Palgrave Series in Indian Ocean World Studies

Series Editor Gwyn Campbell McGill University Montreal, Canada This is the first scholarly series devoted to the study of the Indian Ocean world from early times to the present day. Encouraging interdisciplinarity, it incorporates and contributes to key debates in a number of areas including history, environmental studies, anthropology, sociology, political science, geography, economics, law, and labor and gender studies. Because it breaks from the restrictions imposed by country/regional studies and Eurocentric periodization, the series provides new frameworks through which to interpret past events, and new insights for present-day policymakers in key areas from labor relations and migration to diplomacy and trade.

More information about this series at http://www.springer.com/series/14661

Greg Bankoff • Joseph Christensen Editors

Natural Hazards and Peoples in the Indian Ocean World

Bordering on Danger



Editors Greg Bankoff University of Hull Hull, UK

Joseph Christensen Murdoch University Perth, Australia

Palgrave Series in Indian Ocean World Studies ISBN 978-1-349-94856-7 ISBN 978-1-349-94857-4 (eBook) DOI 10.1057/978-1-349-94857-4

Library of Congress Control Number: 2016942672

© The Editor(s) (if applicable) and The Author(s) 2016

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made.

Cover illustration: © 2d Alan King / Alamy Stock Photo

Printed on acid-free paper

This Palgrave Macmillan imprint is published by Springer Nature The registered company is Nature America Inc. New York

ACKNOWLEDGEMENTS

The editors would like to acknowledge a number of people whose assistance and support has made this volume possible. In particular, we thank Professor James Warren, Convenor, and the participants at the *Dimensions of the Indian Ocean World Past* conference, Western Australian Maritime Museum, 12–14 November 2012; Professor David Starkey and the Maritime Historical Studies Centre group at the University of Hull; Professor Kevin Hewison and the staff and students of the Asia Research Centre, Murdoch University; and Professor Gwyn Campbell, Dr Erik van Dongen and Lori Callaghan at the Indian Ocean World Centre, McGill University. Unless otherwise indicated, all maps that appear in this volume were produced by Dr Alexander Brown, Murdoch University, and Karina Pelling, ANU College of Asia and the Pacific. Finally, we would like to extend our thanks to Linda Rossi, Anna Chapman, Ashleigh Forrest and Bas van Maren for their support of the volume and the projects upon which it is based.

Contents

1	Bordering on Danger: An Introduction Greg Bankoff and Joseph Christensen]
2	Revisiting Southeast Asian History with Geology: Some Demographic Consequences of a Dangerous Environment Anthony Reid	3]
3	'The Sea Becomes Mulberry Fields and Mulberry Fields Become the Sea': Dikes in the Eastern Red River Delta, c.200 BCE to the Twenty-First Century CE Li Tana	55
4	'The Most Horrible of Evils': Social Responses to Drought and Famine in the Bombay Presidency, 1782–1857 George Adamson	79
5	Philippine Typhoons Since the Seventeenth Century James Francis Warren	105

6	Bushfire in Madagascar: Natural Hazard, Useful Tool, and Change Agent Christian A. Kull	143
7	Emperor Tự Đực's 'Bad Weather': Interpreting Natural Disasters in Vietnam, 1847–1883 Kathryn Dyt	169
8	Storm over San Isidro: Repeated 'disasters' and Civic Community Culture in the Nineteenth-Century Philippines Greg Bankoff	199
9	Disaster Management and Colonialism in the Indonesian Archipelago, 1840–1920 Alicia Schrikker	225
10	Cyclones, Drought, and Slavery: Environment and Enslavement in the Western Indian Ocean, 1870s to 1920s Matthew S. Hopper	255
11	Their Inescapable Portion? Cyclones, Disaster Relief, and the Political Economy of Pearlshelling in Northwest Australia, 1865–1935 Joseph Christensen	283
	atum to: Natural Hazards and Peoples in the lian Ocean World	El
Index		313

Notes on Contributors

George Adamson works at the boundary of environmental history, historical geography and climatology, focusing on climate variability and human responses in colonial India. Adamson is Lecturer in Geography at King's College London, having undertaken doctoral and postdoctoral research at the University of Brighton and University of Sussex. He is an affiliate of the Centre for World Environmental History.

Greg Bankoff has worked and published extensively on the historical dimension of how societies adapt to risk as well as engaged with contemporary civil defence and emergency management practices in Asia, Australasia and more recently Europe. His most recent publications include co-authoring The Red Cross's World Disaster Report 2014: Culture and Risk and a companion co-edited volume entitled Cultures and Disasters: Understanding Cultural Framings in Disaster Risk Reduction (2015). He is Professor of Modern History at the University of Hull, UK.

Joseph Christensen holds a BA and a PhD from the University of Western Australia. He is a postdoctoral fellow at the Asia Research Centre, Murdoch University, where he works in the fields of maritime and environmental history. He is co-editor of Historical Perspectives of Fisheries Exploitation in the Indo-Pacific (2014).

Kathryn Dyt is a historian with an interest in the environment and religious and cultural practices in Vietnam. Her current PhD research at the Australian National University, funded by a Vice-Chancellor's Scholarship for Doctoral Study, explores the relationship between the environment, emotion and kingship in nineteenth-century Vietnam.

Matthew S. Hopper is an associate professor in the History Department at California Polytechnic State University, San Luis Obispo. He holds a PhD in History from UCLA (2006) and has held fellowships at Yale University (2009), the Institute for Advanced Study (2015), and the University of Cambridge (2016). His writing has appeared in Annales, Itinerario, and the Journal of African Development. His book Slaves of One Master: Globalization and Slavery in Arabia in the Age of Empire was published in 2015.

Christian A. Kull researches the political ecology of resource management issues like fire, introduced plants, peasant agriculture and forest management, particularly in Madagascar and around the Indian Ocean rim. Trained in the USA, he has taught in Canada and Australia, and, since 2015, in Switzerland.

Tana Li holds a BA and an MA from Peking University and a PhD from Australia National University, where she is currently a senior fellow in the School of Culture, History and Language. Li is also Director of the Centre for the Study of the Chinese Southern Diaspora.

Anthony Reid is Emeritus Professor of Southeast Asian History at the Australian National University. His recent books include An Indonesian Frontier: Acehnese and Other Histories of Sumatra (2004), Imperial Alchemy: Nationalism and Political Identity in Southeast Asia (2010), To Nation by Revolution: Indonesia in the 20th Century (2011) and A History of Southeast Asia: Critical Crossroads (2015).

Alicia Schrikker is Lecturer in Colonial and Global History at the Institute for History at Leiden University. She wrote her PhD on colonial transitions in Sri Lanka and has been involved in two research projects on natural disasters in history: one examining the interaction between government and society in the wake of natural disasters in colonial Indonesia in the nineteenth and early twentieth centuries and the other focusing on the representation of disaster in colonial and postcolonial contexts in Southeast Asia and the Caribbean.

James Francis Warren is Professor of Southeast Asian Modern History at Murdoch University. He is an award-winning historian who has published numerous monographs, journal articles and book chapters. His books include Iranun and Balangingi: Globalisation, Maritime Raiding and the Birth of Ethnicity (2002), The Sulu Zone 1768-1898: The Dynamics of External Trade, Slavery and Ethnicity in the Transformation of a Southeast Asian Maritime State (2007) and Pirates, Prostitutes and Pullers: Explorations in the Ethno-and Social History of Southeast Asia (2008).

List of Figures

4 36 81
81
81
93
121
123
125
146
171
173

xii LIST OF FIGURES

Fig. 8.1	The Philippines showing a detail of San Isidro and	
	surrounding areas c.1887	205
Fig. 9.1	Ternate (left) and Sangihe Besar (right), Eastern Indonesia	228
Fig. 9.2	Java, showing the location of Mt Kelud	242
Fig. 10.1	Approximate paths of the cyclones of 1885 and 1890,	
	with inset showing date growing region affected by 1890	
	cyclone	260
Fig. 10.2	Oman, showing places mentioned in chapter	262
Fig. 10.3	Muscat date exports, 1874–1905	266
Fig. 11.1	Broome and the Dampier Peninsula, showing the track	
	of the March 1935 cyclone and the approximate position	
	of the Koolinda (marked a 'K') when the cyclone was	
	first reported	285
Fig. 11.2	Northwest Australia, showing places mentioned in the	
	chapter and the locations of the severe cyclones of 1875,	
	1887, 1908 (April and November), 1910, and 1935	288
Fig. 11.3	Major losses through cyclones in the pearling industry,	
	Northwest Australia, 1868–1935 (only losses of five or more	
	lives and/or three or more vessels have been included; losses	
	sustained by other industries, such as passenger or merchant	
	shipping, are not counted)	290
Fig. 11.4	Monthly frequency of tropical storms, Northwest Australia,	
	1872–1923	292

LIST OF TABLES

Table 3.1	Households in the Coastal South, 2 BCE	61
Table 3.2	Taxpayers in Hai Duong and Nam Dinh, 1417–1819	69
Table 4.1	Details and codes for archival collections consulted	
	in the UK, USA and India	82
Table 5.1	Number of remarkable typhoons per month, 1903–1918.	
	Census of the Philippine Islands: Taken under the Direction	
	of the Philippine Legislature in the Year 1918, (Manila:	
	Philippine Islands Census Office, Bureau of Printing,	
	1920–1921), vol. 1, pp. 448–51	116
Table 5.2	Annual remarkable typhoon frequency, 1903–1918.	
	Census of the Philippine Islands: Taken under the	
	Direction of the Philippine Legislature in the Year 1918,	
	(Manila: Philippine Islands Census Office, Bureau of	
	Printing, 1920–1921), vol. 1, pp. 448–51	116
Table 5.3	The 25 most intense tropical cyclones in the	
	Philippines (1951–2001), in order of wind speed	119
Table 5.4	Annual tropical cyclone numbers	122
Table 5.5	Number of typhoons affecting the Philippines from 1880	
	to 1999	126
Table 10.1	Number of tropical storms > 34 knots and number of	
	> 64 knots affecting the coastline of Oman and Yemen	
	from 1890 to 1996	260
Table 10.2	Statement showing the number of date trees with their	
	prices, destroyed by the cyclonic storm of June 5, 1890	265

LIST OF MAPS

Map 3.1	Dikes in the Red River delta, 1803	57
Map 3.2	Impact of sea intrusion at the current Red River delta	58
Map 3.3	Dikes of the Red River, 1926	59
Map 3.4	a. Historical evolution of the Red River delta, b. Sea level curve	63
Map 3.5	Sections of accretion and erosion in contemporary Nam	
	Dinh coastlines	66
Map 5.1	Path of Super Typhoon Haiyan, November 2013	107
Map 5.2	Common typhoon paths in the Philippines	112
Map 5.3	Areas vulnerable to floods and typhoons, Philippines	113
Map 5.4	Areas vulnerable to storm surges, Philippines	127