



CONFERENCE REPORT

9TH INTERNATIONAL SEABIRD GROUP CONFERENCE, ABERDEEN. 1-3 SEPTEMBER 2006

“SEABIRDS UNDER PRESSURE”

Welcome to the conference

After a reception buffet at Crombie Hall, delegates gathered in the King's Conference Centre auditorium for the welcome speech from Mark Tasker, Chairman of the Seabird Group. Mark welcomed the 163 delegates from 16 countries attending the full two-day programme which included 68 presentations. This year's conference covered a range of pressures that seabirds experience such as fisheries interaction, climate change, mammal predation, wind farm interaction, disturbance and other effects and contaminants.

Kees Camphuysen from the Royal Netherlands Institute for Sea Research followed with his talk on distributional shifts of seabirds and marine mammals in the southern Bight. He pointed out that during the 1970's, industrial fishing used to be blamed for declines in seabird and cetaceans. Today land reclamation, human overpopulation and climate change are the driving factors that influence food availability and are manifested as changes in species composition, overall abundance and distribution.

The evening continued with a BBC film screening - 'South Georgia – An Island all alone'. This was based on a film crew following

the seabirds and marine mammals of the island throughout the yearly cycle. Many of us admired the scenery but also realised about the tough wintering conditions these species are exposed to. The Zeste Restaurant became the last stop of the evening where delegates enjoyed socialising, drinking and pondering about their next field season.



Delegates seated in the King's College Conference Centre (Juan Brown)

Theme 1: Fisheries Interaction

The first session of Saturday was opened by Chris Robertson who reported that in New Zealand a small number (<20%) of 240 observed vessels killed >80% of the incidental by-catch in seabirds. A necropsy programme on the diet of dead birds in New Zealand waters found that Polish boats in particular, by using old fishing gear and poorly cleaned surfaces, have not made an effort to avoid interaction risks with albatrosses and petrels.

Maria Mateos followed with a presentation which showed that discard and offal is an important food source for seabirds migrating along the Gulf of Cadiz, in south-west Spain. Her study was based on observations and bird counts from a research trawler. They found that large numbers of threatened species such as Balearic and Cory's Shearwater were occurring and highlighted that this issue needed conservation attention.

Michelle Sims demonstrated the challenge of modelling estimates of bycatch rates by comparing data from 1992 to 2004 of the US sink gillnet fisheries with that of the pelagic longline fisheries in the western North Atlantic. She demonstrated spatial modelling of multi-

taxa bycatch rates where 95% of the sets showed no bycatch and the difficulties occurring when dealing with zero estimates.

In the final presentation of the first session, Richard Phillips focused on population declines in albatrosses and petrels from South Georgia. He demonstrated that fisheries bycatch is still a current problem in the Southern Ocean. Quality tracking and demographic data showed that during the non-breeding period all species are vulnerable. Richard pointed out that Black-browed Albatrosses are most at risk during incubation, whereas Wandering Albatrosses and White-capped Albatrosses are most vulnerable during pre-laying and incubation.

Theme 2: Climate Change

After a 20-minute coffee break, the second session was opened with a presentation by André Breton who kindly filled in for George Divoky. André spoke about his project on shared characteristics of Black-legged Kittiwakes by analysing data collected from automated telemetry stations based on Kodiak Island.

Robert Thomas followed with a talk about the relationship between climate change and the fuel loads of migrating European Storm Petrels. He found out that between-year variation in body fuel reserves were associated with the North Atlantic Oscillation.

John Chardine then told us about the influence of ocean climate variability on Black-legged Kittiwake breeding success at Witless Bay, Newfoundland. He found interesting trends between breeding success and the difference between timing of Kittiwakes hatching and capelins spawning. Changes in Capelin biology have occurred over years since 1980s. Capelin now tend to occur in colder, deeper waters and the lower temperatures have resulted in delayed spawning. Such mismatch of timing may mean that breeding conditions for Kittiwakes will deteriorate.

Lorien Pichegru presented results from a study on Cape Gannet colonies in South Africa located in two different ocean currents. Surprisingly birds within the upwelling system spent greater time foraging, travelled further and fed mainly on fisheries offal while gannets from Bird Island

fed mainly on sardines. Competition with fisheries and predation by Fur Seals are suggested as environmental pressures to make birds display such behaviour.

Before talking about trends in seabird abundance and distribution Stefan Garthe encouraged delegates to undertake more European Seabirds at Sea (ESAS) counts of the North Sea to improve future data sets and interpretation. He analysed two time periods (1979-1991, 1992-2004) for seabirds during the non-breeding season and detected substantial declines for Herring Gulls and Greater Black-backed Gulls, while fulmars were less affected. He concluded that behaviour of seabirds is changing over time: Pelagic species interactions with fisheries are decreasing whilst inshore species interactions are increasing.

A scrumptious lunch was then prepared for us in Elphinstone Hall.



Lunch in Elphinstone Hall (Juan Brown)

The first session of the Saturday afternoon was opened by a presentation from Thomas Reed who made predictions in phenotypic plasticity for colonial breeders. He stressed the point that all Common Guillemots responded similarly in their average lay date to the large-scale environmental cues such as North Atlantic Oscillation leaving little space for individual variation and limiting the potential for directional selection to act.

The last presentation relating to climate change was given by Bernard Cadiou, who demonstrated that predation by Greater Black-backed Gulls, combined with impacts of climate change, can have a serious threat on the European storm petrel population in Brittany.

Theme 3: Mammal Predation

The first presentation of this session was given by Bob Swann who talked about the impact of Brown Rats on the Isle of Canna's breeding seabirds. Rats were shown to have led to a decline in seabird numbers and a redistribution in nesting Common Guillemots. He also pointed out that, at the same time, a food shortage occurred and that birds switched to energetically low value fish species. Following the winter 2005/06 rat eradication programme on the island, he presented updates on the current situation with Razorbills recovering from near local extinction.

Elizabeth Bell followed with an impressive report on crow clips, wax blocks and a very effective bait station grid containing 4200 stations to eradicate Brown Rats from Canna during winter 2005/06. She talked about the struggle to get 23 tonnes of bait to the island and the high amount of material lost through weathering (2.5 tonnes). By March 2008, we will be able to find out if the project has been successful and whether the island can be declared rat free - fingers crossed!

The last presentation before the two hour poster session was given by John Hughes. He informed us about the decline of Sooty Terns on Ascension Island by introduced predators such as Norway Rats, Mynah Birds and the encroachment onto nesting sites by Mexican Thorn. Domestic feral cats predated up to 32 Sooty Terns per night and were therefore the main priority species to be eradicated in 2003. However, the population status of Sooty Terns has not improved and recent studies show that Norway Rats are now on a rapid increase.

Final Session on Saturday

Presentations continued with Thierry Boulinier after coffee. He asked the question: are individuals of varying quality distributed heterogeneously within a colony? Using mean egg size of Black-legged Kittiwakes, as an indicator for quality, no clear pattern of spatial autocorrelation was found amongst study plots over seven years of investigation. Therefore mean egg size could be used as monitoring tool to show response in environmental change.

Karen McCoy presented seabird ecology from the viewpoint of the tick *Ixodes uriae*. Recorded on more than 50 seabird host species, this generalist can aid in the transmission of pathogens, reduce reproductive success, limit habitat selection and affect recruitment. Karen talked about host specialization and the implications that this may have for both host population dynamics and the epidemiology of avian diseases.

Stephen Votier showed us the factors influencing recruitment in a breeding colony of Common Guillemots at Skomer Island, Wales. Apparently, combined influences of extrinsic and intrinsic mortality events can be masked by recruitment of non-breeders which will have an effect on actual recruitment rate.

The final talk of the day was presented by Matthew Parsons who talked about the first efforts to develop a breeding seabird indicator for Scotland as demanded by policy-makers. He showed how modelling trends from the UK Seabird Monitoring Programme closely agreed with the trend revealed by previous censuses but gave unsatisfactory output for species such as terns and cormorants. He concluded, however, that an all species indicator does not reflect individual species trends and sandeel specialists needed to be looked at as individually.

Conference Dinner

The conference dinner was held in the Elphinstone Hall which offered a grand space and a great atmosphere with a very high ceiling, chandelier and antique wall hangings. After an excellent dinner in good company, a raffle was organised and delegates had the chance some attractive prizes. Afterwards the floor was cleared for the traditional Ceilidh and provided welcome exercise to delegates after a day of sitting. The Flying Piemen were well received and as a new face to the scene I greatly enjoyed my night and learned much about Scottish dancing and beer consumption.

Ilka Soehle.

E-mail: Ilka.Soehle@jncc.gov.uk

First Session on Sunday

“Ceilidh survivors” were welcomed to the first session by Chair Stefan Garthe. Any blurry eyes and minds were soon sharpened by the first talk, with Tony Diamond describing a looming crisis in the seabird populations in the Bay of Fundy. On the American – Canadian border, any confusion of ownership of Machias Seal Island was not shared by the resident Common Terns, as the patriotic maple leaf nest markers illustrated! On a less jovial note, Tony described how seabirds are struggling. A decline in young Herring has caused prey-switching to larval fish and krill. He also reported on a novel way of catching Atlantic Puffins, fledglings of which seem to be inexplicably drawn to the throb of a diesel generator!

Nele Markones then followed with news of the better fortunes of Black-legged Kittiwakes in German Bight, which are not suffering the declines experienced by some other North Sea colonies. Rather than foraging on sandeels, the German kittiwakes are thriving on young Whiting, foraging at ‘fronts’ (current interfaces or upwellings) rather than scavenging discards.

The next paper was delivered by Morten Frederiksen on the ‘boom and bust’ population dynamics of the European Shag. Unlike most seabird species, which typically exhibit slow reproductive rates and more stable populations, European Shags are able to exploit favourable conditions by producing a larger number of young. Conversely, they are less able to avoid unfavourable conditions than other seabirds and suffer high mortality in bad years. The ultimate factor driving this adaptive strategy is their partially waterproof plumage, which facilitates more efficient foraging when conditions are good. However they are more susceptible to poor conditions as their plumage is less protective in stormy weather and their requirement for dry-land roosts limiting the species’ dispersal ability. Morten’s colleague Francis Daunt confirmed the sedentary nature of the Isle of May shags, and examined factors affecting year-round foraging behaviour using logger data and linked this with breeding success.

The conference then adjourned for coffee, with another opportunity to browse some 35 posters, plus a display of excellent pictures by Shetland artist Howard Towll.

Theme 4: Wind farm interaction

The late morning session was chaired by Sheila Russell. With pressure on governments to reduce carbon dioxide emissions as part of the Kyoto Treaty, coupled with opposition to terrestrial siting of windfarms, the number of proposed installations at sea is increasing. In order to minimise impacts on important bird populations, it is vital that we establish numbers, distribution and behaviour of species in areas of proposed or likely development.



Henrik Skov’s presentation (Juan Brown)

Results from surveys in North America (where there seems to be a lack of planning, as Henrik Skov reported, in place of Richard Podolsky), UK (Andy Webb and Ilya Maclean) and Denmark (Ib Krag Petersen), were presented. Andy described how aerial surveys in the UK have revealed considerably bigger populations of Common Scoters in Liverpool Bay and Red throated Divers in the Thames Estuary than were previously known.

Theme 5: Disturbance and other effects

After lunch, the next theme of the conference commenced and was chaired by Jim Reid. Iain Stenhouse headed the session with that charismatic species: the Ivory Gull. With a world population of just 14,000 pairs (far smaller than I had realised), the species’ apparently massive population crash in Arctic Canada is cause for concern.

Claire Smith reported on the pecking order of the bully-birds of Handa, with Arctic Skuas heading for extinction due to predation of fledglings by Great Skuas, themselves suffering

from the aggressive tendencies of the Great Black-backed Gull. This was particularly interesting since at other colonies Bonxies eat Great Black-backs chicks.

Philipp Schwemmer examined the impacts of shipping, which is predicted to increase of as new windfarms are constructed, on seaduck and Red-throated Divers in German waters. Mariette Wheeler ended the session by demonstrating the degree of irritation exhibited by nesting wandering albatrosses to human visitation and the implications for managing public access.

Theme 6: Contaminants

Alexander Bond looked at mercury contamination in Machais Seal Island seabirds, an anthropogenic pollutant which, when biomagnified, can cause reproductive failure. In order to identify the source of the mercury he used stable isotope ratios of nitrogen to identify what level in the food chain organisms were feeding, and of carbon to measure how far offshore species were feeding. The highest mercury levels were found in petrels and Atlantic Puffins, indicating a diet of Euphausiid shrimps in these species, as these were the prey items with the highest mercury levels.

The Conference ended as it began, with a Dutch speaker, Jan Andries Franeker, who exposed the considerable amount of plastic found in dead Fulmars. The grizzly sight of Fulmar entrails stuffed with coloured plastic has attracted the media spotlight and highlights the responsibility we have to ensure their survival.

Closing speeches and remarks

In his closing speech, Mark Tasker noted that we are becoming more co-operative as testified by the mean number of authors per paper: 2.45 in 2004, compared with 4.34 in 2006! Mark thanked everyone concerned with the organisation of the conference and presented

Alan Leitch and Martin Heubeck with gifts of a local liquid speciality in recognition of the tremendous amount of work involved. Sarah Wanless also thanked Mark on behalf of delegates for his important role.

Juan Brown

E-mail: j.brown@welshwildlife.org

Field trip

On the Monday morning, a truly international group of 26 delegates boarded a coach for the field trip to Royal Deeside. Their guide for the day was Nick Picozzi, formerly of Banchory CEH, who has lived in Deeside for the past 40 years. His knowledge of the geomorphology, ecology and history of the area made for an interesting and entertaining commentary between and during stops, the first of which was at the famous Queen's View. Despite a bit of wind from the west, the weather held throughout the day, and we enjoyed a walk at the Muir of Dinnet through birch woods to the Burn O'Vat, a massive bowl in the rock carved out thousands of years ago by a sub-glacial river. Although the woods were fairly quiet, mixed flocks of tits and Goldcrests provided species for folks only just starting their European lists.

Further on, we drove up Glen Cree to high ground at the Cairnwell and Glen Shee Ski Centre for some magnificent views (plus Red Grouse and Red Deer, Buzzards, Ravens and Dipper – but alas no Golden Eagle) before descending for a picnic lunch by the Linn O'Dee (Grey Wagtails, Siskins and fly-over Crossbill). Then it was on to the Royal Lochnagar Distillery for a tour and tasting, and yes, the standard up the pole indicated the neighbours were in residence at Balmoral. All in all, it was a very convivial and relaxed introduction to the habitats and history of inland Aberdeenshire.

Martin Heubeck

E-mail: martinheubeck@btinternet.com