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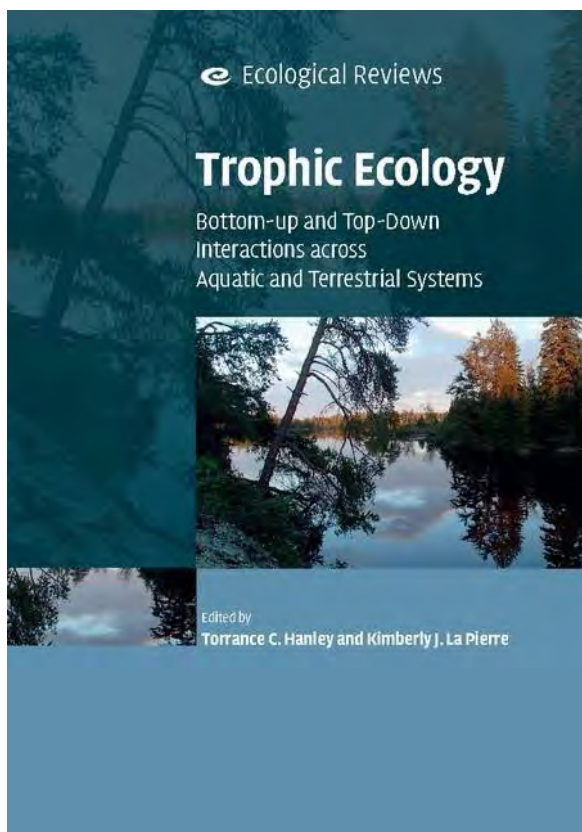
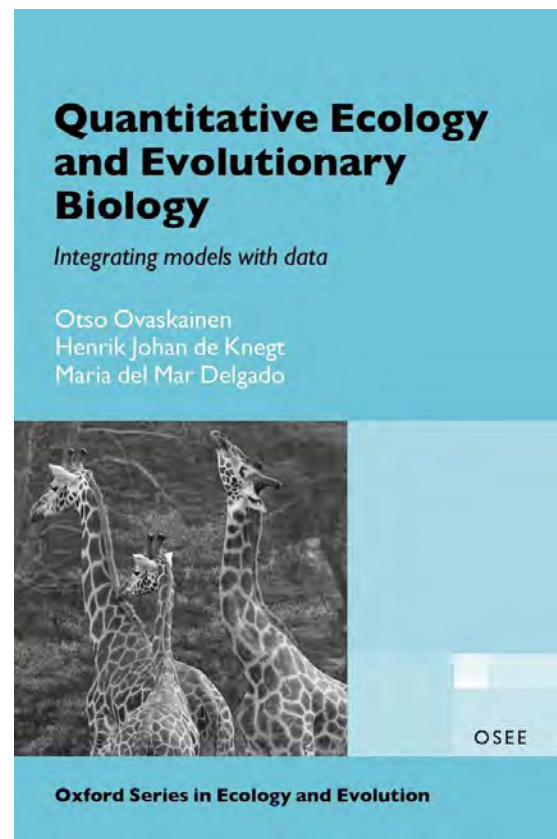
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books noted with interest

Quantitative Ecology and Evolutionary Biology: Integrating Models With Data

Otso Ovaskainen, Henrik Johan de Knecht & Maria del Mar Delgado, 2016, Oxford University Press, 304 pp. £75.00 (Hardback) / £34.99 (Paperback) ISBN: 9780198714866 / 9780198714873; <http://global.oup.com>

How does environmental heterogeneity interact with biological processes? The sophistication of modern statistical and mechanistic models in spatial ecology makes this a daunting field, and an entry-level text is long overdue. Applied chapters consider frameworks for analysing movement, communities, population genetics and evolutionary dynamics. Despite its breadth, a strength of the book is the way modelling frameworks are linked together, leading the reader gradually into more sophisticated questions and analyses. This will be greatly appreciated by graduate students, either biologists looking to acquire new tools, or mathematicians who wish to see how their expertise can be applied to ecological questions.

**Trophic Ecology: Bottom-Up and Top-Down Interactions Across Aquatic and Terrestrial Systems**

Torrance C. Hanley & Kimberley J. La Pierre (editors), 2015, Cambridge University Press, 426 pp. £59.99 (Hardback) / £34.99 (Paperback) ISBN: 9781107077324 / 9781107434325; <http://www.cambridge.org>

It is not sufficient to acknowledge that both bottom-up (e.g. resource availability) and top-down forces (e.g. predation) independently influence natural systems at all trophic levels; there are also interactions between them, with the outcomes differing among systems, taxa and scales. The editors each come from terrestrial and aquatic perspectives in their own research. Here they have brought together an impressive array of contributors to present a series of case studies and reviews, allowing for commonalities and differences to be noted and elaborated upon. It thereby presents the state of the field and will inspire many future comparative studies.

Spatial Point Patterns: Methodology and Applications with R

Adrian Baddeley, Ege Rubak & Rolf Turner, 2016, Chapman & Hall / CRC, 810 pp. £63.99 (Hardback) ISBN 978-1-4822-1020-0; <https://www.crcpress.com>

Several books on analysing point pattern processes have been published in recent years; this is by far the largest, at least in part due to the inclusion of example scripts and output. Its central tool is the `spatstat` package in R. Chapters cover spatial point pattern statistics from first principles through to some of the more sophisticated techniques. Its audience is scientists looking to employ and interpret these tools, and while technical sections are included, they expand on the applied material rather than being core. This will prove a valuable reference and its guidance will improve standards in the field.

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