

## **United Kingdom Voluntary National Cetacean Conservation Report, 2012**

**This report provides an update on cetacean conservation since IWC63**

**National Governmental Authority Submitting the Report:**

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### **1. Legal Developments (laws, regulations and other regulatory measures related to cetaceans)**

The Marine Management Organisation (MMO) uses an intelligence led risk based enforcement model to direct enforcement activities and resources. Any intelligence received by the MMO in relation to offences against cetaceans or anthropogenic impacts in MPAs designated for them is considered and appropriate enforcement action taken.

As part of the Marine Licensing process for offshore construction, the MMO require and monitor the implementation of Marine Mammal Mitigation Protocols (MMMPs) to mitigate against harm and disturbance to cetaceans, including for piling work on wind farms.

### **2. Current Government Programs Related to Cetacean Conservation**

#### **2.1 UK surveillance and monitoring programme**

The Sea Mammal Research Unit has used spatial modelling to estimate abundance and explore species-habitat relationships of cetaceans in European Atlantic waters. The analysis combined data from SCANS-II (surveyed in 2005), CODA (surveyed in 2007) and the Faroes block of TNASS (surveyed in 2007). Species for which abundance could be estimated were: harbour porpoise (*Phocoena phocoena*), white-beaked dolphin, white-sided dolphin, bottlenose dolphin, short-beaked common dolphin, striped dolphin, long-finned pilot whale, minke whale, fin whale, sperm whale, and all beaked whale species combined. Preliminary results were presented in December 2011 to the Biennial Conference on Marine Mammal Biology in Tampa. Recently discovered minor issues with the processing of the SCANS-II and CODA data, which are currently being addressed, will alter the results very slightly. The final results will be available later this year.

Annual monitoring of bottlenose dolphin and harbour porpoise populations continued in Cardigan Bay, West Wales using photo-ID (bottlenose dolphin) and line transect survey (both species) (Veneruso & Evans, 2012). After earlier (2001-07) increases, abundance estimates of the bottlenose dolphin population of Cardigan Bay Special Area of Conservation show a general decline. In 2011, the overall Cardigan Bay abundance estimate for bottlenose dolphin was 296 (CV=28.8) and for harbour porpoise was 990 (CV=27.1), from line transect surveys. Life history parameters measured from photo-ID for bottlenose dolphin indicate a mean annual birth rate of

between 5.2% and 7.7% (2001-11) depending upon whether a closed or open population model is adopted; an inter-calf interval ranging from 2-5 years, with 3 years being the most common; and calf mortality rates of 20.4% (year 1), 24.5% (year 2), and 10.2% (year 3) (Veneruso & Evans, 2012). Bottlenose dolphins from Cardigan Bay disperse in winter and generally move northwards in November to waters between Anglesey and the Isle of Man (and probably beyond) where they largely remain until the following April (Veneruso & Evans, 2012). Acoustic studies using T-PODs and C-PODs have been undertaken between 2009-12 (Hanna Nuuttila, PhD student, University of Bangor), extending other acoustic monitoring & research by SWF within Cardigan Bay SAC (Simon et al., 2010; Meier, 2010; Nurminen, 2010; Wahlberg et al., 2011).

In Jersey, the marine biology section of the Societe Jersiaise receive and collate information from the public concerning cetacean sightings. This data is available online. Sighting data is also recorded by the States of Jersey Fisheries Protection Vessel. Dolphins were sighted on 18 separate occasions in 2011. This was a decrease on 2010's figures, but still higher than most previous years and above the 10 year average (Fig. 10). All sightings were identified as bottlenose dolphins. Sightings occurred mainly to the north, east and south of the Island ranging from Les Écréhous in the north to Les Minquiers in the south. In total 124 adult dolphins and 15 Juveniles were observed. Juveniles represented 12% of sightings in 2011, compared to 9% in 2010, 10% in 2009 and just 3% in 2008. Pattern and frequency of patrols was reduced in 2011, with days at sea slightly less than in 2010 due to section re-structuring.

### **3. Current threats to Cetacean Conservation and Management Measures Taken/Proposed**

#### **3.1 Bycatch**

The two main species affected by fishing in UK waters are the harbour porpoise and the short-beaked common dolphin. All Reports to the European Commission on activities conducted by the UK under Regulation 812/2004, and under Article 12(4) of the Habitats Directive, provide details of the monitoring work undertaken and estimates of bycatch.

A dedicated monitoring scheme is operated by the SMRU, while collaborative links with the three fishery research laboratories in the UK also allow selected observations from the Discard Sampling Programmes to be included in our assessment of cetacean bycatch. The observer scheme relies upon good collaborative links with industry. Nevertheless fisheries regulations were enacted in England and Scotland to ensure that there is also a legal obligation for skippers and owners to take observers when asked to do so.

Reports can be found at: <http://ww2.defra.gov.uk/environment/marine/protect/species/cetaceans/>

In June 2010, a Scottish Government project ‘Entanglement of minke whales in Scottish waters: an investigation into occurrence, causes and mitigation’ was published. The report can be found at the following link: [www.smru.st-and.ac.uk/documents/347.pdf](http://www.smru.st-and.ac.uk/documents/347.pdf)

#### **Implementation of methods to reduce bycatch**

Work on mitigation continues to focus on the use of one specific type of acoustic deterrent device (DDD). These devices (DDD03F) are being used in the UK component (outside 12NM) of the midwater pair trawl fishery for bass in the Western English Channel with continued success. A

variant of the same device (DDD03H) has been adopted by the over 12m gill and tangle net fleet in the Western Channel and Celtic Sea. Observations on this fleet segment have shown the effectiveness of these devices in minimising porpoise bycatch by over 90% in nets of up to 4km in length, but the effect on common dolphins is not yet clear.

### **3.2 Research proposals**

The UK was pleased to provide a voluntary contribution of £10,000 to the IWC small cetacean fund in 2011. The UK was also pleased to provide financial support contributing to the work of the IUCN's (International Union for Conservation of Nature) Western Gray Whale Advisory Panel. We have also commissioned research into 'The Contribution of Marine Protected Areas to Protecting Highly Mobile Species in English Waters'.

Through membership of the Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS) the UK helped secure funding for 3 projects in 2011/12:

- Examination of habitat exclusion and long-term effects of pingers;
- Extension of the contract for the coordinator of the North Sea Plan for harbour porpoises for a further six months;
- Kaliningrad CPOD project submitted by Baltic Fund for Nature

Results of these projects will be presented next year.

The UK will also host the seventh Meeting of Parties to ASCOBANS in October 2012.

### **3.3 Renewables**

The Scottish Government let a contract to the Sea Mammal Research Unit (SMRU) in January 2012 to undertake strands of research in three key marine themes, including marine renewables. The focus of this work programme will include: mapping out the current marine research landscape with respect to marine mammals and marine renewables and identifying any data/research gaps, quantifying potential risks to marine mammals from marine renewable energy and identifying management and mitigation measures where appropriate building on ongoing work in this area. This research programme will complete in 2015

## **4. Reporting Systems for Cetacean Injuries/Mortality/Strandings**

### **4.1 Research on the effects of pollutants on cetacean health**

During 2011, Defra funded the analysis of 100 retrospective samples from UK-stranded harbour porpoises (2004-2008) for polychlorinated biphenyls (PCBs) at the Centre for Environment, Fisheries and Aquaculture Science (CEFAS, [www.cefass.co.uk/](http://www.cefass.co.uk/)). Combining this new data with older data from 1990-2008 has enabled a near 20-year time series of data for PCBs (n=540), OC pesticides (n=489) and brominated diphenyl ethers (BDEs) (n=415) in UK-stranded harbour porpoises (Law et al submitted). Initial results show that concentrations of organochlorine pesticides, HBCD and BDEs are declining. In contrast, PCB concentrations have reached a plateau since 1997 following earlier reductions due to regulation of commercial use. Further reductions in PCB levels in UK waters are likely to take decades. Blubber PCB concentrations

are still at toxicologically significant levels in many stranded harbour porpoises (Jepson et al 2005) and occur at even higher levels in UK-stranded bottlenose dolphins and killer whales (ICES 2010), mainly due to their higher trophic level in marine food chains in these top predator species. Further reductions in PCB inputs into the marine environment are undoubtedly needed to mitigate risk from PCB exposure in these species (ICES 2010, Law et al submitted).

Given the concerns about high PCB levels, ASCOBANS funded IoZ to co-ordinate a project to assess PCB exposure in stranded bottlenose dolphins in European waters (Project ref: SSFA/ASCOBANS/2010/3). Blubber samples from stranded bottlenose dolphins from UK, Spain and Portugal are currently being analysed for organochlorine contaminants (PCBs). Data will be analysed and reported to the ASCOBANS Secretariat later in 2012.

ICES. 2010. Report of the Working Group on Marine Mammal Ecology (WGMME), 12-15 April 2010, Horta, The Azores. ICES CM 2010/ACOM:24. 212 pp.

([www.ices.dk/reports/ACOM/2010/WGMME/wgmme\\_final\\_2010](http://www.ices.dk/reports/ACOM/2010/WGMME/wgmme_final_2010))

## **4.2 Reporting on anthropogenic noise**

The UK has recently published its proposals for a characterisation of Good Environmental Status (GES) and associated targets and indicators in UK waters under the Marine Strategy Framework Directive (MSFD). The consultation, including proposals for noise, can be found at <http://www.defra.gov.uk/consult/2012/03/27/marine-strategy-framework-1203/> and closes on 18th June 2012. GES Descriptor 11 requires that 'the introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment'. The Statutory Instrument transposing the MSFD into UK law came into force on 15 July 2010.

The UK continues to actively engage more widely on noise issues within Europe. The UK currently chairs the OSPAR (Oslo and Paris Conventions for the protection of the marine environment of the North-East Atlantic) ICG-MSFD which, in December 2011, held a workshop to improve regional coordination of contracting parties proposals for MSFD targets and indicators (including elements relating to noise). The UK also co-chairs the OSPAR committee EIHA (Environmental Impacts of Human Activities) which includes the impacts of marine noise within its remit and is currently considering the need to develop guidance for Contracting Parties on options for noise mitigation measures.

The UK also co-chairs the EU Technical Sub Group on underwater noise (EU TSG-Noise). With the Netherlands. This group recently published its advice to Member States on MSFD noise targets and indicators and will be continuing its work throughout 2012/13 with the aim of providing advice for Contracting Parties on meeting the monitoring requirements of the Directive.

The UK Government is in the process of finalising guidance on deliberate disturbance and injury following the Offshore Marine Regulations 2007. This guidance is intended to provide a resource for marine users, regulators, advisors, courts and the enforcement authorities when considering whether an offence of deliberately disturbing or injuring/killing a marine European Protected Species (EPS) is likely to occur or to have occurred as a result of an activity. The guidance document will illustrate a preventative approach to ensuring the strict protection of EPS in their natural range as required by Article 12 of the Habitats Directive.

The guidance has been prepared with the input of key stakeholders including JNCC, Natural England, Countryside Council for Wales and the Welsh Assembly Government, and will have statutory significance in English, Welsh and UK offshore waters.

The Defra and Ministry of Defence (MoD) Military Underwater Sound Stakeholder forum meet twice, providing an opportunity for industry, non-government organizations and other interested stakeholders to engage directly with government to discuss emerging issues and exchange information on the impacts of noise in the marine environment. These discussions have helped drive the development of a real-time alert procedure for naval training operations, enabling local information on unusual cetacean sightings, e.g. the presence of a species group closer to shore than is usual, to be incorporated into the training schedule and for operations to be relocated if necessary.

The Underwater Sound Stakeholder forum, in conjunction with the UK Institute of Acoustics, ran a two day conference in October 2011 entitled - Ambient noise in North European seas: monitoring, impact, management.

The National Physical Laboratories, on behalf of the UK, continues to lead in the development of underwater noise standards via the British Standards Institute Committee. Engagement in the International Standards Organisation [ISO] new Sub-Committee within ISO TC43 (SC3 title: "Underwater Acoustics") is considered a future priority. This new ISO TC43 sub group will cover " Standardization in the field of underwater acoustics (including natural, biological, and anthropogenic sound), including methods of measurement and assessment of the generation, propagation and reception of underwater sound and its reflection and scattering in the underwater environment including the seabed, sea surface and biological organisms, and also including all aspects of the effects of underwater sound on the underwater environment, humans and marine aquatic life."

Work is continuing in the new International Maritime Organisation [IMO] Design and Equipment [DE] Correspondence Group to develop a 'Draft Framework for Non-Mandatory Technical Guidelines to minimise underwater noise from shipping'.

The UK Government continues to fund research into the effects of underwater noise on marine species. Of particular relevance to this report is a project developing a programme of monitoring for ambient noise to meet the requirements of the Marine Strategy Framework Directive. Two further projects are underway looking at the behavioural effects of underwater noise on marine life and the impact of anthropogenic noise at the individual, population and community level (both with a focus on coastal fish and crustaceans but also considering cetaceans).

#### **4.3 Reporting of cetacean strandings in the UK**

Since 1990, the collaborative UK Cetacean Strandings Investigation Programme (CSIP) has been funded by UK Government (currently through Defra, Welsh Assembly Government and Scottish Government) to collate analyse and report data for all cetacean strandings around the coast of the UK. CSIP determines the causes of death in stranded cetaceans, including bycatch and physical trauma and undertakes surveillance on the incidence of disease in stranded cetaceans in order to identify any substantial new threats to their conservation status.

The CSIP holds data on nearly 10500 cetaceans which were reported stranded around the UK between 1990 and 2011. In addition, detailed pathological data is also held on over 3000 UK stranded cetaceans which were necropsied by the CSIP during the same period. Data collected on strandings and during necropsies are routinely recorded in a web-accessed relational database (<http://data.ukstrandings.org>). A proportion of data held on this system is also made available to the public via a Defra funded portal, the NBN gateway ([www.nbn.org.uk/](http://www.nbn.org.uk/)). Further information on the CSIP is available at [www.ukstrandings.org](http://www.ukstrandings.org). Intellectual property rights to the data directly generated as a result of CSIP research belong to Defra.

At the ASCOBANS Advisory Committee meeting in Bonn in 2010, the ASCOBANS Secretariat agreed to fund IoZ to co-ordinate a feasibility study into the creation of a centralised point of access for selected data collected by stranding networks within the ASCOBANS region (Project ref: SSFA/ASCOBANS/2010/2). The project report on this feasibility study was presented at the recent Advisory Committee in March 2012 and it is hoped that this work will be the first step towards the eventual creation of a central database on strandings and necropsies, encompassing ASCOBANS Parties and Range states.

In addition to providing part funding to the UKCSIP work programme, the Scottish Government also funds additional strandings work in Scotland. This work is primarily focused on seals and seeks to provide a co-ordinated approach to the surveillance of strandings and to investigate major causes of death.

In addition to the strandings co-coordinators funded by Defra, the Welsh Assembly Government continues its funding of the Welsh Strandings Co-ordinator in conjunction with the Countryside Council of Wales. The cetacean most commonly found stranded on the Welsh coast is the harbour porpoise and the most common cause of death for this species is from attack by bottlenose dolphins.

#### **4.4 Reporting on the impacts of shipping**

A risk analysis of vessel strikes was undertaken throughout the ASCOBANS Agreement Area using VOS ship data and effort-related cetacean sighting rates derived from multiple data sources (including SCANS II & CODA), found highest potential overlap between cetaceans (particularly large whales) and vessels in the Bay of Biscay (Evans et al., 2011).

### **5. Whale Watching**

Whale and dolphin watching around the UK coast has increased dramatically in the past 20 years, as both commercial ventures are set up and the public has started to take an interest in watching the animals in their natural habitat.

In the UK, several codes of conduct and accreditation schemes are in place aimed both at the public in general and at commercial wildlife watching operators. Although it is considered that the adherence to such schemes should, in principle, much reduce the risk of an injury offence and potentially of a disturbance offence, their effectiveness in terms of compliance and protection to the species should be tested and monitored.

#### **Scotland**

In November 2006, The Scottish Marine Wildlife Watching Code (SMMWC) was launched as a result of the Nature Conservation (Scotland) Act 2004. This code was developed by Scottish Natural Heritage (SNH) for those who watch marine wildlife in Scotland - whether from the shore or at sea. The code comprises recommendations, advice and information. The Scottish Code and its guidance have been incorporated into the WiSe (**Wildlife Safe**, [www.wisescheme.org](http://www.wisescheme.org)) courses, a UK wide training and accreditation scheme aimed at operators of passenger pleasure craft, wildlife cruise operators, dive boats and charter yachts who may come into contact with large marine wildlife such as whales, dolphins, basking sharks or seals. The countries' nature conservation agencies (NE, CCW, SNH and NIEA) advise compliance with this scheme.

Another set of guidelines, specific to the Moray Firth area, are part of the Dolphin Space Programme (DSP), an accreditation scheme for wildlife tour boat operators in that area. The aim of the DSP is to encourage people who go out to observe dolphins and other marine wildlife to "watch how they watch" and to respect the animals' need for space. The mission of the DSP is to be a model of excellence in responsible wildlife tourism and is intended to support the sustainable, positive development of marine wildlife watching in the area.

### **Wales**

Ceredigion County Council's dolphin and boat monitoring includes the monitoring of wildlife watching trips. The Council are very proactive and have a meeting with the boat operators at the beginning of each season to agree the code of conduct. This is a voluntary scheme that results in almost 100% compliance from the wildlife watching boats and about 98% compliance from other boat users.

### **Northern Ireland**

The Northern Ireland Environment Agency actively supports the WiSe Scheme and has facilitated three separate workshops for commercial and leisure operators since 2005. Recent funding enabled the training of two local WiSe Instructors in Northern Ireland, one for Co Antrim and Derry (north coast) and another for Co Down (east coast). The scheme focuses on cetaceans, in addition to seals, basking sharks, and seabirds.

At recent WiSe Scheme workshops, local police (PSNI), marine policy advisors and marine vertebrate specialists have attended and contributed. There is a published article which provides a summary of this initiative and its implementation here in the third edition (pages 47-50) of COAST magazine: [http://www.doeni.gov.uk/niea/biodiversity/habitats-2/coast/ehs\\_coast\\_magazine.htm](http://www.doeni.gov.uk/niea/biodiversity/habitats-2/coast/ehs_coast_magazine.htm)

Further details and references to papers available on request