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

something new under the sun



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SOMETHING NEW

UNDER THE SUN

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UNDER THE SUN

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

J. R. McNEILL

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[List of Maps and Tables](#)

[Foreword by Paul Kennedy](#)

[Acknowledgements](#)

[Preface](#)

[1. Prologue: Peculiarities of a Prodigal Century](#)

[ECONOMIC GROWTH SINCE 1500](#)

[POPULATION GROWTH SINCE 10,000 B.C.](#)

[ENERGY HISTORY SINCE 10,000 B.C.](#)

[CONCLUSION](#)

[PART ONE: THE MUSIC OF THE SPHERES](#)

[2. The Lithosphere and Pedosphere: The Crust of the Earth](#)

[THE BASICS OF THE EARTH'S CRUST](#)

[SOIL ALCHEMY](#)

[SOIL POLLUTION](#)

[EARTH MOVERS](#)

[CONCLUSION](#)

[3. The Atmosphere: Urban History](#)

[THE BASICS OF THE ATMOSPHERE](#)

[AIR POLLUTION BEFORE 1900](#)

[AIR POLLUTION SINCE 1900](#)

[COAL CITIES](#)

[SMOG CITIES](#)

[MEGACITIES](#)

[RECOVERING CITIES](#)

[CONCLUSION](#)

4. The Atmosphere: Regional and Global History

REGIONAL AIR POLLUTION SINCE 1870

THE AIR IN JAPAN

ACID RAIN

FURTHER CONSEQUENCES OF AIR POLLUTION

CLIMATE CHANGE AND STRATOSPHERIC OZONE

SPACE POLLUTION

CONCLUSION

5. The Hydrosphere: The History of Water Use and Water Pollution

WATER BASICS

WORLD WATER USE AND SUPPLY

URBAN WATER

RIVER WATER

LAKES AND EUTROPHICATION

SEAS AND OCEANS

CONCLUSION

6. The Hydrosphere: Depletions, Dams, and Diversions

GROUNDWATER

DAMS AND DIVERSIONS

TAMING FLOODS AND DRAINING WETLANDS

COASTLINES

CONCLUSION

7. The Biosphere: Eat and Be Eaten

MICROBIOTA: THE FIRST LORDS OF THE BIOSPHERE

LAND USE AND AGRICULTURE

CONCLUSION

8. The Biosphere: Forests, Fish, and Invasions

FORESTS

WHALING AND FISHING

BIOLOGICAL INVASIONS

BIODIVERSITY AND THE SIXTH EXTINCTION

CONCLUSION

PART TWO: ENGINES OF CHANGE

9. More People, Bigger Cities

POPULATION GROWTH

MIGRATION

THE FOOTPRINTS AND METABOLISMS OF CITIES

CONCLUSION

10. Fuels, Tools, and Economics

ENERGY REGIMES AND THE ENVIRONMENT

TECHNOLOGICAL CHANGE AND THE ENVIRONMENT

ECONOMIC CHANGES AND THE ENVIRONMENT

CONCLUSION

11. Ideas and Politics

BIG IDEAS

ENVIRONMENTAL IDEAS

INTERNATIONAL POLITICS AND WAR

ENVIRONMENTAL POLITICS AND POLICIES

CONCLUSION

12. Epilogue: So What?

BIBLIOGRAPHY

CREDITS

List of Maps and Tables

MAPS

- [1. KEY LOCATIONS IN MINING AND SOIL EROSION HISTORY](#)
- [2. KEY CITIES AND SMELTER SITES IN MODERN AIR POLLUTION HISTORY](#)
- [3. REGIONAL AIR POLLUTION: THE RUHR AND THE SULFURIC TRIANGLE](#)
- [4. KEY LOCATIONS IN JAPAN'S AIR POLLUTION HISTORY](#)
- [5. KEY LOCATIONS IN WATER QUALITY HISTORY](#)
- [6. KEY LOCATIONS IN WATER MANIPULATION HISTORY](#)
- [7. CHANGES IN WORLD FORESTS, C. 1920 TO C. 1990](#)
- [8. ACTIVE FISHERIES IN THE LATE TWENTIETH CENTURY](#)
- [9. WORLD URBANIZATION SINCE 1800](#)
- [10. MAJOR OIL FIELDS SINCE 1900](#)

TABLES

- [1.1 EVOLUTION OF WORLD GDP, 1500–1992](#)
- [1.2 PER CAPITA WORLD GDP SINCE 1500](#)
- [1.3 WORLD POPULATION SINCE 1820](#)
- [1.4 WORLD FUEL PRODUCTION, 1800–1990](#)
- [1.5 WORLD ENERGY USE, 1800–1990](#)
- [2.1 AVERAGE ANNUAL TRANSPORT OF ROCK AND SOIL](#)
- [2.2 WORLD COAL OUTPUT, 1850–1995](#)
- [2.3 POPULATION DENSITY OF RWANDA, 1910–1996](#)
- [3.1 SOME IMPORTANT TRACE GASES IN TWENTIETH-CENTURY HISTORY](#)
- [3.2 WORLDWIDE METAL EMISSIONS TO THE ATMOSPHERE, 1850–1990 54](#)
- [3.3 SOME AIR POLLUTANT EMISSION RATES IN THE TWENTIETH CENTURY](#)
- [3.4 MEXICO CITY POPULATION, 1900–1997](#)
- [5.1 ESTIMATED GLOBAL FRESHWATER USE, 1700–1990s](#)
- [5.2 CONTINENTAL DISTRIBUTION OF WATER USE, 1900–1990 122](#)

[5.3 NORTH-SOUTH ENVIRONMENTAL COMPARISON IN THE MEDITERRANEAN, 1985](#)

[6.1 GLOBAL IRRIGATED AREA, 1900–1990](#)

[7.1 APPROXIMATE EVOLUTION OF GLOBAL VEGETATION COVER TO 1990](#)

[7.2 TRACTORS IN THE USA, USSR, AND WORLD, 1920–1990](#)

[7.3 YIELD HISTORY IN 93 DEVELOPING COUNTRIES, 1961–1992](#)

[8.1 GLOBAL FISH CATCH, 1800–1996](#)

[8.2 GLOBAL LIVESTOCK POPULATION, 1890–1990](#)

[9.1 REGIONAL POPULATION, 1750–1996](#)

[9.2 URBAN PROPORTIONS, 1890–1990](#)

[9.3 DAILY METABOLISM OF HONG KONG, 1971](#)

[12.1 THE MEASURE OF THE TWENTIETH CENTURY](#)

Foreword by Paul Kennedy

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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