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## **Book Review**

## The Age of Wood: Our Most Useful Material and the Construction of Civilization, R. Ennos. Simon & Schuster, Inc., New York, NY (2020). 318 pp ISBN 978-1-9821-1473-2

Of interest to a broad-based audience of tree-advocates, woodworkers, construction professionals and the public-at-large, *The Age of Wood: Our Most Useful Material & the Construction of Civilization* is an intently-researched resource produced by author and Visiting Professor of Biological Sciences (University of Hull, U.K.) Roland Ennos. Comprised of 4 parts and 15 chapters, this 318-page hardcover book is revealing, illuminating, and perhaps most prevailing of all, filled with historical realities about the importance of wood as it relates to our society and the way we live. This work is composed in a manner that is enjoyable to all, and surely engaging to any wood – or tree – enthusiast.

The book commences with a prologue that details the feverish search for suitable trees by the two 18<sup>th</sup> century powers of the western world: England and France. The approach to the race between these military powers meant two very different solutions to the problem of locating wood appropriate for ship masts:

"The engineer Paul-Marie Leroy put forward his plan to extract trees from the previously inaccessible Vallee d'Aspe by cutting a daring path through the edge of the cliff. The path was completed in 1772 and named the Chemin de la Mature (literally, the Mast Road)... France's supply problems were fixed, at least temporarily." p.x

England, however, opted to derive its supply of wood for masts from overseas:

"Britain turned to its American colonies, where the old-growth forests of New England contained huge, straight-trunked eastern white pine trees in seemingly limitless numbers. From the mid-seventeenth century onward these trees, which could grow up to 230 feet tall with a diameter of over five feet, became the tree of choice for the British navy." p.x

The prologue ends with a description of the ensuing conflict between Britain and America that culminated in the Pine Tree Riot – an event involving sawmill owners from Weare, NH, who were at odds with the Sheriff of Hillsborough County for refusing to pay the fine associated with sawing up large white pine logs. Without a reliable source of wood for suitable ship masts, the British Navy was greatly diminished and played a substantially reduced role in the war for independence; thus, trees – or lack thereof – and the wood they provide us with, were central to the birth of an independent America.

Following the Prologue, this 15-chapter book is divided into 4 parts: 'Wood and human evolution' (part I) details the evolutionary path of modern humans from the earliest periods of living in trees, to the use of fire (fueled by wood of course), to living inside wooden domiciles. It also outlines the fashioning of simple wooden implements to assist with essential tasks like eating and fashioning temporary or basic, small-scale shelters.

'Building civilization' (part II) links the use of tools fashioned with wood – like the axe – and its role in enabling populations of the Neolithic period to remove large tracts of forests and commence the cultivation of crops. Indeed, an ever-increasing complexity of tool construction fostered by melting and smelting – all processes contingent on the use of wood for heat – had been set in motion and enabled the spread of agriculture. Populations also spread as the construction of ships furthered travel and colonization. Wood was being consumed in ever-increasing quantities as practices such as the cooking of raw foods became commonplace. Specialization of professions – like carpenters – also demanded more wood for the construction of increasingly complex homes, buildings, and increasingly specialized manufacturing.

'Wood in the Industrial Era' (part III) outlines how the shift from burning wood to energy-rich coal precipitated the rise of London – "the largest, fastest-growing and most free-thinking city in Europe" (p.188). The use of coal and charcoal (also derived from trees) enabled the widespread smelting of iron: cast iron, bar iron, wrought iron, became increasingly popular for shipbuilding and in the construction of bridges, buildings, and urban infrastructure. In addition to wood having changed the physical character of the way that we lived, it also changed the way that we thought:

"...one nineteenth-century development must be more important than any ridge or house: the ability to make paper from wood pulp." p.222

Machine-made wood pulp revolutionized journalism and education as the power of the written word commenced spreading across the globe in relatively short order.

'Assessing our impact' (part IV) details the effects that clearing forests and felling trees has had on the state of the environment. The book correctly identifies that history is replete with negative literary works depicting stories of vast deforestation:

"...tales that popular histories tell are generally ones of destruction; the writings are complaints about how forests have been "razed to the ground" and woods "spoiled." p.245

The book posits, however, that "the truth is very different" (p.246) and that while the world's forests have indeed been impacted, massivescale environmental catastrophe has been avoided, societies have adapted, and forests have typically regrown. It does caution that the more contemporary concern relative to modern-day deforestation are the large-scale logging operations of the Amazon; though quick to regrow, removal of these forests has opened what have historically been generally sparsely habited tracts of land to modern day agriculture and settlement.

Though there are over 3 trillion trees on the Earth responsible for covering over 30 % of its surface, the book points out that pristine or old

growth forested areas are indeed at risk with only a few "untouched" sites remaining throughout Europe. The text closes with a call for stewardship as we must strive to "mend our broken relationship with trees and forests and with the wood that they produce" (p.265).

## **Declaration of Competing Interest**

The authors report no declarations of interest.

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