



**Scottish
Wildlife
Trust**



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Dear Dr Savage

**WDCS & SWT comments on Habitats Regulations Assessment of the Round 3 plan:
Information to inform an Appropriate Assessment**

GENERAL COMMENTS

Marine renewable energy is an important component of future energy supply and could make a valuable and environmentally sensitive contribution to reducing the greenhouse gas emissions responsible for climate change if developed in an appropriate manner. The immediate and long term concerns about climate change do not eliminate the requirement for the UK and Scottish governments, Crown Estate and the marine renewable energy industry to deal with environmental protection, including habitat degradation, displacement and disturbance of European Protected Species, as well as considering collisions and entanglements. Indeed, the vital importance of a healthy, well-functioning marine environment in the mitigation of and adaptation to climate change cannot be underestimated.¹ There is a requirement to deal simultaneously with both climate change

¹ The sea is the world's second largest carbon sink after the atmosphere itself. It is estimated to have absorbed around a third of the total carbon (150 Gt) from human activities since 1850 and contains about fifty times as much inorganic carbon as is found in the atmosphere. A recent report by the United Nations Environment Programme concludes that, 'Minimisation of pressures, restoration and sustainable use are

and more immediate and localised threats to individuals and populations. The draft assessment currently only recognises some of these concerns.

A consultation period of 21 days is not adequate to enable detailed consideration of such a long and detailed document. Further, requesting a meeting during the comment period adds additional pressure on consultees to read and interpret the document in even less time than this.

There are some general issues relating to cetaceans in the document (some of which occur multiple times) which we believe are erroneous and/or unhelpful:

1. It is unclear exactly what species information was considered in the MARS planning tool used to assist in determining the zones. If only Special Areas of Conservation (SACs) were considered, as the only currently existing areas of protection for cetaceans in the UK, then we strongly believe such data are inadequate. Only three SACs have been designated in UK waters for only one of the two qualifying cetacean species (the bottlenose dolphin). This can be contrasted with the more than 20 species that regularly use our waters. All cetaceans are required to be protected by European law as they are European Protected Species. Joint Nature Conservation Committee (JNCC) has recently developed draft Disturbance Guidance that is not considered in this document. We would be grateful if you would clarify the sources and extent of cetacean data used to select the 9 development zones.

2. Whilst cetaceans may be widespread, as indicated in the document, this does not mean that there are not particular habitat areas which are of importance to them and which can be degraded, resulting in impacts on the animals. By contrast, haul out sites (which are important for resting, breeding and rearing pups) are discussed for seals, whilst the limit of attention for cetaceans seems to be on only two factors – noise and impacts on prey.

3. The report contains scientific errors as well as some assumptions. Common bottlenose dolphins do not occur globally nor are they the most common of the *delphinidae*. The taxonomy of animals previously known world wide as common bottlenose dolphins, *Tursiops truncatus*, is complex and two species are now defined – one with a more southerly distribution to *T. truncatus*. We refer you to the IUCN's recent review of the taxa. More importantly, Europe's remaining inshore bottlenose dolphins should be viewed as remnant populations and seen as vulnerable to further depletion. Further, there is no mention in the document of the status of any of the species considered despite population declines in harbour (common) seals and likely declines in the Moray Firth bottlenose dolphin population.

4. Pile-driving noise should not be classified as a transient impact (e.g. table 4.3) in the context of the construction of wind farms with large numbers of turbines, where powerful

management options that can help [oceans and coastal] ecosystems maintain their important carbon management function.' Trumper, K., Bertzky, M., Dickson, B., van der Heijden, G., Jenkins, M., Manning, P. June 2009. *The Natural Fix? The role of ecosystems in climate mitigation*. A UNEP rapid response assessment. United Nations Environment Programme, UNEPWCMC, Cambridge, UK

impulsive noise will be transmitted into a marine region for months and possibly even years, including in regions or zones where wind farms are to be built in the vicinity of each other.

5. We are very concerned that there is an over-reliance on ‘mitigation measures’ to reduce the threshold of impact to that which falls below ‘Adverse effects on integrity’ (table 4.5). We do not believe that mitigation measures alone can be guaranteed to reduce impacts to an acceptable level. It would be more appropriate to refer to ‘management and mitigation measures’ or ‘avoidance and mitigation measures’, which encompasses the concept of avoiding key areas altogether or of ramping back or removing development should adverse impacts be detected. Further there is inadequate discussion of the mitigation measures that will be required, their effectiveness or their applicability (more detailed comments below). Such details would provide useful guidance to developers.

SPECIFIC COMMENTS

Section 1

We welcome that the Round 3 Plan includes the cradle-to-grave consideration of each of 9 zones.

Decisions about the location of wind farms within zones should be based on a firm knowledge base of each cetacean population’s distribution, status and vulnerability, as would be expected in the terrestrial environment (see earlier comment on SACs in the General Comments section). Where data are lacking (as may be identifiable in the MARS planning tool), data should be collected as a priority to a predetermined standard before decisions about development are made.

Section 4

We agree with the approach to include consideration of transnational SACs due to the highly mobile nature of marine mammals.

We believe that habitat displacement should be considered under section 4.1.3. Habitat displacement can be short term (days or weeks during pile driving, for example) or it can be long term (months or extending to the life of site operation). Both could have long term and significant implications for individuals and/or populations. Consideration should be given to habitat displacement and the implications of this.

We concur with JNCC’s earlier comments (provided in Appendix A) about habitat degradation. We note with concern that these do not appear to have been taken into account in this report.

We do not agree that pile driving (described in Table 4.3) can be considered as a transient impact in all cases. In the same way that seismic pulses can be considered cumulative, where piles are repeatedly driven, or indeed where development occurs in different wind farms in the same zone, the sound source can be considered cumulative in nature. We would like to see a clear assessment of the likely timescales and extent of pile-driving

activities that takes into account not only projected Round 3 developments but the cumulative impacts of similar developments in adjoining Scottish territorial waters. We believe that an investigation should be undertaken into the likely extent of impacts and habitat displacement based on existing knowledge.

Given the rapidly-increasing scale and extent of offshore wind developments around the UK in the coming decades, we encourage the use of other more environmentally benign forms of turbine installation than pile driving wherever possible.

We strongly disagree with the suggestion in the summary of section 4.2.1 that cetaceans are tolerant of human activity. Coastal species have no choice but to share their marine environment with increasing human activity. Declines in harbour porpoise and bottlenose dolphin populations around the UK since the industrial era provide scientific evidence for the inability of cetaceans to tolerate certain types of human activity.

The report makes an unsubstantiated statement about changes in prey species which is of concern. We note that the EU Habitats Directive requires scientific certainty in determining significant impacts. Changes in prey density in the vicinity of offshore wind farms, and subsequent changes in cetacean distribution, is clearly an area that requires further investigation. We strongly disagree with the statement that cetaceans ‘are not restricted to a single foraging area’. This contradicts the available science on the biology and foraging requirements of a number of cetacean species.

Seals

Section 4.2.2 fails to mention that harbour (or common) seals have undergone major declines, due to unknown but likely cumulative impacts of a number of sources, in large parts of their range in UK waters. This is a significant point that should not only be included, but considered as a matter of priority in decision-making.

Section 4.3.2 states that “none of the sites designated for bottlenose dolphins will be physically affected”. Under the EU Habitats Directive, it is not the SAC boundaries that are important here, but the ranges of the animals themselves, where the protection is not contained within the SAC boundaries, but follows the animals (for example, the current offshore wind farm being considered off Aberdeen is about to undertake an Appropriate Assessment because of the bottlenose dolphins that frequent the area and the protection provided for them under the inner Moray Firth SAC).

Section 4.3.6 – Mitigation at plan level

Mitigation alone can not guarantee that adverse impacts can be removed or reduced to acceptable levels. We have serious concerns about the effectiveness of some of the suggested mitigation measures to be implemented at plan level in order to prevent damage and disturbance. Some measures are technical and can be expected to reduce noise levels, such as not piling or extending the duration of piling (although there are issues here associated with the duration of disturbance). Clearly the extension of the duration of piling, while possibly reducing physical injury, will add to general disturbance. This cannot, therefore, be described as effective mitigation. However, other

measures are either not tested or have shown limited effectiveness to date, including air bubble curtains, soft start and the use of Acoustic Harassment Devices (AHDs). There are legal issues relating to disturbance for all cetacean species where AHDs are proposed for use during pile driving. “Conducting seismic surveys during daylight hours” is only likely to be a mitigation measure where independent Marine Mammal Observers are used to detect those animals that are in the immediate vicinity and at the surface during appropriate weather conditions (detections are unlikely in fog and in increased sea states, for example). Where large-scale developments or cumulative the impacts of multiple developments are concerned (particularly given that cetaceans can detect noise at a range of at least ten’s of miles), mitigation that might be appropriate for individual turbine installation will no longer be effective.

As a result, we have no confidence that mitigation measures undertaken at the time of a development will take a Plan below the threshold for adverse effect on integrity. This includes all those sites identified in Table 4.5.

Section 2 - Bats

Swedish research that recorded Daubenton’s bats foraging 10+km from land is mentioned. The report suggests that bats flying over sea are only migrating. This is unsubstantiated.

Disturbance

This document only deals with potential impacts on Annex 2 species. The Crown Estate is also required to address the licensing of disturbance impacts for Annex 4 species including all cetacean (and microchiroptera) species that reside in or regularly visit UK waters. We would like an indication from the Crown Estate as to how this will be obligation will be fulfilled.

A strategic approach to understanding and filling the data gaps of marine species is also required. Development of broader monitoring programmes than the development sites themselves will help to ensure cumulative and in-combination impacts are accounted for and monitored.

We would be happy to discuss any points raised in this letter in further detail.

Yours sincerely



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