Long Distance Movements of Male Sperm Whales, Physeter macrocephalus, in the North Atlantic: including new matches between the Azores and Norway

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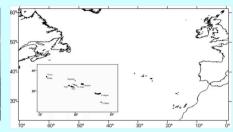
Norway Study site, Malangsgrunnen



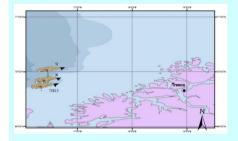
Cetacea, whale watching boat of **Arctic Sea Cruises**



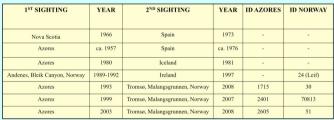
Physeter, whale watching boat of Whale Watch Azores



The Azores



Male sperm whale re-sightings in Malangsgrunnen



Male sperm whale re-sightings in the North Atlantic



Historic and recent long range movements of male sperm whales in the N. Atlantic. Martin ('82), Mitchell ('75) and Aguillar ('85) and current paper.



Azores sightings, male sperm whale matches



Azores 2003 - Malangsgrunnen 2008



Azores 1999 - Malangsgrunnen 2007







1993 Azores - Malangsgrunnen 2008





Bleik Canyon 1989-1992 strands W. Ireland 1997



Abstract

Very little is known about the movements of male sperm whales, Physeter macrocephalus, in the North Atlantic. Recoveries of traditional harpoons and tags during commercial whaling indicated moments from Nova Scotia to Spain and from the Azores to Iceland and Spain. We have compared collections of photo-id images from different areas using the NAMSC catalogue and the Eurphlukes Phlex/Match programs. The largest collections of identified males (number of individuals, start and end date for data collection shown in brackets) are for the Azores (310, 1987-2008), Andenes (375, 1988-1996 and 2008), Tromsø (84, 2005-2008). There were six matches between Andenes and Tromsø (~25 nm), with three of these sighted in multiple years and three photo-id matches have been made from the Azores to Norway (~2400 nm) - all with images taken in Tromsø. In all cases individuals first photographed in the Azores (in 1993, 1999 and 2003) were matched to images collected later in Tromsø (in 2007 and 2008). In 1997 a photo-id image from Andenes matched a male stranded on the West coast of Ireland. No matches were made to images in smaller collections from Iceland, Nova Scotia, Greenland, Dominica, Guadeloupe, Gulf of Mexico and the Mediterranean. It is noteworthy that the matches between Azores and Norway are all with the Tromsø images rather than the larger Andenes collection and that the "direction" of matches has all been from the Azores to Norway. These findings show the value of data collected from whale watching vessels and the importance of collaboration between groups when investigating biology at an ocean basin scale. It is hoped that with the addition of more images from around the Atlantic, further insight might be gained into the movements of these widely ranging animals.



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