

BOOK REVIEW

1491: *New Revelations of the Americas before Columbus*

C. C. Mann, editor. 2005. Alfred A. Knopf, New York, NY, U.S.A. 465 pp., \$30.00, ISBN 1-4000-4006-X (hardback).

In 1491, Charles Mann aims to introduce new findings in Indian¹ demography, origins, and ecology, selecting examples from cultures that are well documented and intriguing, in order to dispel many false ideas about Indian cultures. Mann is clear that 1491 is not "a systematic, chronological account of the Western Hemisphere's cultural and social development before 1492 ... nor a full intellectual history of the recent changes in perspective among anthropologists, archaeologists, ecologists, geographers, and historians."

An introductory chapter and first section set forth the book's thesis: many commonly held perceptions of the people and landscape of the Americas before Columbus are mostly wrong. Instead of finding primitive peoples, Europeans found sophisticated civilizations. Instead of a vast uninhabited wilderness, the Americas were heavily populated and the landscape fundamentally altered as a result of human manipulation. Mann draws on evidence suggesting that perceptions of Indians as small nomadic societies result from the collapse of major population centers caused by as much as 95% population decline from introduced disease after contact.

The second section covers a broad range of topics. Mann evaluates new evidence from genetics, linguistics,

and archaeology that explains when the paleo-Indian migrations from Asia occurred. He questions the overkill hypothesis, a theory that these migrations caused a wave of large mammal extinctions. The author also describes the different agricultural paths that led to the rise of various new world civilizations, dispelling the myth of cultural inferiority. For example, Mann dismisses the claim that Indian models of agricultural development were more primitive than those using Western technologies (Diamond 1999).

The third section addresses the relationship between indigenous populations and their natural environment. Mann dispels the myth that Indians left no footprint on the landscape by presenting case studies on the widespread use of fire as a land management tool, the human creation of *terra preta* (rich organic soil found in the Amazon) and the intentional planting of selected tree species as a food source. The book concludes with a brief and tangential coda, in which the author claims that the Iroquois gave the concept of liberty to the world, and several short appendices on technical subjects. Like many trade books written for a popular audience, citations are provided as endnotes that can be frustrating for an audience accustomed to in-text citations.

Restoration ecologists will find this book valuable for several reasons. First, by arguing that precontact societies profoundly modified natural landscapes, Mann demonstrates that restoration goals based on imagined precontact environments are suspect, especially given the nature and extent of Indian manipulation of these ecosystems. Rather than trying to "restore" precontact nature, the author argues that conservationists should focus on shaping future environments in ways that preserve valued species and ecosystems, but that also accept changing ecological conditions. This resonates with recent

developments in restoration ecology that focus on the importance of emerging or novel ecosystems.

Second, Mann offers an engaging survey of a wide diversity of sources, which would be otherwise unfamiliar to people outside the fields of physical and cultural anthropology, archaeology, and history. Specifically, the book illuminates the intellectual history of scientific debates within these fields and provides a solid foundation for an in-depth understanding of ongoing investigations into the cultural and ecological past of the New World.

Last, although Mann is not the first to address the subject of precontact conditions in the Americas (e.g., Cronon 1983, Denevan 1992), he has tackled the largest geographic scope and does so in a language that is accessible to a general audience. The vivid style enables readers with little prior knowledge of the subject to both follow his arguments and simultaneously savor the experience.

Although we recommend this book to restoration ecologists, we do so with some caveats. Like many science writers, Mann aims to provide a balanced account of legitimate scientific disagreements, but he is not always successful in doing so. He tends to describe disagreements among scholars as being divided into two camps, a common journalistic tendency that may propel narratives but silences nuance. In other cases, scholarly disagreements are ignored altogether. This is particularly problematic for a general audience, where the reader is often left thinking that a debate has been resolved, when in fact it has not.

The emphasis on revisionist accounts (the "new revelations" of the subtitle) often leads Mann to overstate the prevalence of those findings. For example, large-scale fires, particularly those set by humans, are now considered to be more important than previously thought. But his

¹ Our use of the term Indian to refer to indigenous peoples follows that of the book.

claims that “for more than ten thousand years, most North American ecosystems have been dominated by fire” and that “almost everywhere there was Indian fire” border on hyperbole. In waging the revisionist fight, Mann appeals to the searing argument that absence of evidence is seldom evidence of absence. So it is only fitting to note that evidence of presence somewhere is not evidence for presence everywhere.

In terms of organization, the book jumped around both chronologically and geographically, making it difficult for the reader to keep track of historical details. Restating the main points in concluding paragraphs would have helped link the chapters into a more coherent and organized message, and a timeline of the various cultures discussed would have been helpful.

Overall, the book does an excellent job of exposing many myths

about the Western Hemisphere before Columbus in provocative and entertaining prose. The lingering debates this book highlights will likely never be completely resolved, and emerging scientific discoveries may call into question Mann’s conclusions. Restoration ecologists will undoubtedly find the book a useful introduction to ideas, debates, and evidence from outside their field. Readers wanting more depth or regional specificity will need to pursue other references, including those cited in his 46-page bibliography, but that is hardly unexpected given the vast temporal and spatial magnitude of his project. Mann’s account of human history in the Americas is best taken with a grain of salt, but its diet of maize, frijoles, and revelations can be quite delicious, especially to those who may not have tasted it before.

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**The CentTREAD Working Group (part of the Center for Tropical Research in Ecology, Agriculture, and Development at the University of California Santa Cruz, <http://centread.ucsc.edu>) is a diverse group of scholars from the natural sciences, the social sciences, and interdisciplinary studies. Participants in developing this review included Alexander Gershenson, Karen Holl, Pete Holloran, Julie Jedlicka, V. Ernesto Mendez, Dustin Mulvaney, Brian Petersen, Ana Spalding, and Michael Vasey.*

LITERATURE CITED

- Cronon, W. 1983. *Changes in the land: Indians, colonists, and the ecology of New England*. Hill and Wang, New York.
- Denevan, W. M. 1992. The pristine myth: the landscape of the Americas in 1492. *Annals of the Association of American Geographers* 82:369–385.
- Diamond, J. M. 1999. *Guns, germs, and steel*. W.W. Norton & Company, New York.