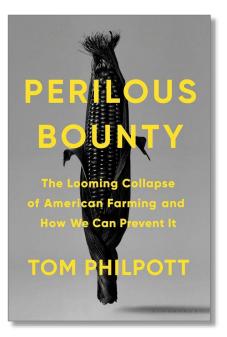


## *Perilous Bounty* and the future of farming in America

Lars Chinburg \* University of Montana

Review of *Perilous Bounty: The Looming Collapse of American Farming* and How We Can Prevent It, by Tom Philpott. (2020). Published by Bloomsbury Publishing. Available as hardcover, paperback, and eBook; 256 pages. Publisher's website: https://www.bloomsbury.com/us/perilous-bounty-9781635573138



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I n Perilous Bounty, Tom Philpott builds a meticulously researched argument that the U.S. is too reliant on farming methods and economic systems that are destroying our critical ecosystems. Mixing investigative journalism, eye-opening statistics, and farmer profiles, he paints a stark picture of the current state of industrial agriculture. He focuses on the two predominant U.S. agricultural regions, presents the major challenges facing each region, and discusses the "handful of seed-pesticide corporations, investment funds, and magnates who benefit from these dire trends" (p. 8).

He begins in California, where the agricultural industry faces drought, catastrophic flooding, reduced snowmelt, and overdrawn aquifers. A primary takeaway is that as aquifers are overdrawn, "dwindling water means ever more emphasis on pricey export-oriented snack crops-and less on fruit and vegetable crops" (p. 72). The depletion of groundwater threatens future agricultural production in the state on which we depend for more than 90% of the "broccoli, carrots, garlic, celery, grapes, tangerines, plums, and artichokes; at least 75% of the cauliflower, apricots, lemons, strawberries, and raspberries; more than 40% of our lettuce, cabbage, oranges, peaches and peppers" (p. 17), as well as nearly 100% of the almonds, walnuts, and pistachios we eat. In short, aquifer depletion is severely threatening our national salad bowls. This is exacerbated by the effects of climate change, with increased likelihood of droughts and flooding.

<sup>\*</sup> Lars Chinburg is a master's candidate in Environmental Studies at the University of Montana. He's originally from New Hampshire, and loves spending time outdoors skiing, camping, fishing, and hiking. You can find more of his writing at <u>https://larschinburg.com</u>, and he can be contacted at <u>lars.chinburg@umontana.edu</u>

He then discusses the Corn Belt, a group of Midwestern states that produce 90% of U.S. corn and 80% of soybeans (p. 75). Philpott highlights the corn and soybean monocultures that strip the area's soil of its vitality. He describes the effects of "gully washers," rain-driven erosion events that have contributed to the loss of 33% of Corn Belt topsoil (p. 131) and create streams of toxic manure and fertilizer runoff that poison vital ecosystems like the Gulf of Mexico, where "nutrient runoff from row crops and confined livestock operations deliver 60% of the nitrogen load" (p. 144). Historically, the rich soil of the Corn Belt was covered by perennial grasses and wildflowers, which anchored the soil even in the case of heavy rains (p. 126). Now, the corn and soybean fields are left bare from November through June, leaving them vulnerable to heavy rain events, which are only increasing in intensity with climate change.

He also criticizes the corporations that stand to benefit from monocultures, such as Monsanto, which profits from the use of its own pesticides and herbicides on crops it designed to resist those same pesticides and herbicides. This practice contributes to the common practice of incredibly high chemical usage on fields and the creation of a relentless cycle, a "permanent chemical war against ever-evolving weeds, with Monsanto and its peers playing the role of defense contractors" (p. 112).

Philpott wraps up in a more hopeful tone, meeting with Ohio farmer David Brandt, who makes use of a more diverse crop mix to increase resilience and boost productivity. Through Brandt, Philpott illustrates how techniques like cover cropping can be used to build healthier soils, decrease reliance on fertilizers and herbicides, and reduce erosion. As more farmers adopt these strategies nationwide, Philpott argues, we all stand to benefit. Not only will our farmland be more resilient, but these techniques will contribute to less runoffbased pollution and combat the effects of climate change.

In *Perilous Bounty's* final pages, we learn that despite increasing consumer interest in local agriculture, "we have reached the limits of 'market-asmovement' to transform the food system" (p. 189). Philpott argues that for meaningful change, we will need much more, referencing the Green New Deal and vaguely calling for mass mobilization and activism. Without such initiatives, he warns, we are "heading into a hotter, less stable future with a food system that's as durable as an ice cube dropped on a sunny street" (p. 192). Overall, Philpott delivers a book heavy on facts, reporting, and exposition, while hinting at potential solutions in the closing chapters.

For the most part, the book accomplishes what it set out to do. Philpott creates an unforgettable portrait of a failing system. He makes convincing use of quantitative analysis to support a succession of vivid warning signs that necessitate immediate action. This is perhaps the book's greatest strength. It would be impossible to finish *Perilous Bounty* and remain unsure of the impact that our agricultural system has on the environment, and the fact that there are major corporate players across multiple industries that stand to benefit from continued inaction. Another strength is Philpott's decision to frame these impacts in the context of self-preservation rather than simply environmentalism.

In a 2019 interview with Varshini Prakash, founder of the Sunrise environmental organization, Ezra Klein (2019) noted that framing environmentalism as an act of altruism versus self-preservation was a major obstacle to the mass realization of the dangers of climate change. In Perilous Bounty, there is no danger of the reader missing the urgent selfpreservation argument that Philpott makes. Especially in the California chapters, he drives home the near-apocalyptic dangers we face if we do not take issues like drought and megafloods seriously. He takes multiple pages to describe the catastrophic effects a megaflood would have, projected to include the submergence of the entire Central Valley and an estimated US\$725 billion in damages (pp. 43-51).

Despite his use of impossible-to-ignore statistics and graphic descriptions of the consequences we face, Philpott still leaves us with questions. While it is powerful to be inundated with a deluge of facts and figures about the end of the agricultural world, to make an effective argument out of such a fear-mongering approach requires concrete solutions and a well-argued path forward. Philpott does not always succeed with these. While there are moments of optimism throughout *Perilous Bounty*, they are few and far between. We get a short chapter on cover cropping, peppered throughout by reservations that such practices are not catching on, and then we get a mention of the Green New Deal in the final two pages of the book. Philpott is not required to save the world all by himself, and he succeeds in laying out the problems and their potential repercussions, but his argument would be more compelling if it concluded with a firm call to action. Therefore, the book falls short of accomplishing the second half of the lofty goal put forward in its subtitle: "*The looming collapse of American farming and how we can prevent it.*" Overall, however, Philpott is successful in contributing to our collective knowledge of contemporary agriculture in the United States. *Perilous Bounty* catalogs the dangers we are facing with rigorous attention to detail. It belongs on the shelves of both academic and non-academic audiences. In academia, it would be useful in either high-level undergraduate or graduate courses in agriculture, environmental studies, or sustainable food systems as a solid overview of the current state of agriculture. Non-academic audiences, such as activists and non-profit groups, would find it useful in establishing a baseline understanding from which to create change.

## Reference

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