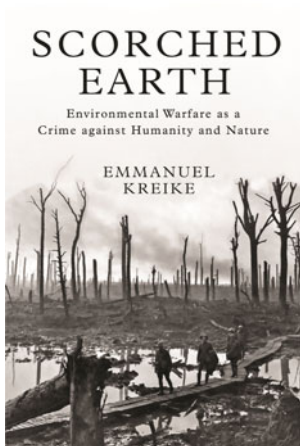


LIBRARIAN'S PICK



Scorched Earth: Environmental Warfare as a Crime against Humanity and Nature

By Emmanuel Kreike*

Book review by Charlotte Mohr, ICRC Reference Librarian for the collections on the ICRC's history and activities.

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Despite its title, *Scorched Earth* is not a book about the environmental cost of war – or, more accurately, it is not a book focusing on how war harms the environment rather than on how it harms humans. Surveying over four centuries of environmental warfare in the modern era, the book looks instead at the destructive effect of war on the society and environment nexus. The nature–culture dichotomy casts a long shadow, Emmanuel Kreike argues: for too long, the effects of war on human societies, on one side, and on the environment, on

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the other, have been studied separately. This same dichotomy has permeated international criminal law, in the definitions of genocide and ecocide. But thinking about the environmental cost of warfare in isolation, the author finds, fails to capture the scale of destruction caused by scorched-earth tactics throughout history. It also overlooks the genocidal consequences of destroying a population’s environment. Published as part of Princeton University Press’s Human Rights and Crimes against Humanity series, *Scorched Earth* is thus, true to its premise, a human-centred history of environmental warfare.

How does one describe in simple terms the harm caused by war to lived-in environments? The author introduces two key concepts early on: “environmental infrastructure” and “environcide”. The first refers to the ensemble of structures and systems that make up the human-shaped environment, from homes to cultivated fields, food stores, dams and canals. The second concept echoes, but differs from, the terms “genocide” and “ecocide”. The author makes a case for reframing environmental warfare as a crime against both humanity and nature. The term “environcide”, he argues, captures better than “ecocide” the interrelated nature of environment and society and the damage incurred by the latter when warfare destroys the former. Applied to the history of modern wars, this framework opens new avenues for understanding the indirect consequences of scorched-earth tactics, often longer-lasting and more widespread than assumed, and the challenges of post-conflict reconstruction. “Environment”, by contrast, is not restrictively defined in the book; the author considers the destruction of

barns and orchards, the theft of agricultural and trade equipment, and the extortion of cash, food and forage, all as different pieces of the same puzzle.

Scorched Earth looks at a number of conflict-affected societies between the late sixteenth and early twentieth centuries, on five continents. Its structure is largely chronological, but the book plays with scale. The author recounts stories across timelines ranging from a couple of years to centuries, and zooms in on specific villages before looking at an entire continent. He traces scorched-earth tactics back to a time when armies literally marched on their stomachs, having to live off the land they conquered, and he then shows that such practices did not abate as the military logistical apparatus developed. The environment remained a central target, object and tool of warfare throughout the modern era and beyond. Its exploitation sustained the war effort, deprived the enemy of key resources, and forced local populations into submission.

Across ten chapters, *Scorched Earth* describes how different communities invested in and shaped their environment through a variety of labour- and time-intensive processes – and how war, time and time again, caused such painstakingly built and maintained infrastructure to collapse. *Dramatis personae* include commanders and colonizers, soldiers and settlers, but also farmers, villagers and refugees. The book is based on extensive archival research; it draws from the tax records of sixteenth-century Holland, analyzes archaeological records of Pueblo peoples in sixteenth-century Central America, and reads between the lines of Dutch military journals of the nineteenth-century conquest of Aceh. Each chapter opens with a quote from a contemporary source, illustrating in a few evocative lines the consequences of environmental warfare. These sources help the author reconstruct the trajectories of individuals and communities in war. His interest lies in the agency and resilience of categories of people rarely placed front and centre as historical actors, and his portrayal remains nuanced; the book notably explores how victims of environmental warfare sometimes became perpetrators themselves, engaging in short-sighted but necessary survival strategies that harmed other communities or exterminated plant or animal species.

The opening chapter introduces a major theme of the book: the contrast between the hasty destruction of environmental infrastructure in warfare and the long, difficult work of post-conflict reconstruction. Set in sixteenth-century southern Holland, during the revolt against King Philip II of Spain, it recounts how the rebels used massive flooding as a tactic of warfare in 1574. This caused immense damage to the countryside, forcing farmers and villagers to evacuate. Because the dikes destroyed by the rebels took a long time to repair, much of southern Holland was still inundated years later, and the countryside remained depopulated.

Chapters 2, 4 and 8 take a second look at the “virgin soil epidemics” model explaining the demographic collapse of indigenous societies during the wars of conquest. This model, first put forward in the 1970s, presents demographic and societal collapse after contact with European settlers as the inevitable consequence of “Old World” diseases making their way through “New World” communities

with no prior immunity. *Scorched Earth* argues that this explanation glosses over not only the direct violence of conquest, but also the deadly consequences of displacing indigenous populations and separating them from the environmental infrastructure that sustained their lives.

First, Chapter 2 reframes the demographic collapse of the indigenous American people during the sixteenth-century Spanish conquest as a consequence of environcidal warfare. Kreike presents the elaborate infrastructure of those societies and shows how it was taken over, exploited or destroyed by the conquistadors. As communities were forcibly displaced, the fertile dark soils disappeared, the irrigation systems collapsed, the range of crops cultivated diminished, and the health of the indigenous population dramatically declined. Epidemics may be at least partly to blame for the demographic collapse of the indigenous American population in the sixteenth century, but it was the environcidal Spanish conquest that made them particularly vulnerable to diseases in the first place.

Set a century later, Chapter 4 contrasts the similarly advanced (and understudied) infrastructure maintained by indigenous North Americans with European sources portraying their societies as precarious and “wild”. The author shows how European settlers minimized indigenous environmental infrastructure in discourse, but relied on it and appropriated it in practice for their own survival. Here again, war and displacement caused the indigenous population’s health to decline. People fled for safety, and as villages became denser, epidemics turned them into death-traps.

Similar dynamics play out again in Chapter 8, set in the nineteenth-century American West. Kreike refutes what he calls an “environmentally deterministic argument”¹ that presents Western Native Americans as nomadic hunter-gatherers. He argues that they should instead be seen as war refugees who turned to such practices to survive, after being displaced and robbed of their environmental infrastructure. The author unpacks a discourse that originated in contemporary sources and later permeated the historical narrative, minimizing indigenous peoples’ ties to their land in order to legitimize its theft.

Set in the eighteenth century, Chapters 5, 6 and 7 take on what the author calls the “myth of limited war”. The idea of civilized, rational, limited war began to take hold in both pamphlets and military orders during the age of reason. “Marauding” (which included murder, rape and theft) was outlawed, and soldiers’ looting was replaced by taxes and requisitions. And yet, the author argues, total warfare remained the norm. The infamous sack of the Dutch town of Bergen op Zoom by French soldiers in 1747, which had outraged European opinion, has been wrongly depicted as an exception to the general rule of “limited war” in the eighteenth century. Using examples from the War of the Spanish Succession (1701–14), the War of the Austrian Succession (1740–48) and periods of mass violence in Ghana, Sri Lanka and Indonesia throughout the century, the author shows that total warfare remained a widespread, global phenomenon. Between the sixteenth and the eighteenth centuries, he argues,

1 *Scorched Earth*, p. 282.

there were far more similarities in the conduct of war than differences. The book shows how rules of war promulgated by heads of State failed to be respected and enforced, to the point of being little more than window dressing. The sources presented echo present-day debates: “critics of limited war ... at times openly contested the rules of war as being ineffective or even counterproductive given that they were seldom enforced, or unenforceable, or because they seemingly prolonged wars, making them more costly economically, politically, military and socially”.² Yet the book paints such a vivid picture of the destructive consequences of total war that it can hardly be read as anything other than a strong argument for the current legal regime protecting civilians, civilian infrastructure and the environment from the worst effects of warfare.

In the tenth and final chapter, Kreike draws a straight line from the 1900–17 Portuguese conquest of the Ovambo floodplain and the First World War to the 1920s “famine of the dams” in Angola and Namibia. The famine has traditionally been attributed to climatic factors, but *Scorched Earth* reframes it instead as a consequence of past warfare and mass population displacement. It shows how the environmental infrastructure that was critical to ensuring population resilience in times of drought and poor harvests, such as granaries and water holes, had either collapsed or proved insufficient to support local populations and war refugees, as a direct consequence of past conflicts.

Ultimately, this leads us to perhaps the most compelling point made by this 400-page study of environmental warfare: history has too often and too easily attributed to natural disasters and epidemics death and destruction that were really the consequence of total warfare. Simply put, war leaves communities incredibly vulnerable to the other three horsemen of the apocalypse: famine, disease and death. All four loom large on every page of the book. *Scorched Earth* is a history of never-ending loss, of the alienation of land and environmental resources, century after century. The author’s tour de force, then, is to successfully dig different and important insights out of similar stories, preventing the book from turning into a litany of pillages and plunders, extortions and exactions, sackings and burnings. Set in a distant but far from irrelevant past, *Scorched Earth* is thus a cautionary tale about the danger of underestimating both how much we depend on our environment and how much damage total war can cause.

2 *Ibid.*, p. 244.