

8th INTERNATIONAL SEABIRD GROUP CONFERENCE

Aberdeen, 2-4 April 2004

Our 8th International Seabird Group Conference was held during the weekend of 2-4 April 2004 in the grand but comfortable setting of the King's Conference Centre in Old Aberdeen, Scotland. After a welcoming reception on Friday evening, our Chairman, Mark Tasker, welcomed the 176 delegates from 22 countries and introduced Ian Mitchell and Steve Newton to launch the keenly awaited results of the SEABIRD 2000 census, the book "*Seabird Populations of Britain and Ireland*". Ian firstly thanked the sponsors of the project, the 11 partner organisations, the 46 regional organisers, and the 1,000 participants in the fieldwork. The previous census, the 1985-88 Seabird Colony Register, had spawned "*The Status of Seabirds in Britain and Ireland*", the Seabird Monitoring Programme (SMP) for Britain and Ireland, and the "*Seabird Monitoring Handbook*" for Britain and Ireland.

However, things change. Apart from the obvious aims of SEABIRD 2000 of updating estimates of the population sizes and distributions of the 25 breeding species (not least to comply with statutory obligations under EU Directives), here was an opportunity to compare regional trends recorded by the SMP with two national censuses, as well as to improve, or in some cases to provide first estimates for the 'difficult' nocturnal petrels and shearwaters, and obtain blanket coverage of species which may have low site fidelity, such as terns and Great Cormorants. Conversely, some things don't change, and there were amusing images of difficult landings at the same remote colonies 15 years apart. But a series of images of the Bass Rock over the past 30 years dramatically illustrated just how some things (the expansion of the Gannetry) do change. In a light-hearted talk, Mark Tasker and Oscar Merne featured in embarrassing poses! Among the achievements of SEABIRD 2000 were the first comprehensive census of nocturnal petrels in Britain and

Ireland, the first estimate of population trend for Black Guillemots in the UK and the first complete Irish census, the first census of inland nesting gulls, and the first thorough census and estimate of trends in urban breeding gulls.

The evening continued with an informative and enjoyable presentation by Tony Gaston (co-authored by Grant Gilchrist) on the potential impacts of global warming on high Arctic seabirds, particularly focussing on year-to-year variations in ice conditions, the relationships between these and seabird breeding biology and, hence, the predicted effects of earlier ice break-up if this occurs in the future. Many delegates then graced the bar with their presence until the early hours!

The conference hall and delegates (© JNCC)

The first session of Saturday morning was given to 'show-casing' the SEABIRD 2000 results in more detail. Ian Mitchell, the lead organiser of the project and senior author of the new book, began with an overview of the results by species, focusing on those groups of seabirds not covered in the following presentations (including the auks, cormorants, terns and Fulmar for example). He also briefly outlined the many factors that may have contributed to the numerous and variable changes across species and highlighted what he saw as future priorities for seabird research in Britain and Ireland: understanding the relationships between sandeel stocks and seabird populations in more detail, quantifying the true extent of the effects of mink predation (following Clive Craik's ground-breaking work), monitoring of shearwater and petrel population size and productivity, development of a Europe-wide seabird colony database, the forthcoming review of the UK Seabird Monitoring Programme, not to mention gearing up for 'Seabird 2015'!!

Stephen Newton followed with an interesting summary of changes in Herring and Lesser Black-backed Gull populations, including the increases in urban (roof-nesting) birds and contrasting declines in some areas – the reasons for these changes are probably diverse but largely man-induced, including changes in waste and fishery discard management, changes in culling/control practice, predation by mink and foxes and even changes in practices for rearing free ranging pigs in East Anglia. He finished

with the question of whether conservation of these species was required, and made a strong case for more research on Herring Gulls in Ireland.

Tim Dunn reported on the SEABIRD 2000 results of the first full census of petrel populations in Britain and Ireland. He explained the difficulties of monitoring these species and the development and calibration of the play-back technique that is now available for use. For Leach's Petrel, the main colony on St Kilda holds more than 45,000 or the 48,000 AOSs in Britain and Ireland. A total of 128,000 European Storm Petrel AOSs exist, of which there must be more in Ireland than in Britain (the largest colony at Inishtooskert holding *ca* 28,000 AOSs. Tim then mentioned priorities for future conservation: keeping islands predator free and removing predators from others *eg* Lundy, continued monitoring and research into threats to populations, and further work on predation by Bonxies.

In the final presentation of the first session, Norman Ratcliffe shared his expertise on skuas to explain the reasons for the decline of Arctic Skuas in the Northern Isles (of 37% between 1992 and 2002-03). Population modelling using observed productivity rates failed to replicate the decline completely and predation of fledged juvenile Arctic Skuas by Bonxies is the suspected additional cause. Inclusion of rates of post-fledging mortality measured on Handa and Noss caused the model to fit the observed data very closely. Further work is required to measure post-fledging survival more precisely.

I (Chris) had the real privilege of chairing an excellent session after coffee on Saturday morning. Theresa Burg provided an extremely useful review of the studies in which she has been involved comparing genetic and demographic techniques (*eg* ringing) for studying dispersal (metapopulation dynamics) in seabirds. She presented work on Black-browed Albatrosses, frigatebirds, Common Guillemots and Black-legged Kittiwakes, providing examples of the two approaches being entirely complementary and others where patterns are somewhat contradictory. Morten Frederiksen presented population modelling to investigate reasons for the decline in Kittiwake breeding success in the North Sea since 1990 –

concluding that a strong relationship between winter sea-surface temperatures and breeding success (and a regime shift in North Sea winter sea-surface temperature since the mid-1980s) is likely to be at least partly to blame. Morten also highlighted the lack of information available for the modelling on juvenile survival rates, age of recruitment and dispersal. Daniel Oro also highlighted the importance of knowledge of dispersal processes when modelling seabird population dynamics, in his presentation on source-sink populations of Audouin's Gulls. A trawling moratorium since 1991 was used as a natural experiment into the effects of changing food availability, using multi-stratum capture-recapture modelling to estimate adult survival and dispersal rates. Sin-Yeon Kim presented an interesting talk, to complement that by Stephen Newton, providing more detailed information the diets, feeding sites and distances travelled by the declining Herring Gull population on Walney Island, and contrasting these with those of the local Lesser Black-backed Gull population (not showing similar declines). Finally, Mark Grantham gave a presentation contrasting the results of analyses of the origins of seabirds killed in several recent oil spills, reinforcing the information presented in the *BTO Migration Atlas* as to the differing wintering areas of Common Guillemots of varying age class and breeding origin.

The first session on Saturday afternoon focused on recent changes in seabird populations. Rob Barrett (with his co-authors) kicked off the session by describing the status of seabirds breeding in Norway and highlighting how Herring and Capelin are their most important prey. He explained how the decrease in Puffin numbers on Røst, Norway since the 1970s is correlated with changes in Herring stocks (caused by a combination of reduced recruitment and effects from the fishery), while the reduction in guillemot numbers has been caused by drowning in gill nets, with consequences for the social structure of colonies. Kittiwake population declines have been linked to disturbance caused by White-tailed Eagles, which has increased predation opportunities for Ravens. Bergur Olsen described how the reduction in Common Guillemot populations in the Faroes since the 1950s is probably linked to a reduction in primary production on the Faroes Shelf. Fulmars have also started using

traditional guillemot breeding sites, so that there is now nest site competition between guillemots and Fulmars. Bernard Cadiou explained how the recent population increase in Brittany's European Storm Petrels, despite heavy predation by gulls, may be linked to a reduction in the Rabbit population, which has increased the availability of nest sites. Veronica Neves (co-authored by Bob Furness) gave a very interesting presentation on the status of Roseate Terns in the Azores, which hold 54% of the European population. She highlighted the possibility of cyclical variation in the numbers of breeding pairs being correlated with the North Atlantic Oscillation (NAO), with higher numbers during a negative NAO. The main threats to the Azores population are predation (including from Starlings, gulls, cats and rats) and human disturbance.

After a well-planned poster session, with plenty of interesting material to peruse and authors present for discussion, the focus of the afternoon session was foraging ecology. Kees Camphuysen presented interesting data collected at sea on the foraging behaviour of Northern Gannets in the North Sea (from southern Shetland south to the Yorkshire coast), showing their interactions with other seabirds, marine mammals and fishing vessels and demonstrating them to be 'suppressors' of feeding flocks. Steve Votier (co-authors Jonathan Crane & Bob Furness) presented dietary information for Bonxies from pellets collected by Bob Furness and his team since 1973 to demonstrate seasonal and spatial variations in the quantity of discards consumed. In a further presentation on discard utilization, José Arcos (co-authors Daniel Oro & Xavier Ruiz) modelled the implications of discard consumption for the Ebro Delta seabird community, showing that the total breeding community consumes only *c.*one-sixth of the energy available from discards but that overall (including non-breeders and visiting distant breeders) the community consumes 85% of the total energy available. The theme of at-sea foraging behaviour was returned to by Philipp Schwemmer (co-author Stefan Garthe), who used both general at-sea data and detailed behavioural observations from dedicated surveys to investigate the foraging of Lesser Black-backed Gulls in the German Bight and to show that swimming crabs are of major importance for those birds foraging inshore, while some birds

foraged further from the shore on both 'natural prey' and discards, thus avoiding competition with other species. In the final contribution of a stimulating session, Sarah Davis (co-authors Bob Furness & Ruedi Nager) presented the results of an experiment to supplementary feed Arctic Skuas in Shetland, showing that adult birds consumed most of the additional food themselves, rather than feeding it to their young.

On Saturday evening, the Conference Dinner was held in the historic Elphinstone Hall, adjacent to the Conference Centre. After a grand meal with a distinct Scottish flavour, special tribute was paid to Dr Bill Bourne, founding father of the Seabird Group. Mark Tasker outlined Bill's involvement with the Group and just a handful of his very many achievements, and Bill replied graciously, before being presented with a copy of "*Seabird Populations of Britain and Ireland*". Raffle prizes were then distributed (and some immediately consumed) before tables were cleared for the ceilidh, with dancing to the excellent band *The Flying Piemen*. This was an energetic affair for the commendable number prepared to sweat and lose their shirt-tails. Fortunately, the quantity of beer consumption had been anticipated, and equally fortunately, none of the middle-aged participants in the final marathon Gay Gordons suffered long-term effects, or worse!

The first session on Sunday focussed on human management of seabird colonies. Brian Bell described several situations in which seabirds had recovered after removal of invasive species such as cats and rats, including Little Barrier Island (petrels), Galapagos (Dark-rumped Petrel) and Ascension island (5 species returned). He highlighted that monitoring seabirds after eradication programs is something that has rarely been done. Richard Podolsky described successes and failures to artificially increase seabird numbers by the National Audobon Society's Seabird Restoration Program. This program has undertaken 66 world-wide projects since 1970 and uses both social attraction and translocation techniques. Colin Beale (co-authored by Pat Monaghan) gave an extremely informative talk about research on the effects of human disturbance on Kittiwakes breeding at St Abbs. He described how, by placing heart rate monitors in dummy eggs, he detected an

increase in Kittiwake heart rate when they were approached by humans. This increased heart rate would increase the daily energy requirement sufficiently to explain the observed increase in breeding failures. He also found that there were only minor changes in parental behaviour (such as spending less time asleep), while there was no change in parental attendance. This highlights how disturbance effects may be more widespread than suggested by behavioural responses.

Our apologies, but none of us managed to report in detail on the talks that were presented in the last two sessions on Sunday. The first of these included talks and interesting mix of topics: seabird population changes and determinants on Johnston Atoll (Betty Anne Schreiber & Gary Schenk), long-term changes in seabird populations in the Gulf of St Lawrence (Gilles Chapdelaine *et al.*), the impact of climate change on Bonxies (Steve Oswald *et al.*), winter movements of Northern Gannets (Ulrike Kubetzki *et al.*) and, Bill Bourne on the gadfly petrels. The final session included talks on Razorbill demography in Labrador (Jennifer Lavers & Ian Jones), the status of breeding seabirds in Svalbard, Franz Josef Land and Novaya Zemlya (Hallvard Strøm), and hormonal and energetic changes in Kittiwakes during chick rearing (Olivier Chastel *et al.*). Linda Wilson and co-workers gave a fascinating talk on ammonia emissions by seabirds, showing that UK seabirds produce <1% of total annual emissions but that 45% of their annual emissions occur in northern Scotland (sufficient to cause local changes in *eg* the species composition of moorlands). Antonio Hernández-Matías (co-author Peter Becker) rounded off the talks programme with a presentation on their

ambitious project to investigate and successfully demonstrate food information transfer amongst seabirds but providing artificial food patches for Common Terns.

On the Monday morning, about 30 delegates boarded the coach for a trip north along the Aberdeenshire coast. Fortunately it remained dry and sunny all day, although with an increasing north-westerly wind. First stop were the cliffs at Bullers o' Buchan, where although all the breeding seabirds were seen well, not even the Shags had built proper nests yet - signs of worse things to come. We then backtracked to the Ythan Estuary where, on a rising tide, some of the North Americans were ticking off new species every few minutes among the early spring waders, waterfowl and passerines of the surrounding farmland. Fortunately, large numbers of Pink-footed Geese were still in the area and gave spectacular and noisy views, before we retired to the Undy Arms Hotel in Newburgh for lunch. In the afternoon, we headed north to the Loch of Strathbeg, the largest coastal lagoon in the UK. We split into two groups, guided by RSPB Warden Scott Patterson and Assistant Warden Katherine Puttick, and had an enjoyable couple of hours, which included yet more geese in big numbers and, for one group, an incredibly close view of a Water Rail. All in all, a fine day out and a fitting close to a stimulating and enjoyable conference weekend.

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(Seabird Group Executive Committee)