

SECOND INTERNATIONAL
MANX SHEARWATER WORKSHOP:
STUDIES ON THE MANX SHEARWATER *PUFFINUS*
PUFFINUS AND RELATED PETREL SPECIES

INTRODUCTION

The Second International Manx Shearwater Workshop took place between the 2nd and 4th August 2005. It was hosted by Copeland Bird Observatory (CBO), was held at the Ulster Museum in Belfast, Northern Ireland, and was attended by 90 delegates from around the world.

The First International Manx Shearwater Workshop took place in Madeira in 2000 and attendees included an enthusiastic group from CBO who volunteered to host a second workshop. In planning the event, we aimed to attract a wide range of interests by extending the focus from Manx Shearwater *Puffinus puffinus* and related petrel species to include petrels breeding in the North Atlantic. We invited papers on four broad themes: populations and censusing; conservation issues (threats to breeding colonies and protection measures); activity at the colony (breeding behaviour and population ecology); and activity away from the colony (at-sea behaviour and censusing).

Each of the four themes is represented in the nine papers included in this volume, and I will use part of this introduction to complement these by summarising some of the material covered by all the presentations and posters.

The workshop was dedicated to the late Irynej Skira, who had died just a few months earlier. Irynej had been an enthusiastic supporter of the workshop and had planned to present a paper on his study of the Short-tailed Shearwater *P. tenuirostris*.

We began with **populations and censusing** – an appropriate beginning, coming after the publication of *Seabird Populations of Britain and Ireland*, at a time when we could consider the results of the surveys and discuss the value of the various census methods. Stephen Newton, Greg Robertson and Aevor Petersen set the scene describing previous and recent surveys and current understandings of population sizes and distributions of Manx Shearwater, Leach's *Oceanodroma leucorhoa* and European Storm-Petrels *Hydrobates pelagicus*. These papers were followed by others on speciation and on the effectiveness of some of the methods used in surveys, concentrating particularly on tape-playback methods where birds in breeding burrows are counted when they respond to pre-recorded calls played near the burrow entrance. It was

apparent from the discussion session that there remains much work to be done on refining the methods used and the interpretation of results from all of the current survey techniques.

The section on **conservation** included talks on the impact of predators and on predator control, on (protected) site designations and on the potential impacts of climate change. Stephen Votier described the severe impact of Great Skuas *Catharacta skua* on St Kilda's Leach's Storm-Petrels and the dilemma arising because the skuas are arguably the more important species in global terms. There was much less sympathy for the rats which have been eradicated from Lundy and those to be removed from Canna, or the feral cats which threaten the endangered Townsend's Shearwaters *P. auricularis* breeding high in the hills on Socorro Island in the Pacific Ocean. The poor outlook for the Balearic Shearwater *P. mauretanicus*, with perhaps 2,000 breeding pairs, seems to be due to a more complex range of inter-acting factors including introduced predators, poor survival rates, low productivity, long-line fishing and changing food availability – with proposed new wind farms about to join the picture.

The identification and protection of key feeding and rafting areas was also covered with descriptions of ship-based surveys and the use of radio tracking and data loggers to follow the birds into these areas.

There was also a selection of papers on the potential impacts of climate change, especially changing sea surface temperatures and the connections with food availability, foraging success and the ability to raise chicks. There are observable changes in the condition of individuals and on the distribution at sea of affected species.

The theme of **breeding behaviour and population ecology** had papers ranging from fledging behaviour at colonies, to studies of colony and burrow location faithfulness, comparative survival rates, availability of food and competition from human fishing activities, impacts of the timing of snow cover, and the selection of the best nest sites.

Our last session was on **at-sea distributions and censusing**. It soon became apparent that some highly ingenious techniques covering a wide range of levels of technology are currently being applied in this difficult area. These studies are uncovering evidence of the adaptability and variability of the birds' survival strategies, when they react to seasonally changing conditions, perhaps modifying their migration and feeding strategies to take best advantage of wind patterns and food sources.

The workshop was held to be a great success by all of the participants who offered their feedback. This was not only due to the quality and interest of the papers and posters presented, but also because of the opportunity to network, to discuss current and future prospects and to socialise together in the evenings. One of the most popular aspects of the week was the opportunity for some of

our delegates to visit the Observatory on Lighthouse Island, either before or after the workshop, to experience the Manx Shearwater colony and to take part in our Shearwater and Storm-petrel studies.

Of course such events require a great deal of organisation and significant funding to make them a success and I wish to acknowledge the major contributions made to our workshop. Funding and other support was provided by the JNCC, Atlantic Seabirds, the Quercus Centre at Queen's University Belfast, the Centre for Environmental Data and Recording (CEDaR) and the Ulster Museum, and particularly, our major sponsor, the Environment and Heritage Service of the Northern Ireland Department of the Environment.

There is also a long list of people who helped to make things go so well. Our thanks go to Stuart Bearhop (who acted as editor for this volume) and Robbie McDonald from Queen's University (SB is now at Exeter University), James Orr and his staff at the Wildfowl and Wetlands Trust, Angela Ross, Moira Concannon and their colleagues at the Ulster Museum. Thanks also to the many members of the Observatory who helped out in dozens of ways. Special mention is due to our boatman, Philip McNamara who ferried us all to and from the Island and to Pat McKee who organised all the food and catering for the visits.

The two other main organisers of the workshop were Fiona Maitland and Kerry Leonard, who were involved in almost every aspect of the event. The ultimate success of the workshop was due, in no small part, to their sustained efforts over a two-year period.

John Stewart