

Population Regulation and Dynamics. M. P. HASSELL and R. M. MAY, Eds. Royal Society, London, 1990. viii, 182 pp., illus. £37.50. Reprinted from *Philosophical Transactions of the Royal Society*, series B, vol. 330. From a meeting, London, May 1990.

"These proceedings," writes T. R. E. Southwood in his introduction, "bring together two topics of long-standing interest to ecologists: the regulation of individual species and the relative abundance of different species in a community." The volume contains 14 papers in all, beginning with reviews of the population dynamics of plants by Crawley and of terrestrial animals by Hanski. In two other general papers Chesson brings geometric analysis to bear on populations in temporally variable environments and Kareiva discusses the interaction of theory and data in studies concerned with spatially complex environments. Issues of chaos in population dynamics are considered in papers by Godfray and Blyth and by Sugihara *et al.*, the former concerned with the application of the new techniques of attractor reconstruction and estimation of the correlation dimension to the dynamics of multispecies communities and the latter with a method for distinguishing error from chaos in ecological time series, taking measles epidemics as a case study. With respect to specific categories of organisms, there are papers on population regulation ("myth or mirage?") in fish by Shepherd and Cushing and in gastrointestinal helminths by Quinnell *et al.*, on host-parasitoid interactions by Hassell and Pacala, and on density dependence in neotropical trees by Hubbell *et al.* In the one paper concerned explicitly with genetic diversity Travis discusses its maintenance by ecological forces, and in a paleontological paper Valentine expounds the fossil record as "a sampler of life's diversity." May concludes the volume with a consideration of how many species exist and how that question might be answered. Each paper is preceded by an abstract, and some include comments by participants in the meeting at which they were originally delivered. The volume contains no index and uses an awkward system of double pagination not clearly indicated in the table of contents.—K.L.

Books Received

Acidic Deposition and Aquatic Ecosystems. Regional Case Studies. Donald F. Charles and Susan Christie, Eds. Springer-Verlag, New York, 1991. xii, 747 pp., illus. \$98.

Advances in Connectionist and Neural Computational Theory. Vol. 1, High-Level Connectionist Models. John A. Barden and Jordan B. Pollack, Eds. Ablex, Norwood, NJ, 1991. xii, 389 pp., illus. \$34.50. From a workshop, Las Cruces, NM, April 1988.

Aging, Sex, and DNA Repair. Carol Bernstein and Harris Bernstein. Academic Press, San Diego, CA, 1991. xii, 382 pp. \$44.95.

AIDS. Deadly Threat. Alvin and Virginia Silverstein. Enslow, Hillside, NJ, 1991. 160 pp., illus. \$18.95.

Alcohol Education and Young Offenders. Medium and Short Term Effectiveness of Education Programs. Steve Baldwin. Springer-Verlag, New York, 1991. x, 152 pp. Paper, \$39. Recent Research in Psychology.

Algebraic Methods in Nonlinear Perturbation Theory. V. N. Bogachevski and A. Povzner. Springer-Verlag, New York, 1991. xii, 265 pp., illus. \$59. Applied Mathematical Sciences, 88.

Amphibians and Reptiles of the West Indies. Descriptions, Distributions, and Natural History. Albert Schwartz and Robert W. Henderson. University of Florida Press, Gainesville, 1991. xvi, 720 pp., illus. \$75.

The Ancient Art of Northern Asia. Anatoly I. Martynov. Demetri B. Shimkin and Edith M. Shimkin, Transl. Eds. University of Illinois Press, Urbana, 1991. xviii, 301 pp., illus. \$39.95.

The Arrow of Time. A Voyage through Science to Solve Time's Greatest Mystery. Peter Coveney and Roger Highfield. Fawcett Columbine, New York, 1991. 378pp., illus., + plates. \$22.50.

Conversations on the Dark Secrets of Physics. Edward Teller, Wendy Teller, and Wilson Talley. Plenum, New York, 1991. xii, 247 pp., illus. \$23.95.

The Cosmic Water Hole. Emmanuel Davoust. MIT Press, Cambridge, MA, 1991. xvi, 206 pp., illus. \$19.95. Translated from the French edition (1988) by Barbara Jachowicz.

Cosmogenesis. The Growth of Order in the Universe. David Layzer. Oxford University Press, New York, 1991. xii, 322 pp., illus. Paper, \$11.95. Reprint, 1990 ed.

Effect of Laser Radiation on Absorbing Condensed Matter. V. B. Fedorov. Nova Science, New York, 1990. vi, 203 pp., illus. \$62. Proceedings of the Institute of General Physics Academy of Sciences of the USSR, vol. 13. Translated from the Russian edition (Moscow, 1988) by Richard Moore.

Elephants, Economics and Ivory. Edward B. Barbier *et al.* Earthscan Publications, London, 1991 (U.S. distributor, InBook, East Haven, CT). xiv, 154 pp., illus. Paper, \$19.95.

Endogenous Sleep Factors. Shojiro Inoue and James M. Krueger, Eds. SPB Academic Publishing, The Hague, The Netherlands, 1990. xii, 323 pp., illus. \$82. From a conference, Honolulu, HI, Nov. 1988.

Energy Dissipation in Superconducting Materials. V. Kovachev. D. Dew Hughes, Ed. Clarendon (Oxford University Press), New York, 1991. x, 229 pp., illus. \$90. Monographs on Cryogenics, 7.

Energy for Planet Earth. Readings from Scientific American Magazine. Freeman, New York, 1991. x, 140 pp., illus. Paper, \$12.95.

Enjoying Organic Chemistry, 1927-1987. Egbert Havinga. American Chemical Society, Washington, DC, 1991. xx, 122 pp., illus. \$24.95. Profiles, Pathways, and Dreams. Autobiographies of Eminent Chemists.

Entropy, Compactness and the Approximation of Operators. Berand Carl and Irmtraud Stephani. Cambridge University Press, New York, 1991. x, 277 pp., illus. \$69.50. Cambridge Tracts in Mathematics, 98.

Environmental and Metabolic Animal Physiology. Comparative Animal Physiology. C. Ladd Prosser, Ed. 4th ed. Liss (Wiley), New York, 1991. xii, 578 pp., illus. \$44.95.

Enzymology and Molecular Biology of Carbonyl Metabolism 3. Henry Weiner, Bendicht Wermuth, and David W. Crabb, Eds. Plenum, New York, 1991. x, 359 pp., illus. \$85. Advances in Experimental Medicine and Biology, vol. 284. From a workshop, West Lafayette, IN, June 1990.

Evolutionary Genetics and Environmental Stress. Ary A. Hofmann and Peter A. Parsons. Oxford University Press, New York, 1991. x, 284 pp., illus. \$75.

Exotic Nuclear Spectroscopy. William C. McHarris, Ed. Plenum, New York, 1990. x, 677 pp., illus. \$135. From a symposium, Miami Beach, FL. Sept. 1989.

A Field Guide to Freshwater Fishes. North America, North of Mexico. Lawrence M. Page and Brooke M. Burr. Illustrations by Eugene C. Beckham, III, John Parker Sherrod, and Craig W. Ronto. Houghton Mifflin, Boston, MA, 1991. xiv, 426 pp., illus., + plates. \$24.95; paper, \$15.95. Peterson Field Guide Series.

Human Error. Cause, Prediction, and Reduction. John W. Senders and Neville P. Moray. Erlbaum, Hillsdale, NJ, 1991. xiv, 153 pp., illus. \$34.50. Series in Applied Psychology. From a conference, Bellagio, Italy,

1983.

Precalculus Algebra and Trigonometry. Sharon Cutler Ross and Linda Hawkins Boyd. Brooks/Cole, Pacific Grove, CA, 1991. xii, 481 pp., illus. \$46.

Prehistoric Textiles. The Development of Cloth in the Neolithic and Bronze Ages. E. J. W. Barber. Princeton University Press, Princeton, NJ, 1991. xxxii, 471 pp., illus. \$69.50.

Science for All American. F. James Rutherford and Andrew Ahlgren. Oxford University Press, New York, 1990. xxvi, 246 pp., illus. \$24.95; paper, \$9.95. Reprint, 1989 ed.

Science in the Third World. Abdus Salam. Edinburgh University Press, 1991 (distributor, Columbia University Press). vi, 35 pp., illus. Paper, \$7. The First Edinburgh Medal Address. From a meeting, Edinburgh, U.K.

The Search for Eve. Michael H. Brown. Harper Perennial (Harper Collins), New York, 1991. x, 357 pp., illus. Paper, \$10.95. Reprint, 1990 ed.

Searching Behaviour. The Behavioural Ecology of Finding Resources. William J. Bell. Chapman and Hall, New York, 1991. xii, 358 pp., illus. \$69.95. Chapman and Hall Animal Behaviour Series.

Secret Agenda. The United States Government, Nazi Scientists, and Project Paperclip, 1945 to 1990. Linda Hunt. St. Martin's, New York, 1991. xii, 340 pp., + plates. \$19.95. A Thomas Dunne Book.

Selected Genetic Papers of J. B. S. Haldane. Krishna R. Dronamraju, Ed. Garland, New York, 1990. xx, 202 pp., illus. \$100.

Selected Popular Writings of E. U. Condon. Asim O. Barut, Halis Odabasi, and Alwyn van der Merwe, Eds. Springer-Verlag, New York, 1991. x, 343 pp., illus. \$39.

Selective Laser Spectroscopy of Activated Crystals and Glasses. V. V. Osiko, Ed. Nova Science, New York, 1990. x, 208 pp., illus. \$62. Proceedings of the Institute of General Physics Academy of Sciences of the USSR, vol. 9. Translated from the Russian edition (Moscow, 1988) by Kevin S. Hendzel.

The Self-Society Dynamic. Cognition, Emotion, and Action. Judith A. Howard and Peter L. Callero, Eds. Cambridge University Press, New York, 1991. xii, 337 pp., illus. \$44.50. From a conference, Seattle, WA, July 1988.

Semiconductors. Group IV Elements and III-V Compounds. O. Madelung, Ed. Springer-Verlag, New York, 1991. viii, 164 pp., illus. Paper, \$49.50. Data in Science and Technology.

The Sexual Matrix. Boy Meets Girl on the Evolutionary Scale. Sam Kash Kachigan. Radius, New York, 1990. xvi, 171 pp., illus. \$21.95.

Signal and Sense. Local and Global Order in Perceptual Maps. Gerald M. Edelman, W. Einar Gall, and W. Maxwell Cowan, Eds. Liss, (Wiley), New York, 1990. xii, 727 pp., illus. \$149.95. Neurosciences Institute Publications Series. From a symposium, Stockholm, May 1987.

Signal Detection. Mechanisms, Models, and Applications. Michael L. Commons *et al.*, Eds. Erlbaum, Hillsdale, NJ, 1991. xxiv, 285 pp., illus. \$49.95. Quantitative Analyses of Behavior. From a symposium, Cambridge, MA, June 1987.

Silane Coupling Agents. Edwin P. Plueddemann. 2nd ed. Plenum, New York, 1991. xiv, 253 pp., illus. \$55.

Sir Charles Frank. An Eightieth Birthday Tribute. R. G. Chambers *et al.*, Eds. Hilger, Philadelphia, PA, 1991 (distributor, American Institute of Physics, New York). xii, 448 pp., illus. \$55.

Situation Cognition and Coherence in Personality. An Individual-Centred Approach. Cambridge University Press, New York, and Editions de la Maison des Sciences de l'Homme, Paris, 1991. xiv, 207 pp. \$49.50. European Monographs in Social Psychology.

Solid State Physics. Advances in Research and Applications. Vol. 44. Semiconductor Heterostructures and Nanostructures. Henry Ehrenreich and David Turnbull, Eds. Academic Press, San Diego, CA, 1991. x, 454 pp., illus. Paper, \$49.95.

Vom richtigen Umgang mit Genen. Die Debatte um die Gentechnik. Ernst Peter Fischer and Wolf-Dieter Schleuning. Piper, Munich, F.R.G., 1991. 249 pp. Paper, 16,80 DM.

Vygotsky and Education. Instructional Implications and Applications of Sociocultural Psychology. Luis C. Moll. Ed. Cambridge University Press, New York, 1990. xii, 439 pp. \$49.50.

Vygotsky's Sociocultural Psychology and Its Contemporary Applications. Carl Ratner. Plenum, New York, 1991. xii, 368 pp., illus. \$45. Cognition and Language.