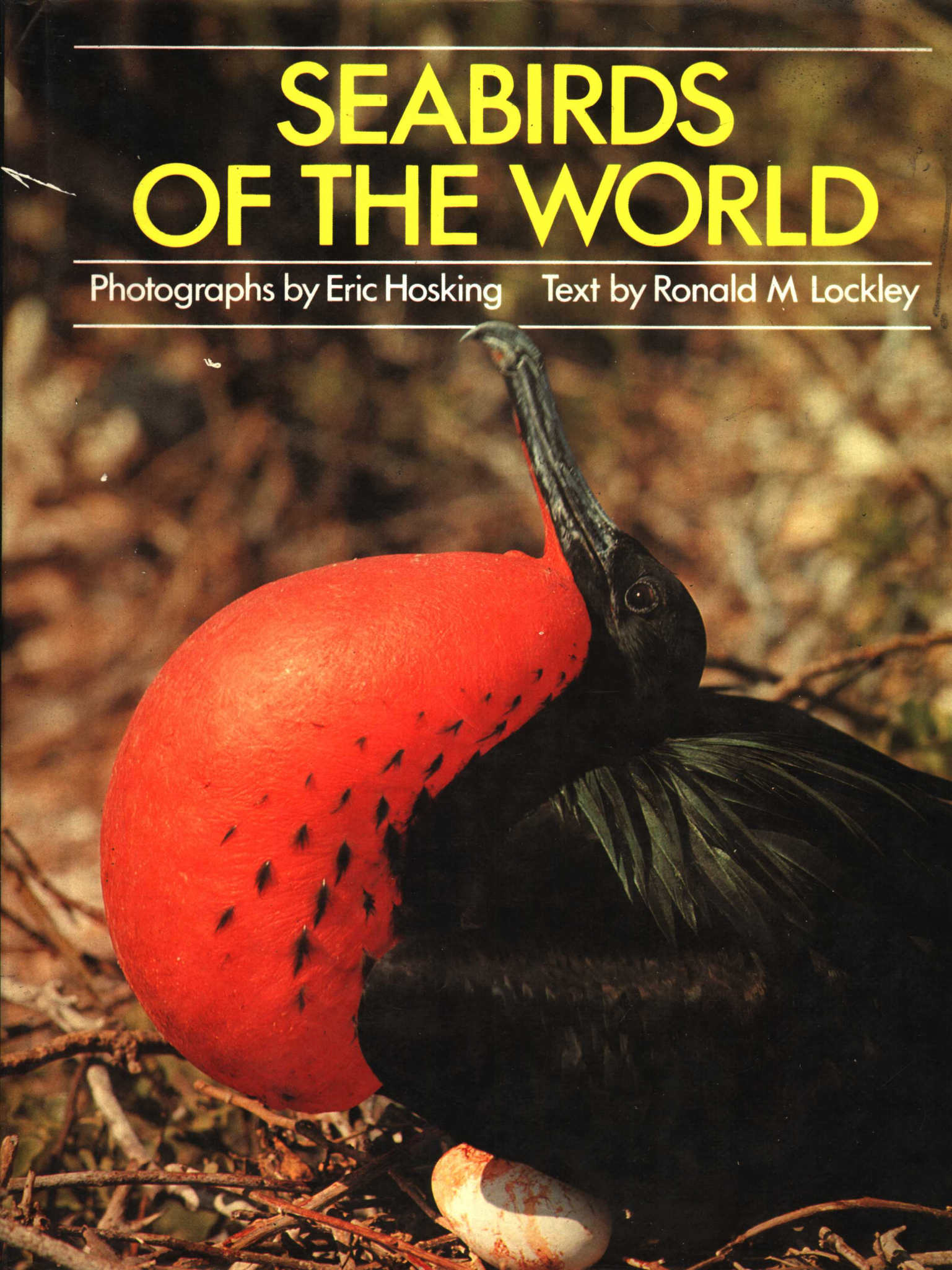
SEABIRDS OF THE WORLD

Photographs by Eric Hosking Text by Ronald M Lockley



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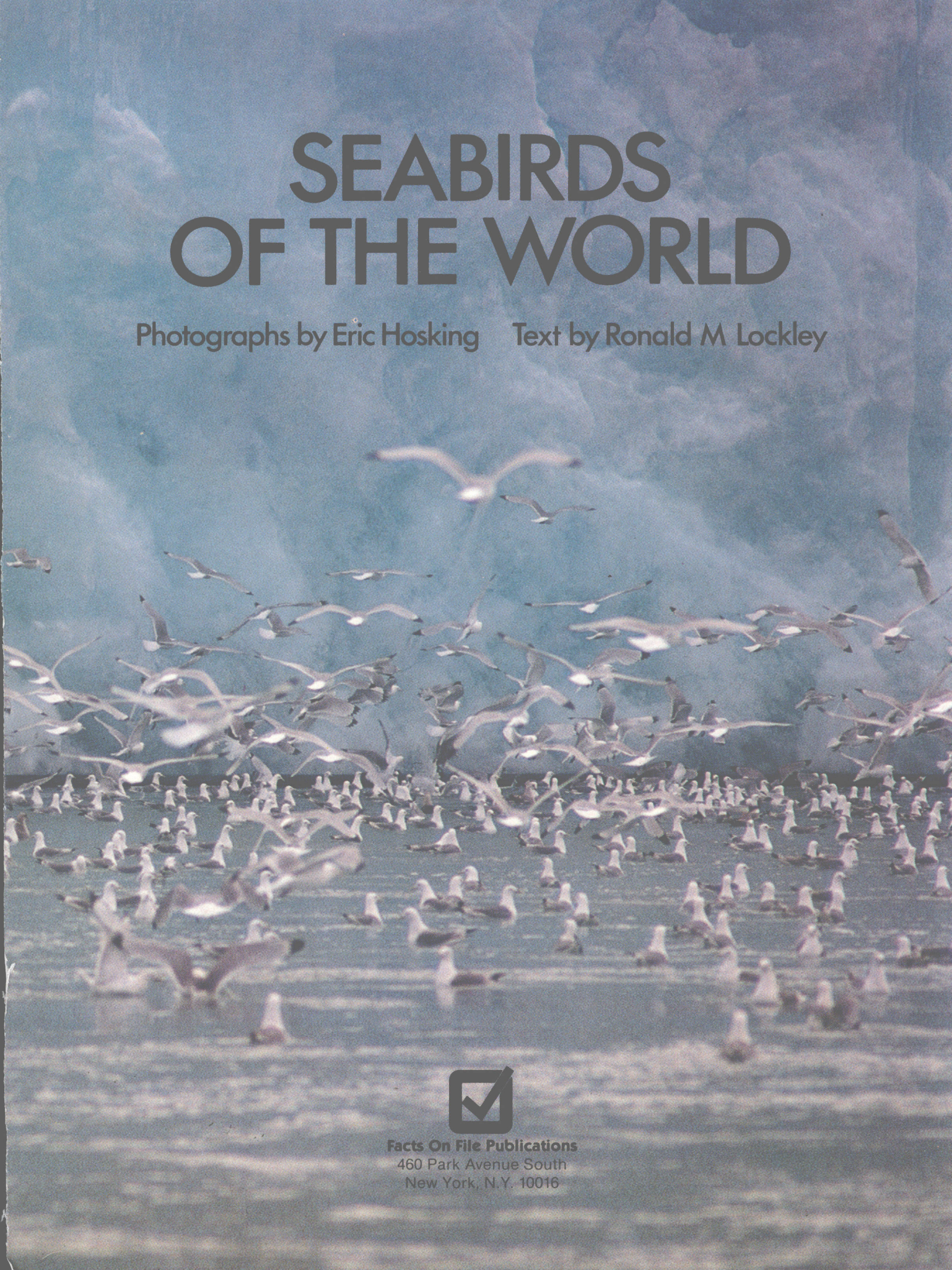

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To the memory of a brilliant field ornithologist, Sir Julian Huxley FRS, who encouraged and shared with us the study of birds in nature.

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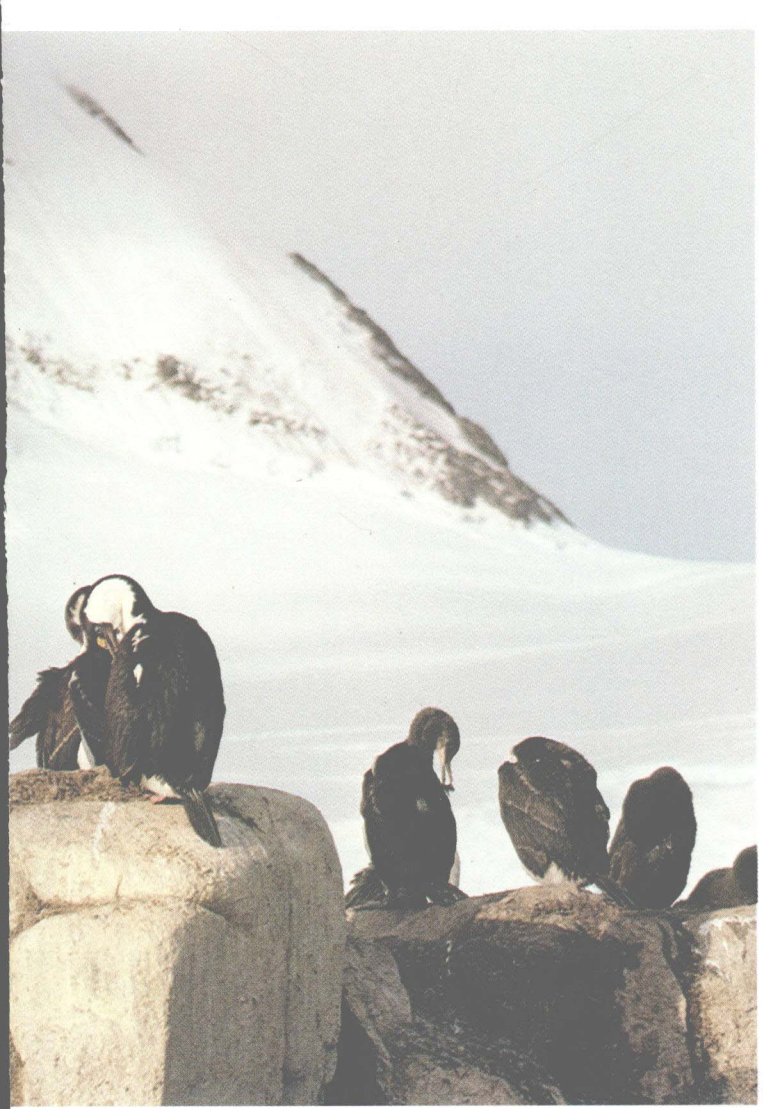
Title page A whirling mass of fulmars, Arctic terns, Kittiwakes and Glaucous gulls, at the vast Monaco Glacier in Liefdefjorden, Spitsbergen.

Above Scenes at a breeding colony of the Blue-eyed Cormorant, *P. atriceps*, at Port Lochroy, Antartica.

Overleaf The Black-billed Gull, *L. bulleri* is simply a dark-billed, black-legged offshoot of the Red-billed (Silver) Gull, confined to New Zealand where it nests principally inland by lakes and river beds. It is less of a scrounger on man.

Contents



Acknowledgements

Photographing some of the world's seabirds has given me immense pleasure because it has taken me to every continent in the world and I have made innumerable friends. First and foremost of these is Ronald Lockley and I would like to express my gratitude to him for writing such a splendid text. He is the author of more than 50 books and has a unique way of writing about the most scientific subjects in a lucid, fascinating way which makes you want to read on and on.

Many hours were spent at the stern of the *Lindblad Explorer* photographing the albatrosses, petrels, shearwaters and gulls that followed the ship and I would like to thank the Lindblads for inviting me to go on board. If ever you have an opportunity of going on an expedition on this ship do not miss it – you really do explore and visit places to which no other ship ventures. It was after visiting the Antarctic with Ronald on the *Explorer* that we travelled through New Zealand and were joined by Geoff Moon, who made it possible for me to photograph several of the cormorants, terns and gulls.

While staying in California with Dr and Mrs Ralph Buchsbaum, and later in Washington State with Van and Peggy van Sant, I succeeded in getting pictures of many of the west-coast pelagic species and I am grateful to them for all the many miles they drove me in our search for them.

Our visit to the Galapagos Islands, again with Lindblad, was most productive with its boobies, frigatebirds and those unique gulls, the Lava and the nocturnal Swallow-tailed. I would particularly like to thank the International Council for Bird Preservation for allowing us to stay on the island of Cousin in the Seychelles inhabited by the lovely White Terns, noddies and shearwaters – all so tame I could not fail to get photographs.

It was well away from the sea that I photographed the White-necked Cormorant, the African Darter and the White-winged Black Terns and I am grateful to John Williams, who lived in Kenya for so many years, for helping me to take these and some of the other portraits.

Once again I am delighted to include a few of the photographs taken by the late Niall Rankin, whose negatives are now in our collection. These are of the Wandering Albatross display, the White-chinned and Leach's Petrels and the St Kildan with his catch of fulmars taken many years ago. My daughter, Margaret Woodward, took the photograph of the Manx Shearwater while staying on the Isle of Rhum. Her husband, Jeremy, gallantly stood his ground while a Great Skua mobbed him on the Shetland island of Fetlar, so that I could obtain pictures showing the bird's aggressive nature in its breeding territory. Dr D. P. Wilson kindly gave us permission to use his photo-micrograph of zooplankton. The portrait of the Great Auk was taken in the Icelandic Museum in Reykjavik where the late Dr Finnur Gudmundsson kindly made arrangements for me to take it.

My son, David, has helped me in many ways not least of which has been providing 14 of the photographs that appear in this book and worthy of special mention is his black and white picture of the Sandwich Tern feeding its young, taken when he was only eleven years old.

The layout of a book of this kind is no easy task and I am extremely grateful to Simon Blacker for all the trouble he has taken to make it so attractive. Christopher Helm, my publisher, and his Natural History Editor, Jo Hemmings, have by their enthusiasm and understanding made my task so much easier.

In travelling the world, Dorothy, my wife, has usually been at my side always ready to give me every possible assistance – I cannot thank her enough.

Over the many years it has taken to compile the photographs in this book there has been a host of people who have given me invaluable aid and although they have not been mentioned by name I am nevertheless very indebted to them all.

I hope that this book helps others to enjoy the seabirds of the world and gives them as much pleasure as they have given me.

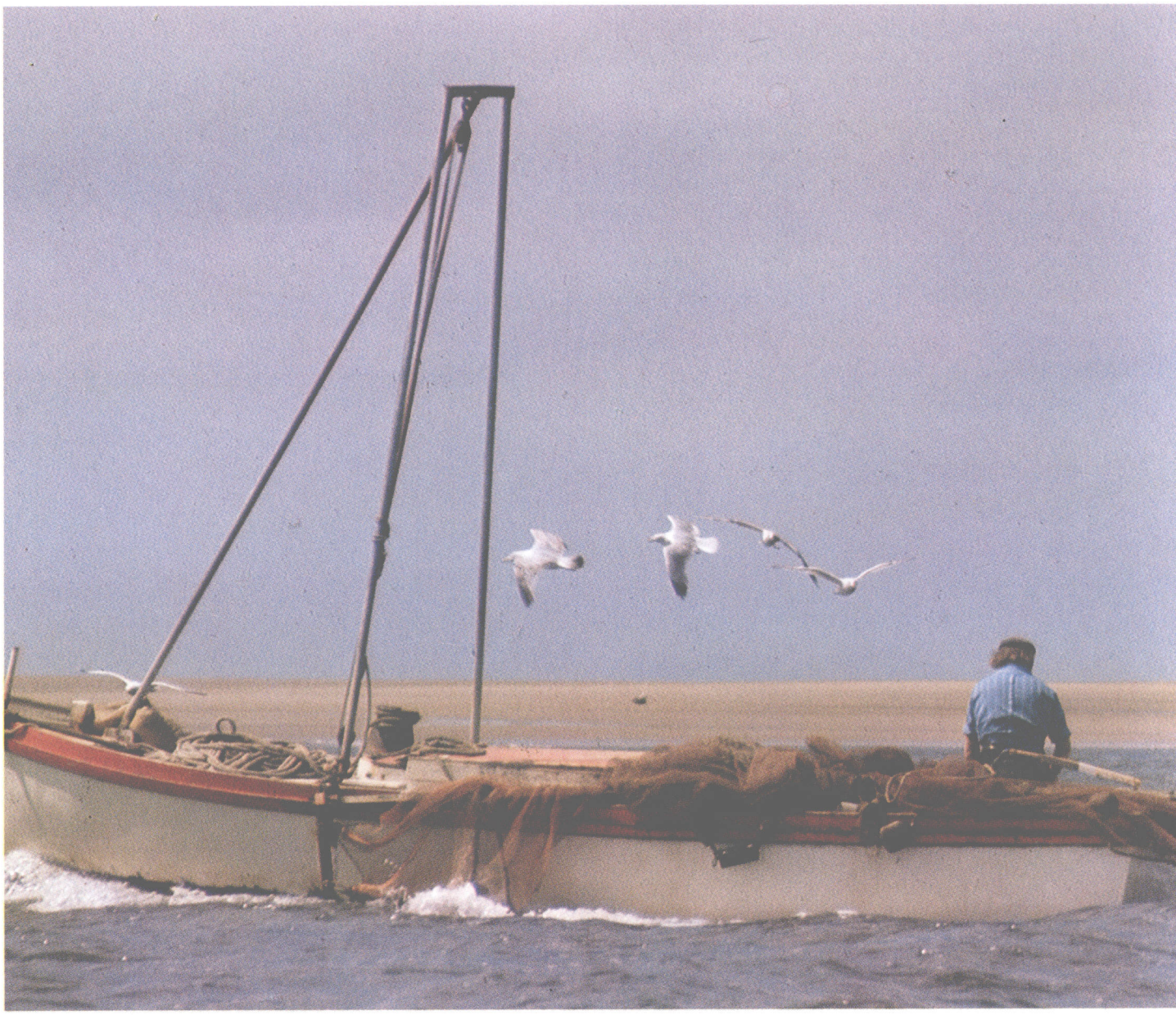
Eric Hosking

Introduction

The beauty and grace of the flying bird compel admiration and wonder. It is an aesthetic appeal to eye and mind when, for a while, we pause to observe the apparently effortless ease with which birds flap and fly, hover and soar. Seabirds seem especially expert in aerial manoeuvres when we watch them, perhaps because it is usually when we have leisure to stand and stare, as at the seaside or aboard ship. Often, hovering or moving slowly near us in the sea wind, a gull, tern, petrel or albatross appears to return that stare of ours intelligently, its bright eyes momentarily examining us closely. Obviously (we may suppose) this is not for any aesthetic reason, but for some advantage the bird may discover of food, or merely because the displacement of air-flow by the obstacle of the cliff, pier or ship we are watching from gives better lift to sustain its flight; or for both reasons.

We have often tried to analyse this fleeting exchange of visual communication with the passing bird, well aware that it is a highly sentient creature, however much we may consider that it is moved principally by instinct – a somewhat ambiguous word we use to cover up our own ignorance of innate (inherited) behaviour patterns in all animals, including man. For us there remains the continual pleasure and challenge of studying the mind and behaviour of birds, a delight springing from our strong curiosity to learn the why, wherefore and whence of their remarkably diverse lives. For many it is a form of escapism – certainly it has been for us: at times we wish we could exchange our plodding earth-bound existence and take wing ourselves into the clean sky with such ease, even to follow summer across the equator as many migrant birds do, who know no winter in their lives.

Some such thoughts – a mixture of human curiosity and acquisitiveness – led me as a young man to live with, and study, seabirds and other groups, alone at first as a young man on a remote Welsh island of 100 hectares. Skokholm has since become an observatory, the first in Britain, where field studies of island and oceanic birds have continued for more than fifty years. A similar inquisitiveness has inspired Eric Hosking to answer the life-long challenge to photograph the natural lives of seabirds. The present book is the happy result of sharing our experiences in seabird studies in many oceans



around the world. Fortunately we were both encouraged, early in our careers, by two leading ornithologists of their day. First to advise me in my island studies was Harry F. Witherby, known today as the father of both modern museum and field ornithology, founder of the monthly journal *British Birds*, and its ringing scheme, and editor of the first comprehensive *Handbook of British Birds*. Recognising my unique opportunity for studying at Skokholm what was at that time (1928) virtually unknown – the breeding biology of the Manx Shearwater, *Puffinus puffinus*, and Storm Petrel, *Hydrobates pelagicus* – he supplied me with the essential means by which the individual can be identified: numbered leg-rings (or bands as they are more usually called today) from his *British Birds* scheme. This was then still in its infancy, but has since been developed to its present success and efficiency under the British Trust for Ornithology and the Nature Conservancy. Witherby was a frequent early visitor to my island.

Another friend of both Eric and myself was the veteran biologist W.B. Alexander, who became first Director of the Edward Grey Institute of Field Ornithology at Oxford. I can still see 'W.B.' (as he was affectionately dubbed) diving through an ancient cork lifebuoy from the wreck of the schooner *Alice Williams* which had, fortunately for me, provided material for the repair of the little house soon after I landed to live at Skokholm. It was a feat which mystified us, but W.B. was proud of it, since the measured circumference of his large stomach exceeded by a few inches that of the

interior ring of the buoy! Alexander was a Johnsonian figure, admiring but criticising the studies of seabirds he was so expert in identifying himself, having in 1928 produced his classic *Birds of the Ocean: a Handbook for Voyagers*. This condensed guide to the seabirds of the world, chiefly their distribution, has run into many editions. We recommend it here as still one of the best books to fit the pocket of the traveller who will need to identify oceanic birds from the detailed plumage descriptions Alexander gives.

W.B. Alexander was deeply interested in establishing coastal bird observatories. Together we had the pleasure of joining Edinburgh ornithologists in setting up, in 1934, the second British one on the Isle of May in the Firth of Forth. More such stations have been established at strategic sites

Preceding page The Glaucous Gull, *Larus hyperboreus*. The adult Glaucous has a very pale mantle and the wing-quills are white, as shown in this picture of one following our ship at Spitsbergen. It is a circumpolar breeder, nesting along the whole of the Arctic coast.

Above Herring Gulls *Larus argentatus* taking fish offal thrown overboard from a boat passing Hilbre Island, Cheshire.

around the British Isles, including Jersey, and there are now several abroad which Eric and I have visited, for example in the Galapagos Islands and New Zealand. Such stations have enabled ornithologists to complete monographs and scientific papers on seabirds. We have freely drawn on these in this book, as acknowledged in the bibliography.

There is still much more to be discovered and this is part of the pleasure of bird-watching. According to systematists, who not infrequently dispute over and change the (artificial) specific and subspecific rank, and thereby the scientific names, of living organisms, there are between 270 and 280 species of seabirds, classified in four Orders containing 18 families if we include the ocean-going waders, the phalaropes, and the more estuarine darters.

In this largely pictorial record of the living seabird it has not been possible to describe and illustrate more than a limited number of species of our more personal intimate acquaintance, typical of those families. But in doing so it is our hope that the reader will share with us in actively supporting their protection and conservation, so much needed today in a world where man increasingly destroys or exploits their nesting grounds. In this book we visit many sanctuaries established specially to protect birds on shores which are no longer remote but have become accessible within a few hours by swift modern transport. To see and study and understand something of their beauty and remarkable adaptation to seagoing life is a great privilege, and one which we must preserve for future generations. But many more such nature reserves are needed if we are to save the more endangered species.

Please support your national conservation organisations, and world-wide wildlife protection societies such as the Audubon Society of America, the Royal Society for the Protection of Birds of the British Isles, and the World Wildlife Fund.

Ronald Lockley

The White-necked Cormorant, *Phalacrocorax lucidus*, photographed at a tree roost in Kenya.

CHAPTER 1

The Seabird as an Individual

It may be asked, 'What is a seabird?' A good question, and one which we can only attempt to answer briefly here through a sketch of the origin, evolution and wonderful adaptation of seabirds, on the one hand to ocean wandering, and at the other extreme to a non-migratory, sometimes largely inland, existence: some have even become flightless diving birds. Several in the same family have diverged surprisingly in life-style and distribution. For example the European Cormorant, *Phalacrocorax carbo*, makes a migration of several hundred miles from its nesting site and is distributed almost world-wide between the sub-Arctic and sub-Antarctic latitudes; but the Galapagos Cormorant, *Nannopterum harrisi*, is so completely stay-at-home that its wings have become atrophied and can no longer lift it in flight.

Above Zooplankton of the marine food chain (×25 approx).

Right The Pelagic Cormorant, *Phalacrocorax pelagicus*, associates with the larger more abundant Brandt's Cormorant, *P. penicillatus*, in off-duty roosting, preening and sunning along the Californian shore at Monterey. Both are black, but note the smaller head and bill of the Pelagic species, which also develops a white flank patch in the breeding season.

Overleaf Lesser Black-backed Gulls, *Larus fuscus*, are migratory, feeding much in coastal waters and following ships (as here, off the Norwegian shore). It breeds on all coasts of north-west Europe, and Iceland, ranging in winter to the Mediterranean, North Africa and the Atlantic isles. It prefers to nest colonially where vegetative cover grows to shelter its chicks, enabling them to hide when the colony is disturbed by prowling mammals, including man.

Even in such truly oceanic species as the petrels, including albatrosses, shearwaters and storm petrels, we find within the same genus that one species is a pelagic transequatorial migrant, another is a partial migrant roaming perhaps 500 kilometres from home, while a third is more or less sedentary within sight of the breeding island or cliffs. Yet these tube-nosed birds, as ornithologists call them collectively, rarely alight on the land except when breeding. Watching their perfect control of long-duration flight one has the impression that, if only they could, some would nest on the surface of the sea. An impossibility of course, but such a fleeting thought has occurred to us when admiring the graceful flight of a tropicbird or bos'n bird above the weed-strewn Sargasso Sea, at least a thousand kilometres from the nearest land.

The Food Chain of the Sea

The main reason for the maintenance activity which ensures the survival of all living creatures is perfectly basic and simple: in one word, food. We shall try to show, as we describe the lives typical of the main family groups, how each seabird has developed to fill one of the different ecological niches of food and territory of the marine habitat just as successfully as terrestrial birds share those of the land. It may seem strange, but although there are fewer species in total, numerically there are more individual seabirds than land birds in the world. We need to remember that about three-quarters of the earth's surface is covered by salt water; and that this is just as rich as the land in food; sometimes richer.