BEACHES OF THE NEW SOUTH WALES COAST

A guide to their nature, characteristics, surf and safety

ANDREW D SHORT

Coastal Studies Unit School of Geosciences F09 University of Sydney Sydney, NSW 2006



COPYRIGHT © AUSTRALIAN BEACH SAFETY AND MANAGEMENT PROGRAM

Coastal Studies Unit School of Geosciences F09 University of Sydney Sydney NSW 2006 and

Surf Life Saving Australia Ltd 1 Notts Ave Locked Bag 2 Bondi Beach NSW 2026

Short, Andrew D

Beaches of the New South Wales Coast (2nd edition) Published February 2007

1-920898-15-8

Other books in this series by A D Short:

•	Beaches of the New South Wales Coast, 1993 (1st edition)	0-646-15055-3
•	Beaches of the Victorian Coast and Port Phillip Bay, 1996	0-9586504-0-3
•	Beaches of the Queensland Coast: Cooktown to Coolangatta, 2000	0-9586504-1-1
•	Beaches of the South Australian Coast and Kangaroo Island, 2001	0-9586504-2-X
•	Beaches of the Western Australian Coast: Eucla to Roebuck Bay, 2005	0-9586504-3-8
•	Beaches of the Tasmania Coast and Islands, 2006	1-920898-12-3
•	Beaches of the Northern Australian Coast: The Kimberley, Northern Terra	itory and Cape York, 2006

Beaches of the Northern Australian Coast: The Kimberley, Northern Territory and Cape York, 2006
1-920898-16-6

Published by: Sydney University Press University of Sydney www.sup.usyd.edu.au

Printed by: University Publishing Service University of Sydney

Copies of all books in this series may be purchased online from Sydney University Press at:

http://www.sup.usyd.edu.au/marine

New South Wales beach database:

Inquiries about the New South Wales beach database should be directed to Surf Life Saving Australia at info@slsa.asn.au

Cover photograph: Boomerang Beach (NSW 208) is an exposed rip dominated beach, with six well developed beach rips visible in this view.

TABLE OF CONTENTS

	-	
Abstra	ct	
1 INT	PRODUCTION	
1 IIN		
	The Coastal Envir	
	~	
		1 · D
		ospheric Processes
	Biological Proces	ses
2 BE	ACHES	
2 00.		Y
	1 0	
	Beach types	
3 NE	W SOUTH WALES	BEACH USAGE AND HAZARDS
- ,		Surf Life Saving
		201 210 20 116
		ty
		ich in this book
4 NE	W SOUTH WALES	BEACHES
4.1	Far North Coast:	Duranbah to Ballina
4.2		South Ballina to Iluka
4.3		Yamba to Corindi Creek
4.4	Mid North Coast:	Coffs Harbour region
4.5		Scotts Head to Hastings River
4.6		Port Macquarie to Hawks Nest
4.7		Port Stephens
4.8	Newcastle Region	: Port Stephens to Catherine Hill Bay
4.9	Central Coast:	÷
4.10	Sydney: Broken	
4.11	•	Beaches: Palm Beach to Manly
4.12		Harbour:
4.13		Beaches: Bondi to Congwong Bay
4.14		Bay
4.15	Southern	n Beaches: Cronulla to Port Hacking
4.16	Illawarra Coast:	Hacking Point to Wollongong
4.17		Port Kembla to Comerong Island
4.18	South Coast:	Crookhaven Heads to Bherwerre
4.19		Sussex Inlet to Ulladulla-Kioloa
4.20		Murramarang National Park: O'Hara Island to Surfside
4.21		Batemans Bay to Moruya River
4.22	Far South Coast:	Moruya Heads to Wagonga Inlet
4.23	Tur youth Coust.	Narooma to Mogareeka Inlet
4.24		Tathra to Cape Howe
4.25	Lord Howe Island	Laura to Cape Howe
7.43	LUIU IIUWE ISIAIIU	1
Glossa	rv	
	•	
	-	
Jul 11	144-21	

iv A D Short

To Gordon and Eileen

who first took me to the beach

FOREWORD (1st edition)

BEACHES OF THE NEW SOUTH WALES COAST

A guide to their nature, characteristics, surf and safety

Hundreds of thousands of people visit New South Wales's 721 beaches every year. These beaches are characterised by dynamic geographical processes (rips, waves and currents), resulting in an average of 5000 rescues and 15 drownings per year.

Water safety awareness, learn to swim and the prevention of death by drownings are regarded as major safety issues by the NSW Government.

I am delighted that the NSW Government through my Department of Sport, Recreation and Racing has been able to support the development of a four-year research program examining the nature, facilities, conditions, usage and public risk associated with all beaches in NSW.

This program. entitled "The NSW Beach Safety Program" is the first of its kind, not only for NSW but worldwide. It is a benchmark study that has now received Federal funding to act as a pilot for the development of the Australian Beach Safety and Management Program.

The NSW Beach Safety Program has identified coastal hazards which affect bathers along the NSW coast as well as rating all NSW beaches as to the level of hazard they impose on the bather.

In addition, research findings have clearly identified the need to continue beach safety education programs, particularly directed at people residing more than 50 kilometres from the NSW coast, people from a non-English speaking background and overseas tourists to NSW.

My Department is working closely with Surf Life Saving New South Wales, Inc. in the development of water safety programs and resources in order to ensure a greater awareness of beach safety within these target groups, and to help reduce the number of beach related rescues and drownings.

I commend this publication to you in the interest of water safety education.

CHRIS DOWNY, MP

Clini so

Minister for Sport, Recreation and Racing

vi A D Short

PREFACE (1ST edition)

This book had its origins in November 1986 at a meeting held at the University of Sydney, between Andrew May, National Development Officer with Surf Life Saving NSW (SLSNSW), Angus Gordon, Head of the NSW Public Works Department (PWD) Hydraulics Laboratory, and Professor Bruce Thom and myself from the Coastal Studies Unit (CSU). The meeting had been called by Angus Gordon to help address a problem bought to the PWD by Andrew May, to compile a database on the beaches of NSW and how to assess their safety. As a project of this nature was outside the role of the PWD, the CSU was approached to see if it could assist.

The result was the formation of the NSW Beach Safety Program, a joint project of the CSU and SLSNSW. As the project was both unique and unfunded, the first priorities were to develop clear aims and guidelines to achieve the database, and secondly, to raise funds to get the project up and running.

Those organisations that have supported the project are noted in the Acknowledgments.

Needless to say the project has gone from strength to strength, and now more than six years after that initial meeting, not only is the NSW database and this book complete, but in its broader role as the 'Australian Beach Safety and Management Program' (ABSMP) similar databases and books are under way on all Australian States and the Northern Territory.

This monograph follows a long list of reports produced by the Program. It is, however, different from previous publications in that it presents an overview of all NSW ocean beaches in one publication, together with an introduction to the factors that influence the nature of those beaches. Its overall aim is both to show people the beaches of NSW and at the same time to advise them on how to bathe, surf and fish safely at those beaches.

In compiling a book of this magnitude there will be some errors and omissions, particularly with regard to the names of beach and surfing spots, and some local factors. If you notice any please communicate them to the author at Coastal Studies Unit, University of Sydney, Sydney 2006, A.Short@geosci.usyd.edu.au, phone +61 2 9351 3625 fax +61 2 9351 3644. In this way we can ensure that future editions are up to date.

Andrew D Short Narrabeen Beach, July 1993

2nd edition

The second edition has been written in order to achieve three aims. First, to update information on all beaches along the coast; second, to include an additional 120 beaches in Port Stephens, Broken Bay, Sydney Harbour and Botany Bay, together with 36 'new' open coast beaches which were not included in the first edition; and third to include an additional 323 photographs images of beach systems.

Andrew D Short Narrabeen Beach, July 2006

ACKNOWLEDGMENTS (1st edition)

The project could not have progressed to where it is today without the assistance of the NSW Department of Sport, Recreation and Racing (DSRR) which generously funded the NSW Beach Safety Program from 1988 to 1992. Andrew Whittaker of the DSRR helped us get the Program underway, while Mark Brimfield kept it going longer than even he thought possible.

In 1990 the Program was endorsed as a national project by the National Council of Surf Life Saving Australia. The nationwide research required was facilitated by a grant from the Australian Research Council (1990 to 1992). In recognition of the Program's national focus the Department of Arts, Sport, the Environment and Territories (DASET) allocated fund to SLSA to fund the Program in 1992-93.

In its early days the program received much needed financial support from Randwick, Warringah, Wollongong, Shoalhaven, Shellharbour, Gosford and Kiama councils. The NSW Public Works Department provided access to the NSW Waverider system and their excellent library of NSW coastal aerial photographs.

At SLSNSW Andrew May, the instigator, is still very much involved; while Ernie Davies, Karin Sheedy and Paul Albertini have provided continual support and advice. At SLAA Gus Stanton, Scott Derwin, Dennis Heussner and Darren Peters have ensured the full cooperation of the National Council, State Centres and Surf Clubs throughout Australia. At 125 NSW Surf Clubs and on other patrolled beaches, hundreds of lifesavers and lifeguards filled in our beach maps and rescue forms

At the University of Sydney, cartographer John Roberts assisted Chris Hogan in setting up the Mirage graphics program which has provided all the figures in the book.

For his advice and general level of enthusiasm for the book we thank Mr Mark Hunter of CEP.

In the field Andrew May usually kept the boat afloat, Harry Mitchell alway kept the plane up, while Julia Short assisted in every possible way, as well as proof reading the entire book.

The following companies generously donated software and hardware to the program: DataProducts, Online Control, Microsoft, Dimension Graphics and NetComm.

2nd edition

Since the first edition of this book back in 1993, the Australian Beach Safety and Management Program, was expanded Australia-wide in collaboration with Surf Life Saving Australia. The project and the publication of the seven books in the series, including this revised edition, has enjoyed the full support of SLSA, in particular Greg Nance CEO from 1996-2006, Brett Williamson CEO since 2006 (who also supported the Queensland book when CEO of Surfing Life Saving Queensland), Paul Stormon, Peter Agnew and Katherine McLeod. My former colleague Professor J L (Jack) Davies kindly donated his collection of vertical black and white vertical aerial photographs, which proven an invaluable resource in identifying the location and nature of all the beaches.

Production of the second edition has been assisted by Peter Johnson who drew most of the figures; Colleen Cook who proofread the entire book; and at the University of Sydney Press, by Josh Fry and Freda Taousanis who oversaw the publication, and Jacqui Owen who produced the new cover. All photographs are by the author.

viii A D Short

ABSTRACT

This book provides the first description of all NSW ocean beaches. It is based on the results of the NSW section of the Australian Beach Safety and Management Program. It has two aims: first to provide the public with general information on the origin and nature of all NSW beaches including the contribution of geology, oceanography, climate and biota to the beaches, together with information on beach hazards and beach safety. Second, to provide a description of each beach, emphasising its physical characteristics including its name/s, location, access, facilities, dimensions and the character of the beach and surf zone. In particular, it comments on the suitability of the beach for bathing, surfing and fishing, with special emphasis on the natural hazards. Based on the physical hazards all beaches are rated in terms of their public beach safety and scaled accordingly from 1 (safest) to 10 (least safe). The book includes descriptions of the 757 ocean beaches, 120 bay beaches and 15 beaches on Lord Howe Island; in all 892 beaches.

Keywords: beaches, surf zone, rip currents, beach hazards, beach safety, New South Wales

Australian Beach Safety and Management Program (ABSMP)

Awards

NSW Department of Sport, Recreation and Racing

Water Safety Award – Research 1989 Water Safety Award – Research 1991

Surf Life Saving Australia

Innovation Award 1993

International Life Saving

Commemorative Medal 1994

New Zealand Coastal Survey

In 1997 Surf Life Saving New Zealand adopted and modified the ABSMP in order to compile a similar database on New Zealand beaches.

Great Britain Beach Hazard Assessment

In 2002 the Royal National Lifeboat Institute adopted and modified the ABSMP in order to compile a similar database on the beaches of Great Britain.

Hawaiian Ocean Safety

In 2003 the Hawaiian Lifeguard Association adopted ABSMP as the basis for their Ocean Safety survey and hazard assessment of all Hawaiian beaches.

Handbook on Drowning: Prevention Rescue Treatment, 2006

This handbook was product of the World Congress on Drowning held in Amsterdam in 2002. The handbook endorses the ABSMP approach to assessing beach hazards as the international standard.