New Titles

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are hard to find. Other chapters reinforced my impression that we know much, much more about the seed than we do about the seedling stage. For example, Angela Moles and Michelle Leishman discuss the relationship between seed mass and number in depth, but their review indicates that the literature has much less to offer about the role of seedling traits in life histories.

The editors recognize and acknowledge the lack of identifiable generalities about seedlings in the summary chapter, stating that "there is no typical seedling." The diversity of definitions of the seedling stage's beginning (embryo enlargement? radicle protrusion? cotyledon emergence?) and end (end of dependence on seed reserves? loss of cotyledons? appearance of first true leaf?) illustrates this point. Various authors use different definitions, each quite likely the most appropriate one for a particular species or situation.

One of the most fascinating and valuable aspects of this book is the tour it gives us of the bizarre and idiosyncratic seedlings that most of us will never see. We are introduced to Australian perennial seedlings with contractile roots that pull the shoot below the soil surface, buoyant aquatic seedlings, the few-celled protocorms of orchids (with fabulous photographs by John O'Neill and Melissa McCormick), the pseudorhizomatous seedlings of *Amborella trichopoda,* and the 1.5-meter-long first leaf of *Lodoicea maldivica.* For those of us who study seedlings in one or two systems, it is fascinating to see these diverse and surprising facts of global seedling natural history gathered in one place. And, in reading the book, I had a growing sense that it is partly this great (and still largely unstudied) diversity that makes generalization about seedlings difficult.

Discussion of a few kinds of seedlings that went unremarked in *Seedling Ecology and Evolution* would have added even more interest to this volume: species that finish their lives as seedlings (i.e., plants that flower when still relying on stored seed reserves) and seedlings of true aquatic plants. A few chapters also strayed a bit too far off topic (particularly the one on embryo evolution in nonflowering plants). In fact, sometimes sections that were off topic (particularly those that seemed to be about seeds rather than seedlings) emphasized the point that relatively little is known about seedlings, and that much more is known about the other life-history stages. The book does an amazing job, however, of amassing and synthesizing, for the first time, our knowledge of the lives of seedlings, and it provides a great jumping-off point for future seedling research. I hope that it will stimulate further research and that it will be updated in the future as our knowledge of the most precarious stage of a plant's life history grows.

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NEW TITLES

Avian Invasions: The Ecology and Evolution of Exotic Birds. Tim M. Blackburn, Julie L. Lockwood, Phillip Cassey. Oxford University Press, 2009. 320 pp., illus. $55.00 (ISBN 9780199232550 paper).

Cave Biology: Life in Darkness. Aldemaro Romero. Cambridge University Press, 2009. 306 pp., illus. $60.00 (ISBN 9780521535533 paper).

Chasing Molecules: Poisonous Products, Human Health, and the Promise of Green Chemistry. Elizabeth Grossman. Island Press, 2009. 246 pp., illus. $26.96 (ISBN 9781597263702 cloth).

Dinosaur Odyssey: Fossil Threads in the Web of Life. Scott D. Sampson. University of California Press, 2009. 352 pp., illus. $29.95 (ISBN 9780520241633 cloth).

The Eponym Dictionary of Mammals. Bo Beolens, Michael Watkins, Michael Grayson. Johns Hopkins University Press, 2009. 592 pp. $65.00 (ISBN 9780801893049 cloth).

Glimpses of Creatures in Their Physical Worlds. Steven Vogel. Princeton University Press, 2009. 316 pp., illus. $35.00 (ISBN 9780691138077 paper).

Grass: In Search of Human Habitat. Joe C. Truett. University of California Press, 2009. 240 pp., illus. $34.95 (ISBN 9780520258396 cloth).

The Metamorphosis of Plants. Johann Wolfgang von Goethe. (trans.) Douglas Miller. MIT Press, 2009. 123 pp., illus. $21.95 (ISBN 9780262013093 cloth).

Mr. Jefferson and the Giant Moose: Natural History in Early America. Lee Alan Dugatkin. University of Chicago Press, 2009. 184 pp., illus. $26.00 (ISBN 9780226169149 cloth).

The New Foundations of Evolution: On the Tree of Life. Jan Sapp. Oxford University Press, 2009. 448 pp., illus. $39.95 (ISBN 9780195388503 paper).

The Oyster Question: Scientists, Watermen, and the Maryland Chesapeake Bay since 1880. Christine Keiner. University of Georgia Press, 2009. 344 pp., illus. $44.95 (ISBN 9780820326986 cloth).

Sexy Orchids Make Lousy Lovers: And Other Unusual Relationships. Marty Crump. University of Chicago Press, 2009. 232 pp., illus. $25.00 (ISBN 9780226121857 cloth).

The Theory of Island Biogeography Revisited. Jonathan B. Losos, Robert E. Ricklefs, eds. Princeton University Press, 2009. 494 pp., illus. $49.50 (ISBN 9780691136530 paper).

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