

New Titles

Source: BioScience, 61(5): 411

Published By: American Institute of Biological Sciences

URL: https://doi.org/10.1525/bio.2011.61.5.13

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up to the level at which this book begins. In particular, more graphical representations of model logic and results would be particularly valuable to these students. The Charlesworths are not visual thinkers.

In addition to being readable, Elements of Evolutionary Genetics is also organized to make it a very effective reference. The chapters are structured into sections and subsections that are extensively cross-referenced. Getting to a particular topic is usually easy using the book's adequate (although less than comprehensive) index or by perusing the well-organized table of contents that repeats the section and subsection information. The book avoids redundancy through this crossreferencing, but a cost is that one is likely to be led back through several previous sections to get fully up to speed on the topic of interest.

My problems with the book are in what is omitted, rather than what is covered. To me, evolutionary genetics is significantly broader than the material covered in this text. In particular, to deal with genomic-level data, evolutionary genetics must be extended in two directions: First, genome evolution is entirely an evolutionary genetic topic, but the Charlesworths choose to cover only special topics, largely omitting consideration of important phenomena such as gene and genome duplication and the evolution of multigene systems such as regulatory networks. On the other end of the spectrum, the recent collapse of the genomewide association paradigm suggests that more attention must be given to traditional phenotype-based quantitative evolutionary genetics. I would also love to see more information on inferring the phenotypic causes of natural selection and estimating its strength. Many clever, older approaches to these problems seem to have been forgotten.

Overall, *Elements of Evolutionary Genetics* is a superb introduction to evolutionary genetics for the serious and motivated student of evolution. The writing is clear, the scholarship authoritative, and the blending of theoretical and empirical approaches is simply without parallel among books aimed at this audience. I expect to be using this book as a text and as my firstline reference for many years to come.

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NEW TITLES

- Adaptation and Resilience: The Economics of Climate, Water, and Energy Challenges in the American Southwest. Bonnie G. Colby and George B. Frisvold, eds. Earthscan, 2011. 256 pp., illus. \$99.95 (ISBN 9781933115931 cloth).
- **Animal Behavior.** Michael D. Breed and Janice Moore. Elsevier (Academic Press), 2011. 496 pp., illus. \$79.95 (ISBN 9780123725813 paper).
- **Bats.** Phil Richardson. Firefly Books, 2011. 128 pp., illus. \$19.95 (ISBN 9781554078035 paper).
- Biological Diversity: Frontiers in Measurement and Assessment. Anne E. Magurran and Brian J. McGill, eds. Oxford University Press, 2011. 368 pp., illus. \$72.50 (ISBN 9780199580675 paper).
- The Ecosystem Approach to Marine Planning and Management. Sue Kidd, Andy Plater, and Chris Frid, eds. Earthscan, 2011. 230 pp., illus. \$49.95 (ISBN 9781849711838 paper).
- An Empire of Ice: Scott, Shackleton, and the Heroic Age of Antarctic Science. Edward J. Larson. Yale University Press, 2011. 320 pp., illus. \$28.00 (ISBN 9780300154085 cloth).
- **Encyclopedia of Biological Invasions.** Daniel Simberloff and Marcel

Rejmánek, eds. University of California Press, 2011. 792 pp., illus. \$95.00 (ISBN 9780520264212 cloth).

- Evolution of Island Mammals: Adaptation and Extinction of Placental Mammals on Islands. Alexandra van der Geer, George Lyras, John de Vos, and Michael Dermitzakis. Wiley-Blackwell, 2010. 496 pp., illus. \$99.95 (ISBN 9781405190091 cloth).
- Feathers: The Evolution of a Natural Miracle. Thor Hanson. Basic Books, 2011. 336 pp., illus. \$26.99 (ISBN 9780465020133 cloth).
- Finding Higher Ground: Adaptation in the Age of Warming. Amy Seidl. Beacon Press, 2011. 208 pp., illus. \$24.95 (ISBN 9780807085981 cloth).
- Frogs: The Animal Answer Guide. Mike Dorcas and Whit Gibbons. Johns Hopkins University Press, 2011. 208 pp., illus. \$24.95 (ISBN 9780801899362 paper).
- Haldane, Mayr, and Beanbag Genetics. Krishna Dronamraju. Oxford University Press, 2011. 296 pp., illus. \$34.95 (ISBN 9780195387346 cloth).
- Let Them Eat Shrimp: The Tragic Disappearance of the Rainforests of the Sea. Kennedy Warne. Island Press, 2011. 167 pp., illus. \$25.95 (ISBN 9781597266833 cloth).
- Making the Most of the Water We Have: The Soft Path Approach to Water Management. David B. Brooks, Oliver M. Brandes, and Stephen Gurman, eds. Earthscan, 2011. 296 pp., illus. \$49.95 (ISBN 9781849713085 paper).
- Mathematical Models of Biological Systems. Hugo van den Berg. Oxford University Press, 2011. 256 pp., illus. \$49.50 (ISBN 9780199582181 paper).

doi:10.1525/bio.2011.61.5.13