

New Titles

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The final two chapters describe some of the combinations of membrane transporters that animals use for osmoregulation, both in transepithelial transport (chapter 10) and for the regulation of individual cell volume (chapter 11). A few of the hormones involved in osmoregulation are mentioned briefly, but I found myself wanting to know more about how these hormones alter cell transporters under various conditions. I also would have liked more information on how animals integrate information about changes in volume and internal osmolarity to maintain homeostasis.

Bradley has a very clear writing style that makes reading this book a pleasure. He writes so conversationally that I sometimes found important definitions slipping by. The absence of bolded or italicized words made it difficult to go back and find the initial mentions of important terms. In many cases, the brief index was also no help because the term was not listed there, either (*euryhaline* is an example).

There were a few factual inconsistencies in the book. For example, creation of dilute urine by the mammalian kidney was attributed to the loop of Henle in two places, and to the distal tubule in a third. There were also omissions: the role of urea in osmoregulation was discussed for elasmobranchs but ignored in the mammalian renal medulla. But most of these failings were minor. The one major topic I found missing from the book was discussion of the anadromous and catadromous fishes, which move between fresh- and saltwater and flip-flop their osmoregulatory mechanisms as they do so. This is one example that I always teach, and I would have liked to have seen it included, as the switch between hypo-regulation and hyperregulation and the endocrine control of this switch is a beautiful illustration of how animals meet the osmoregulatory challenges of migration between habitats.

Overall, *Animal Osmoregulation* is a very readable book that will appeal to students and faculty alike, and I rec-

ommend it to readers who are looking for a supplementary textbook or an introduction to the field.

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NEW TITLES

Bioinvasions and Globalization: Ecology, Economics, Management, and Policy. Charles Perrings, Harold Mooney, and Mark Williamson, eds. Oxford University Press, 2010. 288 pp., illus. \$70.00 (ISBN 9780199560165 paper).

The Calculus of Selfishness. Karl Sigmund. Princeton University Press, 2010. 192 pp., illus. \$35.00 (ISBN 9780691142753 cloth).

Cellular and Molecular Biology of Filamentous Fungi. Katherine A. Borkovich, and Daniel J. Ebbel, eds. ASM Press, 2010. 802 pp., illus. \$209.95 (ISBN 9781555814731 cloth).

Conservation of Shared Environments: Learning from the United States and Mexico. Laura López-Hoffman, Emily D. McGovern, Robert G. Varady, and Karl W. Flessa, eds. University of Arizona Press, 2010. 336 pp., illus. \$24.95 (ISBN 9780816528783 paper).

Deep-sea Biodiversity: Pattern and Scale. Michael A. Rex and Ron J. Etter. Harvard University Press, 2010. 354 pp., illus. \$55.00 (ISBN 9780674036079 cloth).

Elements of Evolutionary Genetics. Brian Charlesworth and Deborah Charlesworth. Roberts and Company, 2010. 734 pp., illus. \$60.00 (ISBN 9780981519425 cloth).

Evolutionary Behavioral Ecology. David F. Westneat and Charles W.

Fox, eds. Oxford University Press, 2010. 664 pp., illus. \$49.95 (ISBN 9780195331929 paper).

Island Bats: Evolution, Ecology, and Conservation. Theodore H. Fleming and Paul A. Racey, eds. University of Chicago Press, 2010. 560 pp., illus. \$65.00 (ISBN 9780226253305 cloth).

Modeling Evolution: An Introduction to Numerical Methods. Derek A. Roff. Oxford University Press, 2010. 422 pp., illus. \$75.00 (ISBN 9780199571147 paper).

The Nanoscience and Technology of Renewable Biomaterials. Lucian A. Lucia and Orlando J. Rojas, eds. Wiley, 2010. 366 pp., illus. \$199.99 (ISBN 9781405167864 cloth).

Nature's Chemicals: The Natural Products that Shaped Our World. Richard Firn. Oxford University Press, 2010. 272 pp., illus. \$65.00 (ISBN 9780199566839 cloth).

Progress in Bioethics: Science, Policy, and Politics. Jonathan D. Moreno and Sam Berger, eds. MIT Press, 2010. 308 pp., illus. \$29.00 (ISBN 9780262134880 cloth).

The Quest for the Perfect Hive: A History of Innovation in Bee Culture. Gene Kritsky. Oxford University Press, 2010. 216 pp., illus. \$24.95 (ISBN 9780195385441 cloth).

Teaching Environmental Literacy: Across Campus and Across the Curriculum. Heather L. Reynolds, Eduardo S. Brondizio, and Jennifer Meta Robinson, eds. Indiana University Press, 2010. 244 pp., illus. \$21.95 (ISBN 9780253221506 paper).

What Darwin Got Wrong. Jerry Fodor and Massimo Piattelli-Palmarini. Farrar, Straus and Giroux, 2010. 288 pp., illus. \$26.00 (ISBN 9780374288792 cloth).

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