

# Digital Aerial Survey (DAS) – Marine Mammals

## Introduction

To collect data on the marine mammals present in the Offshore Array area throughout the year, Moor Vannin commissioned 24 months of Digital Aerial Surveys across the whole Offshore Array plus a 4km buffer area. This data enables the Environmental Impact Assessment team to understand which species are present in the area and how the populations change throughout the year. This data is used, along with supplementary information from organisations like Manx Whale and Dolphin Watch and the Manx Wildlife Trust, to create a baseline description of the marine mammal receptors present in the Offshore Array area and to assess these appropriately during the Environmental Impact Assessment. These surveys collected data on both birds and marine mammals. Further details on how the ornithological data is used can be found in the document [Digital Aerial Survey \(DAS\) – Ornithology](#).

## Timeline

The surveys were undertaken once every month from August 2021 to July 2023.

## Methodology

The survey area consisted of the full 253km<sup>2</sup> Offshore Array area plus a 4km buffer area. The survey was undertaken by an aircraft with 4 specialist cameras attached to it facing down to the water. On each survey, the aircraft flew over the survey area along the transect lines shown in Figure 1 at a height of approximately 550m above sea level. Whilst in flight along these lines the cameras recorded images of all marine megafauna at, or near, the surface in the transect area.



This document is part of a suite of preliminary environmental materials prepared to fulfil pre-application consultation requirements under The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (of Parliament) as applied to the Island by the Climate Change (Infrastructure Planning) (Environmental Impact Assessment) (Application) Order 2024.

**Figure 1: Digital Aerial Survey transects across the survey area**

Once back on the land, the hours of video footage were reviewed by technical specialists and the individual marine mammals identified, where possible, to species level. 20% of these identifications were then subject to an additional blind quality assurance to confirm the accuracy of the identification. Animals were only available for identification when near or at the surface. As such, an additional calculation was undertaken for each species to account for the proportion of individuals may be underwater when the aircraft passed overhead to ensure that numbers were not underestimated. This is especially important to ensure that the recorded numbers are not an underestimate of those populations present in the area.

This methodology is commonly used in Environmental Impact Assessments to gather site-specific data and was pre-agreed with the Isle of Man government as sufficient to provide a supplementary baseline information for the site.

## Findings

Over two years of surveys there were eight species of marine megafauna identified across the survey area, of which five were marine mammals species. The species seen in the study area during the two years of surveys were:

Species seen in study area	Total count over 2 years of surveys
Barrel Jellyfish	35
Blue shark	1
Bottlenose Dolphin	11
Grey Seal	10
Harbour Porpoise	371
Harbour Seal	1
Lions Mande Jellyfish	19
Minke Whale	1

This data has been combined into a baseline report with other available data and shared with the Offshore Environment Technical Advisory Group for review and comment. The Offshore Environment TAG includes representatives from Defa, Manx Whale and Dolphin Trust and the Manx Wildlife Trust.

## Next Steps

The marine mammals baseline characterisation, including the data collected as part of the Digital Aerial Survey, will now be used to inform the Environmental Impact Assessment. The outcomes of this assessment will be discussed with the Offshore Environment Technical Advisory Group and appropriate mitigation and monitoring of any potential impacts will be discussed and presented in the Environmental Statement, which will be submitted in 2025 as part of the Application to the Isle of Man government.