

## **A Global Environmental History of the First World War**

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Despite the massive scholarship on the First World War, historians have paid scant attention to the conflict's environmental legacies. Iconic images of the Western Front include ravaged farmlands, charred forests, and muddy quagmires, but few have examined the war from an environmental perspective, and then only in a limited fashion. Yet, mobilizing natural resources for the war had far-reaching consequences across the globe. Only by taking the environment into account can we fully understand the trauma of war and how this conflict in particular shaped the most basic levels of human existence for years afterwards.

My book project, *A Global Environmental History of the First World War*, focuses on how energy geopolitics linked the battle lines and home fronts with industry and agriculture in ways that fundamentally shaped the twentieth century. Few human endeavors have altered the natural world in the modern era as agriculture, industry, and warfare have. In 1914, the three formed a violent triad geared for the production of destruction. While battlegrounds seemingly suffered devastation, the resulting damage to nature was normally short-lived. Paradoxically, major environmental change occurred behind the lines, away from the killing fields. Scholars have typically studied armies in the First World War as social entities, but I classify fighting forces as biological systems, which depended on a "military ecology" of energy extraction, production, and supply to function. To maintain the "biological welfare" of soldiers and power engines of war, belligerent countries commandeered energy resources throughout the biosphere. The duration and scale of the conflict altered military ecologies around the world and led to new "material flows" of foodstuffs and fossil fuels that transformed relationships from global geopolitics down to individual consumption patterns.

Merging humanities research with natural science studies places the Great War in a new light. I incorporate ecology in my study to analyze the interrelated processes of war and ecosystems. My multi-tiered approach measures the conflict's reach around the world. A top-down assessment evaluates the extent to which the reorganization of government bureaucracies and national economies altered the natural world. A regional and local level of analysis examines how various municipal authorities faced different challenges to harness energy while contending with directives from above. A bottom-up approach shows how soldiers, farmers, and workers altered the land and experienced environmental change firsthand. My book decenters the Western Front and brings greater attention to the war's peripheries. Since environmental transformations began before the start of hostilities and continued after the armistice, my work challenges the traditional timeframe of the conflict and complicates the distinction between war and peace.

My project develops the ongoing and much needed environmental analysis of war in the modern era. High-energy economies are among the largest drivers of climate change, and like industrial warfare, those economies demand ever more natural resources, creating a dangerous feedback loop of energy, war, and climate change. By understanding how warfare and energy geopolitics coevolved over the course of the First World War, we can better understand and address the intersections of military violence, human victimization, and environmental exploitation in today's world.

Seeing what George Kennan called the twentieth century's "seminal catastrophe" from an environmental perspective illuminates the global dimensions of the First World War. Militarized energy flows brought their own violence that turned supposed "peace lands," places far from the frontlines, into "war lands." These subjugated environments often meant marginalized people were alienated from their land. The legacies of that violence have continued long after the fighting ended. Indeed, the First World War is still contemporary; we live with the environmental consequences of the conflict even now.