

PROJECT MUSE

The Defoliation of America: Agent Orange Chemicals, Citizens, and Protests by Amy M. Hay (review)

David Kinkela

Technology and Culture, Volume 64, Number 1, January 2023, pp. 282-283 (Review)

Published by Johns Hopkins University Press *DOI: https://doi.org/10.1353/tech.2023.0028*



➡ For additional information about this article https://muse.jhu.edu/article/879608

The Defoliation of America: Agent Orange Chemicals, Citizens, and Protests

By Amy M. Hay. Tuscaloosa: The University of Alabama Press, 2022. Pp. 328.

JANUARY 2023 VOL. 64



The words "Agent Orange" often conjure up images of the "ecocide" in Vietnam, where, from 1962 to 1971, the U.S. military sprayed over 11 million gallons of the chemical herbicide under the auspices of Operation Ranch Hand. The goal, from the U.S. military perspective, was to remove the lush tropical vegetation in order to track enemy movements. Immediately and over time, the fallout from this spray campaign had pro-

nounced health, environmental, and political impacts that would call into question the use of the chemical compounds 2,4-D and 2,4,5-T, which, when combined in equal quantities, produced Agent Orange.

Under the skillful analysis of historian Amy Hay, The Defoliation of America provides a much more complex story of Agent Orange and other phenoxy herbicides. Ranging from the battle fields of Vietnam to the political battles in the American West, Hay sheds light on the complicated history of the phenoxy herbicides from the 1960s to the 1990s. At its best, The Defoliation of America is both an international and national story that underscores how debates about the safety and risks of phenoxy herbicides were informed by local and global processes rooted in particular places and times. For Hay, it is the "process of how these competing paradigms of hazard play out [rather] than in trying to determine a *singular truth* about chemical toxicity" (p. 3) that is most interesting. The Defoliation of America succeeds in this approach. On the one hand, it describes the rationale and safety claims made by those advocating the use of phenoxy herbicides. On the other, it traces the stories about the people and places placed at risk from this use. And for Hay, it is this latter group that is the primary focus in the book. Indeed, the various citizen groups at the heart of this book, Hay writes, "challeng[ed] state and scientific authority, demonstrat[ed] a changed environmental and health consciousness, and act[ed] on a new understanding of the human-nature relationship" (pp. 223-24).

The Defoliation of America is a history in three parts. Part 1 examines the development of phenoxy herbicides and their use prior to and during the Vietnam War. It also highlights the initial protests over that use. Part 2 explores the work of three activists—Billee Shoecraft, Ida Honorof, and Carol Van Strum—who challenged large-scale phenoxy herbicides spray programs in Arizona, California, and Oregon, respectively, from the 1960s to 1980s. Finally, part 3 emphasizes the political debates over the long-term health effects of Agent Orange exposure in Vietnam and the United States. It also details a fascinating story of how phenoxy herbicides became a critical chemical technology in Richard Nixon's "war on drugs." The book's structure is one of its strengths. Not only does each part explore a broad thematic issue that frames the story of Agent Orange, but it also provides a useful framework to teach this book in the college classroom. For example, part 2, titled "Three Cases in the West: Arizona, California, and Oregon, 1960–80," offers exciting possibilities to engage students in the histories of environmental activism, the West as a site of environmental debate, and women as critical leaders who galvanized scientific and citizen groups to respond to the dangers of phenoxy herbicides. As such, each part offers discrete units of analysis that can be used effectively in a classroom setting.

At the same time, as a whole, the book is more than the sum of these sections. Hay skillfully develops a strong, chronological narrative as well, one that interweaves the global with the local to continually reinforce that the story of Agent Orange crosses boundaries and evolves over time.

The Defoliation of America is a welcome addition to the existing literature on the history of chemicals. More significantly, it is also a book that is part of an emerging literature that sheds new light on these complicated histories, such as Elena Conis's recent study on DDT and Greg Wilson's forthcoming work on Kepone. Hay has produced an important book that reframes the story of Agent Orange. It is a book that gives voice to the women, veterans, and citizen groups that challenged the political and scientific consensus of the postwar period to reduce the use, exposure, and long-term impacts of phenoxy herbicides.

DAVID KINKELA

David Kinkela is a professor of history at SUNY Fredonia. He is the author of "Insects and Food" in *A Cultural History of Insects in the Modern Age* (Bloomsbury, forthcoming) and *DDT and the American Century: Global Health, Environmental Politics, and the Pesticide That Changed the World* (University of North Carolina Press, 2011).

Citation: Kinkela, David. "Review of *The Defoliation of America: Agent Orange Chemicals, Citizens, and Protests* by Amy M. Hay." *Technology and Culture* 64, no. 1 (2023): 282–83.

Conflicted American Landscapes

By David E. Nye. Cambridge, MA: MIT Press, 2021. Pp. ix + 201.



David Nye is an outstanding and prolific historian of the social construction of technology. Among his numerous books are *Technology Matters* (2006), *America as Second Creation* (2003), *Consuming Power* (1998), *American Technological Sublime* (1994), and *Electrifying America* (1990). *Conflicted American Landscapes* is a collection of ten of his essays, half of which had previously appeared in publications in Britain, Germany, and

the United States but were revised for this collection. Others in this volume were specifically prepared to fit his theme of contested landscapes with a more environmental focus than his previous, more technologically oriented studies.