

Arming Mother Nature: The Birth of Catastrophic Environmentalism

by Jacob Darwin Hamblin

x + 298 pages, notes, index.

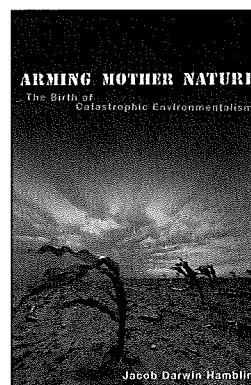
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Much of America's post-1945 history focuses on the Cold War. From the maturation of thermonuclear bombs to the exploding use of pesticides, postwar events blurred the lines between military might, ecological fragility, and cultural uncertainty. Although many scholars have explored the geopolitical duel between the United States and the Soviet Union, few have used an environmental lens. Yet agricultural, hydrological, and ecological warfare all played a key role in U.S. efforts to combat the communist threat.

In *Arming Mother Nature*, historian Jacob Hamblin makes three key arguments in narrating "the interplay of science in the Cold War and the history of environmental thought" (p. 11). First, warfare went well beyond soldiers, countries, and ideologies. Government scientists studied crops, seas, forests, and landscapes for vulnerability and manipulability—all could be used as both weapons and targets. Second, this kind of militarized ecological research encouraged a belief that "large-scale human induced changes already were within the power of American and Soviet scientists" (p. 12). These experts were "quite willing to tamper with the earth, the oceans, and the atmosphere" (p. 12). Third, Cold War geopolitics "fundamentally shaped how scientists, economists, military leaders, and politicians responded to the scientific evidence of large-scale human actions" (p. 12). Crop radiation experiments, weather modification projects, and harebrained schemes to build artificial radiation belts around the earth all show how the Cold War "transformed thinking about humanity, the vulnerabilities of the earth, and the poisoned fruits of human labor" (p. 13).

Arming Mother Nature is organized into three main parts. Part one surveys how the search for "bacteriological weapons" linked climate fluctuations and ecological fragility to military strategy. American and NATO scientists envisioned climates, landscapes, and crops that fought communism. They also planned a global stockpile system to preserve a pre-fallout life. As Hamblin suggests, "man's simplifications of the landscape had made him extraordinarily vulnerable. . . . With the arms race came an increasing military interest in environmental sciences on a global scale" (p. 82).

Parts two and three explore the expansion of environmental surveillance, testing, and "geo-physical" war planning. NATO countries followed American President Dwight D. Eisenhower's plan to collect geophysical data to encourage peaceful cooperation. The International Geophysical Year (IGY) of 1957–1958 was a global project, which, Eisenhower hoped, would ease Cold War tensions; in his view, "science itself was not nationalistic, knowledge knew no borders, and ideas were



universal" (p. 90). However, while the Soviet Union and its allies met to exchange data, the United States and NATO countries were secretly scheming to melt polar ice caps, raise water levels, and design global warming zones.

Hamblin offers an astonishing account of these "wildcat ideas for environmental warfare." Strategists built on the work of scientists such as Gordon McDonald and Charles Elton and crafted global war plans—reports on making volcanoes erupt on command or steering lightning storms over enemy camps read like science fiction novels. American policymakers used the threat of harm, risk, and vulnerability as both shield and spear—they could claim that the Soviets were threatening human civilization while planning scenarios of mass destruction.

For readers of *Kansas History*, Hamblin's concepts of ecological warfare can be used to study Great Plains agriculture during the Cold War. As Joe Anderson, Kendra Smith-Howard, and I have all argued, conceptualizing risk, anticipating vulnerability, and calculating toxicity guided agricultural production in Iowa corn, Wisconsin dairy, and Kansas wheat. More can be done on how vulnerability played out in the region. Future scholars could also study links between land-grant colleges and larger national plans for environmental warfare.

Arming Mother Nature takes a new look at Cold War history through an environmental-military-scientific lens. However, Hamblin's analysis of environmental risk assessment is lacking. Although he addresses how environmental security contributed to the 1970s pesticide debates, he might have engaged Frederick Rowe Davis's history on toxicology. Chicago Tox Lab scientists pioneered assessment practices that determined the risks, benefits, and vulnerabilities of pesticides. Hamblin also keeps to professional war-planners and scientists while offering little on the local practitioner's role.

Arming Mother Nature makes clear that the modern scientific, scholarly, and political roots of catastrophic environmentalism have a strange and storied Cold War past. As scientists experimented with weaponizing agriculture and altering climates, they also learned about ecological fragility on a global scale—the more they armed the earth, the more they endangered themselves.

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