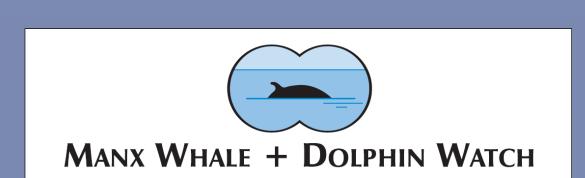


The Occurrence, Distribution and Photo Identification of Risso's Dolphins in Manx Waters



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INTRODUCTION

- The Isle of Man is uniquely situated in the Northern Irish sea, has varied coastal habitats and relatively deep surrounding waters.
- Risso's dolphins (*Grampus griseus*) are found throughout European waters, however their typically offshore, elusive nature means they have not been extensively studied.
- Over the last few years, it has been realised that there is a consistent and easily accessible population of Risso's dolphins utilizing Manx waters, which is now being studied by the Manx Whale and Dolphin Watch (MWDW).





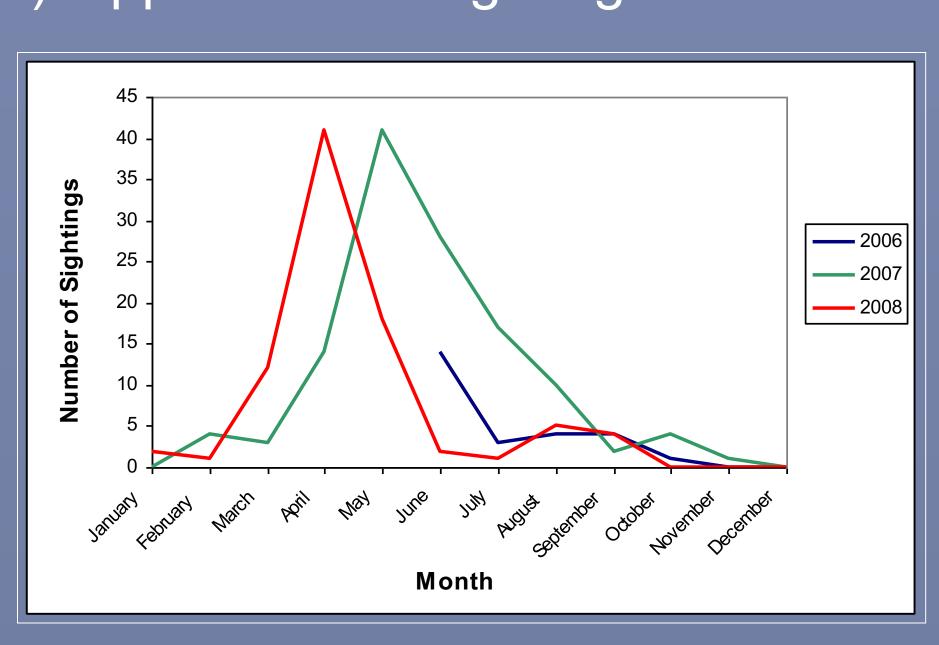
1) Opportunistic public sightings data, recorded and verified through the MWDW website. Data, collected since June 2006, includes date, time, location, number of individuals and sea state.

METHODOLOGY – Data Collection

2) Photo Identification data from 2007 and 2008, collected from dedicated boat surveys, under license from the IOM Government. Usable images are extracted and formatted before being catalogued. Individuals are catalogued as either 'Well marked' (can be identified from a photo of either side of the fin), 'Left' or 'Right' (can only be identified from a photo of the left/right of the fin).

RESULTS

1) Opportunistic Sightings Data



Graph 1: Temporal distribution of sightings, since recording on website in June 2006. Peak numbers of sightings in spring/early summer.

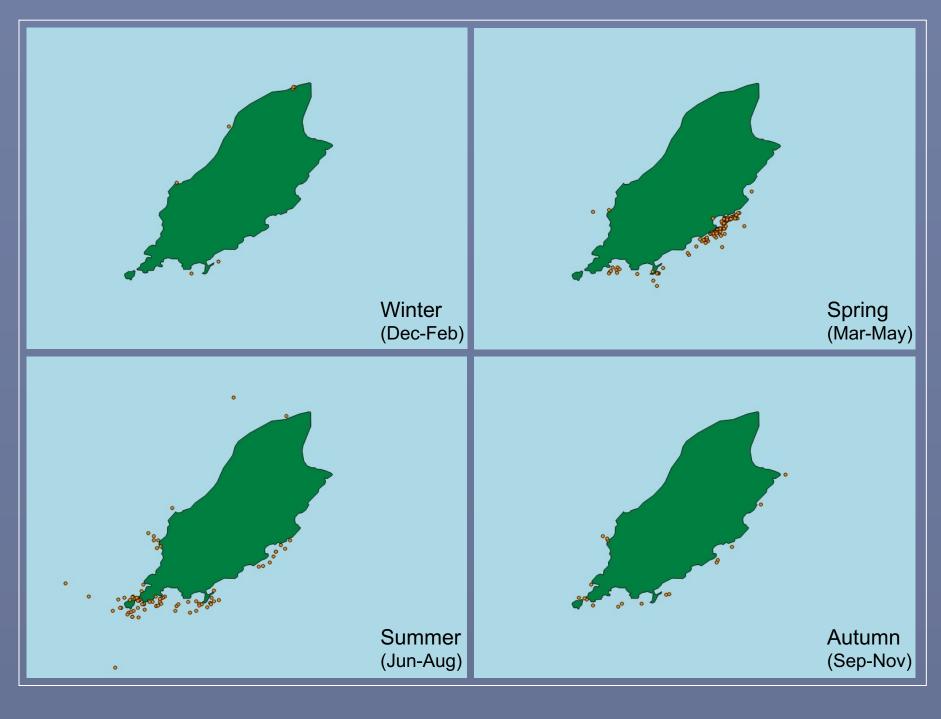
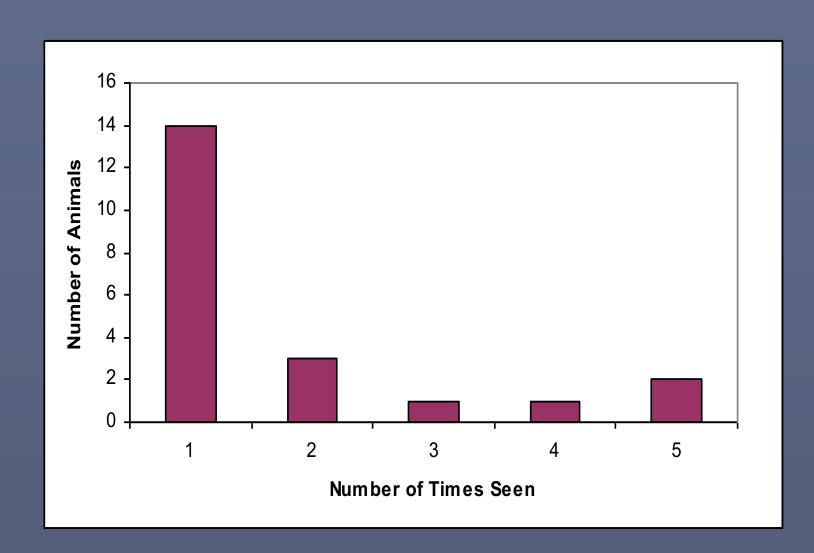


Figure 1: Spatial distribution of all sightings. Distinct southward shift of sightings from spring into summer. Also, predominantly west coast distribution with few sightings along the west coast, especially in the north.

2) Photo Identification

From 16 encounters (11 in 2007, 5 in 2008) a catalogue has been created containing 21 'Well marked' individuals, 6 'Left' individuals and 8 'Right' individuals. Therefore there is a minimum of 29 different animals that have used Manx waters, in the last two years.



Graph 2: Number of times each animal has been seen across the 2 years. Majority of animals only seen once – individuals within the population are still being discovered.

However, 4 individuals have been seen in both 2007 and 2008 and 2 individuals have been seen 5 times, in both years and across the months April – August. This shows a degree of site fidelity and consistent, regular use of Manx waters.

CONCLUSIONS:

- Risso's dolphins are highly prevalent in Manx waters, found consistently throughout the year. They are seen regularly within a few hundred metres of shore, making them relatively easy to study.
- Photo ID is proving highly valuable in understanding the size and site fidelity of this population better.
- Future land and boat based study, including photo ID, should define further the temporal and spatial patterns of Risso's dolphins around the Isle of Man and determine whether the population could be described as resident.

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