on identical scales; there is in fact no significant difference in annual temperature change between their subpolar and tropical sites (t test, $p > .05$).

The final chapter of the volume is one of the few attempts in the literature to apply the comparative approach to the study of seals and to integrate aspects of their behavior, physiology, and ecology; it is valuable for these reasons. Still, it contains more compilation than synthesis, including unnecessary repetition of figures from earlier chapters.

Given the recent interest in the ecological implications of body size in mammals generally, it is unfortunate that the authors did not pursue this matter further, especially given that the two species of otariid seals living in the most unpredictable (in terms of annual productivity) environment studied are smaller than close relatives living in more predictable environments. It might also have been more interesting to attempt to explain differences in population density than differences in absolute abundance of the species considered. Finally, in a book on maternal strategies that attempts to integrate observation and theory, failure to discuss observed differences in maternal investment in individual sons and daughters in relation to recent theories of parental investment is an opportunity missed.

Seal biology, as evidenced by this work, still shows all the traits of a young science; it remains largely inductive in approach and descriptive in nature, with new understanding emerging more through serendipity than design and reference to theory often merely a post hoc exercise. Yet it is clear that this monograph, and the pioneering approach it describes, which has already yielded some valuable and unexpected results, will provide further stimulus for using pinnipeds as vehicles for testing hypotheses generated by ecological and evolutionary theories, thereby bringing more field studies of these fascinating yet elusive mammals into the mainstream of modern biology.

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Some Other Books of Interest

Hormones, Receptors and Cellular Interactions in Plants. C. M. CHADWICK and D. R. GARROD, Eds. Cambridge University Press, New York, 1986. xii, 375 pp., illus. $69.50. Intercellular and Intracellular Communication, 1.

Noting that the study of ligand-receptor interactions is less well advanced for plant than for animal systems, Chadwick and Garrod have compiled a volume the aim of which is "to take a broad look at the current status of [such] interactions in a variety of higher and lower plant systems" in the hope of providing "a cross-fertilization of ideas and a stimulus to research." The work opens with chapters on auxin, ethylene, and gibberellin receptors (Libbenga *et al.*, Hall, and Stoddart), which are followed by a discussion of cyclic AMP in higher plants (Newton and Brown). Receptors in slime molds are the subject of the next two chapters (Newell, Chadwick *et al.*). Further chapters deal with the plasma membrane of higher plant protoplasts (Fowke), yeast mating (Ballou and Pierce), pollen-stigma interactions as studied in *Brassica oleracea* (Dickinson and Roberts), host-pathogen interactions (Ralton *et al.*), attachment of *Rhizobium* to legume root hairs (Dazzo), and functions of plant lectins (Holden and Yeoman). Each chapter has its own reference list, and the book includes a subject index.

The volume inaugurates a series to be published under the general editorship of B. Cinader. The second volume will be devoted to receptors in tumor biology.—K.L.

Wetlands. WILLIAM J. MITSCH and JAMES G. GOSSELINK. Van Nostrand Reinhold, New York, 1986. xvi, 539 pp., illus. $44.50.

In this volume the authors have set out to fill a need for "a comprehensive reference [for] scientists, engineers, and planners involved in the management of wetlands and . . . a textbook for students and professors for newly evolving courses on wetland ecology." The book is intended for an audience with some background in ecology and emphasizes, though does not limit itself to, North American wetlands. The opening section gives some history of wetland use, outlines the distinguishing features of wetlands, defines the various types, and describes their status and distribution in the United States. Part 2, entitled The Wetland Environment, contains chapters on hydrology, geochemistry, biological adaptations, and ecosystem development. Parts 3 and 4 are devoted to particular types of wetland ecosystems—tidal salt and freshwater marshes, mangrove wetlands, inland freshwater marshes, northern peatlands and bogs, southern deepwater swamps, and riparian wetlands. Part 5 takes up such practical issues as the valuation of wetlands, strategies of and laws bearing on wetland management, and classification and inventorying of wetlands. A list of nearly 700 references and a 21-page index conclude the volume.

—K.L.

Books Received

Applied Classical Electrodynamics. Vol. 2, Nonlinear Optics. F. A. Hopf and G. I. Stegeman. Wiley-Interscience, New York, 1986. x, 187 pp., illus. $27.50. Wiley Series in Pure and Applied Optics.

Are Australian Ecosystems Different? J. R. Dodson and M. Westoby, Eds. The Ecological Society of Australia [no place], 1985 (distributor, Blackwell Scientific, Carlton, Australia). iv, 250 pp., illus. Paper, $A25. Proceedings of the Ecological Society of Australia, vol. 14. From a symposium, Sydney, Aug. 1984.

Assessing the Nuclear Age. Selections from the *Bulletin of the Atomic Scientists*. Len Ackland and Steven McGuire, Eds. Educational Foundation for Nuclear Science, Chicago, 1986 (distributor, University of Chicago Press, Chicago). xviii, 382 pp., illus. $29.95; paper, $12.95.

Authority, Liberty, and Automatic Machinery in Early Modern Europe. Otto Mayr. Johns Hopkins University Press, Baltimore, 1986. xviii, 265 pp., illus. $30. Johns Hopkins Studies in the History of Technology.

Averting Catastrophe. Strategies for Regulating Risky Technologies. John G. Morone and Edward J. Woodhouse. University of California Press, Berkeley, 1986. x, 215 pp., illus. $17.95.

Basic Mechanisms of the Epilepsies. Molecular and Cellular Approaches. Antonio V. Delgado-Escueta *et al.*, Eds. Raven, New York, 1986. xxiv, 1096 pp., illus. $98.50. Advances in Neurology, vol. 44. Based on meetings, San Diego, CA, Dec. 1983, and Santa Ynez Mountains, CA, Dec. 1982.

Basic Toxicology. Fundamentals, Target Organs, and Risk Assessment. Frank C. Lu. Hemisphere, New York, 1985. xvi, 276 pp., illus. $49.95.

Biochemistry and Biology of Plasma Lipoproteins. Angelo M. Scanu and Arthur A. Spector, Eds. Dekker, New York, 1986. xii, 514 pp., illus. $107.50. The Biochemistry of Disease, vol. 11.

Chemotherapy of Malaria. R. H. Black *et al.* L. J. Bruce-Chwatt, Ed. 2nd ed. World Health Organization, Geneva, 1986 (U.S. distributor, WHO Publications Center, Albany, NY). vi, 262 pp., illus. Paper, SwF 44. World Health Organization Monograph Series, no. 27.

Clinical Trials. Design, Conduct, and Analysis. Curtis L. Meinert in collaboration with Susan Tonascia. Oxford University Press, New York, 1986. xxvi, 469 pp., illus. $75. Monographs in Epidemiology and Biostatistics, vol. 8. Intended as "a general reference for practitioners of clinical trials," with "the main focus on trials involving uncrossed treatments and a clinical event as the outcome measure."

The Development of Social Welfare. John W. Landon. Human Sciences Press, New York, 1986. 210 pp. $24.95.

Developmental Behavioral Pharmacology. Vol. 5. Norman A. Krasnegor, David B. Gray, and Travis Thompson, Eds. Erlbaum, Hillsdale, NJ, 1986. xiv, 310 pp., illus. $36. Advances in Behavioral Pharmacology. Based on a conference, Leesburg, VA, Aug. 1983.

Disordered Systems and Biological Organization. E. Bienenstock, F. Fogelman Soulié, and G. Weisbuch, Eds. Springer-Verlag, New York, 1986. xxii, 405 pp., illus. $72.50. NATO Advanced Science Institutes Series F, vol. 20. From a workshop, Les Houches, France, Feb. 1985.

Education's Smoking Gun. How Teachers Colleges Have Destroyed Education in America. Reginald G. Damerell. Freundlich, New York, 1985 (distributor, Scribner, New York). viii, 312 pp., illus. $17.95.

Elastic Energy Methods of Design Analysis. Ralph J. Harker. Elsevier, New York, 1986. xxii, 441 pp., illus. $42.50.

Electromagnetic Surface Excitations. R. F. Wallis and G. I. Stegeman, Eds. Springer-Verlag, New York, 1986. x, 305 pp., illus. $45. Springer Series on Wave Phenomena, 3. From a summer school, Erice, Italy, July 1985.

Immunology and Epidemiology. G. W. Hoffmann and T. Hraba, Eds. Springer-Verlag, New York, 1986. viii, 242 pp., illus. Paper, $20.50. Lecture Notes in Biomathematics, vol. 65. From a conference, Mogilany, Poland, Feb. 1985.

Induced Circular Dichroism in Biopolymer-Dye Systems. M. Hatano. S. Okamura, Ed. Springer-Verlag, New York, 1986. xiv, 135 pp., illus. $49. Advances in Polymer Science, 77.

Integral Methods in Science and Engineering. Fred R. Payne *et al.*, Eds. Hemisphere (Harper and Row), New York, 1986. x, 653 pp., illus. $95.50. From a conference, Arlington, TX, March 1985.