

Nazi racial policy than has heretofore been recognized; new efforts will no doubt continue to shed light on this darker, hidden chapter in the history of science.

In his preface, Müller-Hill worries that his work may be misunderstood as "a condemnation of science and a denial of rationalism." He deflects this by noting that a world in which science flourishes but justice is absent is condemned "to the same fate as Sodom" but that a world in which justice flourishes but science is absent would be condemned "just as surely to a different, but equally horrible fate." One hopes that we do not have to choose between these fates; perhaps we can find ways to ensure that both science and justice can flourish in ways that might prevent the horrors of such a past.

ROBERT N. PROCTOR

*Program in Science, Technology, and Power,
Eugene Lang College,
New School for Social Research,
New York, NY 10011*

The Party of John Muir

Pacific Visions. California Scientists and the Environment, 1850–1915. MICHAEL L. SMITH. Yale University Press, New Haven, CT, 1988. xii, 243 pp. + plates. \$26.50.

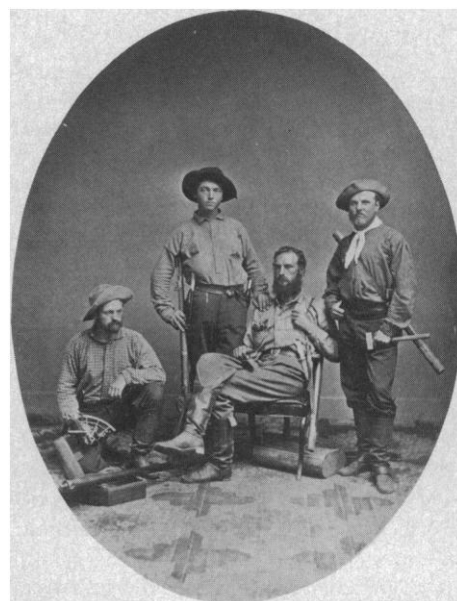
The most famous environmental organization in the United States, the Sierra Club, was founded in 1892 in San Francisco. Among its leading members was a group of scientists and naturalists, some of them amateurs, some professionals, including John Muir, the club's first president, and Joseph Le Conte from the Berkeley campus, George Davidson of the Coast and Geodetic Survey, David Starr Jordan and William Dudley of Stanford University, and Alexander McAdie of the Weather Bureau, all members of the club's board in the first decade or so. Those were some of the most important names in the fledgling scientific community on the Pacific shore. Why so many men of that caliber, busy organizing science in a new setting, became dedicated conservationists is the question prompting this book. The answer Michael Smith gives is that they were emotionally responsive to the spectacular beauty of their surroundings—the redwoods, mountains, and sea. From them they gained a new vision of humans living in harmony with nature, a vision they shared with Muir. Like him, they rejected an anthropocentric attitude, especially one that sanctioned a commodifying, exploitative stance toward the natural world. Here in California, they believed, men and women

might create a better set of attitudes, acknowledging their dependence on all living things, preserving the beauty of places like Yosemite Valley, and using the earth's resources with care and sensitivity. In pursuing that vision, they sought to establish science on a more "feminine" foundation, where knowledge comes through cultivating sympathy with what is being observed rather than through a rigidly distanced, manipulative, domineering approach.

Certainly that was the vision of John Muir, though he largely brought it with him from Wisconsin. The extent to which it was also the vision of the scientists is less certain; the evidence presented is fragmentary and circumstantial. Often the differences separating them from Muir loom as large as their similarities. If they really did accept the core of his thinking, biocentrism, it is still not clear whether they were different in this from any of their peers in, say, Boston or Chicago. Smith reasons that "from observing the California backcountry, with its radical variations in topography, climate, and vegetation, they developed an emphasis on environmental interdependence" (p. 4), rather than on Darwinian individualistic competition—an intriguing idea but a hard one to find good evidence for. The most we can say is that at least some California scientists heard Muir's challenge to traditional Judeo-Christian and capitalistic values



"Toppled statue of Louis Agassiz following the 1906 earthquake, Stanford University Campus. Despite Agassiz's strong influence on California's first scientists, most of them rejected his stand against Darwinian evolution." [From *Pacific Visions*; Stanford University Archives, Palo Alto]



"California State Geological Survey, 1864 field crew: James Gardner, Richard Cotter, William Brewer, Clarence King." [From *Pacific Visions*; Bancroft Library, University of California, Berkeley]

and were not loathe to associate with him in seeking environmental reform.

Smith discusses in detail such figures as Davidson, Le Conte, Josiah Dwight Whitney (who headed the state geological survey in the 1860s), and Clarence King. His research into their published and unpublished papers is impressive and his presentation consistently informative; we learn a great deal about their careers and the institutions with which they were affiliated. As a study in the history of science this is a fresh, innovative book. With a deft, engaging style, it surveys the formative period of West Coast science and relates it skillfully to broader European and American developments.

For a golden moment, leading scientists discerned a road they wanted to help nonscientists travel—a road leading to environmental literacy, responsibility, and humility. Then, yielding to demands for a more "disinterested professionalism," which held such reform activity to be incompatible with research, they put aside that vision. By 1915 they had largely deserted the club and its campaigns. The state of California went on to build factories, freeways, massive water projects, and the Lawrence Radiation Laboratory at Livermore, all expressions of the urge to use science to win power over nature. Smith ends by asking why so few of the 20th century's scientific leaders, in this or any region, have belonged to the party of John Muir. Does the fault lie in the vision or in the institutions of science?

DONALD WORSTER

*Department of American Studies,
Brandeis University,
Waltham, MA 02254*