



History for a Sustainable Future series

# Plantations and Protected Areas

A Global History of Forest Management

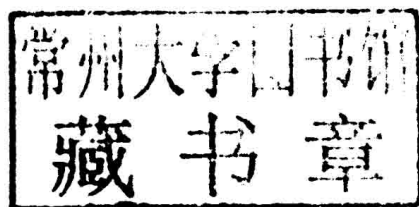
**Brett Bennett**

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A Global History of Forest Management

Brett M. Bennett



The MIT Press  
Cambridge, Massachusetts  
London, England

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This book was set in Sabon LT Std by Toppan Best-set Premedia Limited. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Names: Bennett, Brett M., 1983–

Title: Plantations and protected areas : a global history of forest management / Brett M. Bennett.

Other titles: Global history of forest management

Description: Cambridge, MA: The MIT Press, 2016. | Series: History for a sustainable future | Includes bibliographical references and index.

Identifiers: LCCN 2015037897 | ISBN 9780262029933 (hardcover: alk. paper)

Subjects: LCSH: Forest protection. | Sustainable forestry. | Forest reserves.

Classification: LCC SD411 .B46 2016 | DDC 634.9/2—dc23 LC record available at <http://lccn.loc.gov/2015037897>

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## Plantations and Protected Areas

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## History for a Sustainable Future

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## Series Foreword

Michael Egan

As the crickets' soft autumn hum  
is to us,  
so are we to the trees  
as are they  
to the rocks and the hills.<sup>1</sup>

On a recent visit to Oxford, I happened upon a haunting metaphor of global forests and their future. It was a wet spring and the Cherwell River had flooded. My carry-on travel bags did not permit me to bring a variety of footwear options, so I didn't have with me the necessary shoes for tromping across the soggy fields that separate the town and colleges from Marston, where I was staying with family. The Romans might have marched straight across the fields, but they would have been better shod. So I stuck to the pavements, taking the more circuitous route toward Summertown and then down the Marston Ferry Road. The route took me past the Museum of Natural History, which had on its front lawn a rather striking exhibit called "Ghost Forest," a collection of massive tropical forest tree stumps, mounted—lying down—on stone slabs.<sup>2</sup> I tarried. It was late afternoon, and as I wandered from installation to installation, reading each plaque—which indicated the tree species and its full, living height in a manner that felt more like eulogy than informative display—the world became rather quiet. The

traffic and bustle of the road, not twenty feet away on the other side of the waist-high stone wall, was muted. I was in a mausoleum, or the silent aura one associates with entering a church.

The exhibit was surprisingly moving: less, perhaps, the explicit ghost forest message, and more, simply, the massive remnants of once-living things. Shelley might have written a more sympathetic version of “Ozymandias” for them, where just the stumps remain. I was transported back to childhood holidays on Vancouver Island and trips to Cathedral Grove. There, Douglas firs older than the Oxford colleges, through which I had roamed prior to discovering the ghost forest, still stand protected from the axe, accessible to visitors. Equally massive, awe-inspiring. Or the Carmanah Valley, further west on North America’s edge. During my early adulthood, the struggle to protect the Carmanah resonated like few other political debates for me. On the one hand, the fight over the Carmanah Valley was one of many similar efforts to preserve the unique, natural beauty of old-growth forests and to demonstrate the social and economic value of trees uncut. On the other, it was an attempt to highlight the precarious fragility of ancient ecosystems and to improve our ethical relationship with some abstract nature. Though close to home, I had never visited the Carmanah. But, still, they elicited a sense of home, of belonging, of importance.

A significant portion of environmental history’s mission is to highlight human trespasses into nature. Themes of resource extraction, landscape despoliation, scarcity, and sustainability abound in the literature. Global and transnational analyses of these topics also investigate the social, economic, and historical factors that explain the more rapid rate of deforestation in the tropical world in relation to the increased protection of old-growth stands in the northern, more prosperous parts of the world (a far from simple, perfect, or complete distinction). The

ghost forest was a warning—a testament. But in Oxford, I was especially struck by the sadness I felt. Maybe it was the fatigue of travel catching up with me, combined with mounting homesickness. But the sadness seemed to be born of a kind of kinship—very distant cousins, as it were. It felt more like a palpable reminder of the larger community of life, to which we are all connected.

Deforestation is another expression of the Great Acceleration. Whereas tropical forests—measured by acreage or amount of old growth—have been declining for centuries, that process gained speed with European expansion and increased at a colossal rate after World War II.<sup>3</sup> The demand for timber, but also for the land underneath it to be converted to ranching and agriculture, has radically transformed ever-growing swaths of the tropical world. In turn, that transformation has altered and moved peoples, economies, and politics, not to mention their relationships with power and the environment. Timber scarcity and responses to it are not novel refrains, though. Indeed, the parallel narrative to forest degradations is the emergence of a scientific forest management designed to remedy the potential for economic and ecological collapse.

Trying to procure more trees with less land is at the heart of Brett Bennett's treatise on global forestry and forest management. Sustaining or increasing timber resources on diminishing lands, while ensuring that ecosystems remain healthy, is a daunting task, one that has historically been littered with "conspiracies of optimism," abject failures, and hopeful successes.<sup>4</sup> The expansive narrative that Bennett presents echoes the dominant faith in Western science that shaped Diana Davis's work on French colonialism and agriculture in northern Africa.<sup>5</sup> But this is an older story than the science of forest management that emerged in the wake of industrial scarcity. Paul Warde and others have shown how silviculture's prehistory stems from much earlier, local worries about imminent scarcity.<sup>6</sup> In its first



iterations, “sustainability” was a concept derived to best manage dwindling timber resources in parts of Germany and, later, in England, where John Evelyn stressed the significance of healthy and abundant forests to Britain’s naval survival.

From the local to the global: forest resources didn’t seem so scarce. North American Eden narratives—a continent of infinite resources—and European colonization of Asia meant that trees were perhaps further away, but no less abundant. Still, early colonial expansion resulted in some of the most prescient efforts to conserve resources. The establishment of forest reserves from Europe to Mauritius to Indonesia acknowledged that uncontrolled, rapacious plunder had deleterious consequences.<sup>7</sup> An ordering of landscapes evolved into a system of management, which created a global agricultural system that treated trees as crops. Forest plantations were distinguished from protected areas. Exotic species could be introduced and grown and cultivated in structured patterns. We might think of the forest plantations as sacrifice zones, adopted to allow for the protection of native species.<sup>8</sup> Managing these distinctions, while nurturing both types of forests, is the enduring challenge of foresters the world over.

Another part of the juxtaposition between trees for cutting and trees for saving is that Bennett’s protected areas are far more than trees that have been spared the axe. In more contemporary parlance, these protected areas are the lifeblood of biodiversity preservation and the centerpiece of conservation biology. Put another way, native forests are the stubborn hold-fasts against exotic and invasive species, even if such strict distinctions are never so tidy. Emerging after World War II, during the Age of Ecology, Bennett notes that these protected areas and forests reserves—many of them established by colonial foresters—have become key battlegrounds. But they also constitute an abrogation of forester authority. On the ground, in the courts, and in legislative houses, the efforts to protect

forests, trees, and their inhabitants have diminished forest managers' agency (in some cases, maybe, for the better). In effect, the shift to insert "broader social and environmental considerations"—as distinct from century-old commercial priorities—into forest debates has altered the forester's role.<sup>9</sup> And this introduces some interesting questions about the changing role of scientific expertise in environmental issues.

This is the morass into which Bennett wades. And it points to the critical importance of history in making sense of the world in which we live. Examining catastrophe and its social implications, sociologist Robert Wuthnow observes that we are not very good at responding to threats—terror, pandemic, or environmental. A big part of this, he concludes, stems from our need to act, but we typically respond like generals fighting the last war: Terror provokes Cold War reactions; avian flu elicits revisiting the 1918 epidemic as a reference point. "A threat appears and we buy duct tape," he writes, "because we did that the last time."<sup>10</sup> This is Wuthnow's problem with history: antecedents dictate actions even when they are not especially useful. Bennett makes a related case for our current global forest crisis. Contemporary forest management and the struggle to reduce wasteful deforestation worldwide is fraught with twentieth-century approaches and understandings (as varied and complex as those were), and burdened by dominant-but-outdated silvicultural practices and policies.

Wuthnow's problem with history does not negate history's value, however. Rather, it magnifies its importance. If history is simply a matter of recalling events, then we are indeed doomed to repeat it as Wuthnow describes. But history is the study of nuance and complexity. It is the process of disentangling and demystifying the myriad events, decisions, and knowledges that have shaped our present. Identifying how continuity and change have evolved through global forestry's past provides a potent lens for reading the present landscape and planning for

a more resilient future. In charting such an ambitious history of past forests, Bennett provides a roadmap for imagining strategies to realize robust future forests. Perhaps it is a foolish question, but what will forests look like in the future? Bennett shows we are at a critical tipping point where globalization's contemporary economic pressures are in conflict with long-term resilience imperatives.

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## Acknowledgments

Many friends, colleagues, and family members have encouraged me during the writing of this book. I am thankful for all of your support. I am unfortunately unable to individually thank all of the people who offered encouragement and advice at various stages of the project owing to word limitations.

A few people who played a special role in helping this book come to print deserve mention. Fredrik Albritton-Jonsson, Diana Davis, Simon Pooley, and Gregory Barton inspired me to start and finish the project. Frederick Kruger commented on the manuscript in various incarnations. John Dargavel and James Beattie advised on specific chapters. Michael Egan, the series editor, has encouraged me to undertake and finish this book since we first talked in 2010. Beth Clevenger, the MIT Press acquisitions editor, has shown great generosity and professionalism in helping me revise the manuscript for publication. The MIT Press team, especially Kathleen Caruso, has helped me at every step of the publishing process.

The Forest History Society (special thanks to Cheryl Oakes, Steven Anderson, Jamie Lewis, and Eben Lehman) has given me consistent financial and scholarly support, including providing most of the pictures in this book. My colleagues at the University of Western Sydney (especially Peter Hutchings, Tim Winter, Tim Rowse, Robert Lee, Ien Ang, Lynette Sheridan

Burns, and Paul James) have inspired me since I joined the faculty in early 2011. Special thanks go to my mentors (Bruce Hunt, Wm. Roger Louis, Tony Hopkins, Gail Minault, James Vaughn) and fellow graduate students at the University of Texas at Austin. Faculty at the University of Cape Town (Lance van Sittert), Stellenbosch University (David Richardson and Sandra Swart), and the Australian National University (Tom Griffiths, Carolyn Strange, Libby Robin, Melanie Nolan, Kim Sterelny, Peter Kanowski, and all the members of the Centre for Environmental History and the School of History) have offered me an intellectual home away from home for many years.

The University of Western Sydney, Australian Research Council (DP140102991), National Science Foundation (USA), and Social Science Research Council (USA) funded my research.

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## Introduction: The Forest Management Divergence

A myriad of human-caused pressures threaten the world's forests. Demand for wood products and agricultural land endangers many of the last unlogged tropical forests. Tropical forests were deforested from 2000 to 2010 at a yearly rate of 5.2 million hectares, or roughly the size of Costa Rica, to make way for farms, plantations, and ranches. Trade liberalization since the 1980s has allowed Western corporations to export timber processing jobs and to import wood fiber and forest products from developing countries with lower costs and ideal growing conditions. Exotic species now comprise a sizeable percentage of the forest cover in developing countries in Asia, Africa, and South America. Ecologists warn that this is increasing the potential that exotic trees will become invasive in the future. These are but a few of the most pressing problems threatening the world's forests.

As a result of these changes, some scientific experts warn that the world's forests face historically unprecedented crises. In 2003, the eminent forest ecologist Jerry Franklin urged participants in forest policy discussions to look to the future, rather than the past, to find the solutions needed to address contemporary problems. He argued:

Too many participants in the current forest policy debates—stakeholders, media, politicians, and resource professionals—appear



focused on the past rather than on the future . . . In North America and many other regions of the world, stakeholders and politicians continue to fight the resource war of the 20th century—preservation versus exploitation. These battles are familiar and comfortable. But the major challenges of the 21st century are not likely to repeat those from the previous century. Few of the forest policy debates, alliances, and “solutions” of the 20th century are likely to be relevant to these new challenges.<sup>1</sup>

Franklin noted that economic globalization was the primary factor reshaping forest policy throughout the world: the “globalisation of the wood products industry is, I believe, the most significant factor influencing the developing context for forest stewardship.”<sup>2</sup>

Franklin’s assertion that many participants have focused narrowly on conflicts over the management of public forests without understanding broader global change is correct, although we should be wary of the claim that the past cannot help us explain and solve contemporary forestry problems. From a historical perspective, many of the world’s “new” environmental problems—rapid deforestation, climate change, pollution, and peak resource use—appeared during the modern era (1750–present).<sup>3</sup> Nor are the processes associated with globalization new: we are living through the most recent phase of a longer process of global integration and connection that began in earnest during the early modern era (1500–1750) and continues to today.<sup>4</sup>

Almost all of the management paradigms and problems that scientific experts and policy makers now wrestle with appeared in their current forms by the 1980s. The expansion of intensive exotic timber plantations in tropical countries, the creation of protected forest areas, the privatization of state plantations, fears about tropical deforestation, and the awareness that trees can be problematic invasive species garnered considerable attention during the 1980s. If we look even further back, the