

New Titles

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campus as a microcosm of the world and the perfect place to teach students the true role, costs, and responsibilities of understanding energy. Christian Glaser explains that “the human economy is nested within nature’s economy, and economic activity must therefore ultimately be constrained within the biosphere’s finite capacity to regenerate resources and assimilate wastes” (p. 61). He poses thorny philosophical questions that force us to reconsider some fundamental truths and provides a useful list of concrete economics-based examples that clearly need to be part of any environmental education.

A recurring theme in this volume is that of the deepening disconnect between the virtual and real worlds. Rachel Carson and her work constitute another common thread, no more so than in “Environmental literacy and the lifelong cultivation of wonder” by Lisa Sideris, who explores the role of wonder in fostering and sustaining environmental virtues and in creating a sense of love of particular places. She argues eloquently that wonder is the keystone virtue and cites the work of Liberty Hyde Bailey and Anna Comstock, both of Cornell University, who were instrumental in establishing “nature study” as a means of placing children in direct contact with nature and fostering a lifelong “sympathy with nature.”

Part 3 is composed of six essays on pedagogy in which teaching strategies are investigated in and beyond the traditional classroom. James Cashaw discusses modeling the campus as an ecosystem and provides examples of the use of everyday items for both environmental exploration and for up- and downstream analyses. Nicole Schonemann, Andrew Libby, and Claire King describe a mode of learning that lends itself to achieving greater environmental literacy by empowering students through situated service learning. This essay comes with sage advice to faculty about the potential pitfalls and the significant commitment required to make this type of learning successful.

Matthew Auer espouses an unusual but convincing five-senses approach to environmental awareness and takes us on a guided journey of discovery, starting with a discarded candy wrapper in a college lot and ending with an ethical consideration of ethanol production. At the same time, Auer provides practical advice for leading field trips and for framing guiding questions. Other essays advocate the use of natural or protected areas as teaching environments in which effective learning and environmental education can take place. Another, perhaps counterintuitive, perspective builds a strong argument for using working landscapes—farms, dams, mines, and industrial areas—to confront students with the effects and implications of the choices we make as a global society. Craig Nelson advocates a holistic approach and brings his distinguished affiliation with the Scholarship of Teaching and Learning program to bear on the nontrivial task of engaging undergraduates in evidenced-based, theory-framed transformational learning, while providing thoughtful perspectives and strategies that faculty would be wise to embrace.

Part 4 focuses on the strategic and administrative issues of implementing environmental literacy. In three essays on integration, a common theme emerges: Complex problems demand multidisciplinary approaches, and grassroots and top-down approaches are required to operate concurrently for success, but this can be very difficult to pull off. The approach is well illustrated, however, with the simple yet very effective idea of faculty, staff, and student partnerships. Catherine Larson outlines a number of possibilities for greening the curriculum (e.g., service-learning programs, a minor in environmental science, online courses, freshman seminars). Whitney Schlegel and colleagues describe the development and function of a campus-wide “inquiry commons,” a learning community of students, faculty, and community partners based on the concept of food literacy. It is a powerful and effective model that uses “e-portfolios”

to document and assess both teaching and learning.

This important and unique volume makes a significant contribution to the field of environmental education. It provides a conceptual framework rich with pedagogical strategies, offers a field-tested implementation model, and even outlines the infrastructure required to make an environmentally literate campus a reality. The short chapters, especially in part 2, would make excellent discussion readings for undergraduates or even high school students. The bottom line, however, is that environmental literacy cannot be compartmentalized. It does indeed take a village to raise environmental awareness sufficiently high to produce inspired, clear-thinking graduates for whom environmental stewardship is an integral part of everyday life.

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Epigenetics: Linking Genotype and Phenotype in Development and Evolution. Benedikt Hallgrímsson and Brian K. Hall, eds. University of California Press, 2011. 472 pp., illus. \$85.00 (ISBN 9780 520267091 cloth).

The Fate of Greenland: Lessons from Abrupt Climate Change. Philip Conkling, Richard Alley, Wallace Broecker, and George Denton. MIT Press, 2011. 232 pp., illus. \$29.95 (ISBN 9780262015646 cloth).

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Fields, Forces, and Flows in Biological Systems. Alan J. Grodzinsky. Taylor and Francis, 2011. 308 pp., illus. \$120.00 (ISBN 9780815342120 cloth).

Frogs and Toads of the World. Chris Mattison. Princeton University Press, 2011. 192 pp., illus. \$29.95 (ISBN 9780691149684 cloth).

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The Great Sperm Whale: A Natural History of the Ocean's Most Magnificent and Mysterious Creature. Richard Ellis. University Press of Kansas, 2011. 432 pp., illus. \$34.95 (ISBN 9780700617722 cloth).

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Here on Earth: A Natural History of the Planet. Tim Flannery. Atlantic Monthly Press, 2011. 336 pp., illus. \$25.00 (ISBN 9780802119766 cloth).

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Transylvanian Dinosaurs. David B. Weishampel and Coralia-Maria Jianu. Johns Hopkins University Press, 2011. 328 pp., illus. \$60.00 (ISBN 9781421400273 cloth).