



Perilous Bounty

The Looming Collapse of American Farming and How We Can Prevent It

By Tom Philpott
368 pages
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Reviewed by Ken Meter

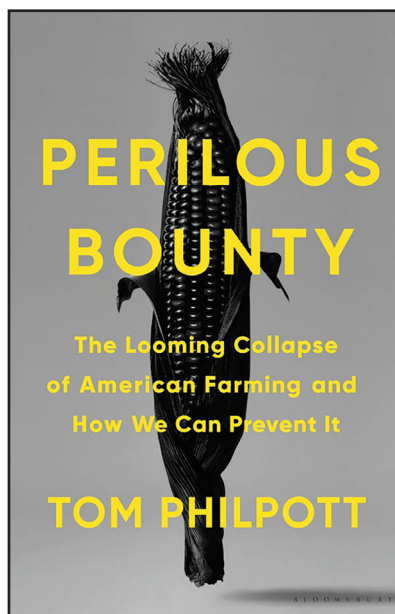
Tom Philpott, who morphed from a career as a respected business reporter to covering agribusiness for *Mother Jones* magazine, provides plenty of reasons to read his new book, *Perilous Bounty*. It is worth reading for his coverage of the environmental dilemmas facing California agriculture alone, but it also offers a compelling and thoroughly documented overview of the dilemmas inherent to Big Ag in general. These harm all of us.

Philpott directs a bright spotlight on the catastrophic water issues that threaten the state that grows much of the produce the U.S. eats. He highlights California's importance: "Why must just a few clusters of water-stressed counties in a single state provide 81 percent of U.S.-grown carrots, 95 percent of broccoli, 78 percent of cauliflower, 74 percent of raspberries, 91 percent of strawberries, 66 percent of lettuce, 63 percent of tomatoes, and on and on?" Further, he notes that one single firm, called the Wonderful Company, controls 80 percent of the state's \$1.5 billion pistachio crop, and a "substantial but undisclosed share" of the state's \$5 billion almond crop, on its 50,000 acres of nut orchards. The firm also commands significant holdings in pomegranates and mandarin oranges. These crops consume large quantities of water, requiring "a gallon of water to grow a single almond." Thus, the fact that a handful of companies dominate produce markets threatens the resource most precious to life itself.

This centralized industrial engine is endangered, however, because it turns a blind eye to the very water cycles that sustain it. Philpott notes that California's rivers have experienced massive floods at sporadic intervals for centuries — erupting in 1235, 1395, 1555, 1750, 1810, and 1862, spanning as many as 10 to 125 years during each event. These floods deposit nutrients on the land, making agriculture possible, but also refashion the landscape in ways that threaten industrial agriculture itself. Worse, scientists estimate that the risk of such massive flood-

ing has increased threefold. And potential human and property damage increases exponentially as development intensifies.

Native villages anticipated the historical floods and adapted by moving to higher ground. That strategy is far more difficult to pursue in an era of constructed towns and infrastructure. During the 1862 flood, Philpott notes, 200,000 cattle were drowned. The herd fell another 2.2 million in size (from a previous total of 3 million) due to a subsequent drought, as animals were sold off because they could not be fed. Today, however, the state hosts 5 million beef cattle and 1.4 million dairy cows. Those animals are mostly present in the Central Valley, which is extremely prone to flooding. Now immense manure lagoons concentrate wastes in small areas. When combined with the municipal waste facilities and industrial



detritus that occupy the valley, U.S. Geological Survey researchers warn that a toxic soup of "petroleum, mercury, asbestos, persistent organic pollutants, molds, and soil-borne or sewage-borne pathogens" could spread across much of the Central Valley, along with manure, fertilizer, and pesticides.

Honing in on the farm of Joe del Bosque, Philpott encapsulates the dilemmas faced by a farmer who is wondering if he will be able to continue in his profession. "Melons are a relatively water-efficient crop that faces increasingly high labor costs, and almonds are an extremely labor-efficient crop that takes a huge gulp out of an increasingly scarce water supply," Philpott concludes.

To compound these dilemmas, as the Sierra Nevada snowpack recedes, California simultaneously faces a future of declining water resources. This amplifies a horrific legacy that pushed the surface of the Central

Valley 29 feet lower than its original elevation. Beginning in the 1920s, when irrigation first pumped water out of the ground, subterranean water pockets collapsed. These potential water storage channels won't come back, Philpott argues, because the geologic structure of those open channels is gone. This would, I assume, make the destructive potential of future floods all the more fierce.

Having lived in California for nine years, Philpott harvests a wealth of stories from his reporting, and he shows a seasoned grasp of the state. His account of the agricultural situation in Iowa is solid, but less compelling, since it relies more heavily on secondary information. Land Stewardship Project members who are familiar with the state may learn less in this section, but will still find useful analysis here. He writes about the stark erosion of soil in Iowa, with losses more than 16 times the soil's rate of replenishment. He cites research showing that the farms of this single state cause 29% of the Mississippi River's nitrogen load. Philpott adds that 60% of Iowa's farms have been lost since industrial agriculture took hold, with the biggest victims being mid-sized diversified operations. But Philpott essentially uses "Iowa" as a narrative frame for the corn-soy-meat complex that has harmed large swaths of the U.S. He looks far beyond this one Midwestern state to draw some of his key conclusions. He shows that in many regions corn and soybean growers frequently lose money producing these essential crops, and much of the research data and corporate influence Philpott cites is national or international.

One additional chapter that is well worth the price of admission features Philpott's visit to the Monsanto corporate headquarters in St. Louis. He expects to encounter a bold defense of the Roundup herbicide system, but in fact participates in a very gentle discussion of how the firm — which is now a subsidiary of Bayer — is repositioning itself for a future beyond the chemical. Philpott does an elegant job of relaying this story with gentility, while not overlooking the damage Roundup has caused.

For all of us who care about the soil and farm communities, it is always easier to describe the dilemmas we encounter than to celebrate positive motion forward. Philpott's book is no exception. He offers surface treatment of "how we can prevent" the collapse of agriculture, only partially fulfilling the promise of his book's subtitle. He does report from Tom and Irene Frantzen's farm in northeastern Iowa to showcase these particular sustainable ag pioneers' efforts to build soil organic matter. Philpott also calls

Perilous, see page 29...

for more localized food production, and correctly argues that merely urging privileged consumers to shop for local food will not be sufficient — we need supportive infrastructure and effective policy that overturn food insecurity. He identifies the importance of supply management for farm commodities. Yet given the remarkable fact that Farm Bureau and Farmers Union leaders have jointly embraced the concept of supply management for dairy in the throes of the dairy crisis — a crisis fueled by oversupply — Philpott neglects to highlight the farm groups that have championed this stance for decades. Rather, he speaks of Bernie Sanders’ support for the concept, without acknowledging how strenuously sustainable

agriculture groups had to work to inject this proposal into the Vermont Senator’s recent presidential campaign. This is not the best framing for opening a conversation about farm policy that needs to be farmer-led and bipartisan to win. Significantly, Philpott does not mention that global market conditions and the looming presence of the World Trade Organization make supply management both more difficult, and more costly, to implement than in the past. It is a strategy we need, but one that has to be reinvented for a new era.

For me, *Perilous Bounty* underscores the fact that there is no way to create effective policies for agriculture if we focus solely on farms. We have to address entire food systems in their complexity, and adopt policies that can flex in rapidly changing times.

Food businesses and public officials need to collaborate in building market power for farmers. Low-income residents must be engaged in creating answers. I hope that my forthcoming book, *Building Community Food Webs*, will complement Philpott’s fine work by adding a deeper economic perspective and documenting the growth of community foods efforts across the U.S. □

LSP member Ken Meter is one of the most experienced food system analysts in the country, working with 144 community partners in 41 states. His work can be found at www.crcworks.org. His book, Building Community Food Webs, will be published by Island Press in March.

Erosion Essays of Undoing

By Terry Tempest Williams
318 pages
Farrar, Straus & Giroux
www.coyoteclan.com

Reviewed by Dale Hadler

Erosion: *Essays of Undoing* is, as author Terry Tempest Williams explains, “a gathering of stories, poems, and pleas in the name of Beauty in an erosional landscape sculpted by wind, water, and time.” Williams, a native of Utah, may be the finest “Western” writer working today, but her latest work will appeal to anyone connected to a landscape that is being sculpted not just by natural forces, but by human activity, positive as well as negative.

During a highly productive career, Williams has addressed a wide range of political, environmental, and cultural issues, and how the three intertwine, often on a personal level. *Erosion* continues this theme as she writes eloquently about her experiences in various American national parks and monuments and her frustration and fear surrounding the anti-environmental stands of the Trump Administration. The war on the land is heartbreaking, but Williams is at her most poignant when she writes about her brother, Dan Dixon Tempest, and his tragic suicide stemming from years of mental illness and substance abuse issues.

Through the breadth of issues she addresses, Williams gives us a glimpse of her personal spirituality, which she describes as being based on humanity’s relationship with the natural world. To a large extent,

this spirituality is a reaction against the very conservative faith of her Mormon childhood. Williams makes it clear that upbringing was too restrictive for her, but she also credits the Mormon Church with connecting her to nature in the first place through outings to nearby national parks like Mesa Verde and Canyonlands.

Williams is no mere observer — she also describes her own work to preserve the flora and fauna of the West, as well as to protect endangered species such as prairie dogs near Grand Teton National Park.

She is at her best when she describes the public lands she loves so passionately. In fact, I would highly recommend reading *Erosion* in conjunction with Williams’ 2016 book, *The Hour of Land: A Personal Topography of America’s National Parks*. Together, these two books make a compelling argument for the preservation of public lands in the face of threats posed by federal policies that are opening them up to development that will produce short-term gains with long-term, negative consequences.

These policies, she argues, are stripping future generations of a public land inheritance that belongs to all Americans. In spite of these myriad threats, the author believes this inheritance can be preserved. While visiting Great Falls National Park outside of Washington, D.C., she observes: “Standing at Great Falls on a hot humid day when the

political temperature in Washington registered like a fever, an uncommon peace came over me. I allowed myself to believe that in another hundred years, there will be others standing on this same brink of beauty, grateful for all that remains wild and wholesome and free.”

How does someone so aware of the threats our ecosystem faces find it in themselves to feel so optimistic? For Terry Tempest Williams, such inner strength comes not just from the land itself, but from the inhabitants who live in harmony with it.

That’s an important lesson to keep in mind as we here in the Midwest struggle to create farming systems that take their cue from the land and all the beauty it can offer. As Williams observes during the great sandhill crane migration while

crouched in a blind on Nebraska’s Platte River: “Through the open window framing and focusing our attention, we saw what survival looks like in the shimmering light of awe.” □

Land Stewardship Project member Dale Hadler lives in southeastern Minnesota.

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