

What determines the distribution of seabirds at sea?

EDITORS: KJELL EINAR ERIKSTAD, ROBERT T. BARRETT AND FRIDTJOF MEHLUM

Preface

The rationale behind the Nordic workshop, 'What determines the distribution of seabirds at sea?', held in Skibotn, near Tromsø, 17–21 October 1988, was the initiation of a new pelagic seabird research programme at Tromsø Museum. We felt a need to gather experts within oceanography, fisheries biology and marine ornithology to discuss how to best organize such research in relation to the available resources. It was attended by 24 students and scientists from 7 countries, including those specially invited from the USA, Canada and Scotland. 24 papers were presented, of which 12 make up this volume.

Seabirds spend most of their time at sea, yet the vast majority of seabird research has been (and still is) limited to the short, hectic breeding season when the seabirds come ashore and are easily accessible. Only during the last few decades have seabirds been recognized as an integral part of the marine ecosystem and multidisciplinary programmes have been initiated to investigate the mechanisms and processes which regulate the patterns of their distribution at sea.

Knowledge of the pelagic ecology of seabirds away from the colonies is critical for the understanding of their population dynamics and hence also for a sensible management of the various species. After the reviews presented by the non-Scandinavian guests, the majority of the contributions to the workshop addressed various processes which are thought to be critical causal mechanisms affecting the distribution of seabirds at sea in a Scandinavian context. A central topic repeatedly presented was the distribution of birds in relation to that of their prey, but underlying the discussions were the uncertainties of how well they were correlated and to what extent physical processes such as wind, currents, ice-cover, fronts, etc. determine the movements of both birds and their prey. These have been the subjects of several well documented papers, yet it was agreed that a lot more data are needed at a variety of spatial and temporal scales before seabird movements in relation to physical and biological features can be fully understood. Such studies will necessitate a continual close cooperation between oceanographers, fisheries biologists and marine ornithologists.

The workshop was organized by Tromsø Museum, and we are very grateful to the Nordic collegiates for Ecology, Wildlife Research and Marine Biology (Nordisk Kollegium for Økologi, Nordisk Kollegium for Viltforskning and Nordisk Kollegium for Marinbiologi), and the University of Tromsø for financing the workshop.

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Kjell Einar Erikstad*, Robert T. Barrett* & Fridtjof Mehlum**

* Norwegian Institute for Nature Research, Tromsø Museum, Univ. of Tromsø, N-9000 Tromsø, Norway

** Norwegian Polar Research Institute, P.O. Box 158, N-1330 Oslo Lufthavn, Norway