

W. D. Matthew's camp on Porcupine Creek, South Dakota, 1906. "The sheet iron stove with its long stovepipe along with the wall tent, chuck wagon, and horses reveal a past perhaps forgotten or unappreciated by many present-day fossil hunters." [From William Diller Matthew, Paleontologist]

The biography's scientific strengths are Colbert's clear précis of Matthew's key paleontological monographs and papers, particularly those on the character and evolutionary significance of various Cenozoic mammalian fossils and the interpretation of the temporal ordering, paleoenvironments, and paleogeography of the fossil sequences, and his rendering of the local color surrounding Matthew's many field expeditions to the American West. The biography's weaknesses spring from an insufficiency of analysis of how and why Matthew came to differ so strongly from Osborn, among others, in his views about mammalian evolution and of how he anticipated much of what Simpson was later to contribute to the evolutionary synthesis. A more explicit discussion of the origin and development of Matthew's paleobiological conclusions would have been most valuable, especially given how well placed Colbert is to provide such an analysis. Fortunately, however, this shortcoming can be mitigated by reference to Ronald Rainger's recent biography of Osborn (An Agenda for Antiquity, University of Alabama Press, 1991), which has an excellent chapter on Matthew's original ideas in biostratigraphy and correlation, paleobiogeography, and evolution and how they fit within contemporary vertebrate paleontology.

The systematic development of Matthew's evolutionary thinking from an Osbornian evolution internally driven by aristogenesis to one environmentally mediated by natural selection leads one to wonder whether, had he lived just a few years longer, he would have preempted Simpson in bringing paleontology back into the mainstream of 20th-century biology. Although not explicit on this point himself, Simpson did acknowledge years later that he "was trained by Matthew at least as much as by [his] major professor, [Yale's Richard Swann] Lull." This biography deserves the attention of those interested in the more recent history of vertebrate paleontology as well as its eventual seating at the "high table" of modern evolutionary theory.

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## **Books Received**

**Aging Skin**. Properties and Functional Changes. Jean-Luc Lévêque and Pierre G. Agache, Eds. Dekker, New York, 1993. xviii, 304 pp., illus. \$135. Clinical Dermatology, 4.

**Australian Rainforests.** Paul Adam. Clarendon (Oxford University Press), New York, 1992. xiv, 308 pp., illus. \$85. Oxford Monographs on Biogeography, 6.

**Banning Chemical Weapons**. The Scientific Background. Hugh D. Crone. Cambridge University Press, New York, 1992. viii, 122 pp., illus. \$39.95; paper, \$12.95.

**Biology and Feminism**. A Dynamic Interaction. Sue V. Rosser. Twayne, New York, 1992. xviii, 192 pp. \$26.95; paper, \$14.95. Impact of Feminism on the Arts and Sciences.

**Caterpillars.** Ecological and Evolutionary Constraints on Foraging. Nancy E. Stamp and Timothy M. Casey, Eds. Chapman and Hall, New York, 1993. xiv, 587 pp., illus. \$75.

**Celestial Delights.** The Best Astronomical Events Through 2001. Francis Reddy and Greg Walz-Chojnacki. Celestial Arts, Berkeley, CA, 1992. xii, 135 pp., illus., + plates. Paper, \$16.95.

Distillation and Absorption '92. Hemisphere (Taylor and Francis), Bristol, PA, 1992. 2 vols. Vol. 1, xvi, 531 pp., illus. Vol. 2, xviii, 313 pp., illus. The two, \$225. From a symposium, Birmingham, U.K., Sept. 1992.

**Electronic Properties of Materials**. Rolf E. Hummel. 2nd ed. Springer-Verlag, New York, 1993. xvi, 404 pp., illus. \$49.

Explorations with the Texas Instruments TI-85. John G. Harvey and John W. Kenelly, Eds. Academic Press, San Diego, CA, 1993. x, 349 pp., illus. Paper, \$32.50.

Fire and Vegetation Dynamics. Studies from the North American Boreal Forest. Edward A. Johnson. Cambridge University Press, New York, 1992. xiv, 129 pp., illus. \$49.95. Cambridge Studies in Ecology.

Gulde to Biological Field Stations. Directory of Members 1992. Organization of Biological Field Stations. Joseph F. Merritt and Colleen J. Hannakan, Eds. Organization of Biological Field Stations, Eureka, MO, 1992. xxvi, 296 pp., illus. Paper, \$10.

**Heat Conduction.** Sadik Kakaç and Yaman Yener. 3rd ed. Taylor and Francis, Philadelphia, 1993. xviii, 363 pp., illus. \$59.50.

The investigation of Difficult Things. Essays on Newton and the History of the Exact Sciences in Honour of D. T. Whiteside. P. M. Harman and Alan E. Shapiro, Eds. Cambridge University Press, New York,

1992. xvi, 531 pp., illus. \$175. **Leukocyte Adhesion**. Basic and Clinical Aspects.
Carl G. Gahmberg *et al.*, Eds. Excerpta Medica,
Amsterdam, 1992 (U.S. distributor, Elsevier Science,
New York.) xviii, 426 pp., illus. \$172. Novo Nordisk
Foundation Symposia, no. 6. From a symposium,
Copenhagen, June 1992.

Major Hazards Onshore and Offshore. Hemisphere (Taylor and Francis), Bristol, PA, 1992. xii, 738 pp., illus. \$175. Institution of Chemical Engineers Symposium series, no. 130. From a symposium, Manchester, U.K., Oct. 1992.

Molecules and Mental Illness. Samuel H. Barondes. Scientific American Library (Freeman), New York, 1993. viii, 215 pp., illus. \$32.95.

Non-Timber Products from Tropical Forests. Evaluation of a Conservation and Development Strategy. Daniel C. Nepstad and Stephan Schwartzman, Eds. New York Botanical Garden, Bronx, NY, 1992. xii, 164 pp., illus. Paper, \$22.70. Advances in Economic Botany, vol. 9. From a symposium, Washington, DC, Nov. 1989.

Nonradioactive Labeling and Detection of Biomolecules. C. Kessler, Ed. Springer-Verlag, New York, 1992. xxiv, 436 pp., illus. \$89.

The Origin and Evolution of Life on Earth. An Annotated Bibliography. David W. Hollar. Salem, Pasadena, CA, 1992. xii, 235 pp. \$40. Magill Bibliographies.

Pollution Prevention Technology Handbook. Robert Noyes. Noyes, Park Ridge, NJ, 1993. xxiv, 683 pp., illus. \$98.

Principles of Geoarchaeology. A North American Perspective. Michael R. Waters. University of Arizona Press, Tucson, 1992. xxiv, 399 pp., illus. \$40.

Quarks, Leptons and Gauge Fields. Kerson Huang. 2nd ed. World Scientific, River Edge, NJ, 1992. xiv, 333 pp., illus. \$68; paper, \$38.

RCRA Regulatory Compilance Guide. Mark S. Dennison. Noyes, Park Ridge, NJ, 1993. xiv, 354 pp., illus. \$64

Synthesis, Characterization, and Theory of Polymeric Networks and Gels. Shaul M. Aharoni, Ed. Plenum, New York, 1992. x, 360 pp., illus. \$95. From a symposium, San Francisco, April 1992.

**Temperature**. Its Measurement and Control in Science and Industry. Vol. 6. James F. Schooley, Ed. American Institute of Physics, New York, 1992. 2 vols. lxxviii, 1269 pp., illus. \$245. From a symposium, Toronto, April 1992.

**Up the Infinite Corridor**. MIT and the Technical Imagination. Fred Hapgood. Addison-Wesley, Reading, MA, 1993. xiv, 203 pp., illus. \$22.95.

**Die Weitelslehre.** Ihre Geschichte und Ihre Rolle im "Dritten Reich". Brigitte Nagel. GNT-Verlag, Stuttgart, 1991. 188 pp., illus. Paper, DM 25.