

6-2000

Yellowstone and the Great West: Journals, Letters, and Images from the 1871 Hayden Expedition

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Yellowstone and the Great West: Journals, Letters, and Images from the 1871 Hayden Expedition

Abstract

Although Ferdinand Vandever Hayden submitted the voluminous "Fifth Report" detailing the exploration of Yellowstone's high country in 1871, important parts of this expedition's story were omitted. Later accounts of the expedition by Hayden and by the photographer William Henry Jackson, though prepared from their field notes, contained mistakes caused by faulty memories. Unfortunately, the original field notes of both men have been lost. In *Yellowstone and the Great West*, Marlene Merrill presents the edited and annotated diaries of other expedition members, the geologist George Nelson Allen and the mineralogist Albert C. Peale.

Keywords

high country, western exploration, national parks, fossils, geology, scientists

Disciplines

Geology | Natural Resources and Conservation | Natural Resources Management and Policy | Paleontology | United States History

Comments

This book review is from *Isis* 91 (2000): 375. Posted with permission.



CHICAGO JOURNALS



History
of
Science
Society

Review

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Review by: James Pritchard

Source: *Isis*, Vol. 91, No. 2 (Jun., 2000), pp. 375-376

Published by: [The University of Chicago Press](#) on behalf of [The History of Science Society](#)

Stable URL: <http://www.jstor.org/stable/236987>

Accessed: 04-03-2015 16:02 UTC

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administration. Nor is such distortion atypical. Ruse has G. Ledyard Stebbins putting in a good word for radicals as a faculty member at Berkeley during the late 1960s, when in fact he had moved to Davis in 1950.

A positivistic stage theory is of itself a superficially historicized version of an earlier construct, the *scala naturae*, and a projection of social hierarchy upon the cosmos as a whole. In this light it becomes easy to see why Ruse is so obsessed with prestige. In a hierarchical society based on privilege rather than merit, one gets a system that has been characterized as bad manners organized. Those in the middle bully those below and toady up to those above. Ruse's behavior toward systematists looks like jealousy manifesting itself as spite. Without a solid background in the science itself, he tried to fill what at the time looked like an intellectual vacuum and went into the philosophy of biology. Ironically, the major breakthrough in that field was in the philosophy of systematics, and he missed the boat entirely. Although he has been a prolific author, such tokens of prestige as a chair at a first-rate university have not been forthcoming. What business does someone like him have telling scientists how to run their lives?

MICHAEL T. GHISELIN

Marlene Deahl Merrill (Editor). *Yellowstone and the Great West: Journals, Letters, and Images from the 1871 Hayden Expedition*. xxx + 315 pp., illus., tables, apps., bibl., index. Lincoln: University of Nebraska Press, 1999. \$29.95, £19.95.

Although Ferdinand Vandever Hayden submitted the voluminous "Fifth Report" detailing the exploration of Yellowstone's high country in 1871, important parts of this expedition's story were omitted. Later accounts of the expedition by Hayden and by the photographer William Henry Jackson, though prepared from their field notes, contained mistakes caused by faulty memories. Unfortunately, the original field notes of both men have been lost. In *Yellowstone and the Great West*, Marlene Merrill presents the edited and annotated diaries of other expedition members, the geologist George Nelson Allen and the mineralogist Albert C. Peale.

The publication of these accounts makes several contributions of interest to historians working on geology, western exploration, the U.S. West, or national parks. The diaries demonstrate that Hayden was more involved in scientific aspects of the exploration enterprise than previ-

ously thought. Despite his focus on the geographical puzzles before him, Hayden also took a particular interest in collecting fossils from the Cretaceous and Tertiary periods. Merrill aptly explains the important contributions of lesser-known team members, such as the entomologist Cyrus Thomas and the expedition artist Henry Elliott, who mapped Yellowstone Lake. These diaries also reveal the human side of exploration. Several members of the expedition are identified for the first time, among them the high country guide José, whose last name remains a mystery. While published reports emphasized the successes of the expedition, the diaries and commentary reveal the attendant hardships and mishaps, such as George Allen's leaving the expedition for health reasons and the tragic suicide of the topographer Anton Schönborn shortly after the journey's conclusion.

This book is particularly valuable in helping readers understand what it meant to be a scientist in the field during the late nineteenth century. Though he was interested mainly in geology, George Allen found himself unexpectedly appointed expedition botanist, a turn of events that demonstrates the wide training and expertise expected of natural historians. His diary hints of natural theology and gradualist theories of geological change. The institutional ties that aided Hayden's explorations become evident: Smithsonian Secretary Joseph Henry forwarded letters to newspapers for publication, and Hayden's cooperation with railroads lowered his transportation costs. Merrill has interspersed letters from Hayden to Spencer Baird (assistant secretary at the Smithsonian) into the journals' narrative, manifesting the expedition's connections with scientific institutions. Common prejudices of the day toward Native Americans and immigrants are revealed, particularly, in George Allen's journal, which not only shows a transforming West but also offers clues to class divisions and the social status of scientists. The rigors of camp life are well captured by these diaries, which detail long days in the saddle, camps plagued by mosquitoes, and nightly guard duty.

Merrill's endnotes are important and informative enough that one wishes footnotes had been employed instead. Artfully produced, the volume includes chapter titles illustrated by unique segments of Henry Elliott's panorama of the expedition's route, as well as fifty photographs from the expedition. Augmented by a useful glossary of geological terms, maps, and biographical sketches, the book serves as an excellent resource and represents a useful addition to the existing literature on Hayden and the sur-

veys of the American West. The editor uses primary documents and secondary sources to good effect, clearing up some questions: the identity of the mysterious Mount Madison, how well the Yellowstone area was known to trappers and guides before 1870, and the timing of claims staked out with the intent of developing Mammoth Hot Springs for tourism. Merrill concludes with Hayden's recommendations on the park bill and the observation that the 1871 expedition directly aided in the creation of Yellowstone National Park and, thus, in the preservation of its geological wonders.

JAMES PRITCHARD

Douglas Waitley. *William Henry Jackson: Framing the Frontier.* vi + 217 pp., frontis., illus., bibl., index. Missoula, Mont.: Mountain Press Publishing Company, 1998. \$36 (cloth); \$22 (paper).

While visiting the museum at the Scotts Bluff National Monument near Gering, Nebraska, in 1995, Douglas Waitley, an author of books on steam locomotives, Florida history, and other diverse subjects, was intrigued to see a number of western paintings by William Henry Jackson. The noted nineteenth-century photographer had made the watercolors during the 1930s, basing them in part on scenes he had sketched while traveling along the Oregon Trail in the mid 1860s. Jackson himself had helped dedicate the museum in 1936, returning two years later to point out the spot at nearby Mitchell Pass where he had camped in 1866. Fascinated with Jackson's life and work, Waitley determined to tell his story.

Born in 1843, William Henry Jackson was working as a retoucher in a Rutland, Vermont, photography studio when service with a Union regiment took him to Gettysburg in 1863. After the war he went west as a bullwhacker with a wagon train before founding his own studio in Omaha in 1868. Between 1870 and 1878 he ranged over the western territories with Ferdinand V. Hayden's geological survey, taking the Yellowstone photographs that helped convince Congress to create the country's first national park in 1872. When the Hayden Survey ended he set up shop in Denver in 1879; the Colorado capital remained his headquarters for most of the next two decades as he continued his picture-taking excursions along the railroads then opening up the West. In 1893 he photographed the World's Columbian Exposition in Chicago, following that assignment with a seventeen-month

tour with the World's Transportation Commission. Afterward, his business and finances in disarray, he joined forces with the Detroit Photographic (later Publishing) Company in 1897, contributing his negatives and staying with the firm until it went out of business in 1924. Never idle, he filled the years until his death in 1942 by serving as research secretary for the Oregon Trail Memorial Association, producing four murals for the new Department of the Interior museum in Washington, D.C., and painting the western scenes now at Scotts Bluff.

It was indeed a remarkable life, and Waitley recounts it well, if briefly, utilizing Jackson's autobiography *Time Exposure* (Putnam's, 1940), the diaries he kept during various periods, and general secondary sources. Three maps help the reader follow Jackson's travels, and there is a color section featuring some of his paintings as well as a good selection of his photographs. Those who want to delve further into the meaning of Jackson's work should next consult Peter B. Hales's brilliant and provocative *William Henry Jackson and the Transformation of the American Landscape* (Temple, 1988). Also, by checking the two web sites that Waitley includes in his references, readers can quickly discover Jackson bibliographies, complete information on the paintings at Scotts Bluff, and a section on the Detroit Publishing Company in the American Memory Historical Collections, a component of the Library of Congress National Digital Library Program, featuring twenty-five thousand images accessible by keyword or subject. A few more clicks bring one to Westcliffe Publishers of Englewood, Colorado, which is marking the millennium with the 1999 publication of *Colorado, 1870–2000*, a large-format volume of Jackson photographs paired with contemporary color views of the same subjects, accompanied by an educational program, a traveling exhibit, and newspaper and television series. Clearly, interest in William Henry Jackson continues unabated more than half a century after his death, and Waitley's book fills a niche by providing a current, nontechnical introduction to the photographer's life and to the thriving industry based on his legacy.

MAXINE BENSON

Susan Heuck Allen. *Finding the Walls of Troy: Frank Calvert and Heinrich Schliemann at Hisarlik.* xiv + 410 pp., frontis., illus., figs., bibl., index. Berkeley/Los Angeles/London: University of California Press, 1999. \$35, £27.50.