Geotourism: The Tourism of Geology and Landscape

Edited by

David Newsome

Murdoch University, Australia

and

Ross K. Dowling

Edith Cowan University, Australia



(G) Published by Goodfellow Publishers Limited, Woodeaton, Oxford, OX3 9TJ http://www.goodfellowpublishers.com

British Library Cataloguing in Publication Data: a catalogue record for this title is available from the British Library.

Library of Congress Catalog Card Number: on file.

ISBN: 978-1-906884-09-3

Copyright © Goodfellow Publishers Ltd 2010

All rights reserved. The text of this publication, or any part thereof, may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, storage in an information retrieval system, or otherwise, without prior permission of the publisher or under licence from the Copyright Licensing Agency Limited. Further details of such licences (for reprographic reproduction) may be obtained from the Copyright Licensing Agency Limited, of Saffron House, 6–10 Kirby Street, London EC1N 8TS.

Design and typesetting by P.K. McBride

Printed by Lightning Source, www.lightningsource.com

Cover photo: Uluru (Ayers Rock) is a 340 m high inselberg comprised of feslpathic sandstone. It is one of the world's iconic landforms located in the heart of the continent and visited by approximately 450,000 people every year. The rock's original sedimentary layers have been tilted almost to the vertical as a result of mountain building which occurred some 300–400 million years ago. Together 'The Rock', as it is universally known, and some nearby rock domes (Kata Tjuta) located west of Uluru, combine to form spectacular geological formations that dominate the vast plains of central Australia. For these values, the area was inscribed on the World Heritage List in 1987.

Source: Jane Newsome.

Contents

1	Setting an agenda for geotourism David Newsome and Ross Dowling	1
2	The significance of aesthetic landscape appreciation to modern geotourism provision Thomas A. Hose, Buckinghamshire New University, UK	13
3	Australia's geological heritage: a national inventory for future geoparks and geotourism Bernard Joyce, University of Melbourne, Australia	27
4	Centralized data management approaches in geotourism: a view from Finland Ari Brozinski, University of Turku, Finland	46
5	Promoting geotourism: a case study from northeast Iceland John S. Hull, New Zealand Tourism Research Institute/Icelandic Tourism Research Centre	61
6	The Australian Alps: opportunities and challenges for geotourism Pascal Scherrer, Edith Cowan University, Australia and Catherine Marina Pickering, Griffith University, Australia	77
7	Reconsidering the boundaries and applications of Geotourism – lessons learnt from tourism at Mount Vesuvius Jonathan Karkut, London Metropolitan University, UK	88
8	Management of geotourism stakeholders – experiences from the Network History of the Earth Christof Pforr, Curtin University of Technology, Australia and Andreas Megerle, Universität Karlsruhe, Germany	100
9	Geotourism in the Hawaiian Islands Lisa M. King, James Cook University Cairns, Australia	114
10	The Cretaceous fossil sites of South Korea: identifying geosites, science and geotourism In Sung Paik, Pukyong National University, Korea, Min Huh, Chonnam National University, Korea, Hyun Joo Kim, Pukyong National University, Korea, Sook Ju Kim, Pukyong National University, Korea, and David Newsome, Murdoch University, Australia	126
11	Geotourism and geotourist education in Poland Tadeusz Slomka and Wojciech Mayer, AGH - University of Science and Technology, Poland	142
12	Geotourism product interpretation: Rangitoto Island, Auckland, New Zealand Christian Wittlich, Johannes Gutenberg-Universität Mainz, Germany and Sarah Palmer, Murdoch University, Australia	

iv Geotourism: The Tourism of Geology and Landscape

13	Geotourism potential in North Carolina: perspectives from interpretation at state parks Stacy Supak and Yu-Fai Leung, North Carolina State University, USA,	
	and Kevin Stewart, University of North Carolina, USA	172
14	Interpretation rocks! Designing signs for geotourism sites Karen Hughes and Roy Ballantyne, University of Queensland	184
15	The Jurassic Coast World Heritage Site: understanding	
	the nature of geotourism Sally King, Anjana Ford, Richard Edmonds, Dorset and East Devon Coa World Heritage Site, United Kingdom	ist 200
16	USA scenic byways – connecting people to places Judy Walden, Walden Mills Group, Wesley Hill, the Geological Society of America and Sally Pearce, Scenic Byways Program Coordinator, State of Colorado	211
17	The UNESCO global network of national geoparks Patrick J. Mc Keever, Geological Survey of Northern Ireland, Nickolas Zouros, University of the Aegean, Greece, Margarete Patzak, UNESCO, Division of Ecological and Earth Sciences and Jutta Weber, Geo-Naturpark Bergstraße-Odenwald, Germany	221
18	The future of geotourism: where to from here?	
	Ross Dowling and David Newsome	231
	Index	245

Dedication

To our wives and families

Jane, Benjamin and Rachel Newsome

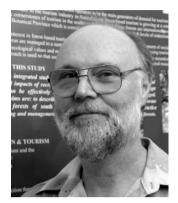
and

Wendy Dowling and Jayne, Trevor, Shenee & Paige Belstead (England); Simon, Lynette, Amelie & Exan MacLennan (Australia); Mark, Jess & Nessa Dowling (Australia); Tobias & HyeHyang Dowling (China), Aurora, Mike, Helena & Nina Gibbs (New Zealand) and Francis Dowling (New Zealand)

About the editors

David Newsome

David Newsome is an Associate Professor in the School of Environmental Science at Murdoch University, Perth, Western Australia. His principal research interests are geotourism and the biophysical impacts of recreation and tourism in protected areas. Professor Newsome's research and teaching focus on the sustainable recreational use of landscapes and the assessment and management of tourism activity in protected areas. He is the lead author of two books *Natural Area Tourism: Ecology, Impacts and Management* and *Wildlife Tourism* and co-editor of *Geotourism*, a book which has helped set the scene for the emergence of geotourism as a distinct discipline within the area of natural area tourism.



Ross K. Dowling

Ross Dowling is Foundation Professor of Tourism in the School of Marketing, Tourism and Leisure, Faculty of Business and Law, at Edith Cowan University in Western Australia. Internationally he is an Advisor, UNESCO Global Network of National Geoparks, Executive Board Member of the Indian Ocean Tourism Organization, and Co-founder, International Cruise Research Society. In Australia he is Co-founder and Executive Director of Ecotourism Australia as well as an Advisor to Cruise Down Under. In Western Australia he is Chair of the Forum Advocating Cultural and Eco Tourism (FACET) as well as a Council Member of the Royal Automobile Club and the Minister of Tourism's appointee to the Council of the National Trust.



Professor Dowling conducts international research in the fields of geotourism, cruise ship tourism and ecotourism and has 200 publications. In recent years he has co-authored or co-edited eight books on tourism. They are *Ecotourism*, *Tourism in Destination Communities*, *Natural Area Tourism*, *Ecotourism Policy and Planning*, *Wildlife Tourism*, *Geotourism*, *Cruise Ship Tourism* and *Coastal Tourism Development*. Two have been translated into Chinese, one into Persian and others published in India.

In 2008 he convened the Inaugural Global Geotourism Conference in Australia and was Advisor to the Sarawak Tourism Board for the Second Global Geotourism Conference held in Mulu. Malaysian Borneo in 2010.

Together with his wife Wendy, Ross Dowling is a director of the tourism consultancy Ideology which carries out international tourism planning, training and development (www.ideology.net.au).

vi Geotourism: The Tourism of Geology and Landscape

Contributors

Ari Brozinski is a geologist currently working on his geotourism PhD in Turku, Finland. His research combines modern ICTs with geology and also presents a framework for geotourism development. Besides his research, Brozinski has worked in many geopopularisation projects covering various computer-centered technologies such as touchscreen interfaces in geological multimedia kiosks and semantic design on geoscience websites. His great passion is to find new ways tell the world how our planet operates and deliberately document them to be used again in various situations where geotourism is to be realised. Contact: ari.brozinski@utu.fi

Roy Ballantyne is the Head of the School of Tourism, University of Queensland, Australia. He has a well established international reputation for his work in environmental education, interpretation, and free-choice learning, wildlife tourism and ecotourism research. He has 86 papers in refereed journals, over 60 other publications and has a substantial record of competitive research grants including six Australian Research Council grants. He is the coeditor of the international journal *Visitor Studies*. Contact: r.ballantyne@uq.edu.au

Richard Edmonds is Earth Science Manager for the Jurassic Coast Project in Dorchester, England. Here he works in conservation, education and marketing through the promotion of geotourism. He has previously worked in the North Sea oil industry, the National Trust for Scotland, and the Charmouth Heritage Coast Centre. Contact: r.edmonds@dorsetcc.gov.uk

Anjana Ford is Education Coordinator, Jurassic Coast World Heritage Site, Dorchester, England. She is an Earth Scientist specialising in communicating ideas about geology, geomorphology and processes that form natural landscapes to a wide range of audiences. After gaining a PhD in glacial geology at the University of Southampton she moved to the USA to continue a postdoctoral research career, during which she was most inspired by time spent working with the US National Park Service. Contact: A.K.Ford@dorsetcc.gov.uk

Wesley Hill is the International Secretariat of The Geological Society of America (GSA). Ms. Hill managed the geotourism program at GSA for many years and currently manages GSA's international affairs and is very involved with bringing the USA into the Global Geoparks Network. Ms. Hill is on the UNESCO Geoparks Advisory Board, Member of the IUCN World Commission on Protected Areas, Member of the Executive Committee of the International Union of Geological Sciences (IUGS), and Member of the US National Committee for the International Year of Planet Earth. Contact: whill@geosociety.org

Tom Hose is a Principal Lecturer in tourism at Buckinghamshire New University, previously working as a biologist and geologist in UK museums and schools. His long-standing commitment to geoconservation, presently for GeoconservationUK, the British Institute of Geological Conservation and ProGEO underpins his expertise as a field naturalist and geologist – crucial in his recognising, defining and developing the geotourism concept for his groundbreaking doctoral thesis on geotourism. Over the past 20 years he has authored numerous geotourism book chapters, journal articles, conference papers and consultancy reports. Contact: Tom.Hose@bucks.ac.uk

Karen Hughes is a Senior Research Officer in the School of Tourism, University of Queensland, Australia. She has worked as a tourism researcher and lecturer for many years and has a particular interest in environmental interpretation, interpretive signage, free-choice environmental learning and visitor research. Karen has recently completed a PhD exploring the impacts of post-visit support on families' conservation learning at wildlife tourism sites. She is a co-author of the book *Designing Effective Interpretive Signs – Principles in Practice*, published by Fulcrum Press, Colorado (USA) in 2007. Contact: k.hughes2@uq.edu.au

Min Huh is Professor of Paleontology in the Faculty of Earth Systems and Environmental Sciences, Chonnam National University, South Korea, and Director of the Korea Dinosaur Research Center. During the past decade he has undertaken several projects on dinosaur excavation and contributed to develop many dinosaur geotourism sites in Korea. He is currently Vice-president of Korean Committee for inscription of UNESCO World Heritage on Korean Cretaceous Dinosaur Coast, Korea. Contact: minhuh@chonnam.ac.kr

John Hull is a Senior Lecturer at the New Zealand Tourism Research Institute at AUT University, Auckland, New Zealand. His present research addresses tourism development issues in peripheral regions. John is a guest professor at the Icelandic Tourism Research Centre and has been Project Director for Northeast Iceland's strategic tourism plan and geotourism workshop. His past clients include the UNWTO, UNCBD, UNEP, UNESCO, World Bank, Nordic Council, European Tourism Research Institute, Commission on Environmental Cooperation, Canadian Tourism Commission, and Parks Canada. Contact: jhull@aut.ac.nz

Edmund Bernard Joyce is Honorary Principal Fellow at the School of Earth Sciences of The University of Melbourne, Australia. He is the former Chair of the Australian Heritage Commission Natural Evaluation Panel (Victoria), and for more than 20 years the Convener of the Standing Committee for Geological Heritage of the Geological Society of Australia. There he convened heritage workshops, produced the first report on Australian sites of National and International significance, and a volume on geological heritage methodology. He is currently studying volcanic landforms and how best to look after the landscape heritage of the new Kanawinka Global Geopark. Contact: ebj@unimelb.edu.au

Jonathan Karkut is a specialist in project development, design and management for London Metropolitan University, England. Foci have included research around intangible heritage and its application within tourism, tourism in conflict and post-conflict regions, and geotourism with reference to sites of active vulcanicity. He is now studying for his PhD by combining experience in exploration geology and in the anthropology of tourism to provide a critical analysis of the geoparks global network. Contact: j.karkut@londonmet.ac.uk

Hyun Joo Kim is a Doctoral candidate in Sedimentary Geology, Department of Earth Environmental Sciences, Pukyong National University, Korea. She has participated in several researches on the interpretation of the Cretaceous paleoenvironments of Korea and excavation and reconstruction of various fossils including dinosaur. She has previously worked with the Program of Natural History Experience, where she guided children through Korean Cretaceous dinosaur and bird track sites and museums. Contact: sunstay@pknu.ac.kr

Sook Ju Kim is Master of Science and a Research Assistant in the Department of Earth Environmental Sciences, Pukyong National University, Korea. She studied Geotourism and wrote the thesis for the degree of M.S., 'Cretaceous geological records along the rocky coast of Busan, Korea as a Geotourism site'. She has also participated in the excavation and reconstruction of dinosaur fossils. She has previously worked as a guide for the Program of Natural History Experience for children. Contact: namul486@pknu.ac.kr

Lisa King is a PhD student in Tourism at James Cook University, Cairns, Australia. She is a third generation field geologist who holds degrees in science, ecotourism, and education. Lisa's research interests include visitor monitoring and management within World Heritage geosites, branding and marketing geosites, and geosite 'collecting' behaviour by geotourists. Currently she is conducting research in the Hawaiian Islands; Queensland, Australia and southeast Asia. She has published book chapters on lava tube tourism and geotourism in the Hawaiian Islands and on Jeju Island, S. Korea. Contact: volcanolisa@hotmail.com

Sally King is the Visitor Manager for the Jurassic Coast World Heritage Site in Dorset and East Devon, UK. Sally's success in managing the inherent conflict between attracting visitors to the Jurassic Coast whilst protecting one of the world's most important geological sites was recognised through the Jurassic Coast winning the international Tourism for Tomorrow Award. Sally has also spent time involved in conservation tourism in Namibia. Contact: s.a.king@dorsetcc.gov.uk

Yu-Fai Leung is an associate professor in the Department of Park, Recreation and Tourism Management at North Carolina State University, USA. His interests focus on recreation ecology and sustainable visitor management in protected areas. His research supports the development of visitor impact indicators and monitoring programs in national parks in the U.S. and East Asia. He has published papers in various peer-reviewed journals

viii Geotourism: The Tourism of Geology and Landscape

and as chapters in edited books. He is a founding member of the Recreation Ecology Research Network and a member of IUCN's World Commission on Protected Areas. Contact: Leung@ncsu.edu.

Wojciech Mayer is a geologist and Assistant Professor at the AGH-University of Science and Technology in Kraków, Poland. He is working in geology, mineralogy and geochemistry of ore deposits, and in geotourism. He was the co-organizer of education in Geotourism and in Tourism & Recreation at the AGH-UST. He was one of the founders of the International Association for Geotourism (IAGt) and is its current Secretary. He is the co-editor of the *Geotourism Quarterly*. Contact: wmayer@geol.agh.edu.pl

Patrick McKeever is Principal Geologist, Geological Survey of Northern Ireland. He has run the Survey's Landscape Heritage/Geotourism sector since 1995. He has pub lished over 70 geological walking routes, 13 geotourism driving routes and numerous other popularstyle books and guides to the geology of the north of Ireland. Since 2000, he has been actively involved in the geoparks movement and is currently one of the two elected coordinators of the European Geoparks Network and a member of the Global Geoparks Network Bureau. In 2009 he was the official delegate for the Republic of Ireland to the Natural Science discussions at the UNESCO General Conference. Contact: patrickgsni@yahoo.ie

Andreas Megerle is lecturer and researcher at the Institute for Regional Science of the Karlsruhe Institute of Technology, Germany. He was a member of the German Expert Board for National Geoparks and is an advisor for different geoparks and geotouristic initiatives. As initiator and manager of the Geotouristic Network History of the Earth he was one of the foundation members of the UNESCO Geopark Swabian Alb. His research mainly concerns the role of geotourism and geoparks for regional development and its management, focussed on the learning effects within heterogenous cooperation networks. Contact: megerle@kit.edu

In Sung Paik is Professor of Sedimentary Geology at Department of Earth Environmental Sciences of Pukyong National University, South Korea, and Vice-President of the Geological Society of Korea. During the past decade he has undertaken several projects on paleoenvironmental reconstruction of the Age of Dinosaurs in the Korean Peninsula, and provided a number of geological and paleobiological records in geotourism. Contact: paikis@pknu.ac.kr

Sarah Palmer is a researcher in Social Sciences and Environmental Science, at Murdoch University, Australia. She is currently researching on various projects related to ecotourism, conservation biodiversity, regional community development and natural resource management. Her main interest is in the socio-cultural aspects of science communication, public understanding of science and behaviour change. Contact: sarahpalmer14@gmail.com

Margarete Patzak is the Programme Specialist for the International Geoscience Programme and Global Geoparks Network initiative, UNESCO, France. She has completed studies in Geology and Mineralogy at the University of Würzburg, Germany and her doctorate in the mineralogy on metamorphic rocks, was completed in 1991. She is the Coordinator of European projects on the protection and conservation of cultural heritage, EUROCARE, based at the University of Karlsruhe. Contact: m.patzak@unesco.org

Sally Pearce is the director of the Scenic and Historic Byways Program for the Colorado Department of Transportation, USA. She is a nationally recognized expert on scenic byways and is a board member of the National Scenic Byways Foundation. Ms. Pearce holds an MA in History from Colorado State University and has published several books on historic mining communities. Contact: sjpearce@comcast.net

Christof Pforr is Course Coordinator (Tourism & Event Management) and Research Director in the School of Management, Curtin Business School, Curtin University, Australia. His main research interests include geotourism and regional development, tourism policy and planning, sustainable (tourism) development and coastal tourism, all fields he has frequently published in. He has contributed to more than 100 publications and numerous international research collaborations, in addition to national projects under the umbrella of the Sustainable Tourism Cooperative Research Centre and the Desert Knowledge Cooperative Research Centre. Contact: c.pforr@curtin.edu.au **Catherine Pickering** conducts research at the International Centre for Ecotourism, Griffith University, Australia. She has undertaken a wide range of research relating to ecology and tourism, including research in recreation ecology, mountain tourism, nature-based tourism, protected area management, alpine ecology and the effects of climate change on tourism destinations. She has over 140 publications, including over 60 papers published in international referred academic journals. Contact: c.pickering@griffith.edu.au

Pascal Scherrer is a Research Fellow in Sustainable Tourism, School of Natural Sciences, Edith Cowan University, Australia. His main research interest is in sustainable tourism and visitor management in natural areas, addressing environmental and social impacts and their relationship. His research and publications span the areas of sustainable tourism, alpine ecology, visitor management and environmental and socio-cultural tourism impacts. He has a PhD in Environmental Science from Griffith University and a Bachelor of Science (Hons) with majors in Environmental Science and Ecotourism. Contact: p.scherrer@ecu.edu.au

Tadeusz Słomka is a professor of sedimentology, general geology, mathematical geology and geotourism at the AGH-University of Science and Technology in Kraków, Poland, and was the founder and the chief organizer of education in Geotourism and in Tourism and Recreation there. He is currently the Vice-Rector at that University. He was the Chief Editor of the 'Catalogue of Geotouristic Sites in Poland', and the Chief Editor of the Geotourism quarterly. He was the founder of the International Association for Geotourism (IAGt) and is recently its Vice-president. Contact: slomka@geol.agh.edu.pl

Kevin Stewart is a professor of Geological Sciences at the University of North Carolina at Chapel Hill, USA. His research is focused on the structural geology and tectonics of mountain belts. He has worked in the southern Appalachian Mountains of North Carolina, the Rocky Mountains of Montana, Wyoming, and New Mexico, and the Apennine Mountains of Italy. Contact: kgstewar@email.unc.edu

Stacy Supak is a PhD student in the Department of Parks, Recreation and Tourism, North Carolina State University, USA. She holds a B.S. in Civil Environmental Engineering from Columbia University and an M.S. in Geophysics from the University of California at Santa Barbara. Her current interests relate to quantifying and understanding trends in nature-based tourism. Contact: sksupak@ncsu.edu

Judy Walden is the president of Walden Mills Group, Denver, Colorado, USA, a consultancy that specializes in economic development for rural communities, many serving as gateways to public lands with significant geologic features. She has worked to help designate Scenic and Historic Byways across North America, and has developed tourism training materials that teach local residents and tourism business owners the concepts of interpretation, resource protection and tourism ethics. Prior to her work in tourism, she was the Vice President of Educational Services for Colorado Mountain College. Contact: walden.judy@q.com

Jutta Weber is Geoscience and Public Relations Manager of the Global and European Geopark Bergstrasse-Odenwald, Germany. She is member of the European Geoparks Network (EGN) and of the Global Geoparks expert group and on the Editorial Board of the EGN. During the last decade, she has contributed to the Geoparks issue with papers, presentations and workshops at EGN and GGN conferences. Contact: j.weber@geo-naturpark.de.

Christian Wittlich is a PhD student who researches in the field of environmental education and interpretation. A 2007 research project brought him to New Zealand where he studied Geography and Environmental Science and investigated geotourism on Rangitoto Island. He currently contributes as a research assistant and tutor to the Geography Didactics team at Mainz University. Contact: C.Wittlich@geo.uni-mainz.de

Nickolas Zouros is a Professor in Physical Geography, Department of Geography, University of the Aegean, Greece. He has been the Director of the Natural History Museum of the Lesvos Petrified Forest since its foundation in 1995. He is one of the founders of the European Geoparks Network in 2000 and is a member of the UNESCO Global Geoparks Bureau. He was co-convenor of several Geopark Conferences and is the author of several articles and books on Geoparks, geoconservation and geotourism. Contact: nzour@aegean.gr

Preface

Geotourism is an exciting subject that has arisen out of the nexus between geology and tourism. While interest in both subjects has been around since time immemorial, it is only in relatively recent times that tourism specifically to see geological features has been put in the spotlight.

The 'Grand Tour' of the 19th century was primarily for tourists to see and experience the natural and cultural features of Europe and of course the establishment of the National Parks System in the USA over 100 years ago was mainly to protect America's wild lands and landscapes from forestry, mining and other exploitative activities as a form of conservation through tourism. In the latter part of the last century, environmental tourism emerged as a separate discipline within tourism, largely through the growth of ecotourism, with its focus on tourism in natural areas which is sustainable, conservation supporting, educative and locally beneficial.

Then in the early part of the 2000s, geotourism emerged as an area of interest with research and conference initiatives and the establishment of geoparks. The editors of this volume contributed through their earlier book on *Geotourism* (Dowling and Newsome eds, Butterworth Heinemann, UK, 2006) and their hosting of the Inaugural Global Geotourism Conference 'Discover the Earth Beneath our Feet'. This was held in Perth, Western Australia from 17-20 August 2008. Over 220 delegates from 36 countries participated in the conference which was held to broaden our knowledge of geotourism and introduce the concept of geoparks to Australia. Major supporters of the conference were Tourism Western Australia and the Department of Environment and Conservation; as well as Tourism Australia, Edith Cowan University, the Geological Survey of Western Australia and the National Trust of Western Australia. The conference was held during the International Year of Planet Earth and was endorsed by UNESCO.

For the conference a 478 page book was produced, *Geotourism – Inaugural Global Geotourism Conference Proceedings* (Dowling and Newsome, eds, Promaco Conventions, Australia, 2008). It comprised over 100 abstracts and papers and quickly became sold out due to strong demand for information on the subject.

Arising from this interest we decided to publish a new book to update the subject we first visited in 2006. Interest in our project grew and so this volume represents the first of two new books on the topic. This volume is specifically designed to set the scene and provide a clear definition of geotourism as well as provide information on its characteristics. Thus it contains content on landscape appreciation, geoheritage, management, interpretation, education and the future of geotourism.

Our second publication *Global Geotourism Perspectives* (Dowling and Newsome, eds, Goodfellow Publishers, 2010) brings together in the second volume a range of case studies of geotourism from a number of countries including Australia, Brazil, China, Greece, Malaysia, Mauritius, Oman, South Africa and the USA. Taken together the two books propel the subject to another level and provide an informed platform on which to build the future of geotourism.

Naturally these two books form only part of the picture. There are other books and journals, emerging research and of course now many conferences on geotourism. Recent books have included *GeoTourism in Ethiopia* (Asrat, Demissie, and Mogessie, eds, Shama Books, Ethiopia, 2009) and *Geotourism and Local Development* (de Carvalho

and Rodrigues, eds, Câmara Municipal de Idanha-a-Nova and Geopark Naturtejo da Meseta Meridional, Portugal, 2009).

Journals include *GeoTurystyka* [*Geotourism*], published by the International Association of Geotourism in Poland (www.geoturystyka.pl) and *Geoheritage* published by ProGeo, the European Association for the Conservation of the Geological Heritage, Portugal (www.springer.com). Another useful publication is *Earth Heritage*, 'The Geological and Landscape Conservation Magazine', published by the Joint Nature Conservation Committee, Natural England, the Scottish Natural Heritage and the Countryside Council for Wales (www.seaburysalmon.com/earth.html).

Research is being conducted in a range of countries as evidenced by the chapters in this book and its companion. Conferences abound on the subject with the World Heritage and Geotourism Conference hosted by the Geological Society of South Africa, held in Pretoria from 4–5 June 2009; the 8th European Geoparks Conference focusing on Geotourism, held from 12–14 September 2009 at Geopark Naturtejo, Portugal and the Second Global Geotourism Conference held from 17–20 April 2010 at Gunung Mulu World Heritage Region, Sarawak, Borneo, Malaysia.

Thus the subject of geotourism is growing rapidly. This book is a research volume which aims to add knowledge to the many facets of this emerging subject. It has been compiled for a broad audience including natural area tourism professionals, planners and managers; government and business decision-makers; and students from a wide range of disciplines seeking general information on geotourism development in one volume. We hope that you enjoy it as well as its companion volume of case studies, *Global Geotourism Perspectives*.

David Newsome and Ross Dowling

Perth, Australia

February 2010

Acknowledgements

The editors would like to thank a number of people who contributed to this book. They include the authors and publishing staff. First we would like to thank the contributors, all 33 of them. Some we have known for many years and have worked with before, others were unknown to us before this project. Some are emerging new or young researchers whereas others are icon academics and well established authors. All we have got to know better through the many iterations of the text during the evolution of the book and we salute each and every one of you for having the faith in this project and the fortitude to deal with our demands over a long period of time. This book is yours and we know that it has been immeasurably enriched by your contributions.

We particularly wish to thank the staff of Goodfellow Publishers, Oxford, England, especially Tim Goodfellow (Co-Director) and our old friend Sally North (Publisher), who worked with us on our first book on Geotourism back in 2006.

Individually as editors we wish to thank some people.

David Newsome

I would like to express my thanks to Professor Nick Costa (former Dean of the School of Environmental Science) and Professor Stuart Bradley (Dean of the Faculty of Sustain-

xii Geotourism: The Tourism of Geology and Landscape

ability, Environmental and Life Sciences) who facilitated the completion of this project through an approved Outside Studies Programme at Murdoch University.

In addition I would like to thank my wife Jane for her support in managing the household when we have hosted international visitors and during the times that I have been away on fieldwork. I am particularly grateful to Steve Martin for assistance during a visit to the Grand Canyon National Park and to Tom Hose for helpful discussions on the definition of geotourism. Thanks also go to Associate Professor Yu-Fai Leung and Professor In Sung Paik who are recent collaborators in geotourism research.

As always I would like to give thanks to the Newsome family in the UK who have, and continue to, provide support for fieldwork in England and Wales. Appreciation goes to Ken and Paul Newsome and to my sister Linda for continuing the great family tradition of cooking the best liver and onion casserole in England. Sadly, my mother, who brought me into this world, is not here to share in the success of previous book writing endeavours. Finally I would like to thank the unknown midwife who said to my mother upon my arrival on this planet 'this boy will travel'.

Ross Dowling

I would like to thank my co-editor David Newsome. We have worked well together over the years authoring and editing a number of books. As always the experience in co-editing this book has been extremely productive and very enjoyable.

My love of geology began through the interest of a friend, Donald Lumsdon, from Nelson, New Zealand. He started my lifetime fascination with the subject. My interests were further enhanced by the comprehensive knowledge of an early lecturer and mentor, Professor Paul Williams, Professor of Geography and globally recognised Karst Geomorphologist, whilst I studied under his direction at the University of Auckland, New Zealand. In recent years I acknowledge my renewed interest comes from working with my co-editor David Newsome, a passionate advocate of exploring and understanding the world through the appreciation of landforms.

As with all previous books, I wish to acknowledge the support of my employer, Edith Cowan University, one of Australia's leading new generation universities that is committed to excellence in teaching and research. It is a truly great university.

Initial thanks goes to Professor Kerry Cox (Vice Chancellor) who continues to inspire me and encourage me to achieve great things, A/Professor David Clark-Murphy (Head, School of Marketing, Tourism and Leisure), and Tourism Program Staff Dr Dale Sanders and Dr Iris Mao. In addition Julie Connolly, Anna Johansson and Leishele Pearce (Administration Officers, School of Marketing, Tourism and Leisure) have also contributed to my work through their excellence as efficient administrators and superb colleagues.

I also wish to thank my many Australian and international students from around the world who have participated in my undergraduate and postgraduate geotourism classes. We have had a lot of fun and I have learned a lot about the industry from your research assignments and oral presentations.

Finally I wish to thank my wife Wendy for her unfailing love and support through this my ninth book in the last nine years. I could not have achieved this without her. I also wish to thank my children and grandchildren for the contributions they have made, and continue to make, to my life. This book is part of my legacy for you all.

Chapter extract

To buy the full file, and for copyright information, click here

http://www.goodfellowpublishers.com/academic-publishing.php?promoCode=&partnerID=&content=story&st

oryID=231



All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recorded or otherwise, without the written permission of Goodfellow Publishers Ltd

All requests should by sent in the first instance to

rights@goodfellowpublishers.com

www.goodfellowpublishers.com