

ATLAS OF EXPLORATION

FOREWORD BY JOHN HEMMING DIRECTOR AND SECRETARY OF THE ROYAL GEOGRAPHICAL SOCIETY (1975–1996) Philip's ATLAS OF EXPLORATION

First published in Great Britain in 1996 by Philip's, a division of Octopus Publishing Group Limited, 2–4 Heron Quays, London E14 4JP

Copyright © 1996, 2006 Philip's

Reprinted 1997, 1998 Second edition 2006

Commissioning Editor Jane Edmonds Executive Art Editor Mike Brown Cartography Philip's Production Sally Banner

Contributors EARLY EXPLORATION Dr Mark Greengrass

ASIA David Mountfield

AFRICA Dorothy Middleton

CENTRAL AND SOUTH AMERICA Sir John Ure

NORTH AMERICA Dr Selma Huxley Barkham Dr Alan G. Macpherson James Steele

THE PACIFIC, AUSTRALIA AND NEW ZEALAND David Mountfield

THE ARCTIC Dr Anita McConnell

THE ANTARCTIC Ann Savours

OCEANOGRAPHY Dr Anita McConnell

EXPLORATION TODAY Shane Winser Tim Furniss (Space Exploration)

ISBN-13 978-0-540-08215-5 ISBN-10 0-540-08215-5

A CIP catalogue record for this book is available at the British Library.

All rights reserved. Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, electrical, chemical, mechanical, optical, photocopying, recording, or otherwise, without prior written permission. All enquiries should be addressed to the Publisher.

Printed in China

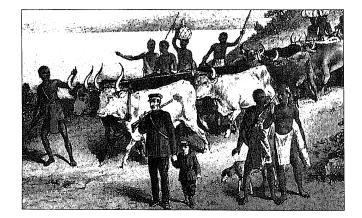
If-title page: Willem Barents's pedition beset by ice in the arctic, 1596

Opposite title page: Africa, Arabia and India: extract from the Miller Atlas of c. 1519

Opposite Foreword: The Tibetan Plateau and Mt Gungar in Northwest China

Contents

- 7 Foreword by John Hemming Director and Secretary of The Royal Geographical Society (1975–1996)
- 8 EARLY EXPLORATION
- **10** The First Civilizations
- 12 The Phoenicians and Greeks
- 14 Alexander the Great
- 16 The Silk Road
- **18** The Geography of the Ancients
- 20 The Roman Empire
- 22 Out of the North
- 24 The Geographies of Islam
- 26 Islamic Travellers
- 28 European Discovery of Asia
- **30** The Journeys of Marco Polo
- 32 China and the Outside World
- 34 Reconnaissance of Africa
- 36 ASIA
- **38** Portuguese Pioneers
- 40 Missions to the Orient
- 42 Beyond the Caspian Sea
- 44 Jesuits in the Himalayas
- 46 Advance of the Cossacks
- 48 The Great Northern Expedition
- **50** Islam's Holy Cities
- 52 The Arabian Desert
- 54 Central Asia
- 56 Roads to Lhasa
- 58 The Surveyors
- 60 Peaks and Plateaus
- 62 Southeast Asia



- 64 AFRICA
- 66 Europeans in East Africa
- 68 The Mystery of the Niger
- 70 Navigation of the Niger
- 72 The Nile Quest
- **74** The Bakers and the Nile
 - **76** David Livingstone
 - **78** Further Exploration of the Nile



- 80 Henry Morton Stanley
- 82 The Central Lakes
- 84 The Desert
- 86 Southern Africa
- 88 The "Scramble" and its Aftermath
- 90 Central and South America
- 92 Columbus and the New World
- 94 Explorers of the East Coast
- 96 Cortés Conquers Mexico
- **98** Pizarro and Orellana
- **100** The Search for El Dorado
- **102** Missionaries and *Bandeirantes*
- 104 Academics on the Amazon
- **106** Baron von Humboldt
- **108** Navigators and Naturalists
- Darwin and the Beagle
- **112** The High Andes
- **Explorers** in the 20th Century
- 116 North America
- **118** Norse Discoveries
- **120** Early Exploration of the East Coast
- **122** Penetration from the East Coast
- **124** The Spaniards in the Southwest
- **126** Champlain and his Contemporaries
- **128** Charting Northern Waters
- 130 Missionaries and Traders
- **132** Jolliet's Journeys
- 134 La Salle and the Mississippi
- **136** Crossing the Appalachians
- **138** Journeys to the Northwest
- 140 The North Pacific Coast
- 142 Crossing the Canadian Rockies144 Surveying the West
- **144** Surveying the West
- 146 The Pacific, Australia and New Zealand
- **148** Voyages of the Polynesians
- 150 Magellan's Voyage
- 152 Planting the Cross
- 154 The Dutch
- **156** The English and the French

- 158 James Cook
- 160 The North Pacific
- 162 The British in Australia
- **164** Across the Blue Mountains
- 166 Into the Interior
- **168** Across the Continent
- **170** Europeans in New Zealand
- **I72** THE ARCTIC
- **174** Search for a Northern Seaway
- **176** British Admiralty Expeditions
- **178** Charting the Northwest
- **180** Reaching for the Pole
- 182 Expeditions in the 20th Century
- 184 THE ANTARCTIC
- **186** First Sightings of the
 - Continent
- **188** Charting the Coastline
- **190** Scientific Voyages
- 192 The Heroic Age
- 194 Mawson and Shackleton
- **196** Expeditions Since 1918

198 Oceanography

- 200 First Observations
- 202 Charting the Ocean Depths204 Exploration for
 - Commercial Needs
- **206** Life in the Depths
- 208 Seeing for Ourselves

210 EXPLORATION TODAY

- 212 Tropical Forests
- 214 Hot Deserts
- 216 The Polar Regions
- **218** The Marine Environment
- **220** The Challenge of the Mountains
- **222** The Global View
- **224** Going to the Moon
- 226 Exploring the Inner Planets
- 228 Journeys to the Giants
- 230 Asteroids, Comets and Beyond

232 BIOGRAPHICAL DETAILS

- **243** Time Chart of Exploration
- 251 Index
- 256 Picture Acknowledgements

