2024 - VOLUME 36 ISSUE 1

ISBE Newsletter

Supplement to *Behavioral Ecology*
www.behavecol.com

CONTENTS

FROM THE NEWSLETTER EDITOR

Dear ISBE member, welcome to a brand-new issue of your Newsletter!

You will find lots of useful information, advertisements and upcoming conference dates. Featured are also three book reviews that really span the breadth of our field. Arne Hegemann reviews a book on animal behaviour and parasitism, a topic close to my own heart. Gergely Horváth reviews a book analysis of behavioural data using R. Finally, Ingo Schlupp reviews a book about how evolutionary scientists have thought about females and female behaviour through history. Many thanks to all that have worked hard to contribute to this issue!

ISBE Congress
Registration is open for our next congress: ISBE 2024 in Melbourne Australia. See more information on p.4 of this newsletter and on the congress website: www.isbe2024.com

Elections
As a member of ISBE you should have received an email from OUP (from the address: jnls.eprod@oup.com) with information about this year's elections, including short biographies of the candidates. Please cast your votes for ISBE's future President, Secretary and two Councillors. You have until April 2nd, but do not leave it to the last minute!

ISBE Newsletter editor
Linnaeus University, Sweden
andreas.svensson@lnu.se

CONTRIBUTE TO THE NEWSLETTER!

Your contribution is important!

The ISBE Newsletter publishes Book Reviews, Conference/Workshop Reviews, Job postings and other advertisements, as well as Commentary Articles of interest to the International Society for Behavioral Ecology and Obituaries for recently deceased colleagues. The ISBE Newsletter will only consider work that is not already published or intended to be submitted for publication elsewhere.

Book Reviews: Persons involved in the publishing of books who would like these to be considered for review in the Newsletter should contact the editor so that they can be added in the books-for-review list. Authors may submit a list of possible reviewers. Members who wish to review a particular book should contact the editor. The editor will provide reviewers with instructions. Reviews are typically 1500-2000 words. For suggestions of books currently available for review, see the end of this Newsletter.

Workshop/Conference Reviews: Workshop and/or Conference reviews can be prepared in one of the following formats: *Brief synopses* (around 1500 words) and *Longer reports* (around 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 or jpg files. All cartoons published in the Newsletter will be credited to the illustrator.

Spotlight on young scientists: Early career members (PhDs/ postdocs) are encouraged to participate in the section "Spotlight on"; please provide name, education, current address, research interests and selected papers in an email to the editor.

Upcoming conferences and events: Please submit information about events that are relevant to the Society. Do this by emailing the Newsletter editor so that it can be included in the "Conference calendar".

The deadline for contributions to the next issue is Oct. 15, 2024
Please email andreas.svensson@lnu.se

THE ISBE EXECUTIVE COUNCIL

CONFERENCE CALENDAR

European Human Behaviour and Evolution
16-19 Apr. 2024 in Montpellier, France
www.cambridge.org/core/membership/ehbea/events

ASAB Spring conference
23-25 Apr 2024 at the University of Exeter; UK
www.asab.org/conferences-events

3rd Joint Congress on Evolutionary Biology
Live online workshops (main meeting in July, below)
26-28 June 2024
www.evolutionmeetings.org

Animal Behavior Society annual meeting
26-29 June 2024, London, Ontario, Canada
www.animalbehaviorsociety.org/2024

European meeting of the International Union for the Study of Social Insects (IUSSI)
7-11 July 2024 Lausanne, Switzerland
http://www.iussi.org/meetings.html

International Society for Human Ethology International Congress
12-16 July 2024, Cal Poly, Humboldt, USA
https://ishe.org/

ECBB/ASAB joint conference
European Congress for Behavioural Biology and Association for the Study of Animal Behaviour: Long-term studies in Animal Behaviour
16-19 July 2024 in Zürich, Switzerland.
www.ecbb.uzh.ch

The International Society of Applied Ethology
22-26 July 2024 in Curitiba, Brazil.
www.applied-ethology.org/Events.html

3rd Joint Congress on Evolutionary Biology
ESEB, ASN, SSB, SSE, in-person conference
26-30 July 2024 in in Montreal, Canada
www.evolutionsociety.org/news

15th International Congress on Neuroethology
28 Jul- 2 Aug 2024, Berlin Germany
www.neuroethology.org/Meetings

Joint orthithology meeting
Wilson Ornithological Society, Association of Field Ornithologists, and Society of Canadian Ornithologists
29 Jul – 1 Aug 2024 in Peoria, IL, USA.
https://afoscowos2024.org/

10th World Congress of Herpetology
5-9 Aug. 2024, in Kuching, Borneo. Malaysia
www.worldcongressofherpetology.org/

European Federation of Animal Science (EEAP)
9th International Conference on the Welfare of Animals at Farm Level (WAFL)
30-31 Aug. 2024, Florence, Italy
https://wafl2024.eaap.org/

Cultural Evolution Society
9-11 Sep 2024, Durham. UK
https://culturalevolutionsociety.org/Conference

ISBE 2024
29 Sep - 4 Oct, 2024 in Melbourne, Australia
www.isbe2024.com see also next two pages

American Ornithological Society Annual meeting
1–5 Oct 2024, in Estes Park, Colorado, USA.
https://americanornithology.org/meetings/

American Genetic Association meeting
Genomic Technologies & the Future of Conservation
6-9 Oct. 2024 Tahoe, California, USA
https://www.theaga.org/

International Conference of Poeciliid Biologists
8-10 Oct. 2024 University of Texas at Austin and Texas State University, San Marcos (USA).
https://ingoschlupp.com/upcoming-events/

Society for Open, Reliable, and Transparent Ecology and Evolutionary Biology, SORTEE
15-16 Oct 2024 See also ad in this issue
https://www.sortee.org/upcoming/

ASAB Winter conference
12-13 Dec 2024 in Edinburgh, Scotland
www.asab.org/conferences-events

European Ornithologists' Union
Aug 2025, Bangor, Wales
https://eounion.org/

European Society for Evolutionary Biology
18-22 Aug 2025, Barcelona, Spain,
https://eseb2025.com/

Australasian Ornithological Conference
18-20 Nov 2025 The University of Western Australia
www.2025aoc.org

International Union for the Study of Social Insects
20th International Congress of the IUSSI
16-20 Aug 2026 Freiburg (Germany)
http://www.iussi.org/meetings.html

XXIX International Ornithological Congress
5-11 Oct 2026, Campeche Mexico
https://www.internationalornithology.org/

ISBE CONGRESS 2024

It's time to register and plan your Congress trip of a lifetime Down Under!
As many of you already know, the 19th International Society for Behavioral Ecology (ISBE) Congress will be held in Melbourne Australia from 29 September to 4 October 2024.

Register Now!
Registration is now open. To register and ensure you receive updates about the Congress, visit the ISBE2024 Congress Website: www.isbe2024.com

It is important to read all the information on the website before you commence the registration process.

Scientific Program
We have put together an exciting scientific program and have already secured an amazing line up of plenary speakers from around the world:

- Prof Ashleigh Griffin, Oxford University, UK
- Prof Shinichi Nakagawa, University of New South Wales, Australia, and University of Alberta, Canada
- Prof Florian Schiestl, University of Zurich, Switzerland
- Prof Claire Spottiswoode, University of Capetown, South Africa
- Prof Roxana Torres, Universidad Nacional Autónoma de México, Mexico
- Dr Maren Vitousek, Cornell University, USA

Due to the cancellation of the 2020 Congress, the Melbourne conference will host two Hamilton Lectures, ISBE's highest Honour. The 2024 Hamilton Award recipient is Assistant Professor Kavita Isvaran from the Centre for Ecological Sciences at the Indian Institute of Science, Bangalore. In addition to the 2024 Hamilton Lecture, Prof John Endler F.R.S., from Deakin University, Australia, will be coming to Melbourne to deliver his much-anticipated lecture as the 2020 Hamilton Award recipient.

For further information, please visit the website.

Welcome reception
As the first official social event of ISBE2024, the Welcome Reception provides you with the opportunity to relax and enjoy the company of colleagues and friends in the surrounds of the Convention Centre Courtyard.

Poster Sessions
Light refreshments will be served during the poster sessions as you view posters and meet with the authors.

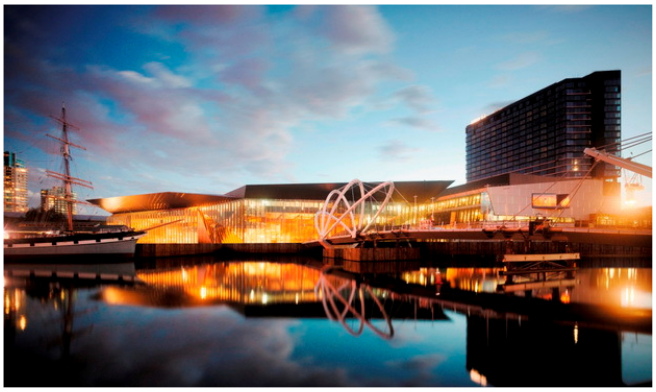
Football (Soccer)
In line with ISBE Congress tradition, there will be a Football (Soccer) tournament during the afternoon of Wednesday 2 October 2024.

Congress Social Event
Join us for a relaxed evening that will offer refreshments and a great opportunity to celebrate the Congress with your colleagues and friends. In ISBE tradition, great music will add to a memorable evening not to be missed.

Diversity and Inclusion

Mentor Program
The Congress provides a valuable opportunity to make connections and share knowledge and to facilitate this, the Organisers are offering a Mentor Program. This is simply an opportunity for you to catch up with your mentor/mentee over a coffee or lunch break and have a conversation, share ideas, challenges and opportunities. There is no expectation beyond the opportunity for a chance to make a connection and share a conversation with a colleague who shares a similar interest.

Onsite Childcare
ISBE 2024 is a family friendly Congress and will be providing a complimentary childcare exclusively for the care of young children of delegates between the ages of 12 months to 12 years, during designated hours at the Melbourne Convention & Exhibition Centre. Places are limited and will be available on a first come basis. Advance booking is required.
Contact the Congress office for more details.
Email: isbe2024@wsm.com.au



The Congress Venue
ISBE2024 will be held in the modern Melbourne Convention and Exhibition Centre (MCEC) located in the heart of the city and adjacent to the Yarra River. The MCEC is easily accessible by foot, public transport, bike and car and is surrounded by cafes, restaurants and

bars—the nearest being only 40 seconds walk from the MCEC's entrance. A wide range of accommodation is within easy walking distance.

Setting new world benchmarks, the MCEC was the first convention centre awarded a '6 Star Green Star' environmental rating by the Green Building Council of Australia. To read more about this accolade and a suite of other initiatives as part of the MCEC's Sustainability Strategy, visit their website.
www.mcec.com.au/our-impact/sustainability

Discover Australian Wildlife
Why not stay one or two days longer to experience time outside of Melbourne, in regional Victoria to see Australian Wildlife? There is a wide array of options available in the city and its surrounds. Visit the website for more information.

Key dates

Registration Now Open	
Notification to authors	Wed. 8 May 2024
Full program release	Fri. 7 June 2024
Early bird registration deadline	Wed. 28 June 2024

Bob Wong
Devi Stuart-Fox
Andy Bennett
Local Organising Committee, ISBE2024
@ISBE2024

SPOTLIGHT ON

... two early career scientists

Clare Doherty and Elliott Steele recently completed their PhDs in the Laidre Lab within Dartmouth College's Graduate Program in Ecology, Evolution, Environment, and Society. They are both now postdocs and their current positions and publications are highlighted below.

Dr. Clare Doherty
Current position: Postdoctoral Research Associate at Ulster University, and Visiting Scholar at Queen's University Belfast, UK
PhD thesis: 'Ecology and Evolution of Social Information Use'

Email: cdoherty68@qub.ac.uk

Publications:
Doherty, C.T.M. & M.E. Laidre. 2024. Experimentally seeded social cues in the wild: costs to bearers and potential benefits to receivers. *Behavioral Ecology* 35: arad105.
Doherty, C.T.M. & M.E. Laidre. 2023. Doors to the homes: signal potential of red coloration of claws in social hermit crabs. *Integrative Organismal Biology* 5: obad018.
Doherty, C.T.M. & M.E. Laidre. 2022. Individualism versus collective movement during travel. *Scientific Reports* 12: 7508.
Doherty, C.T.M. & M.E. Laidre. 2020. Evolutionary loss of threat display in more social species: phylogenetic comparisons, natural interactions in the wild, and experiments with models. *Behaviour* 157: 1025-1058.

Dr. Elliott Steele
Current position: Postdoctoral Scholar at University of California, Davis, USA

PhD thesis: 'Visual Ecology: Sensing the Social World'

Email: epsteele@ucdavis.edu

Publications:
Steele, E.P. & M.E. Laidre. 2023. Group orientation and social order versus disorder: perspective of outsiders toward experimental chains of social hermit crabs. *Ethology* 129: 344-355.
Steele, E.P. & M.E. Laidre. 2023. Wild social behavior differs following experimental loss of vision in social hermit crabs. *The Science of Nature* 110: 20.
Steele, E.P. & M.E. Laidre. 2019. Leaf me alone: visual constraints on the ecology of social group formation. *Behavioral Ecology and Sociobiology* 73: 53.

INCLUSIONARY TEACHING

Dear Colleagues,
We are compiling a resource for undergraduate evolutionary biology education.

One of the first places students engage with evolutionary biology in-depth is in undergraduate courses, and evolutionary concepts can be confusing and difficult to grasp at this early stage. Furthermore, to facilitate a deeper understanding of evolutionary concepts within our classrooms and research community, it is important to address how exclusionary systems influenced foundational work in our disciplines, and how it continues to shape the way we study the natural world.

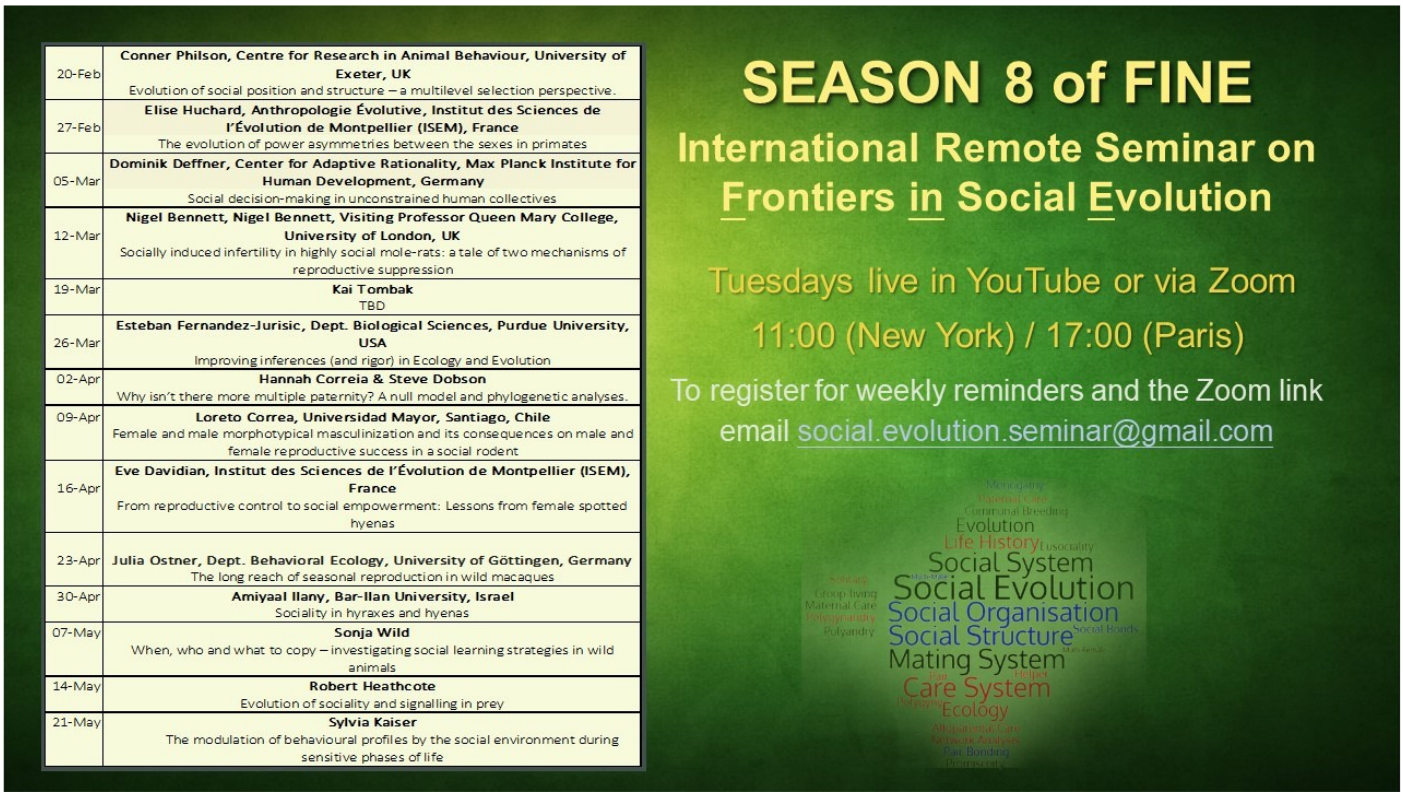
We know that many members of our community have already developed fantastic teaching materials, and our goal is to create a central repository of resources for inclusive undergraduate evolution education. We will share resources on this database monthly: https://tinyurl.com/inclevoedu. If you have any resources to share, we would greatly appreciate it. Please contribute resources and teaching materials by filling out a short Google form (should take <5 minutes to complete): https://forms.gle/Sjn9V3oezas9e8tG6. Please contact inclusive.evoedu@gmail.com with any questions, suggestions, or if you'd like to contribute further to this effort.

Please forward this message to your networks.
Thank you!

Alejandra Camargo
Dr. Nancy Chen
Dr. Kiyoko Gotanda
Dr. Suegene Noh
Amanda Puitiza
Lucia Ramirez
Juleyska Vazquez
Dr. Yaamini Venkataraman
on behalf of Women of Color in Ecology and Evolutionary Biology

FINE

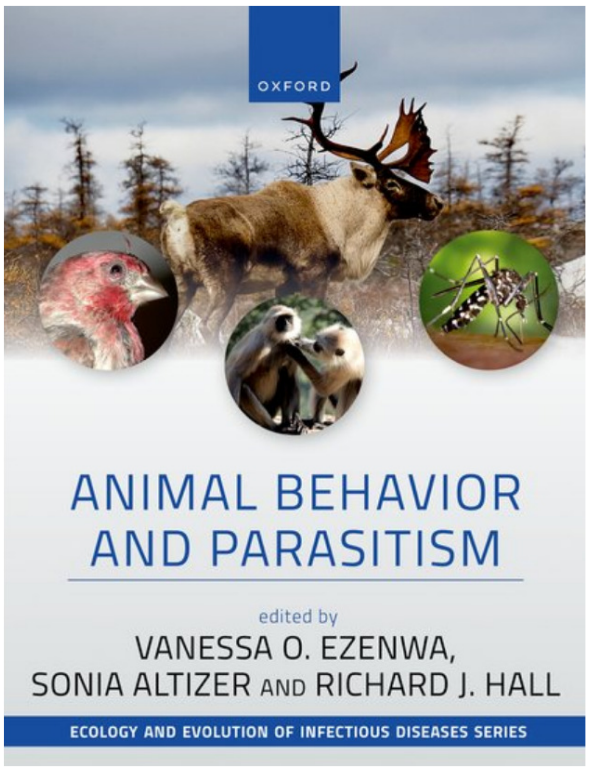
20-Feb	**Conner Philson, Centre for Research in Animal Behaviour, University of Exeter, UK** Evolution of social position and structure – a multilevel selection perspective.
27-Feb	**Elise Huchard, Anthropologie Évolutive, Institut des Sciences de l'Évolution de Montpellier (ISEM), France** The evolution of power asymmetries between the sexes in primates
05-Mar	**Dominik Deffner, Center for Adaptive Rationality, Max Planck Institute for Human Development, Germany** Social decision-making in unconstrained human collectives
12-Mar	**Nigel Bennett, Nigel Bennett, Visiting Professor Queen Mary College, University of London, UK** Socially induced infertility in highly social mole-rats: a tale of two mechanisms of reproductive suppression
19-Mar	**Kai Tombak** TBD
26-Mar	**Esteban Fernandez-Jurisic, Dept. Biological Sciences, Purdue University, USA** Improving inferences (and rigor) in Ecology and Evolution
02-Apr	**Hannah Correia & Steve Dobson** Why isn't there more multiple paternity? A null model and phylogenetic analyses.
09-Apr	**Loreto Correa, Universidad Mayor, Santiago, Chile** Female and male morphotypical masculinization and its consequences on male and female reproductive success in a social rodent
16-Apr	**Eve Davidian, Institut des Sciences de l'Évolution de Montpellier (ISEM), France** From reproductive control to social empowerment: Lessons from female spotted hyenas
23-Apr	**Julia Ostner, Dept. Behavioral Ecology, University of Göttingen, Germany** The long reach of seasonal reproduction in wild macaques
30-Apr	**Amiyaal Ilany, Bar-Ilan University, Israel** Sociality in hyraxes and hyenas
07-May	**Sonja Wild** When, who and what to copy – investigating social learning strategies in wild animals
14-May	**Robert Heathcote** Evolution of sociality and signalling in prey
21-May	**Sylvia Kaiser** The modulation of behavioural profiles by the social environment during sensitive phases of life



Animal Behaviour and Parasitism

Edited by Vanessa O. Ezenwa, Sonia Altizer and Richard J. Hall

Oxford University Press, 2022, 343p
ISBN: 9780192895561



Why should behavioural ecologists care about parasites? The answer is simple: Parasites - in this book defined as any organism that lives in or on another organism exploiting resources and causing harm to the host, thus also fungi, viruses and bacteria - are ubiquitous. There is no ecosystem without parasites and every organism encounters parasites at a regular basis throughout its life. Hence, infections and infestations are in fact part of life, not an exception or interruption of it. Needless to say, this applies not only to animals but also to us humans.

Parasites affect behaviour in many ways, not least because infected individuals often behave differently than healthy ones. This can be because sickness set physiological limits to an infected animal and thereby impair its abilities to move or interact with conspecifics. This can also be because parasites may manipulate the behaviour of the host, and there are quite some astonishing examples of this type of species interaction, as we can learn in this book. At the same time, behaviour affects the risk of encountering parasites and animals can modify their behaviour to reduce the risk of encountering parasites. For example, animals can avoid contact with infected conspecifics or minimise time spent in parasite-rich habitats. Both how parasites affect behaviour and how behaviour affects parasite exposure risk, is relevant for behavioural ecologists at two scales. First, at the ecological time-scale and when we aim to understand fitness. Second, at the evolutionary time-scale when we aim to evaluate past and future evolution. Consequently understanding the interactions between parasites and animal behaviour is relevant for everyone interested in proximate and ultimate questions of behavioural ecology, evolutionary ecology and animal ecology.

This book gives a timely overview over the many aspects of how parasites can influence animal behaviour and vice versa. The book contains 19 chapters grouped into seven sections. It starts with two chapters embedded in an introductory part. Afterwards follow sections on
-Social behaviour (3 chapters),
-Movement behaviour (3 chapters),
-Sexual selection and mating behaviour (3 chapters),
-Behavioural modification by parasites (2 chapters),
-Behavioural defences against parasites (4 chapters)
-Emerging perspectives (2 chapters).

A total of 51 authors have contributed to the different chapters. The content of the entire book is rather diverse and everyone remotely interested in animal ecology and animal behaviour will be able to find relevant information. Topics span multiple levels of biological organisation, from genetics to proteins, individuals and ecological communities. Furthermore, this book also has something for everyone independently of which taxonomic group you are working on. Examples span the whole animal kingdom including a chapter devoted to humans. There are also examples from all kind of host-parasite interactions, including fungal, bacterial and viral infections, ecto- and endoparasites or blood parasites. Even those more interested in theoretical aspects and modelling will find useful information. The focus of the entire book is from the host perspective though, the parasite perspective is clearly underrepresented.

Each chapter stands entirely on its own. Though this comes with some parts being touched upon repeatedly in different chapters, it allows the reader to pick any chapter that may be relevant without the need to read the book from cover to cover. However, it is definitely worth doing the latter. One can learn by picking single chapters, and there is much to learn over the bidirectional relationships between parasites and the behaviour of their hosts. The book does not stop at the behaviour though, but also incorporates for example evolutionary theory as well as genetic, neuronal and physiological underpinnings of parasite-host interactions. Yet the focus stays on behavioural aspects.

The layout is generally pleasing and the text easy to read. Boxes and figure lighten up the text. Each chapter has its own independent reference list, which makes it easy to navigate. One wishes the publisher had put a little more effort into the layout of the figures. While some images are printed in high resolution and quality, other pictures are extremely blurry making one feel sorry for the photographer. Furthermore, while the figures are generally informative, there was apparently

no attempt to standardise or harmonise the figures. One can find everything from simple grey figures over advanced and beautifully created ones to some with surprising colour combinations. While this gives each chapter an individual character, one still would have wished the publisher had paid more attention to this aspect.

In the preface, the editors write, "We hope this book provides an accessible background … for beginning and seasoned scientists alike, …., and that the ideas advanced in this volume will stimulate new research…". I think they succeeded and everyone remotely interested in animal behaviour will be able to learn something from this book, be it fundamental processes or puzzling case studies. For example, have you ever heard about the fascinating zombie ant fungus, and do you know what it does to an infected ant? If not, you will find the answer – and much more - in this book!

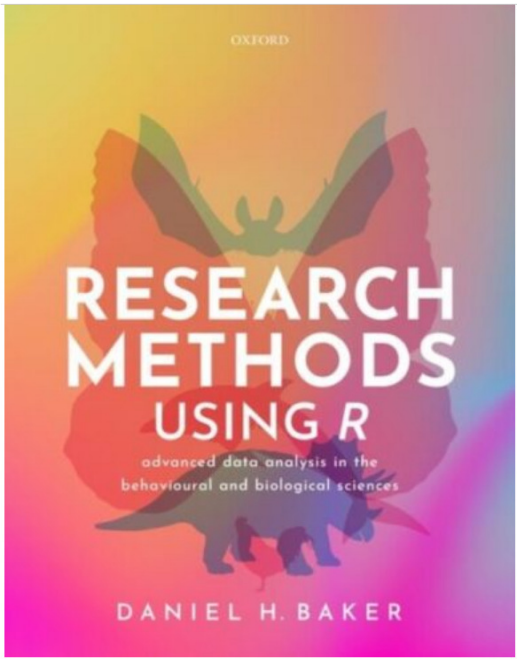
Arne Hegemann
Lund University
Sweden

BOOK REVIEW

Research Methods using R Advanced Data Analysis in the Behavioural and Biological Sciences

Daniel H. Baker

Oxford University Press, 2022, 338p
ISBN: 9780192896599



My very first experience with coding in R as an undergrad was far from positive. In fact, due to the not-very-smooth initial encounter, I was hesitant for a while to use this programming language. But hard feelings rarely last. Since then, I have realized that despite my previous aversion, R is one of the most powerful statistical tools out there, and now I not only use this program almost daily but also teach basic statistics in R to a new generation of biologists. Nevertheless, not forgetting my initial thoughts and considering the most frequent feedback from my students as well, I can say – and many colleagues likely will reinforce this notion – statistics, and especially coding, are still among the most fearsome things biology students have to face during their studies. Scientific publishers have correctly realized the growing need for well-written, up-to-date (bio)statistical textbooks, so although countless terrific online forums dedicated to R are available nowadays, several introductory textbooks based on R are published every year. This is undoubtedly good news for students (I would have been very happy for an easy-to-digest text some fifteen years ago), but several of the books might also aid lecturers who are seeking ideas and tips for planning their courses.. Research Methods using R by Daniel H. Baker is one of these books.

Before delving into the specific content, let's take a quick look at the book's general structure. Anyone familiar with (bio)statistical textbooks will find the content and the logic of the chapters very recognizable, although the subtitle 'Advanced Data Analysis in the Behavioral and Biological Sciences' suggests that the reader should anticipate some more specific methods as well. In fact, many analytical methods covered in the book are usually omitted from books of a similar level, but more on that later.

The book comprises 19 chapters. The first two provide the necessary information on how to navigate the book (Chapter 1) and offer a brief introduction to the R language (Chapter 2), followed by distinct sections on various statistical problems, different statistical techniques, and data visualization methods. At the end of each chapter, the reader will find ten practice questions (the key is provided after the last one), which is an effective way to test whether the essentials have been understood. The strongest feature of the book is its clear language. Baker explains that the content was developed during an in-person statistical lecture, and the didactic tone clearly shines through the text. Another positive aspect is that the individual chapters are not excessively long and are rather focused on practical applications, which is perhaps the most important feature for a beginner in the field. The content of the main chapters can be summarized as follows:

Chapter 3: Data inspection and cleaning. The importance of this integral (though sometimes perceived as boring by students) part of statistics is often neglected in textbooks. Methods for detecting data distribution, correctly transforming data, identifying outliers, and importantly, what to do with them, are

fundamental issues that arise during every statistical workflow.

Chapter 4: Linear models (regression, t-test, ANOVA). These are the most basic and essential techniques for the majority of biology students and researchers alike (I believe that most readers may find the content already familiar). The chapter provides a thorough and rather enjoyable explanation of the logic behind the methods.

Chapter 5: Statistical power analysis. A technique used to determine how many samples (e.g. participants, subjects) should be included in an experiment. Considering the replication crisis (where many influential effects have failed to replicate, mainly due to underpowered original studies) affecting several fields in biology, it is crucial to be familiar with this topic.

Chapter 6: Meta-analysis. A rather theory-oriented chapter. Meta-analysis is a widely applied method, proving to be an especially powerful tool for conducting research synthesis in various areas of biological sciences (e.g., ecology and evolution). As the topic is quite deep (not to mention the possibilities of conducting meta-analysis in R), only the bare essentials are discussed.

Chapter 7: Linear mixed-effect models. Closely related to Chapter 4, this part discusses the extension of basic linear regression by introducing the concept of 'random factors'. These robust and flexible methods are routinely used in various fields, especially in behavioral ecology, for example, to model variance at multiple levels.

Chapter 8: Stochastic methods. This chapter provides information on running simulations using random numbers. Known as resampling, this method is useful if you are interested in estimating the robustness of the data.

Chapter 9: Non-linear curve fitting. This chapter explores issues involved in fitting models to data that are not well described by linear models (Chapter 4). As most biological data are not normally distributed, these techniques often come in handy.

Chapter 10: Fourier analysis. Again, a rather theory-oriented chapter, spanning over 20 pages, making it the longest one. Fourier analysis is a somewhat specific technique, so I believe most readers are not quite familiar with it. Nevertheless, besides the theoretical background, the chapter will guide you through possible applications and basic coding.

Chapters 11-14: Multivariate statistics. These chapters describe methods capable of handling more than one dependent measure. Here, I would like to highlight two of them: structural equation modeling (SEM) and multivariate pattern analysis (MVP). SEM is especially powerful for its ability to analyze complex relationships among multiple variables simultaneously, providing insights into the underlying mechanisms driving ecological processes. MVP is valuable for its capability to analyze high-dimensional datasets, such as those generated by remote sensing or DNA sequencing, enabling the identification of complex patterns and relationships among ecological variables.

Chapter 15: Correction for multiple comparisons This chapter discusses methods of fundamental importance and might be especially important for beginners in statistics. Various methods for adjusting the threshold for significance are presented to avoid detecting effects that are not truly present.

Chapter 16: Signal detection theory. Another theory-oriented chapter. Just like Chapter 10, this topic is quite specific and will intrigue those interested in machine learning and AI the most.

Chapter 17: Bayesian statistics – the bare essentials. Most of us are trained in frequentist methods, to which Bayesian probability represents a whole different philosophy. My personal experience is that there is a great divide between people who accept one approach or the other as the 'only way' of data analysis. Nevertheless, Bayesian statistics is a very powerful tool, and its importance in analyzing behavioral data is increasing.

Chapter 18: Data visualization techniques. This chapter provides practical notes on data visualization. Instead of the well-known ggplot2 package, the base plotting functions are discussed, which is hardly a shortcoming; on the contrary.

Chapter 19: Reproducible data analysis. The concept of open data may not be novel for experienced researchers, but for students, good practices, ways of reporting data, and how to store them in online repositories are very informative and important to be familiar with.

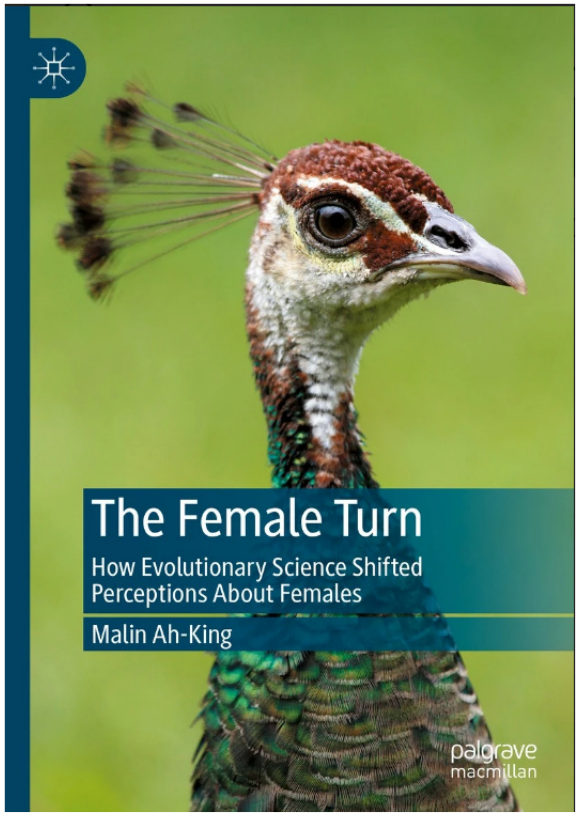
If I were to summarize my thoughts on 'Research Methods using R' in one sentence, I would say that this book is a well-written, compact introductory synthesis of advanced statistical techniques. It is evident that some chapters cover rather specific concepts and methods that are not necessarily part of the essential (bio)statistical toolkit. Some may view this as a perk, while others may argue that by covering these topics, there is insufficient space for in-depth explanations of more commonly applied techniques. Either way, I largely agree with the author that simply reading the book from cover to cover does not make anyone an expert statistician. Expertise and confidence in the application of these methods and coding come with practice, which is not always easy but can be very rewarding if someone takes the time and effort to work through things. This book serves as excellent starting material for students, but as mentioned earlier, lecturers may also find it useful.

Gergely Horváth
ELTE Eötvös Loránd University, Hungary

The female turn.
How evolutionary science shifted perceptions about females

Malin Ah-King

Palgrave Macmillan, 2022, 338p
ISBN: 9811971609



There is always context to how we do science. Like anyone else, scientists are part of the social fabric. We try to be as open minded and objective as possible, but clearly this does not always work. In her book, Malin Ah-King documents how the mindsets of behavioral ecologists, especially those working on sexual selection, shifted towards recognizing the importance of females. Ah-King is an evolutionary biologist and gender researcher and works as an Associate Professor at Stockholm University in the Department of Ethnology, History of Religions and Gender Studies. In her book she asks what enabled and what hindered perceptions of females as sexually active and mating multiply. Her approach to study the female turn was to carefully review the scientific record and interview 15 experts in person, among them many leaders of the field, plus an additional seven by e-mail (full disclosure: I was among the e-mail interviewees). This kind of historiography is uniquely suited to address the questions Ah-King is asking but has the drawback of including only a small number of people and opinions. Ah-King thoughtfully investigates the production of ignorance and outlines the context of the female turn and looks for explanations of what hindered and enabled a more nuanced perception of females. In my personal opinion, Ah-King captures the state of the field very well and provides a compelling account of how interest in the female side of sexual selection grew and provides us with hypotheses why this may have been painfully slow.

Ah-King groups the interviews and her discussion of them along taxonomic lines. At first, I thought this was problematic because at least some of the scientists interviewed work on multiple organisms across taxonomic divides, but on second thought, most researchers stick to one or a few species which they use to address the questions they are interested in. This immediately raises the question how the taxonomic group you work with influences what theories and ideas you are exposed to as you design studies. For example, at least in the early days of behavioral ecology (and before that in ethology) many scientists working with birds were among the thought leaders in the field. As one interviewee said, it was necessary for others to know the ornithological literature, but ornithologists were more self-contained. One could argue that bird examples used by Darwin are now legendary and that the peacock has become the symbol of sexual selection with countless images of peacocks used in books, publications, and lectures. Fittingly, a female peafowl graces the cover of Ah-Kings book. Ah-King argues that taxon-based subfields differed in the timeline of shifting towards a view of the role of females as active. She identifies and discusses in turn, primatology and ornithology, followed by one chapter including entomology, arachnology, herpetology, and ichthyology. These taxon (or subculture) oriented chapters are bracketed by more general chapters. For me this is one of the fundamental questions of the book: does what you study influence the questions you study and maybe even how you go about it? The conclusion from Ah-Kings work is clear: the study organism has an important influence on how we view females and the female turn.

Another take-away for me was that breakthroughs in methods can lead to re-evaluation of conceptual assumptions. The advent of paternity analysis and PCR led to a new appreciation of multiple paternity and polyandry, especially in birds. This shift in perception of female birds from coy (Darwin's terminology) and monogamous to females engaging in adaptive extra-pair copulations and even competing for males took time and still does not seem widely accepted. One example might be Marion Petrie's paper on female competition for males with the beautiful title "Female moorhens compete for small fat males" from 1983 in *Science*, that received so far just 223 citations, while another paper supporting the more mainstream concept of female choice published eleven years later (1994) in *Nature* ("Improved growth and survival of offspring of peacocks with more elaborate trains") has already received more than twice as many. Ah-King analyzes and discusses the many factors that may have played a role in slowing down the female turn. Most importantly, she mentions androcentrism, loss of previously gained knowledge, undermining dissenters among other things. Understanding these mechanisms provides an avenue for evaluating their role in contemporary research.

I suppose there are many other factors that can slow down shifts: for example, maybe studying females is

harder and more challenging than studying males, maybe funding (reflecting research priorities) is not as readily available. All of this is carefully discussed in the book.

Ah-King points to the importance of adding different perspectives to making progress in science. One example is the advent of women in the field, and how this helped to shift paradigms. This has not only been pointed out by feminist scientists and seems widely accepted now. In my opinion, her discussion points to an even bigger problem in science: do we include other viewpoints coming from colleagues with diverse backgrounds enough? This is nicely illustrated by the example of Japanese primatology which had a very different perspective on female behavior as compared to American primatology. Maybe more importantly: how can we make sure we are not losing the creative impulses coming from diverse groups of scientists so that we are not cursed with repeating history. Ah-King points out approaches and tools to tackle this in her Chapter 7.

I really enjoyed reading Ah-King's book. It is thought provoking, insightful and I highly recommend it.

For additional accounts of the development of sexual selection theory more generally, I point towards two other books: the first one also focusing on female choice by Erika Lorraine Milam "Looking for a few good males", and the second one focusing on Darwin's thinking by Evelleen Richards "Darwin and the making of sexual selection".

Ingo Schlupp
University of Oklahoma, USA

SORTEE CONFERENCE

SORTEE
Society for Open, Reliable, & Transparent Ecology & Evolutionary Biology

The fourth annual conference of the Society for Open, Reliable, and Transparent Ecology and Evolutionary Biology (SORTEE) will be held virtually on October 15-16, 2024.

The conference is a forum to discuss and develop ideas for improving research in fields related to ecology and evolutionary biology, and to learn about open science practices. If you are interested in these topics, we invite you to become a member of SORTEE - free membership option available no questions asked:
www.sortee.org/join

Content submissions for the conference will open in March - check SORTEE's website for the latest updates www.sortee.org/upcoming

We will be accepting proposals for three types of interactive events:

1) Unconference: A facilitated discussion of ideas for how to make ecology, evolutionary biology, and related disciplines more open, reliable, and transparent. Facilitation involves moderating the conversation with ideas and examples in an informal setting.

2) Hackathon: A group project with a well-defined goal of developing an output such as a paper, method, software, protocol, etc.

3) Workshop: Facilitators will teach tools for implementing open, reliable, and transparent research practices.

For more information on the conference, please contact the organizing committee at conf.sortee@gmail.com. Materials from previous conferences are available at https://www.sortee.org/past.

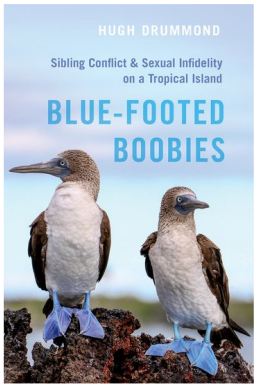
We encourage ISBE members to propose an event at the conference and join us! We look forward to meeting you in October.

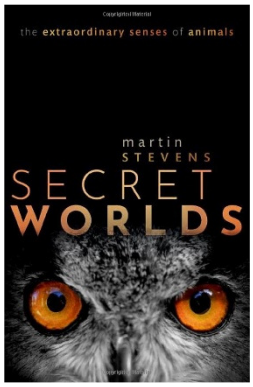
The SORTEE Conference Committee
Marija Purgar
Matthieu Paquet

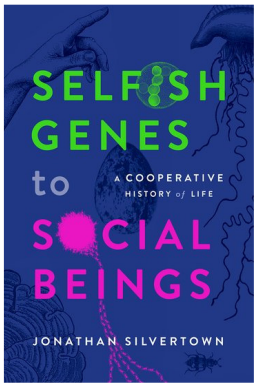
BOOKS FOR REVIEW

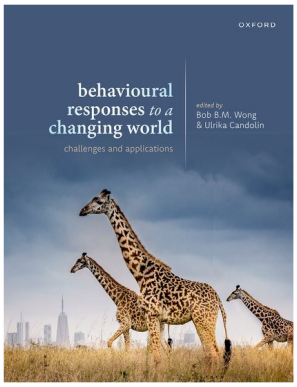
If you are interested in receiving **and** reviewing any of these books, **or some other book** suitable for this Newsletter, please email the newsletter editor: andreas.svensson@lnu.se. Please include your postal address. The deadline for all contributions for the next edition of the Newsletter is Oct 15, 2024.

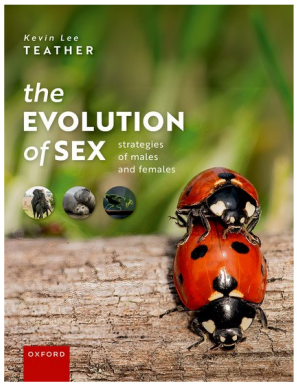
Available from Oxford University Press











Book title	by
Behavioural Responses to a Changing World – Challenges and applications (2024)	Wong & Candolin
The Statistical Analysis of Small Data Sets (2024)	Nauhäuser & Ruxton
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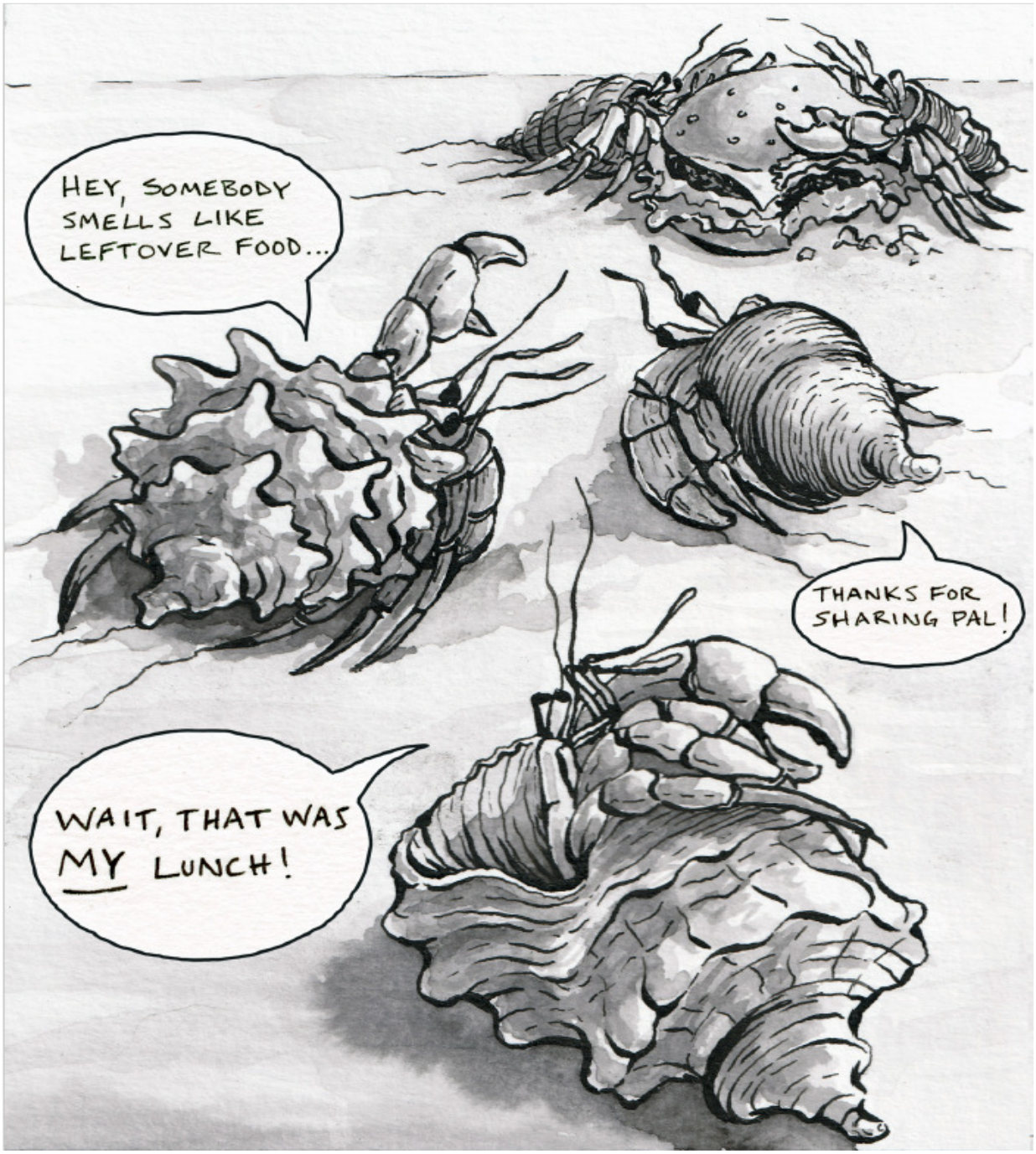

Crab Comics: another tough day on the beach

'Crab Comics'(see 2022 ISBE Newsletter 34:1, p.12) is a scientific outreach project of the Laidre Lab at Dartmouth College. It is inspired by the lives of highly social terrestrial hermit crabs (*Coenobita compressus*) and is a collaboration between a biologist, Mark Laidre, and an artist, Sarah Marcella Parella (previously Sarah Smith). Above is a comic based on our paper co-authored with recent Laidre Lab alumna Clare Doherty (see also "Spotlight on", p5):

Doherty, C.T.M. & M.E. Laidre. 2024. Experimentally seeded social cues in the wild: costs to bearers and potential benefits to receivers. *Behavioral Ecology* 35: arad105.

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