

cycling enabled both men and women to sense greater personal freedom. Typing and female secretarial work gave women, and particularly Eurasian women, a “respectable” form of employment outside the household. By contrast, the proliferation of mechanized rice mills displaced labor and increased the incidence of beriberi and industrial accidents. Gandhi complained that rice mills took away the dignity of rural women by shifting labor toward the townsmen who owned the mills. Other advocates for independence applauded efforts to manufacture bicycles and typewriters in India. All these technologies and their associated social changes were debated extensively. Arnold presents evidence from newspapers and trade journals, as well as contemporary memoirs and historical accounts.

The clever use of extensive sources, together with brilliant scholarly engagement and clear writing, all mean that Arnold has produced a rare gem: a monograph that will interest advanced scholars as well as undergraduates. The author’s technologies are humble, yet the book deserves to attract the attention of a wide audience.

———William Kelleher Storey, Millsaps College

Chris Pearson, *Mobilizing Nature: The Environmental History of War and Militarization in Modern France*. Manchester: Manchester University Press, 2012.

doi:10.1017/S0010417514000371

Until now, few military historians have placed the environmental consequences of mass violence in focus, and few environmental historians have had military operations and warfare in their sights. Although the discipline of environmental history has blossomed dramatically in Europe over the past decade, it has been slow to emerge in France. The birth of environmental studies of warfare in modern France has required the infusion of English-language perspectives. For broader consideration of wars’ environmental impacts, historical geographers at Bristol University have provided an analytical structure that their core member, Chris Pearson, has applied in *Mobilizing Nature*, published in the Manchester University Press series on “Cultural History of Modern War.”

Pearson’s subject includes more than battlefields or wartime regions; he also surveys militarization and militarized landscapes, which “encompass military food supply chains, wartime manufacturing sites, military roads, military recruitment centres on town high streets, and checkpoints in areas such as the West Bank, as well as military bases, battlefields, air bases, navy bases, and fortifications” (p. 2). He mobilizes varied sources in French and English, from military geography and strategic planning to social conflicts, industrial technology, and plant ecology.

Pearson’s account begins in the 1850s, when the French military was evolving into a modern professional establishment. This manifested in its first large,

permanent army camp, established in 1857 at Châlons on the plains of Champagne, a training ground and testing site for the accelerating weaponry of the early industrial era. These peacetime operations alternated with the intensities of actual warfare, beginning with France's humiliation by Germany in the war of 1870–1871. Châlons and subsequent military reservations were often established on marginal lands, where the displacement of agricultural productivity was minimal. But the militarization process was closely associated with social conflicts. Persistent opposition to the military came first from users of the agricultural margins, especially inland foresters and coastal fishers, and then broadened as “military-civilian frictions ... often unfold along class, racial, and gender lines, sparked by a range of issues including national sovereignty, pollution, prostitution, noise and military-related accidents” (170).

During World War I, northern France suffered from the “mangled earth” of trench warfare. Pearson proposes that “the militarized environment of the Western Front was amongst the most extreme that has ever existed, scarring soldiers' minds and bodies, societies and cultures, [as well as] the land itself” (1). Barely a generation later, in World War II, the impact widened as German occupiers mined the Atlantic coast and flooded coastal marshlands, crippling the fishing industry and disrupting civilian life. The Allies' D-Day counteroffensive intensified the impacts on beaches, marshes, woodlands, and farms.

In the early Cold War years, American NATO troops set up operations at 437 sites. When de Gaulle separated his military command from NATO in 1967, the Americans moved those operations to West Germany and elsewhere; some sites returned to natural or managed rural civilian uses thereafter. These operations provoked widespread opposition from a loose coalition of local communities and French anti-war activists. Rooted in earlier protests against U.S. sites under NATO, opposition spread in the 1970s to France's own military expansion, especially its nuclear weapons sites, and died down only with the collapse of the Cold War.

Yet military reservations frequently functioned as *de facto* wildlife reserves, since they were off limits to civilian activities. Recognition of the value of these lands for preserving natural systems increased with the 1970s' dawning of environmentalism. Since then, the French military has increasingly taken ecological factors into account on its land, emphasizing its environmental credentials in its public relations campaigns. By 2000, the Ministry of Defence joined with the Minister for the Environment to participate in the European Union's Natura 2000 system of endangered habitats.

In sum, Pearson lucidly weaves together the environmental and social legacy of relations between the French military and civilians, in wartime and peacetime. He does full justice to the role of the military in the complex and unpredictable flow of French history.

————Richard P. Tucker, University of Michigan