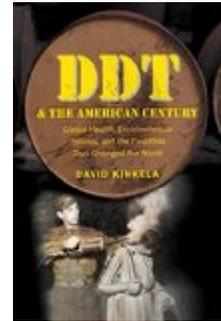


David Kinkela. *DDT and the American Century: Global Health, Environmental Politics, and the Pesticide That Changed the World*. Chapel Hill: University of North Carolina Press, 2011. xiv + 256 pp. \$39.95 (cloth), ISBN 978-0-8078-3509-8.

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## DDT Diplomacy: Pesticides, Public Health, and Foreign Policy in the Chemical Age

Pesticides are some of the most controversial technologies in modern American history. The numerous agricultural chemicals that appeared after World War II dramatically changed the country's environments, social relationships, and politics. The ability to manage insects, weeds, and disease offered American farmers a new weapon in an old fight. Additionally, pesticides, especially DDT, influenced ideas about agricultural health at home and abroad. Not only did American farmers benefit from their application, but communities in Europe, South America, and Asia discovered the potent protection of these poisons. Diseases such as malaria and typhus fever that had long plagued these nations were now controllable, if not beatable.

However, pesticides poisoned as much as they protected. Although early warnings came from scientists, agriculturalists, and farmers before Rachel Carson, her book *Silent Spring* (1962) crystallized the dangers of indiscriminate insecticide use, helping spark an environmental movement that reexamined the relationships between industrialism, agricultural production, and the environment. Many scholars have provided important insights into the domestic politics, policies, and problematic relationships of pesticides but few have addressed how toxins shaped international relationships and environments throughout the mid-twentieth century.

David Kinkela (an assistant professor at the State University of New York-Fredonia) takes such a scope in his

history of DDT, refocusing the scholarly lens “away from a simple narrative that shapes contemporary discourses about DDT, environmental policymaking, and the role of technology in the world” and instead calling attention to “to how people across borders understood the risks and benefits of DDT and based their understandings on different ideas about technology, ecology, and the role of the state” (p. 10). He argues that the historical evolution of DDT, its political embrace and later rebuke expands well beyond the boundaries of the American political landscape to “the rugged landscape of Sardinia to experimental stations in Chapingo, Mexico ... to the agricultural fields in India; and from the backyards of American suburbanites to the malarial regions in Africa” (p. 9). This kind of DDT diplomacy, according to Kinkela, helped usher in Henry Luce’s “American Century,” which presented the United States’ postwar global expansion in philanthropic terms. DDT, in this sense, became a tool of diplomacy that advanced American interests in Europe, Latin America, and Southeast Asia, not just a weapon against insects. International aid organizations such as the Rockefeller Foundation and government agencies such as the U.S. Agency for International Development incorporated DDT into their programs to accelerate scientific “expertise, money, and technology as mechanisms for social and political change” (p. 9).

Kinkela begins by exploring the development of DDT and its international as well as domestic applications. Originally formulated by German graduate student Oth-

mar Zeidler at Germany's University of Strasbourg in 1874 as a crystalline compound and rediscovered by Paul Müller, working for the Swiss Chemical Company Geigy A. G. to address a 1939 invasion of Colorado Beetles in the country, *dichlorodiphenyltrichloroethane*, or "DDT," provided a potent protection that was seemingly nontoxic to humans—a notion that would be challenged by Carson's *Silent Spring* in 1962 (p. 15).

The early success against infestations made DDT a prime tool for the growing war effort. Acting as both shield and spear, the insecticide could kill the pests such as lice, mosquitoes, and other vector-bearing insects that threatened soldiers' lives while also protecting crops from invasions. This kind of chemical effectiveness—the ability to kill pests and protect people and crops—identified DDT application as a key method of disease prevention. As Kinkela explains, the war erased any sense of the risks that could come with prolonged exposure: "of immediate concern was how to keep soldiers and civilians healthy in some of the most diseased environments in the world" (p. 19).

In subsequent chapters, Kinkela explains how DDT's wartime effectiveness translated into a diplomatic potency in the postwar era and beyond. Mosquito eradication campaigns in Sardinia, Naples, and Mexico City demonstrated how the insecticide offered increased productivity and modernity in a time of contentious Cold War political exchanges. DDT's growing role in America's postwar food program in Europe and the chemical's use in Latin America also underscored the efforts of organizations like the Rockefeller Foundation to re-engineer environments, governments, and economies for agricultural production with the promise of public health and happiness.

However, as Carson argued in *Silent Spring*, the ecological hazards that resulted from DDT application had unintended consequences in landscapes and human bodies, threatening the very health and happiness that the insecticide promised. While Carson did not call for the complete elimination of insecticides, she did demand caution and reevaluation of their use and ecological risks. Beyond its significant contribution to the rise of American environmentalism, Kinkela insists that Carson's book also sparked a debate about "knowledge production and professional authority that pitted the 'soft' science of ecology against the 'hard' science of chemistry," with the former viewed as a subversive science and the latter considered an ally in America's Cold War efforts" (pp. 118–119).[1]

The retort to Carson from agribusiness companies, pesticide manufactures, and industry groups such as the National Agricultural Chemical Association all highlighted Cold War politics as much as the environmental problems and inherent paradoxes present in American efforts abroad. Carson's book, industry representatives argued, not only undermined American food production at home, but it jeopardized the general health and welfare of people around the world. As Kinkela aptly notes, "so while the protection of the home front served as a powerful metaphor in the defense of chemical pesticides, the conflict beyond U.S. borders was equally important. American support for international development strengthened the claim that pesticides were of critical importance in the war against famine, disease, and communists" (p. 124).

*DDT and the American Century* takes a new look at the history of DDT, Rachel Carson, and the rise of environmental politics around *Silent Spring* by viewing how the insecticide shaped international policies, changed landscapes, and affected global health in the quarter century after the Second World War. Kinkela identifies DDT's ability to protect and poison as a crucial factor in the domestic debates over its use as well as in disease eradication efforts, global food production, and continued pesticide use overseas.

One quibble, however, relates to the user's role. Kinkela often keeps to the scientists, politicians, and organizations while offering little on the roles of farmers or custom applicators. Historians such as Joe Anderson (*Industrializing the Corn Belt: Agriculture, Technology, and Environment, 1945-1972* [2008]) have made it clear that users did not simply follow the recommendations of experts or accept the promises of manufactures—they often came up with unique mixtures and practices that related to the circumstances in their fields. I wonder, then, how users themselves, both in the United States and abroad, evaluated the risks and rewards of DDT apart from eradicators, politicians, philanthropists, and manufacturers. Nevertheless, *DDT and the American Century* expands our understanding of the politics, policies, and environmental problems associated with one of the twentieth century's most notorious pesticides. It also acts as a guide to the ongoing debates around chemical application for global health and food production.

#### Note

[1]. Also see Michael Egan, *Barry Commoner and the Science of Survival: The Remaking of American Environmentalism* (Cambridge, MA: MIT Press, 2007), 83.

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