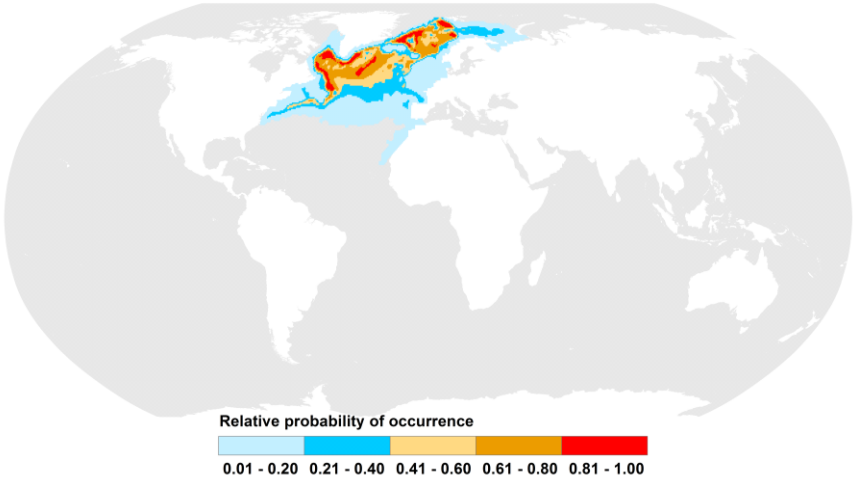
Global Distribution of Northern Bottlenose Whales (2013)



Description:	This dataset shows the modelled distribution of Northern bottlenose whales (Hyperoodon ampullatus). AquaMaps (www.aquamaps.org) is a species distribution modelling approach that provides standardised range maps for marine species using available information on species occurrence. IUCN status: Data Deficient (Red List of Threatened Species).
Citation(s):	Kaschner K, Rius-Barile J, Kesner-Reyes K, Garilao C, Kullander SO, Rees T, Froese R (2013). AquaMaps: Predicted range maps for aquatic species. World wide web electronic publication: www.aquamaps.org, Version August 2013
Temporal range:	2013
Geographical range:	Global
Supplementary information:	The dataset contains continuous probabilities of occurrence as a global grid of 0.5 dd resolution. Field information: scientific name (Genus, Species); center latitude of 0.5 dd cell (Center Lat); center longitude of 0.5 dd cell (Center Long); unique cell identifier following the c-squares code system (C-Square Code; see http://www.cmar.csiro.au/csquares/about-csquares.htm for more information); total predicted relative environmental suitability based on envelope settings (Overall Probability). Predicted distributions often include the potential environmental niche of a species, including historical occurrence. Validation analysis has shown that relative probabilities >=0.4 correspond more closely to the utilised niche of this species: this is the recommended threshold to be used to delineate the core range of this species (precautionary setting). Detailed dataset-specific information (provided by K. Kaschner) is also available.

Purpose of creation:	AquaMaps is a tool for generating model-based, large-scale predictions of natural occurrences of species. The maps can be used to inform environmental impact assessments.
Creation methodology:	The modelled distribution was generated using the AquaMaps online species distribution model. Methodological notes (provided by K. Kaschner) are also available. Observed occurrence records (142 cells; FAO areas: 21, 27, 31, 34, 37, 41) were obtained (August 2013) from the Global Biodiversity Information Facility (GBIF; www.gbif.org). These were supplemented by additional information obtained through online species databases such as FishBase (www.fishbase.org) and SeaLifeBase (www.Sealifebase.org), as well as published information on species-specific habitat usage and expert knowledge. The distribution model was based on five environmental variables (depth, temperature, salinity, primary production, and sea ice concentration), and details of the species envelope are in the dataset-specific information (provided by K. Kaschner).
Version:	1.0 (August 2013)
Data lineage:	In acknowledgement that predicted distributions reflect the current state of knowledge, AquaMaps predictions are not a permanent, fixed output, but instead will be revised and updated as new data or information become available or additional experts provide new input. Environmental dataset used: HCAF version 5 (August 2013; www.aquamaps.org/envtdata/main.php).
Category:	Species distribution
Keywords:	marine, coastal, model, pelagic, high seas
Similar datasets:	None
Limitations:	Excluded from the model: species misidentifications, fossil records and outliers. The modelled distribution has been expert-reviewed by Kristin Kaschner (15 December 2013), and the quality of predictions ranks 3 out of 5 (see www.aquamaps.org/rating.html for further details). Expert comment: "Good match with known sightings and relative occurrences and represents a good compromise capturing both northern and southern maximum migration range extents including the few documented records from the Mediterranean and as far south as the Canary and Cape Verde islands. Adjustment of salinity minimum and maximum thresholds to exclude species from Black Sea and most of Mediterranean.

Adjustment of preferred minimum and maximum temperature range to compensate for data availability bias towards more temperate waters in GBIF (whaling records and expert knowledge support a concentration in polar to subpolar waters). Migratory species, thus predictions would be improved by incorporation of seasonality".

Maintenance frequency:	Data are updated in intervals that are uneven in duration.
Main access/use constraint:	Creative Commons Attribution-NonCommercial 3.0 Unported (CC BY-NC 3.0). See http://creativecommons.org/licenses/by-nc/3.0/ for details. Free to (1) copy/distribute the work, and (2) adapt the work. The material may not be used for commercial purposes.
Other access/use constraints:	Interested users of the dataset should contact Kristin Kaschner who will identify and provide, where appropriate, the most recent updated data. For commercial use, please contact business-support@unep-wcmc.org.

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Data format(s):	Raster (ESRI Grid), Tabular (.xls, .csv, or .tab), Vector (point; .shp)		
Distribution format(s):	Tabular (.xls, .csv, or .tab)	Dataset size (uncompressed):	872 Kb
Webpage and/or download:	http://www.aquamaps.org		
Other webpage:	http://data.unep-wcmc.org/datasets/29		
Web map service:			
Factsheet:			

Resolution, scale:	0.5 dd	Reference system:	WGS 1984
West bounding:	-180.0	East bounding:	180.0
South bounding:	0.0	North bounding:	90.0
Metadata standard:	UNEP-WCMC Specific	Date of metadata:	29/05/2015