

Books & arts

farming and the actual origins of the modern organic movement. Heyman pays more attention to how Bromfield hosted Humphrey Bogart and Lauren Bacall's wedding in 1945 than to soil-building practices. In its descriptions of history, the book verges on simplistic. It presents Bromfield as a leader, when he added little new thinking about restoration of degraded land. Heyman divides farming into industrial and organic camps and casts Bromfield as a champion of the latter — a guru who romanticized a disappearing era and saw solutions to modern problems in the past. Yet techniques used in organic farming created serious problems long before the rise of modern agrochemicals. From classical Greece to colonial America, tillage eroded topsoil out from under civilization after civilization.

As Heyman notes, Bromfield was not an organic purist. He realized that mineral and chemical fertilizers could be needed to kickstart the growth of enough biomass to sustain soil fertility with green manures. Such pragmatic thinking hasn't endeared him to proponents of either organic or

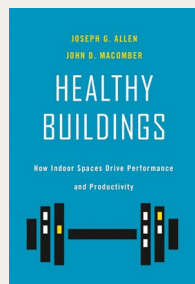
“Bromfield's original insight was seeing the crucial importance of soil health before science really understood why this matters, or how to build it.”

conventional techniques. But many of the practices Bromfield embraced are now central to the burgeoning global movements of regenerative and conservation agriculture, which aim to maintain crop yields and farm profits while enhancing soil fertility and cutting environmental impacts. As I discussed in my 2017 book *Growing a Revolution*, these innovative farmers combine traditional practices, such as planting cover crops and rotation, with more modern developments, such as no-till farming, to build fertile soil and reduce reliance on diesel, fertilizers and pesticides (while saving money). Bromfield's story is an inspirational glimpse into the roots of these growing movements.

Bromfield's original insight, then, was seeing the crucial importance of soil health before science really understood why this matters, or how to build it. Today we know that the future of farming lies not in replicating a mythical golden age, but in merging ancient wisdom with the technology of today.

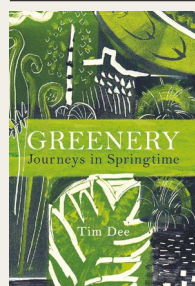
David R. Montgomery is professor of geomorphology at the University of Washington in Seattle, and author of *Dirt*, *The Hidden Half of Nature* (with Anne Biklé) and *Growing a Revolution*. Twitter: @dig2grow; e-mail: bigdirt@uw.edu

Books in brief



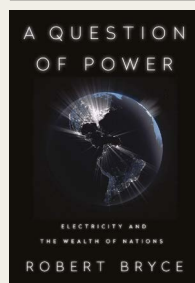
Healthy Buildings

Joseph G. Allen and John D. Macomber Harvard Univ. Press (2020)
“We shape our buildings and afterwards our buildings shape us,” said Winston Churchill in 1943. This is even truer now; people in the United States spend 90% of their time indoors, note health scientist Joseph Allen and business-school lecturer John Macomber. Yet we read little about indoor air pollution. In 2018, the US secretary of education publicly rejected the idea of investing in school buildings rather than students — to the authors' horror. Their detailed, important study is welcomed by architect Norman Foster. But it speaks to everyone.



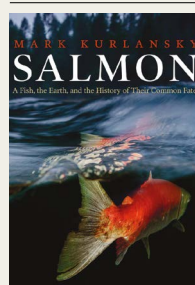
Greenery

Tim Dee Jonathan Cape (2020)
Tim Dee is a lifelong birdwatcher and former radio producer. “I have tried to make as much of this book about the birds and other natural manifestations of the spring as I can,” he writes, “but it is, of course, also about me.” His peregrinations between Europe and Africa — often accompanied by his South African-born wife, ornithologist Claire Spottiswoode — are vividly informative about many migratory species, and alive with literary and historical allusions. But some personal digressions might strike readers as self-indulgent.



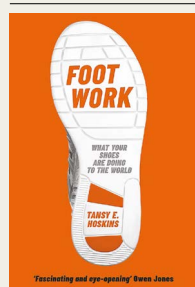
A Question of Power

Robert Bryce PublicAffairs (2020)
Electrification is often deemed one of humanity's greatest engineering achievements. Yet it dates only from the 1880s: a mere eye-blink compared with hominins' 400,000-year history of using fire, as Robert Bryce observes in his enlightening history. Moreover, three billion people still have little or no access to electricity. Although not optimistic about the potential for renewable sources such as wind to increase electricity production, Bryce predicts continuing advances in batteries, generators, lights, microchips and motors.



Salmon

Mark Kurlansky Patagonia (2020)
Salmon was eaten by Neanderthals in the Caucasus Mountains about 48,000 years ago. The name derives from the Latin *salmo*, meaning ‘leaper’; Roman legions in the Rhine Valley observed this fish jumping over rapids and waterfalls while migrating upriver to spawn. Today, because of dams and development, a mere 1.5 million live wild in the Atlantic Ocean — many fewer than in the Pacific. The survival of the Atlantic genus is “highly questionable”, notes Mark Kurlansky in his comprehensive history, complete with historical recipes.



Foot Work

Tansy E. Hoskins Weidenfeld & Nicolson (2020)
According to this pioneering, pugnacious study, our shoes “are the propulsion and the consequence of globalization”. In 2018, 24.2 billion pairs were manufactured, mostly in poor conditions, say industry experts interviewed by journalist Tansy Hoskins. Hazards include noxious fumes, toxic chemicals and poverty wages, as well as the suffering of animals intensively farmed for their hides. She proposes a move to plant-based, metal-free shoes made with non-toxic glues and dyes — and even, radically, “shoe libraries”. **Andrew Robinson**