
WHALES AND DOLPHINS OF THE SOUTHERN AFRICAN SUBREGION
(with apologies to the porpoise)



Shepherd's beaked whale – adult



Shepherd's beaked whale – calf



Pygmy sperm whale



Atlantic spotted dolphin



Spectacled porpoise – male



Southern right whale

Whales and Dolphins of the Southern African Subregion

Peter B. Best

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Illustrations by Pieter A. Folkens

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Cover image: Heaviside's dolphin off Namibian coast, Dionys Moser
 Frontispiece: (not to scale) Shepherd's beaked whale – adult and calf,
Tasmacetus shepherdi; Pygmy sperm whale, *Kogia breviceps*; Atlantic spotted
 dolphin, *Stenella frontalis*; Spectacled porpoise – male, *Phocoena dioptrica*;
 Southern right whale, *Eubalaena australis*

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FOREWORD

IT WAS WITH considerable surprise that I received the request to write the Foreword to this impressive volume, but one that I am very honoured to accept. Peter Best was one of the first cetacean biologists I met almost 30 years ago, and one of those who has most influenced my thinking, not only on cetacean conservation and biology, but also on the privilege and burden faced by scientists when dealing with a group of mammals that represent perhaps the world's most charismatic megafauna.

Consciously or subconsciously, by his behaviour in international fora such as the Scientific Committee of the International Whaling Commission, he has shown me that the most productive and honourable role a scientist can play is to be thorough, questioning and objective, rather than taking the more political role of an unquestioning lobbyist. The implications of a conclusion reached using one's 'best' scientific judgement should never influence one's presentation of the results – I sometimes fear that the honesty and integrity of such a view is being lost given the many environmental problems facing the world and the need to 'act'. Peter's behaviour throughout his long and productive career shows that the best, most lasting and most effective conservation action comes from strong, objective science.

From his UK beginnings, Peter has evolved into the leading cetologist of southern Africa, and it is more than fitting that he has written the definitive volume of southern African cetaceans. In a publishing world where knowledge and experience of cetaceans sometimes seem to be the least important criteria for writing a popular book on the subject, it is indeed a delight to see a true expert in the field put so much effort into what, despite the ever-expanding research into all aspects of cetacean biology, is destined to be a classic reference for many years to come. In what clearly is a labour of love, Peter has consulted in his own inimitable, sometimes grumpy but always fair way, all of the available literature and distilled this into a concise, accurate and occasionally provocative account of the wide range of cetacean species in this fascinating area of the world's oceans.

The number of references cited is indeed a testament both to his thoroughness and to his belief that the reader should be

able to trace the source of any statements made, and if necessary question the conclusions reached. The species accounts are simply excellent, from their considerations of taxonomy and general biology through to their discussion of conservation status. The volume also contains many gems of Peter's own original work and careful thinking. As just one of many new ideas, rare in such encyclopaedic tomes, I would cite his possible link of strandings of beaked whales to whalers' use of ASDIC (a form of sonar) – a good example of taking modern findings and extending them to past situations.

In a diplomatic written style not always present in his blunt verbal (sometimes audible only to blue whales) interventions, I was impressed by his rather gentle 'questioning of the wisdom of attempting a global assessment' of any species – when he and many others have spent their careers emphasising the importance of population level rather than species level assessments. Despite the authoritative, scholarly style of the volume, there are intriguing and occasional glimpses of Peter's dry humour; however, even as a not-so-good Irish Catholic, I hesitate to draw attention to Peter's questioning of the local Cape Town community with respect to the restorative powers of ambergris for problems of erectile dysfunction!

It would be quite remiss of me to complete this Foreword without reference to the outstanding illustrations and photographs to be found in this volume. The illustrations of the species can only be described as excellent – in choosing Pieter Folkens, Peter Best clearly chose the best. The photographs too, whether of skeletal material, archive material or of animals in the field, have been carefully and expertly chosen.

This volume is without doubt a major contribution to cetacean literature – we should all be grateful.

GREG DONOVAN

Head of Science, *International Whaling Commission*
 Editor, *Journal of Cetacean Research and Management*

THE MAMMAL RESEARCH INSTITUTE

University of Pretoria

THE MAMMAL RESEARCH INSTITUTE (MRI) was founded at the University of Pretoria in 1966, and is the only research institute dedicated specifically to the uniquely diverse mammalian fauna of Africa. Based on Main Campus in the eastern suburbs of Pretoria, the MRI is presently involved in research on mammals ranging in size from bats to whales, and in habitats from the Antarctic pack ice to the Serengeti Plains. The MRI's mission is to maintain its long-standing international reputation for undertaking and communicating high-quality research on the biology and ecology of African mammals.

This mission is pursued with a focus on issues of particular relevance to conserving Africa's indigenous mammals and their habitats while promoting sustainable human development.

The MRI is embedded within the Department of Zoology and Entomology and provides an institutional identity to the mammal-oriented researchers in the department. Coordinating existing research, and identifying important topics for future research, are the responsibilities of the Director of the MRI, who is normally also the Austin Roberts Professor of Mammalogy. To date there have been four directors: Professor 'Waldo' Meester (1966–1971), Professor John Skinner (1972–1998), Professor Johan du Toit (1999–2005) and Professor Elissa Cameron (2006–). MRI projects are undertaken and/or overseen by MRI Associates, of which there are normally about seven in the Department of Zoology and Entomology, with an additional four Extraordinary Professors and two Research Fellows from other institutions in South Africa and abroad. Young researchers represent the life-blood of the MRI, and at any one time there are usually about five Postdoctoral Fellows, 20 PhD students and 20 MSc students busy on their individual research projects. The cumulative output of research publications is impressive for an institute of this relatively small size: over the past five years an average of 50 peer-reviewed (ISI-listed) scientific papers were published per year with the MRI cited as the institutional affiliation of at least one of the authors of each paper.

Apart from a small annual allocation from the University of Pretoria to cover office expenses, funds for the activities of the MRI are raised on a competitive basis by MRI Associates from a wide range of granting agencies in South Africa and abroad. In addition, the MRI manages several collaborative projects based in South Africa, the two largest such collaborations being



with the University of California at Berkeley and the University of Cambridge. International academic links extend beyond research, however, and student exchange agreements are in place with a number of universities in Europe and North America. Through an outreach project the MRI also places two graduates per year in Tanzania, where they serve as university lecturers in wildlife ecology.

Students at the University of Pretoria have the opportunity of taking modules in mammalogy from the third year of their BSc degree, but they only occupy workspace in the MRI when they register for MSc or PhD degrees. Even then, because most MRI projects are field-based, our students are scattered far and wide, with some only able to communicate with their supervisors by e-mail or telephone for much of the time that they are occupied with data collection. There is nevertheless a lively and cosmopolitan assemblage of postgraduate students to be found in the MRI at most times, with a core group derived from the one-year intensive MSc degree in African mammalogy. For this programme a limited number of places (10 or fewer) are offered each year to graduates with a good honours degree (or four-year bachelor degree) in biology with a major in zoology. The appeal of spending a year immersed in learning about the biology, ecology, and conservation of Africa's mammals draws applicants from all over the world, and the most successful often stay on to continue with PhD studies. Information on the MSc programme in African Mammalogy, and all other activities of the MRI, can be found on the MRI website:

<http://www.up.ac.za/academic/zoology/MRI.html>

The publication of the authoritative *Mammals of the Southern African Subregion* has been one of the major achievements of the MRI. The first edition, under the authorship of the late Dr Reay Smithers, was published in 1983, and subsequent editions have appeared in 1990 (co-authored by Prof. John Skinner and Reay Smithers) and 2005 (co-authored by Profs John Skinner and Christian Chimimba). The latter edition was published by Cambridge University Press, and the present volume continues this relationship between Cambridge University Press and the MRI. Although *Whales and Dolphins of the Southern African Subregion* is a stand-alone publication, it has been produced very much in the style of the last edition of *Mammals of the Southern African Subregion*.

ACKNOWLEDGEMENTS

IN A COMPILATION such as this, which represents the distillation of a very large number of influences, experiences and published and unpublished observations by a substantial number of people over a protracted period, it is difficult to do justice to all the contributors. If I have omitted someone from the following list it is surely an oversight on my part and not a reflection on their contribution, and I ask them to accept my apologies.

My grateful thanks are due to the following individuals and institutions (in no particular order):

Caroline Weir of Ketos Ecology and BP for allowing me access to unpublished observations off Angola (including incidental sightings made by Alex Vogel and Ian Nicolson); Tara Pelembe and Emma Bennett for information on what occurs off Ascension and St Helena islands respectively; Violaine Drouot for similar information from Réunion; Mike Griffin for assistance with Namibian cetacean records; Bill Perrin for answering numerous queries about obscure dots on maps; Gabbie Luyt for providing personal details of the dolphins at Sea World; Shelton Dudley for correcting statistics of dolphin catches in shark nets off KwaZulu-Natal; James Mead and Charley Potter for providing access to specimens at the Smithsonian Institution for photography; Sylvia van Zyl and Gill Watson for similar privileges at Bayworld, Port Elizabeth; Jimmy Glass for acts beyond the call of duty in securing invaluable specimens from Tristan da Cunha; Ann Bowles and Walter Munk for arranging and allowing me access to original sightings from the 1991 ATOC expedition to Heard Island; Cherry Allison and Marion Hughes for extracting records from the IWC's sighting data base; Michael Mejer and a veritable army of colleagues – Keiko Sekiguchi, Meredith Thornton, Simon Elwen, Colin Potts, Derek Ohland, Desray Reeb, Sidney Kannemeyer, Blake Abernethy, Peter Heather-Noon, Mike Combrink, Deon Kotze and Ken Findlay – who assisted in the grim and greasy business of retrieving stranded material and preparing skeletons.

The writing of this book would not have been possible without funding provided by the Island Foundation, USA, and the Mammal Research Institute Book Fund, South Africa (at the instigation of Johan du Toit). Rina Krynauw and Alieya Haider, chief librarians at the South African Museum and the John D. Gilchrist libraries respectively, were extremely generous and patient in handling my many literature requests.

The team at Cambridge University Press – designer Sandra Hall, editor Douglas van der Horst, cartographer John Hall, proofreader Joy Clack and especially commissioning editor Alison Paulin – did an outstanding job in ensuring quality while maintaining impossible deadlines: my sincerest thanks to you all.

I would like to express my indebtedness to individuals who have had a profound influence on my career, some of them unfortunately no longer living: my parents Kenneth and Marjorie, for allowing me to pursue the career I wanted; Tim Potts, my biology teacher at school, for encouraging me to set my sights higher; Chris Ash, who introduced me to the world of whales and whaling and was a most understanding first employer; Bob Rand, for tolerating many a churlish insult in the process of breaking me in as a scientist; John Bannister, a friend indeed and an invaluable personal adviser over many decades; Graham Ross, a cherished and highly respected colleague, whose emigration in 1989 was a severe loss to southern African cetology; John Skinner, for offering me a lifeline when the South African government dispensed with my services; and Johan du Toit, for bringing me back to earth with a bump.

Finally, none of this would have been possible without the life-support system provided by my wife and soul-mate Maggi. She has suffered my long periods away in the field or at meetings, and endured my frequent returns home 'in bad odour', not without complaint but always with good humour. To her I owe more than it is possible to put into words, and I dedicate this volume to her.