

sion: that for any (trophic) species, life is pretty simple, with two sources of food and two enemies, and this is largely independent of the complexity of the system in which the species is embedded. Intuitively this helps explain the apparent paradoxes in the stability/complexity arguments about communities. Also, it can justify a focus on the complicated dynamics in single-resource-prey-predator interactions. Does the mathematical superstructure clarify or obscure the consequences of the empirical generalizations? For me, the arguments in this book show what can, and especially what cannot, be deduced. It is not clear how a bridge could be built between the topology and the dynamics of food webs. Are we to have a separate geometry and calculus? The authors believe they will be combined, but we do not yet have the generality envisioned at the start. And what do we do next—more analysis or better field observations?

This is more than a matter of taste, and it is important that the pros and cons be set out as lucidly as possible. The basic ideas are elegant, but, unfortunately, the structure of the book is open to criticism. It is not stated overtly, but the book is in fact a reprint of papers by the three authors over the last 13 years, with linking text by Cohen and a listing of all the food webs. This leads to some repetition and hinders the coherent development and evaluation of the arguments. For those who have not read these papers the book is a useful collection. For those who want access to the data, the appendix detailing the 113 webs will be valuable.

JOHN H. STEELE

Woods Hole Oceanographic Institution,
Woods Hole, MA 02543

Books Received

Applications of Statistical and Field Theory Methods to Condensed Matter. Dionys Baeriswyl, Alan R. Bishop, and José Carmelo, Eds. Plenum, New York, 1990. xiv, 405 pp., illus. \$97.50. NATO Advanced Science Institute Series, vol. B218. From a study institute, Evora, Portugal, May 1989.

Beyond Mendel's Garden. Biotechnology in the Service of World Agriculture. Gabrielle J. Persley. Published for the World Bank by C. A. B. International, Tucson, AZ, 1990. xx, 155 pp., illus. Paper, \$21. Biotechnology in Agriculture Series, 1.

The Biologic Role of Dehydroepiandrosterone. (DHEA.) M. Kalimi and W. Regelson, Eds. De Gruyter, New York, 1990. viii, 450 pp., illus. DM 340.

Biology, Ethics, and Animals. Rosemary Rodd. Clarendon (Oxford University Press), New York, 1990. vi, 272 pp. \$55.

Biosensor Technology. Fundamentals and Applications. Richard P. Buck *et al.*, Eds. Dekker, New York, 1990. x, 419 pp., illus. \$99.75. From a symposium, Chapel Hill, NC, Sept. 1989.

Changing Needs in Pediatric Education. Cipriano A. Canosa, Victor C. Vaughn III, and Hung-Chi Luc, Eds. Nestec, Vevey, Switzerland, and Raven, New York, 1990. xiv, 320 pp., illus. \$55. Nestlé Nutrition Workshop Series, vol. 20. From a workshop, Kenting, R.O.C., Oct. 1988.

Cytokines and B Lymphocytes. R. E. Callard, Ed. Academic Press, San Diego, CA, 1990. viii, 274 pp., illus. \$29.50.

The Death of Ramón González. The Modern Agricultural Dilemma. Angus Wright. University of Texas Press, Austin, 1990. xxii, 337 pp., illus. \$29.95.

Debating Oaxaca Archaeology. Joyce Marcus, Ed. Museum of Anthropology, University of Michigan, Ann Arbor, 1990. x, 270 pp., illus. Paper, \$18. Anthropological Papers, no. 84. From a meeting, Philadelphia, PA, 1987.

The Digital Connection. A Layman's Guide to the Information Age. Irwin Lebow. Computer Science Press (Freeman), New York, 1990. xviii, 261 pp., illus. Paper, \$15.95.

Disappearing through the Skylight. Culture and Technology in the Twentieth Century. O. B. Hardison, Jr. Penguin, New York, 1990. xxii, 389 pp., illus., + plates. Paper, \$12.95. Reprint, 1989 ed.

Experiment and the Making of Meaning. Human Agency in Scientific Observation and Experiment. David Gooding. Kluwer, Boston, MA, 1990. xviii, 310 pp., illus. \$94. Science and Philosophy, vol. 5.

Extracellular Matrix Genes. Linda J. Sadell and Charles D. Boyd, Eds. Academic Press, San Diego, CA, 1990. xvi, 270 pp., illus. \$59.95. Biology of Extracellular Matrix.

From Newton to Mandelbrot. A Primer in Theoretical Physics. Dietrich Stauffer and H. Eugene Stanley. Springer-Verlag, New York, 1990. x, 191 pp., illus., + plates. Paper, \$19.95. Translator from the German edition (Berlin, 1989) with additions, by A. H. Armstrong.

Fundamentals of Molecular Evolution. Wen-Hsiung Li and Dan Graur. Sinauer, Sunderland, MA, 1991. xviii, 284 pp., illus. Paper, \$22.95.

Funding Health Sciences Research. A Strategy to Restore Balance. Committee on Policies for Allocating Health Sciences Research Funds. Floyd E. Bloom and Mark A. Randolph, Eds. National Academy Press, Washington, DC, 1990. xiv, 255 pp., illus. \$27.95. A report from the Institute of Medicine.

GABA and Benzodiazepine Receptor Subtypes. Molecular Biology, Pharmacology, and Clinical Aspects. Giovanni Biggio and Erminio Costa, Eds. Raven, New York, 1990. xvi, 239 pp., illus. \$85. Advances in Biochemical Psychopharmacology, vol. 46. From a conference, Villasilumius, Italy, June 1989.

Grand Canyon Geology. Stanley S. Beus and Michael Morales, Eds. Oxford University Press, New York, 1990. x, 518 pp., illus. \$45; paper, \$21.95.

Handbook of Sleep Disorders. Michael J. Thorpy, Ed. Dekker, New York, 1990. xiv, 819 pp., illus. \$165. Neurological Disease and Therapy, vol. 6.

Hawks, Eagles, and Falcons of North America. Biology and Natural History. Paul A. Johnsgard. Smithsonian Institution Press, Washington, DC, 1990. xvi, 403 pp., illus., + plates. \$45.

Healthy People 2000. Citizens Chart the Course. Michael A. Stoto *et al.*, Eds. National Academy Press, Washington, DC, 1990. xiv, 228 pp. Paper, \$24.

Hemopoietic System. T. C. Jones *et al.*, Eds. Springer-Verlag, New York, 1990. xviii, 336 pp., illus. \$249. Monographs on Pathology of Laboratory Animals.

How in the World? Reader's Digest, Pleasantville, NY, 1990. 448 pp., illus. \$29.95.

In Search of Usable Knowledge. Utilization Contexts and the Application of Knowledge. Helga Nowotny. Campus, Frankfurt am Main, F.R.G. and Westview, Boulder, CO, 1990. iv, 166 pp. Paper, \$22. Public Policy and Social Welfare, vol. 3.

Introduction to Statistical Pattern Recognition. Keinosuke Fukunaga. 2nd ed. Academic Press, San Diego, CA, 1990. xiv, 591 pp., illus. \$59.95. Computer Science and Scientific Computing.

An Introduction to the Physics of Nonneutral Plasmas. Ronald C. Davidson. Addison-Wesley, Redwood City, CA, 1990. xvi, 735 pp., illus. \$54.95. Frontiers in Physics Series, vol. 81.

Mathematical Structures in Field Theories. G. G. A. Baierle *et al.*, Eds. Centrum voor Wiskunde en Informatica, Amsterdam, 1990. iv, 169 pp., illus. Paper, Dfl. 48. CWI Syllabus 26. From a seminar, 1986.

Mathematics and Science. Ronald E. Mickens, Ed. World Scientific, Teaneck, NJ, 1990. x, 342 pp., illus. \$58.

Mechanical Action of Light on Atoms. A. P. Kazantsev, G. I. Surdutovich, and V. P. Yakovlev. World Scientific, Teaneck, NJ, 1990. xii, 380 pp., illus. \$38.

Metal-Metal Bonds and Clusters in Chemistry and Catalysis. John P. Fackler, Jr., Ed. Plenum, New York, 1990. x, 341 pp., illus. \$75. Industry-University Cooperative Chemistry Program Symposia. From a symposium, College Station, TX, March 1989.

Nothing to Fear. Risks and Hazards in American Society. Andrew Kirby, Ed. University of Arizona Press, Tucson, AZ, 1990. xx, 301 pp., illus. \$29.95. From a colloquium, Boulder, CO, Aug. 1987.

The Nuclear Shell Model. Kris L. G. Heyde. Springer-Verlag, New York, 1990. xii, 376 pp., illus. \$59. Springer Series in Nuclear and Particle Physics.

Organometallic Chemistry of the Transition Elements. Florian P. Pruchnik. Plenum, New York, 1990. xviii, 757 pp., illus. \$125. Modern Inorganic Chemistry. Translated from the Polish edition (1984) by Stan A. Duraj.

Patterns of Injury and Illness in Great Apes. A Skeletal Analysis. Nancy C. Lovell. Smithsonian Institution Press, Washington, DC, 1990. xiv, 273 pp., illus. \$39.95.

Photo Migration in Tissues. Britton Chance, Ed. Plenum, New York, 1990. x, 195 pp., illus. \$62.50. From a workshop, Philadelphia, PA, 1988.

Physical and Chemical Hydrogeology. Patrick A. Domenico and Franklin W. Schwartz. Wiley, New York, 1990. xxii, 824 pp., illus. \$58.95.

Physical Properties of Tissue. A Comprehensive Reference Book. Francis A. Duck. Academic Press, San Diego, CA, 1990. x, 346 pp., illus. \$63.

Physicists Look Back. Studies in the History of Physics. John Roche, Ed. Hilger, New York, 1990. xii, 393 pp., illus. \$90.

Ratio Scaling of Psychological Magnitude. In Honor of the Memory of S. S. Stevens. Stanley J. Bolanowski, Jr. and George A. Gescheider, Eds. Erlbaum, Hillsdale, NJ, 1991. xvi, 324 pp., illus. \$49.95. From a conference, Syracuse, NY, July 1989.

Romantic Medicine and John Keats. Hermione de Almeida. Oxford University Press, New York, 1990. x, 418 pp. \$45.

The Science of Cancerous Disease from Earliest Times to the Present. Jacob Wolff. Science History (Watson), Canton, MA, 1989. liv, 714 pp., illus. \$59.95. Resources in Medical History. Translated from the German edition (1907) by Barbara Ayoub.

Scientific and Technical Literature. An Introduction to Forms of Communication. Richard D. Walker and C. D. Hurt. American Library Association, Chicago, IL, 1990. xxiv, 298 pp., illus. \$39.50.

Sedimentology. Hervé Chamley. Springer-Verlag, New York, 1990. x, 285 pp., illus. Paper, \$34. Translated from the French edition (Berlin, 1990) by Thomas Reimer.

Serine Proteases and Their Serpin Inhibitors in the Nervous System. Regulation in Development and in Degenerative and Malignant Disease. Barry W. Festoff and Daniel Hantai, Eds. Plenum, New York, 1990. xxvi, 359 pp., illus. \$85. NATO Advanced Science Institute Series, vol. A191. From a workshop, Maratea, Italy, July 1989.

Some Truer Method. Reflections on the Heritage of Newton. Frank Durham and Robert D. Purrington, Eds. Columbia University Press, New York, 1990. viii, 258 pp., illus. \$36.

Spherical Tensor and Operators. Tables of Matrix Elements and Symmetries. J. A. Tuszynski. World Scientific, Teaneck, NJ, 1990. vi, 323 pp. \$38.

Superconductivity and Applications. Hoi S. Kwok, Yi-Han Kao, and David T. Shaw, Eds. Plenum, New York, 1990. xiv, 824 pp., illus. \$135. From a conference, Buffalo, NY, Sept. 1989.

The Superworld II. Antonino Zichichi, Ed. Plenum, New York, 1990. viii, 564 pp., illus. \$125. Subnuclear Series, 25. From a course, Sicily, Italy, Aug. 1987.

Symbiosis. Nature in Partnership. Nicolette Perry. Blandford (Cassell), London, 1990 (U.S. distributor, Sterling, New York). 128 pp., illus. Paper, \$12.95. Reprint, 1983 ed.

Transmembrane Signalling, Intracellular Messengers and Implications for Drug Development. S. R. Nahorski, Ed. Wiley, New York, 1990. xvi, 248 pp., illus. \$39.50. Biological Council Symposia on Drug Action. From a symposium, London, 1989.

Les Troubles de la Mémoire. Martial Van der Linden. Mardaga, Brussels, 1989. 305 pp. Paper, 258 FF. Psychologie et Sciences Humaines.

The Ubiquitous Photon. Helicity Method for QED and QCD. R. Gastmans and Tai Tsun Wu. Clarendon (Oxford University Press), New York, 1990. xvi, 648 pp., illus. \$92. International Series of Monographs on Physics.

Ultrafast Phenomena VII. C. B. Harris *et al.*, Eds. Springer-Verlag, New York, 1990. xxii, 554 pp., illus. \$69. Springer Series in Chemical Physics, vol. 53. From a conference, Monterey, CA, May 1990.

Yeast Strain Selection. Chandra J. Panchal, Ed. Dekker, New York, 1990. xii, 349 pp., illus. \$125. Bioprocess Technology, vol. 8.