MISCELLANEOUS

Smithsonian Institution Secretary Charles Doolittle Walcott

By Ellis L. Yochelson. 2001. Kent State University Press, 307 Lowry Hall, P.O. Box 5190, Kent, Ohio 44242 USA. 590 pages. U.S. \$49.00.

This, the second and final volume of Yochelson's massive "insider" biography (Yochelson retired from the Smithsonian in 1985), is clearly a labour of love. The first volume, Charles Doolittle Walcott, Paleontologist, appeared in 1998. From Walcott's daily diaries, an unusual amount of detail is provided chronologically, month by month, as a record for future historians. Fifty pages describe happenings in 1927 alone, when Walcott was already seventy years old.

Charles Doolitte Walcott was a man of humble and inauspicious beginnings, without any opportunity for a college education. In his early twenties he sold a collection of fossils to Louis Agassiz at Harvard University; a few years later he was offered a job as a temporary field assistant, measuring the thickness of rocks in Bryce Canyon, Utah, for the newly formed United States Geological Survey. A man of great tact and wisdom, Walcott never looked back; in 1933 the fifth edition of American Men of Science listed him posthumously as the third most important geological scientist in the country, and he collected twelve honorary degrees from as many universities.

Walcott is of enormous importance to Canada. He spent about three months each summer for 18 of 19 years, 1907 through 1925, studying geology and paleontology in the Canadian Rocky Mountains. In Yoho National Park, above Emerald Lake, he discovered the Burgess Shale, rated world-wide by Stephen Jay Gould as "the most precious and important of all fossil localities." In addition to his heavy administrative duties during the remainder of the year, Walcott spent his spare hours in winter studying and describing these fossils. This lifelong devotion to his field of science is all the more remarkable when one considers his burdensome official duties. From 1907 until his death in 1927 he occupied the powerful post of secretary of the Smithsonian Institution. He also served variously as president of the Paleontological Society, National Parks Association, American Philosophical Society, Washington Academy of Sciences, National Academy of Sciences, and the American Association for the Advancement of Science, was chair of both the Carnegie Institute of Washington and the National Advisory Committee for Aeronautics, and was First Vice Chairman of the National Research Council and the American Federation of Arts. One of the most powerful men in Washington, a mover and a shaker, Walcott dined with presidents, cabinet members, supreme court justices, and foreign diplomats. In spite of these pressures, Walcott was a devoted husband and father. His chauffeur, butler, furnace stoker, and loyal family retainer at home in Washington, Arthur Brown, was also his camp manager, nurse, cook, general guardian and friend in each of his mountain camps, and the "unofficial mayor of black Washington."

Walcott's first wife, Lura, died of tuberculosis less than two years after their marriage. Thirteen years later, in 1888, he married Helena Stevens; their honeymoon was spent looking at rocks in Newfoundland. Helena was a competent geologist who, at her first International Congress of Geology in London, England, corrected the reversal of Middle and Lower Cambrian levels previously described for New York State rocks. According to daughter Helen's reminiscences, her mother Helena was also the first to split open a piece of Burgess shale, lying by the trail, while waiting for her husband to climb the scree above. It proved to have an unusual diversity and complexity of fossils, included many soft-bellied organisms, unequalled anywhere in the world. Helena had four children, all but the oldest of whom accompanied them on one or more summer geology expeditions to Canada. Helena died in a train accident in Connecticut in July 1911, so Walcott had a much shortened field season that year.

In 1914, Walcott married Mary Vaux, shortly before her fifty-fifth birthday. A Philadelphia Quaker, she had measured and photographed, with her father, George Vaux, the movements of Illecillewaet and other glaciers in the Canadian Rockies, since the 1880s. Mary took the place of Helena in assisting with fossil collecting, but also painted superb portraits of wildflowers. Towards the end of his life, Walcott assisted Mary Vaux Walcott in having the Smithsonian Institution publish her sumptuous five-volume North American Wild Flowers, "the monumental ... Audubon of the floral world." The alpine flowers were painted while with her husband in the Canadian Rockies.

Yochelson inserts chatty comments about many topics, including Walcott's children. Citations are satisfactory, but index entries are haphazardly incomplete. I detected nine spelling or typographical errors.

In the final chapter, Yochelson succinctly and convincingly counters some of the grossly unfair impressions left after reading Stephen Jay Gould's best-selling *Wonderful Life: The Burgess Shale and the Nature of History.* Contrary to Gould's intimations, Walcott supported the concept of evolution, "an act of considerable courage, not an indication that he was hidebound in his thinking ... Walcott did not propose new classes and new phyla. The time was simply not ripe ... Gould has judged Walcott by the context of his own notions more than half a century later." Walcott's detailed descriptions of the fossil organisms in the Burgess shale clearly ranks as among the greatest discoveries in paleontology.

Any reader of this review who has read Gould's *Wonderful Life*, should read Yochelson's final chapter, and each library that holds a copy of Gould, should add this book as well as Simon Conway Norris' *The*

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Amphibians and Reptiles of Pakistan. By M. Khan. 2005. Krieger Publishing, P.O. Box 9542, Melbourne, Florida 32902 USA. No price available.

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The Anatomy of Reptiles. By J. Wyneken. 2005. Krieger Publishing, P.O. Box 9542, Melbourne, Florida 32902 USA. No price available.

*Birds of Australia – Seventh Edition. By K. Simpson and N. Day. 2004. Princeton University Press, 41 William Street, Princeton, New Jersey, 08540-5237 USA. 392 pages. U.S. \$39.50.

Birds of the Raincoast. H. Thommasen and K. Hutchings. 2004. Harbour Publishing, P.O. Box 219, Madeira Park, British Columbia V0N 2H0 Canada. 200 pages. Can \$44.95. Cloth.

*A Citizen's Guide to Ecology. By L. Slobodkin. 2004. Oxford University Press Canada, 70 Wynford Drive, Don Mills, Ontario, M3C 1J9. 245 pages. U.S. \$14.95. Paper.

Dictionary of Herpetology. By H. Lillywhite. Krieger Publishing, P.O. Box 9542, Melbourne, Florida 32902 USA. No price available.

The Exotic Amphibians and Reptiles of Florida. By W. Meshaka, B. Butterfield and B. Hague. 2004. Krieger Publishing, P.O. Box 9542, Melbourne, Florida 32902 USA.166 pages. U.S. \$34.50.

Experimental Approaches to Conservation Biology. Edited by M. S. Gordon and S. M. Bartol. 2004. University of California Press, 2120 Berkeley Way, Berkeley, California 94704-1012 USA. 358 pages. U.S. \$75.00.

A Field Guide to the Reptiles and Amphibians of Bali. By J. L. McKay. 2005. Krieger Publishing P.O. Box 9542, Melbourne, Florida 32902 USA. No price available.Guide to the Amphibians and Reptiles of Japan. By R. Goris and N. Maeda. 2004. Krieger Publishing, P.O. Box 9542, Melbourne, Florida 32902 USA. 296 pages. U.S. \$69.50. Cloth.

*Mammals of the World – A Checklist. By A. Duff and A. Lawson. 2004. Yale University Press, P.O. Box 209040 New Haven, Connecticutt 06520-9040 USA. 312 pages. U.S. \$45.00.

†**The Monarch Butterfly – Biology and Conservation.** By K. Oberhauser and M. Solensky (*Editors*). 2004. Cornell University Press, 512 East State Street, Ithaca, New York 14850 USA. vii + 248 pages. U.S. \$39.95.

Crucible of Creation as a rebuttal. On its own merits, Yochelson's book deserves to be in every major library.

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Our Life with Birds. By J. and G. Tveten. 2004. Texas A&M University Press, Lewis Street, 4354 TAMU, College Station, Texas 77843 USA. 256 pages. U.S. \$24.95. Cloth.

The Panther Chameleon. By G. Ferguson, J. Murphy, J. Ramanamanjato and A. Rasselimanana. 2004. Krieger Publishing P.O. Box 9542, Melbourne, Florida 32902 USA. 166 pages. U.S. \$39.50 Cloth.

Penguins of the World. By W. Lynch. 2004. Firefly Books Ltd., 3680 Victoria Park Avenue, Toronto, Ontario M2H 3K1 Canada. 144 pages. Can \$35.00. Cloth.

† Prairie Ghost – Pronghorn and Human Interaction in Early America. By R. McCabe, B. Ogera, H. Reeves. 2004. University Press of Colorado, 5589 Arapahoe Avenue, Suite 206C, Boulder, Colorado 80303 USA. 208 pages. U.S. \$29.95. Cloth.

Snakes of the Americas: Checklist and Lexicon. By R. Tipton. Krieger Publishing, P.O. Box 9542, Melbourne, Florida 32902 USA. No price available.

Status and Conservation of Florida Amphibians and Reptiles. By W. Meshaka, and K. Babbitt. 2005. Krieger Publishing P.O. Box 9542, Melbourne, Florida 32902 USA. No price available.

*The Wolves of Algonquin Park a 12 Year Ecological study. By J. and M. Theberge. 2004. University of Waterloo, Waterloo, Ontario. Contact bkevans@fes.uwaterloo.ca. Canadian \$ 23.50 Paper.

Botany

Biological Control of Invasive Plants in the United States. Edited by E. Coombs, J. Clark, G. Piper and A. Cofrancesco. 2004. Oregon State University Press, 102 Adams Hall, Corvallis Oregon 97331 USA. 448 pages. U.S. \$45.00. Paper.

† Emulating Natural Forest Landscape Disturbances – Concepts and Applications. By A. Perera, L. Buse, and M. Weber. 2004. Columbia University Press, 61 W. 62nd Street, New York, New York 10023 USA. 352 pages. U.S. \$74.50. Cloth.

*Gathering Moss – A Natural and Cultural History of Mosses. By R. Kimmerer. 2004. Oregon State University Press, 102 Adams Hall, Corvallis, Oregon 97331 USA. 176 pages. U.S. \$17.95. Paper.

Klamath Heartlands – A guide to the Klamath Reservation Forest Plan. By E. Wolf. 2004. Oregan State University Press, 102 Adams Hall, Corvallis Oregon 97331 USA. 56 pages. U.S. \$19.95. Paper.