tropical biologists should own it or have access to a copy. Many chapters are superb, and together they summarize very well the current status of vine biology. The most notable shortcoming is the lack of any attempt at synthesis by the editors. But never mind. Many of the questions regarding the biology of vines raised by Darwin and by Schenck at the end of the 19th century have now been answered, in whole or in part, and many new avenues of research (among them the ecology of different classes of vines, the importance of vines at different points along tropical gradients, the evolution of anti-herbivore defenses and pollination syndromes, and vine ethnobotany) have been opened. Several central questions remain unanswered: How does the allocation to stem tissue compare in vines and free-standing plants of the same height, and how do twiners, tendril-climbers, and root-climbers compare in this respect? What density-dependent factors regulate the relative abundance of climbers and free-standing plants in a given area? Was Darwin correct in arguing that twining is the most primitive vine growth form and tendril climbing the most advanced? And what factors promote rapid and extensive speciation in tropical vines, though to a lesser degree than is seen in epiphytes? This fine volume should provide ample inspiration for scientists interested in these and other issues for many years to come.

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Littoral Life

Galápagos Marine Invertebrates. Taxonomy, Biogeography, and Evolution in Darwin's Islands. MATTHEW J. JAMES, Ed. Plenum, New York, 1991. xiv, 474 pp., illus. $95. Topics in Geobiology, vol. 8.

Compared with terrestrial life in the Galápagos Islands, the littoral marine biota has received little attention. This compilation on the shallow-living (mostly intertidal-zone and insular-shelf) marine invertebrates of the islands is the first attempt to assemble and integrate disparate studies of life in the Galápagos marine realm. The book is organized into nine sections with one to five chapters each. Perspectives on Galápagos marine invertebrate evolution and the oceanographic setting of the islands provide a framework for contributions on the meiofauna and annelid worms, reef-building corals, crustaceans, marine cave fauna, mollusks (both marine and terrestrial), echinoderms, and bryozoans. The final section comprises studies on the taphonomy (processes of preservation and how they affect information in the fossil record) and paleoecology of coral-associated faunas, with emphasis on gastropod mollusks and echinoids.

The volume contains some lengthy species lists, detailed information on collections, and occasional taxonomic digressions that are not likely to offer particularly interesting reading to the nonspecialist. Such documentation is essential for further analyses and understanding, however. Fortunately, most of the 20 authors have supplemented the taxonomic treatments with interesting discussions of ecology, biogeographic relationships, endemism, and speciation within their particular groups.

With the present understanding that the Galápagos Islands are youthful (2.5- to 4.0-million-year-old) oceanic islands, having arisen from a "hot spot" at the Galápagos Spreading Center, biotic dispersal to the archipelago is considered in this book with respect to the four principal current systems influencing the region: Peru Oceanic/Coastal currents, the Panama Current, the Equatorial Undercurrent (Cromwell Current), and sometimes the North Equatorial Countercurrent. The biogeographic complexity of the Galápagos marine fauna must be due in part to these diverse current systems and to the variety of available local habitats, ranging from cool, nutrient-rich upwelling areas to relatively warm waters supporting reef coral populations. In light of recent findings of strong effects of El Niño–Southern Oscillation (ENSO) on the marine biota of the equatorial eastern Pacific, some of the contributors consider evidence for accelerated propagule transport and introductions from the central/western Pacific Ocean at such times. Of course, ENSO disturbances also severely affect local populations, and only through consideration of species losses and gains can the dynamic nature of the Galápagos marine fauna be understood.

The publication of this volume is timely in view of humanity's ever-growing encroachment on Galápagos ecosystems. During the past two decades the number of visitors to the Galápagos Islands has accelerated dramatically, and with it the immigration of people from mainland Ecuador to support the tourism industry. This increase in the human population, with accompanying demands on limited resources and introductions of exotic terrestrial species, will effect changes of unknown magnitude. Recent exploitation of scleractinian corals, black coral, lobsters, mollusks (mostly sea shells and octopuses), and sea cucumbers could cause marked changes in benthic community structure. This problem has been recognized by the Charles Darwin Research Station and the Galápagos National Park Service, two organizations concerned with the protection of Galápagos wildlife, and the Galápagos marine environment is now being considered for incorporation into the Galápagos National Park

Vignettes: On Books

Books are humankind's finest transportation device, possessing the grace of a Porsche 911 and the power of a Mack truck, so it is only fitting that they can close a New York thoroughfare.

—*Randall Rothernberg*, commenting on the New York book fair (*New York Times*, 13 Sept. 1991, C13)

Rousseau once said, as reported by David Hume, that "one half of a man's life is too little to write a book and the other half to correct it." Rousseau must have meant a scholarly book, for he himself wrote many books, and never corrected any of them, as far as I have been able to discover.

—*Jacob Viner*, as quoted by William G. Bowen and Neil G. Rudenstine in *In Pursuit of the PhD* (Princeton University Press)

Over the years, I got into the habit of asking people: "Is there a book that had an impact on you but seemed to have no impact on your field?" With few exceptions, they could come up with, and quickly, at least one book.

—*Seymour B. Sarason*, in the foreword to the second edition of Murray Levine and Adeline Levine, *Helping Children: A Social History* (Oxford University Press)

system. The information in the book can help with the necessary analysis.

The book includes numerous high-quality illustrations and extensive references to the literature. Given the emphasis placed by most of the contributors on ecology, biogeographic relationships, and evolution, I believe Darwin would delight in reading it. Contemporary workers with interests in marine invertebrate biology and insular biotas will want to have ready access to it.

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Books Received

Atherosclerotic Plaques. Advances in Imaging for Sequential Quantitative Evaluation. Robert W. Wissler *et al.*, Eds. Plenum, New York, 1991. xii, 309 pp., illus. $85. NATO Advanced Science Institutes Series A, vol. 219. From a workshop, Siena, Italy, June 1990.

Australian Snakes. A Natural History. Richard Shine. Cornell University Press, Ithaca, NY, 1992. 223 pp., illus. $34.95.

Autism and Asperger Syndrome. Uta Frith, Ed. Cambridge University Press, New York, 1992. x, 247 pp., illus. $46.50; paper, $16.95.

Autonomic Neuroeffector Mechanisms. Geoffrey Burnstock and Charles H. V. Hoyle, Eds. Harwood, New York, 1992. xii, 546 pp., illus. $48. Autonomic Nervous System, vol. 1.

The Biological Bases of Drug Tolerance and Dependence. J. A. Pratt, Ed. Academic Press, San Diego, CA, 1991. xiv, 301 pp., illus. $80. Neuroscience Perspectives.

Blastomycosis. Yousef Al-Doory and Arthur F. DiSalvo, Eds. Plenum, New York, 1992. xx, 268 pp., illus. $65. Current Topics in Infectious Disease.

Blueprint for Space. Science Fiction to Science Fact. Frederick I. Ordway III and Randy Liebermann, Eds. Smithsonian Institution Press, Washington, DC, 1992. 224 pp., illus. $60; paper, $24.95.

Breaking the Mind Barrier. The Artscience of Neurocosmology. Todd Siler. Touchstone (Simon and Schuster), New York, 1992. 416 pp., illus. Paper, $16. Reprint, 1990 ed.

Complexity, Chaos, and Biological Evolution. Erik Mosekilde and Lis Mosekilde, Eds. Plenum, New York, 1991. xii, 431 pp., illus. $110. NATO Advanced Science Institute Series B, vol. 270. From a workshop, Hindsgavl, Denmark, Aug. 1990.

Compound Semiconductor Device Physics. Sandip Tiwari. Academic Press, San Diego, CA, 1991. xvi, 828 pp., illus. $79.95.

Computer Assisted Vegetation Analysis. E. Feoli and L. Orlóci, Eds. Kluwer, Norwell, MA, 1991. x, 498 pp., illus. $235. Handbook of Vegetation Science, vol. 11.

Computer-Enhanced Analytical Spectroscopy. Vol. 3. Peter C. Jurs, Ed. Plenum, New York, 1992. xvi, 320 pp., illus. $75. Modern Analytical Chemistry. From a symposium, Snowbird, UT, June 1988.

Exercises in Quantum Mechanics. A Collection of Illustrative Problems and Their Solutions. Harry Mavromatis. 2nd ed. Kluwer, Norwell, MA, 1991. xiv, 333 pp., illus. $79. Kluwer Texts in the Mathematical Sciences, vol. 6.

Experimental Techniques in High-Energy Nuclear and Particle Physics. Thomas Ferbel, Ed. 2nd ed. World Scientific, River Edge, NJ, 1991. xii, 722 pp., illus. $86; paper, $38.

How to Find Information About AIDS. Jeffrey T. Huber, Ed. 2nd ed. Harrington Park (Haworth), Binghamton, NY, 1992. x, 288 pp. Paper, $14.95. Haworth Medical Information Series.

Methods and Mechanisms for Producing Ions from Large Molecules. K. G. Standing and Werner Ens, Eds. Plenum, New York, 1991. x, 334 pp., illus. $95. NATO Advanced Science Institute Series B, vol. 269. From a workshop, Minaki, Canada, June 1990.

Microbes and Man. John Postgate. 3rd ed. Cambridge University Press, New York, 1992. xii, 297 pp., illus. $49.95; paper, $15.95.

Micronutrients in Health and in Disease Prevention. Adrianne Bendich and C. E. Butterworth, Jr., Eds. Dekker, New York, 1991. xviii, 483 pp., illus. $125.

Presentations of Gender. Robert J. Stoller. Yale University Press, New Haven, CT, 1992. xii, 219 pp. $35; paper, $12. Reprint, 1985 ed.

Prevention and Control of Landslides and Other Mass Movements. M. E. Almeida-Teixeira *et al.*, Eds. Commission of the European Communities, Luxembourg, 1991 (U.S. distributor, Unipub, Lanham, MD). xvi, 349 pp., illus. Paper, $40. Environment and Quality of Life. Proceedings of a school, Lisbon, March 1990.

Principles of Nuclear Magnetic Resonance Microscopy. Paul T. Callaghan. Clarendon (Oxford University Press), New York, 1991. xviii, 492 pp., illus. $125.

Science, Technology, and Society. New Directions. Andrew Webster. Rutgers University Press, New Brunswick, NJ, 1992. viii, 181 pp., illus. $36; paper, $15.

Scientific Computing on Supercomputers III. Jozef T. Devreese and Piet E. Van Camp, Eds. Plenum, New York, 1992. xii, 212 pp., illus. $85. From a workshop, Antwerp, Belgium, Jan. 1991.

Seismic Facies and Sedimentary Processes of Submarine Fans and Turbidite Systems. Paul Wiemer and Martin H. Lind, Eds. Springer-Verlag, New York, 1991. xvi, 447 pp., illus. $89. Frontiers in Sedimentary Geology.

A Survey of Nonlinear Dynamics. ("Chaos Theory"). R. L. Ingraham. World Scientific, River Edge, NJ, 1992. xii, 107 pp., illus. $28.