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An Environmental History of the  
Twentieth-Century World | J. R. McNeill

something new under the sun





# **ALSO BY J. R. MCNEILL**

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THE MOUNTAINS OF THE MEDITERRANEAN WORLD: AN ENVIRONMENTAL HISTORY

THE ATLANTIC EMPIRES OF FRANCE AND SPAIN

ATLANTIC AMERICAN SOCIETIES FROM COLUMBUS THROUGH ABOLITION (*coeditor*)



**SOMETHING NEW**

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**UNDER THE SUN**



**SOMETHING NEW**  

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**UNDER THE SUN**

**AN ENVIRONMENTAL HISTORY OF  
THE TWENTIETH-CENTURY WORLD**

**J. R. McNEILL**

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## Foreword by Paul Kennedy

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At the beginning of the twentieth century, humankind in the West had already become aware that its collective economic activities were doing strange things to the environment. Salmon could no longer migrate upstream through chemical-tainted waters. The air surrounding industrial cities—and further afield, as the winds moved on—was full of particles of burned fossil fuels. Smog took the lives of thousands with respiratory problems each year. Huge gashes had been carved in the landscape to gain access to fresh coal supplies, and ugly heaps of slag blotted once-pleasant countrysides.

The twin sources of this environmental havoc were also known to observers in 1900. The first was that the world's human population, which had grown rather slowly for almost four million years, began to accelerate in the late eighteenth century and still showed no signs of slackening. The second was that human economic activity had also accelerated ever since the post-1760 Industrial Revolution had allowed the substitution of inanimate for animate energy. All this caused intellectuals like the Cuban José Martí and the Englishman H. G. Wells to wonder whether this immense surge in human activities could be sustained in the decades to come without degrading nature.

Had such writers survived another 100 years, they would have been amazed at the even-greater pace of change that the twentieth century witnessed. The world's population quadrupled in that time, the global economy expanded 14-fold, energy use increased 16 times, and industrial output expanded by a factor of 40. But carbon dioxide emissions also went up 13-fold, and water use rose 9 times. Not all of this meant bad news—indeed the productivity increases of the twentieth century raised the living standards of hundreds of millions of human beings out of their forefathers' ghastly poverty—but the sheer size and intensity of the transforming processes also meant that the history of the twentieth century really *was* different, in environmental terms, from that of any preceding periods.

The twin challenge to all intelligent world citizens is, first, to understand the sheer dimensions of environmental change (and the many results thereof) in this past century; and, second, to think sensibly about how these problems might be addressed before dangerous thresholds are breached by our unwitting, collective activities. This message of first comprehending and then responding to environmental change is the hallmark of Professor McNeill's brilliant and remarkably concise examination of the past century. As his title makes clear, at least in this case Ecclesiastes may have been wrong in claiming that there was "nothing new under the sun." For what McNeill demonstrates in the seven chapters of Part One is that in all of the "spheres" that surround us—the lithosphere and pedosphere, the atmosphere, the hydrosphere, and the biosphere—we humans have impacted our planet more deeply in the twentieth century than we did in all previous history combined. One statistic alone sums this up: according to McNeill's (rough) calculations, humans in the twentieth century use *ten times* more energy than their forebears over the entire thousand years preceding 1900.

But Professor McNeill is not a mere recorder of environmental change. What really interests him is the interaction between what he calls "the planet's history and the people's history"—which is why the chapters in Part Two of this book are equally, perhaps even more, important. Here he deftly analyzes the elements of population growth, migration, technological change, industrialization, international politics, ideas—and their many "feedback loops" into the realm of environmental policies.

McNeill is neither a Luddite, nor a dogmatic "no-change-at-all" environmentalist. But he does caution us to be prudent, and to *take action*, lest the ecological thresholds that global society is steadily approaching are in fact closer than we think.

*Something New Under the Sun* is a clearly written and immensely insightful book. It carries a

message that is deeply sobering, and deserves the widest attention from publics and politicians alike.

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