

EMPIRE FORESTRY AND THE ORIGINS OF ENVIRONMENTALISM

What we now know as environmentalism began with a series of land reservations in 1855 in British India, spreading during the second half of the nineteenth century until over 10 percent of the land surface of the earth became protected as a public trust. Sprawling forest reservations, many of them larger than modern nations, became revenue-producing forests that protected the whole "household of nature," and Rudyard Kipling and Theodore Roosevelt were among those who celebrated a new class of government foresters as public heroes. These foresters warned of impending catastrophe, desertification, and global climate change if the reverse process of deforestation continued. The empire forestry movement spread through India, Africa, Australia, New Zealand, Canada, and then the United States to other parts of the globe, and Gregory Barton's pioneering study is amongst the first to look at this movement, and thus the origins of environmentalism, in global perspective.

Born under imperialism, environmentalism today is as profound a global movement as that for democracy itself. Ironically it is in those former colonies where environmentalism took shape that its future, and the future of nature, seems least assured. *Empire Forestry and the Origins of Environmentalism* is a major contribution to the understanding of what is perhaps one of the most powerful political and social forces of modern times.

Raised in Oregon, Gregory Barton is Professor of British, Colonial and Environmental History at the University of Redlands, California. He is the editor of *American Environmentalism*. This is his first book.



Cambridge Studies in Historical Geography 34

Series editors

ALAN R.H. BAKER, RICHARD DENNIS, DERYCK HOLDSWORTH

Cambridge Studies in Historical Geography encourages exploration of the philosophies, methodologies and techniques of historical geography and publishes the results of new research within all branches of the subject. It endeavors to secure the marriage of traditional scholarship with innovative approaches to problems and to sources, aiming in this way to provide a focus for the discipline and to contribute towards its development. The series is an international forum for publication in historical geography which also promotes contact with workers in cognate disciplines.

For a full list of titles in the series, please see end of book.



EMPIRE FORESTRY AND THE ORIGINS OF ENVIRONMENTALISM

GREGORY ALLEN BARTON





PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Cambridge CB2 2RU, UK
40 West 20th Street, New York, NY 10011-4211, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa

http://www.cambridge.org © Gregory Barton 2002

This book is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2002

Printed in the United Kingdom at the University Press, Cambridge

Typeface Times 10/12 pt System \LaTeX 2 $_{\mathcal{E}}$ [TB]

A catalogue record for this book is available from the British Library

ISBN 0 521 81417 0 hardback



> For my mother, Ina Mae Russell Barton



Contents

	List of illustrations	page x
	Acknowledgments	xii
1	Introduction	1
2	The great interference	9
3	Empire forestry and British India	38
4	Environmental innovation in British India	62
5	Empire forestry and the colonies	94
6	Empire forestry and American environmentalism	130
7	From empire forestry to Commonwealth forestry	144
	Bibliography	167
	Index	187

ix



Illustrations

1	Reserved teak forest in Burma, 1914	page 3
2	Reserved teak and evergreen forest in Burma, 1902	22
3	Teak tree in northeast India, 1898	24
4	Reserved evergreen forest of deodar, spruce, and blue pine in the Punjab, India, looking toward the Himalayas:	25
~	photo R. S. Troup, 1914	25
5	Oxen pulling a log, Burma	25
6	Reserved pine forest in the Punjab, India	51
7	Reserved forest in the Gangetic delta, India	52
8	Transporting deodar sleepers for broad-gauge railway construction, Kashmir	53
9	A rare photograph of a forest rest house in Burma, with a woman standing in the forecorner: photo R. S. Troup	53
10	Reserved forest of deodar in the Punjab, India	83
11	A reserved forest in the foothills of the Himalayas in northwest India	84
12	Cart road used as a fire line through a sal forest in Oudh, India: photo R. S. Troup, 1910	85
13	A 100-foot wide fire line protecting a reserved forest of pine in the United Provinces, India: photo R. S. Troup, 1909	86
14	Teak logs placed in a dry stream, waiting for the rainy season to transport to the depot, upper Burma: photo R. S. Troup, 1899	87
15	Dry slide for transporting deodar beams, Kashmir, 1911	88
16	Former forest in Northern Rhodesia: an example of shifting cultivation	99
17	Crown land in Northern Rhodesia during a harvest for firewood, 1956	100

X



	List of illustrations	xi
18	Hills denuded by overcutting and goat grazing, Cyprus: photo R. S. Troup, 1929	105
19	Pine forest after a forest fire, Cyprus: photo R. S. Troup, 1924	106
20	Fire lookout in Western Australia, 1940	112
21	Firewood cutter tractor, Victoria, Australia	113
22	Lumber mill in British Columbia	141
23	Douglas fir and western hemlock forest, British Columbia	142
24	Giant snails on a pometia tree in New Britain: photo	
	H. G. Champion, 1957	155



Acknowledgments

Many people have helped me along the way to make this book possible. Richard Mills at the Oxford Forestry Institute guided me to much valuable material, particularly to early conservation photographs in the Plant Sciences Library collection. I am indebted to Gareth Griffiths and the archival volunteers at the new British Empire and Commonwealth Museum in Bristol, to the staff at the British Library, the Bibliothèque Nationale, the India Archives in New Delhi, the Library of Congress and the National Agricultural Library in Washington, DC. Generous funding from the Fulbright Commission enabled me to research in the subcontinent and to share my ideas at Dhaka University and the Asiatic Society of Bangladesh. The director, Sirajul Islam, gave me much helpful scholarly input. I also thank the director of the National Library of Bangladesh, Md. Shahabuddin Khan and the director of the National Archives of Bangladesh Mr. Chowdhury. I am also grateful to Shibbir Haq, a friend and colleague who provided much hospitality and care in Dhaka, and who guided me to many remote forest areas in northeast India, Nepal, Bangladesh, and Myanmar.

At Northwestern University, where this book began, I benefited from the help and advice of John Bushnell, Paul Friesema, T. W. Heyck, my dissertation advisor, and Harold Perkin. To Harold Perkin I owe a great debt and special thanks. From him I learned the love of writing "big picture" history and observed first hand the habits of mind that a great historian brings to his craft. He read many drafts of the manuscript, suggesting ideas and improvements throughout, and never ceased to make himself available at every stage from dissertation to book. To Michael Williams I also owe much. As the world's leading forest historian, he reviewed early drafts of articles that explored the themes of this work, and despite their many flaws recommended them for publication. He also selflessly aided my efforts to bring to publication an argument that he concurrently formed. I am grateful for the advice of Michael Heffernan, Alan Baker, Richard Grove, and the editors at Cambridge University Press. Matthew Carrell aided me with the conservation photographs in this book, providing much-needed technical expertise. Dr. Elias Stinson generously shared his brilliant ideas on nature, religion, and empire. Mary Curry, cited in this

xii



Acknowledgments xiii

book as Mary Ledzion, became an invaluable friend who, born in India and raised with the Indian Forest Department, explained much that cannot be found in books. Ben Longrigg, also raised in the lap of the Indian Forest Department, generously provided travel funds to Britain and access to his father's control journal, along with his valuable advice and friendship. My mother laboriously read and corrected countless drafts in her forest cabin in Zigzag, Oregon, while my partner T. Neal patiently encouraged me as I traveled and wrote. I am grateful to them all. The faults of this book, are, needless to say, entirely my own.