
A broad survey of Chinese ecological history that encompasses more than 4000 years, Robert Marks’ China: Its Environment and History provides a much-needed bridge between narratives of China’s political, social, and economic history and its environmental history. It focuses on the relationship between humans and the environment, and emphasizes the transformative impact of civilization on agricultural production, deforestation, and water management, on China’s natural environment. Marks illustrates the reciprocal relationship between humans and the environment by noting how human responses to natural forces, particularly climate change, instigated ecological transformations. Major themes include the ecological impacts of agriculture, warfare, technological advances, urbanization, the rise and fall of empire, and population growth. Intentional and unintentional effects of these anthropogenic forces include deforestation, soil erosion, flooding, the spread of disease, the depletion of natural resources, and the endangerment of wild animal species.

In his introduction and first chapter, Marks is explicit in elucidating difficulties that arise when studying the relationship between humans and nature in the Chinese context. He explains the problems inherent in using the terms “Chinese” and “China,” which he employs to describe Han Chinese agricultural settlements. Because most scholarly accounts of Chinese history are grounded in Chinese documents, they commonly portray Chinese culture as a civilizing force that acted upon nature and non-Chinese peoples. Marks’ task is to reconstruct these narratives by assessing how both natural forces and non-Chinese peoples transformed China’s environment.

As the Chinese Empire expanded, its history was shaped by interactions between Chinese and non-Chinese peoples of various tribes, ethnicities, and cultures, who inhabited their environments in diverse ways as hunter-gatherers, pastoralists, and agriculturalists. Marks effectively portrays the significance of relations between Chinese and non-Chinese peoples who inhabited the region that would become China and the borderlands, which developed as sites of conflict, adaptation, and assimilation. For example throughout the imperial period, Chinese encroachment into western regions caused migrations that instigated ecological change, as migrants settled in floodplains and highlands. Until the nineteenth century, interactions between agriculturalists in North China and horse-riding nomadic pastoralists who occupied the grasslands of Mongolia and Manchuria tied both regions in a symbiotic relationship of “peace, war, and trade.” since Chinese states relied on the horses and grasslands of the steppe to support the growth of their military (74).

The book is organized chronologically, and divides Chinese history into four broad periods: the Neolithic, ancient, imperial, and modern. The narrative begins by describing China’s geography, forests, rivers, and other features of its natural ecosystems, and then showing how the earliest known human settlements transformed its landscape and ecology by producing agriculture and establishing a centralized state. Early forms of agricultural production included rice paddy farming in South China and the Yangzi River Valley and millet farming in the fertile Yellow River flood plains, which were rich in loess soil. Impacts of the spread of agriculture included
deforestation in North China and a general trend of population growth and urbanization, which led to an increase in mining and smelting copper by around 1000 BCE.

Next, Marks chronicles how the growth of a powerful imperial state led to ecological changes stemming from warfare, colonization in the south and southeast, and the subsequent expansion of agricultural zones. Ecological impacts included heavy deforestation, the spread of infectious disease, and greater population growth due to the growth of wet-rice cultivation in the Yangzi valley. The rise of tea consumption and production in the eighteenth century resulted in the destruction of highland forest ecosystems, causing soil erosion and infertility. By the late imperial period, China had reached its ecological limits, and was in a position of ecological crisis at the start of the modern era.

In his discussion of modern China, Marks describes a trend of environmental degradation in the nineteenth and early twentieth centuries. Intense population growth, commercial development, and the growing needs of the state led to scarcity of land and water resources, which caused migrations and increased deforestation, triggering floods, nutrient depletion in soils, energy shortages, and social unrest. The establishment of the People’s Republic of China in 1949 resulted in new forms of environmental control, as well as movements in preservation and environmental activism. China’s shift to industrial food production in the late twentieth century enabled even greater population growth and urbanization, alongside new environmental costs including water and air pollution, desertification, and species extinction. Local activist movements in response to growing environmental degradation attained varying levels of success, but for the most part, did not have a substantial impact on state policies.

While the book’s major focus is assessing the anthropogenic causes of environmental change, it is effective in presenting cultural attitudes towards the environment, from ancient ideas about nature to modern forms of environmentalism. It assesses problems that arise when studying “Chinese ideas about nature” in antiquity, as the meanings and interpretations of various terms that could be translated as “nature” transformed over time (92-93). While some Western interpretations have emphasized China’s “harmonious relationship with nature,” Marks shows how as early as the Zhou dynasty, state policies were designed to exploit natural resources for political and military purposes. Such contradictory interpretations are part of a larger paradox of incompatible narratives of Chinese history, which either focus on a broad pattern of sustainability and productivity in China’s agricultural sector or emphasize the process of increasing environmental devastation that has led to a current period of crisis.

The book is instructive in showing how early debates about humans and nature were part of a larger discourse on civilization and politics. In Northern China, during the “Hundred Schools of Thought” period, diverse perspectives on nature manifested in Confucian, Daoist, and Legalist philosophies. As Confucian scholars emphasized control over natural forces, such as floods or wild animals, Daoist thinkers reacted with skepticism of human domination in the natural world; meanwhile, legalist philosophers promoted a higher degree of state control and domination over nature and humans. Later attempts to recreate nature in Tang imperial gardens and hunting parks allude to a desire to preserve natural elements, as well as the belief that nature could be “man-made (literally), and thereby controlled” (164). By the late imperial period, Chinese officials engaged in debates about the negative impacts of development and became concerned about the
depletion of natural resources. Programs that promoted the control of nature continued in the modern era, as Chinese communists promoted the view “that resources derived from nature were to be used to support humans and their society, and that people should dominate and control nature” (271).

For scholars and students of world history, this book is a rich resource that connects Chinese history to world historical processes, and ties these to resulting ecological changes. The global dimension is most evident in chapter six, which describes China’s political and economic dominance in the early modern world, as China “began to cast an ecological shadow beyond its own borders” (223). China’s role as the world’s foremost consumer of silver and producer of silk, porcelain, and tea, contributed to its far-reaching ecological impacts, as European and American demand for Chinese goods led traders to focus on procuring goods to sell to the Chinese market. China’s demand for silver accelerated mining in the Americas, and the desire for sandalwood caused deforestation and major ecological changes to island ecosystems in the Pacific. The quest for high-quality animal skins and pelts from Siberia and North America led to the depletion of animal resources in both regions, including sable, sea otters, and beavers, and facilitated the spread of smallpox and influenza into the Pacific, resulting in the decimation of remote populations who had not been previously exposed to Eurasian diseases. Later, as Chinese demand for opium escalated, British ventures to cultivate opium in India brought cholera to China via new trade routes and contributed to the outbreak of the third great bubonic plague pandemic in the late-nineteenth century.

Essentially, this volume is a comprehensive history of China that situates the national narrative in an ecological framework. In this vein, rather than focusing exclusively on the environment, Marks provides a basic political, economic, and social history that makes the book accessible to non-specialists, including students of world history. It is a great introduction to China’s ecological history, in an East Asian or world historical context. It would be a suitable textbook for a course on the environmental history of China, or a more general Chinese history course. The individual chapters could supplement world history courses, as many general textbooks lack an assessment of East Asian environmental history. Overall, the book provides an ecological backstory that would complement any world history survey.

Given the scope of the book, Marks provides a sufficient amount of detail to show how Chinese environmental practices evolved over the centuries. However, to some readers, the breadth of the book might be daunting, and the severity of chronic processes such as deforestation, soil erosion, and resource depletion may become indistinguishable. More generally, the structure the book evokes a narrative of environmental decline and mounting catastrophe, which can read as an inevitable consequence of development. Marks provides numerous examples of how purported “solution(s) to an environmentally imposed constraint on human activity … created a whole new set of ecological problems that succeeding generations inherited and had to deal with” (336). His conclusions about the future of the Chinese and global environment may be bleak, but they raise important questions about sustainability in the future.

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