

UC Merced

Frontiers of Biogeography

Title

Books noted with interest

Permalink

<https://escholarship.org/uc/item/3br691t8>

Journal

Frontiers of Biogeography, 4(3)

Author

Eichhorn, Markus

Publication Date

2012

DOI

10.21425/F5FBG13225

Copyright Information

Copyright 2012 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at

<https://creativecommons.org/licenses/by/4.0/>

books noted with interest

Zero Inflated Models and Generalized Linear Mixed Models with R

Alain F. Zuur, Anatoly A. Savaliev and Elena N. Ieno

2012, Highland Statistics, 324 pp.

£79.00 (Paperback)

ISBN 9780957174108

<http://www.highstat.com>

Do you analyse large distributional datasets with many absences? Your data are almost certainly zero-inflated, which has to be addressed in any statistical models. If they are also nested, spatially and temporally autocorrelated, or otherwise complicated, then you need this. The authors have a reputation for lucid, straightforward statistical training through their previous books. Here the reader is taken from an introduction to Bayesian and MCMC approaches straight into a series of case studies. The sections on what to present in a manuscript are especially helpful. Definitely not for beginners, rather for researchers with solid grounding in statistics and R.

Community Ecology

Gary G. Mittelbach

2012, Sinauer, 400 pp.

\$72.95 (Paperback)

ISBN 9780878935093

<http://www.sinauer.com>

A second book named Community Ecology in under a year inevitably invites comparisons (see also Morin 2011, Wiley-Blackwell). The themes covered are broadly similar, though the balance of coverage differs, with the new book adding an evolutionary perspective which Morin's lacks. It also however omits any explicit coverage of applied issues. The order of topics is peculiar, following an introductory chapter with biogeography and ecosystems, then population ecology, only later returning to intermediate scales. The presentation is colourful and makes impressive use of research evidence throughout. Mittelbach's could support ecology teaching for undergraduates, while Morin's is more suitable for graduates.

Introduction to the Biology of Marine Life, 10th edition

John F. Morrissey & James L. Sumich

2012, Jones & Bartlett Learning, 467 pp.

\$158.95 (Paperback)

ISBN 9780763781606

<http://www.iblearning.com>

An undergraduate-level course on marine life aimed at complete beginners. At the outset it highlights relevant basic principles of marine geology, physics, chemistry and biology. Approximately half the book is devoted to a systematic review of each of the major groups of life in the oceans, with two entirely new chapters on vertebrates for this edition. The second half considers the main habitat groupings in turn. A final short chapter considers the implications for harvesting of marine resources. It is lavishly illustrated in colour with abundant resources for instructors, and could easily be transformed into a lecture series.

Earth's Evolving Systems: The History of Planet Earth

Ronald Martin

2013, Jones & Bartlett Learning, 698 pp.

\$140.95 (Paperback)

ISBN 9781449648909

<http://www.jblearning.com>

Everything a starting undergraduate student might need to know about the geological and climatic history of our planet. A significant proportion of the text is devoted to the impacts on the distribution and evolution of life, along with reciprocal effects of Earth's biota on its physical characteristics, up to and including the 'anthropocene'. As a comprehensive introduction to the many fields that constitute earth systems study, this would form an intuitive structure for a module, and provides all the resources an instructor could wish for, particularly a vast number of colour illustrations.

Markus Eichhorn

University of Nottingham