available on-line at European Ornithological Union site <http://www.eouunion.org>

And yes, we plan a trip to Norwich in 2013 to join 9th EOU Conference.

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How to contribute to the newsletter

The ISBE Newsletter publishes Book Reviews, Conference and Workshop Reviews and Commentary Articles of interest to the International Society for Behavioral Ecology. The ISBE Newsletter will only consider work that is not already published or intended to be submitted for publication elsewhere.

Book Reviews: Reviews are generally solicited by the Editor as new books arrive at the office, and are deemed to be of interest to the society. Persons involved in the publishing of books who would like these to be considered for review in the Newsletter should contact the Editor and arrange for their publisher to forward a review copy to this office. Authors may submit a list of possible reviewers. Alternately, members who wish to review a particular text should contact the Editor. The Editor will provide reviewers with instructions and a style sheet. Reviews are typically 1500-2000 Words.

Workshop/Conference Reviews: Workshop and/or Conference reviews should be prepared in one of the following two formats. **Brief synopses** (max 1500 words) and **Longer reports** (max 3000 words) Graduate students and postdocs are strongly encouraged to consider contributing to writing these reports.

Cartoons: Cartoonists and other artists are encouraged to submit artwork, either in hardcopy, or as TIFF or high resolution (300 dpi) GIF files. All cartoons published in the newsletter will be credited to the illustrator, and will appear on the Newsletter's website (www.behavecol.com).

49th Annual Meeting of Animal Behavior Society

10-14 June, 2012, University of New Mexico, USA
<http://abs-hbes.unm.edu/index.html>

24th Meeting of the Human Behavior & Evolution Society

13-17 June 2012, University of New Mexico, USA
<http://abs-hbes.unm.edu/index.html>

Annual ASSAB Conference

26-28 June 2012, Deakin University, Geelong, Australia
<http://www.assab.org/conference/>

First Joint Congress on Evolutionary Biology

6-10 July 2012, Ottawa, Canada
<http://www.confersense.ca/Evolution2012/index.htm>

Gordon Research Conference: Neurology of Cognition

8-13 July, Lucca, Italy
<http://www.grc.org>

7th Symposium of the European Association of Acarologists

9-13 July, 2012, Vienna, Austria
<http://euraac.boku.ac.at/SympVienna>

10th International Congress on the Biology of Fish

15-19 July 2012, Madison, Wisconsin, USA
<http://www.fishbiologycongress.org/>

VI European Conference on Behavioural Biology

20-22 July 2012, Essen, Germany
www.ecbb2012.org

10 International Congress of Neuroethology

5-10 August 2012, Maryland, USA
<http://icn2012.umd.edu/>

7th World Congress of Herpetology

8-14 August 2012, Vancouver Canada
<http://wch2012vancouver.com/>

14th Congress of the International Society for Behavioral Ecology

11-17 August 2012, Lund, Sweden
<http://www.isbe2012lund.org/>

International Congress of Entomology

19-25 August 2012, Korea
www.ice2012.org/

1st Symposium on Plant Signalling & Behaviour

16-21 September 2012 Perth, Australia
<http://spsb2012.com/>

2nd PsiAnimal Conference: Behavioural Medicine and Animal Welfare

22-23 September & 29-30 September 2012, Lisbon
<http://psianimal.wordpress.com/>

Pan-African Ornithological Congress

14-21 October, 2012 Tanzania
http://www.unep-aewa.org/news/news_elements/2011/paoc_changed_venue.htm

International Ornithological Congress of Southeast Asia

27-29 November 2012 Phuket, Thailand
<http://harrison-institute.org/IOCSEA/index.html>

Australian Entomology Society & Australasian Arachnological Society - 2012 Meeting

25-28 November 2012, Hobart, Australia
<http://www.austentsoc.org.au/>

.....and beyond 2012**Society for Integrative and Comparative Biology**

January 3-7, 2013, San Francisco, USA
<http://sicb.org/meetings/2013/callsymp.php3>

IEC/ASAB Summer meeting

4-8 August 2013, Newcastle Gateshead, UK
<http://iec2013.com/>

19th International Congress of Arachnology

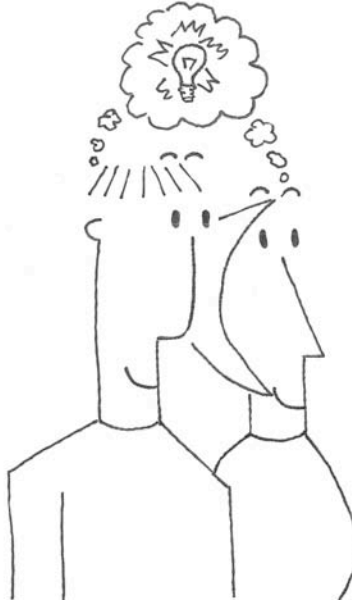
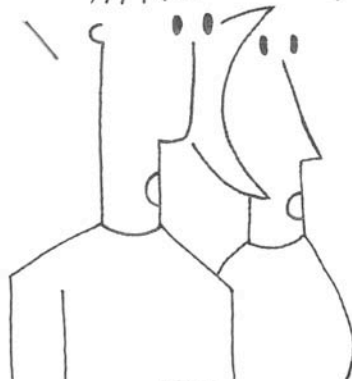
23-28 June 2013, Kenting National Park, Taiwan
<http://araneae.thu.edu.tw/ica2013/welcome>

XVII IUSSI International Congress

13-18 July 2014, Cairns, Australia
<http://www.iussi.org/>

Too bad there aren't
kea there, otherwise
it would be a research
expense ///

I've always wanted
to go to Antarctica



What's
next?

Rome:
41°54'N
12°36'E

