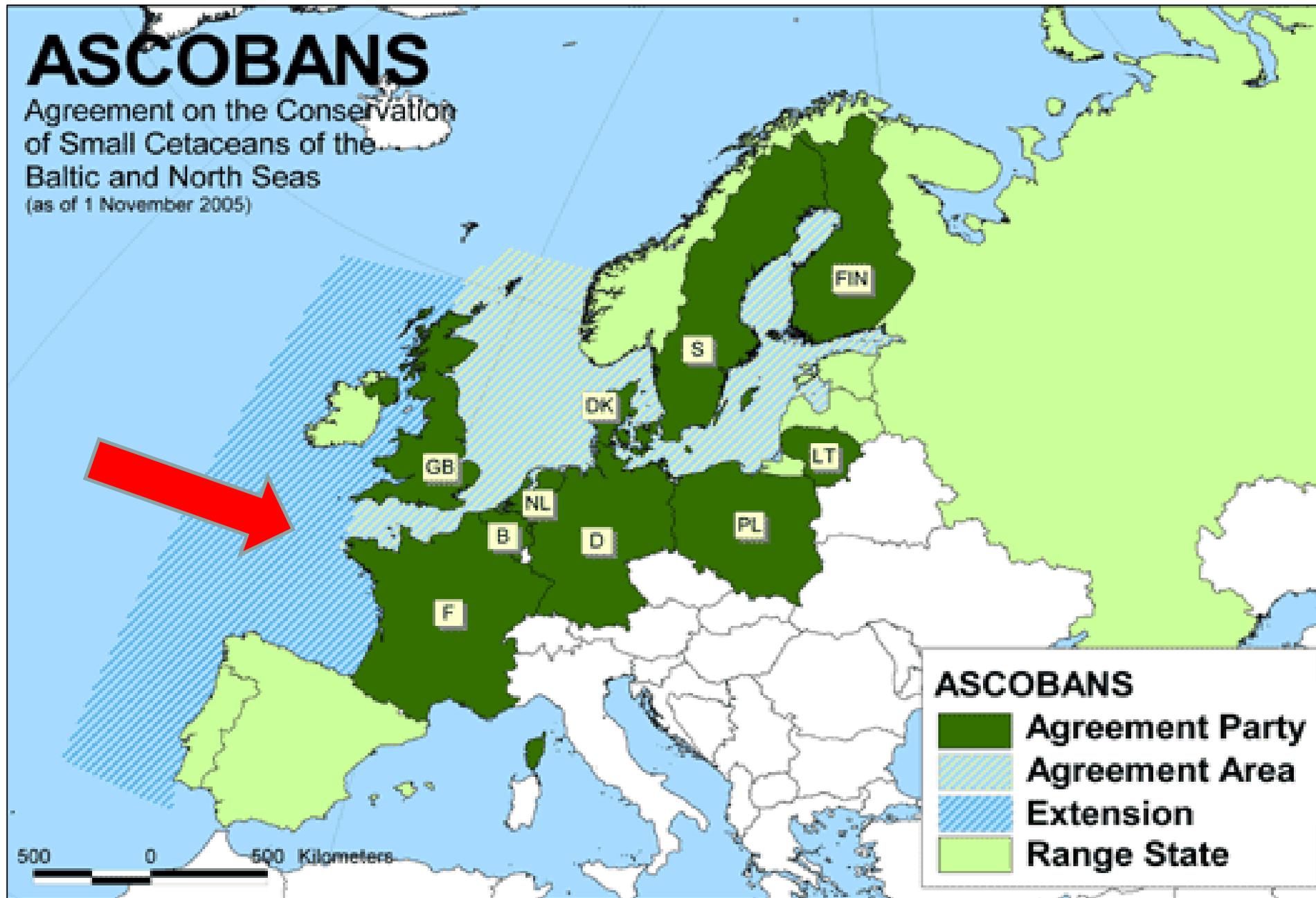


# ASCOBANS Extension Area Progress Report: 2016-18

*Peter G.H. Evans*

# ASCOBANS

Agreement on the Conservation  
of Small Cetaceans of the  
Baltic and North Seas  
(as of 1 November 2005)





Hebridean  
Whale &  
Dolphin  
Trust

# West Scotland

## HEBRIDEAN MARINE MAMMAL ATLAS

Part 1:  
*Silurian, 15 years of marine mammal monitoring in the Hebrides*

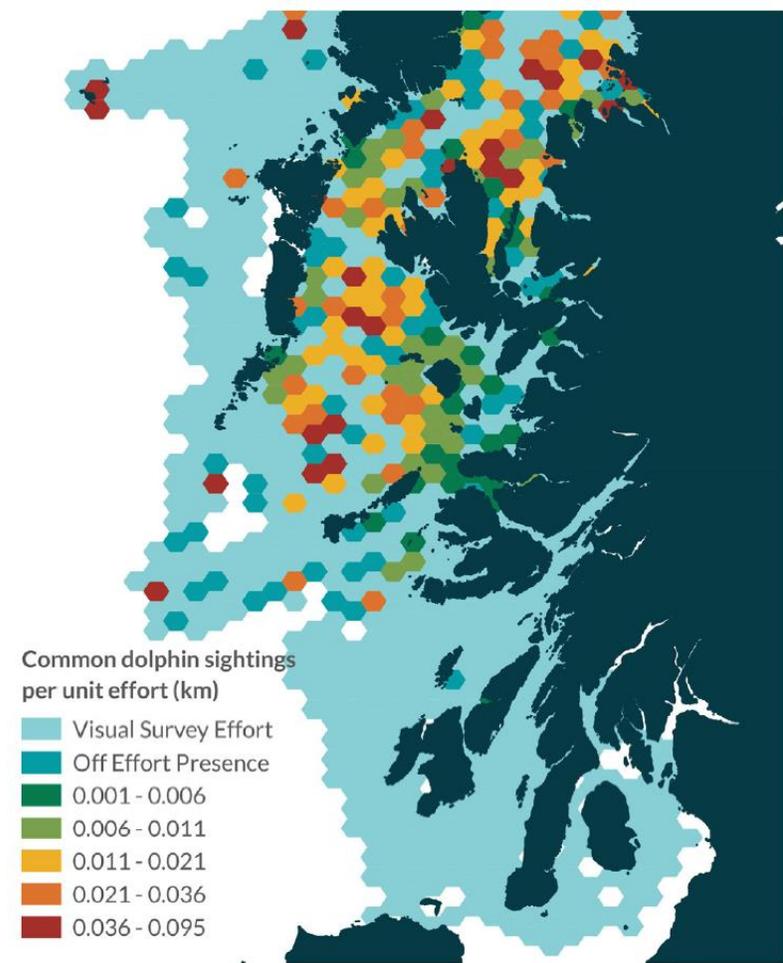
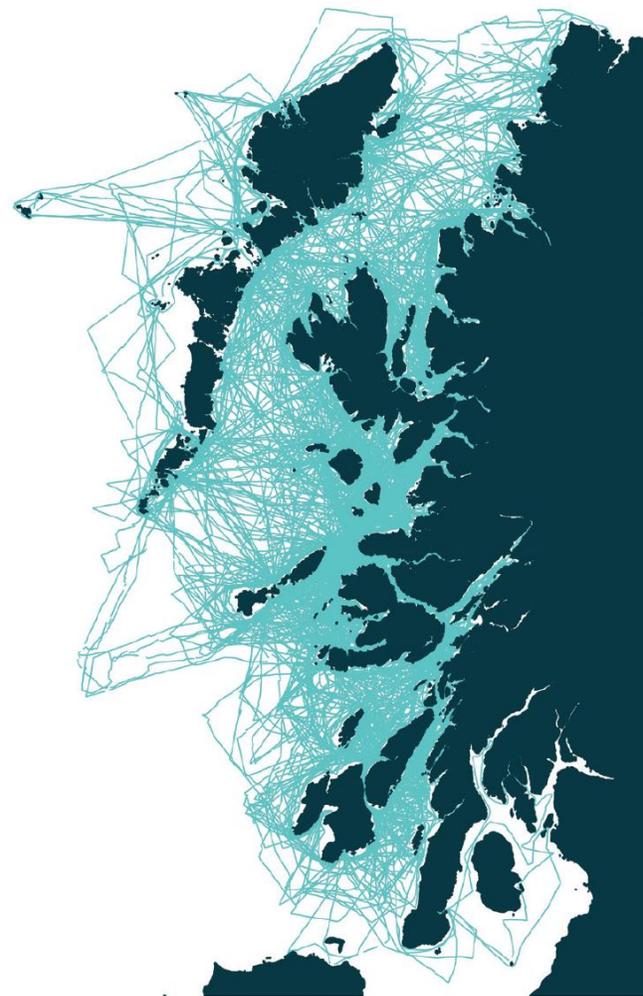
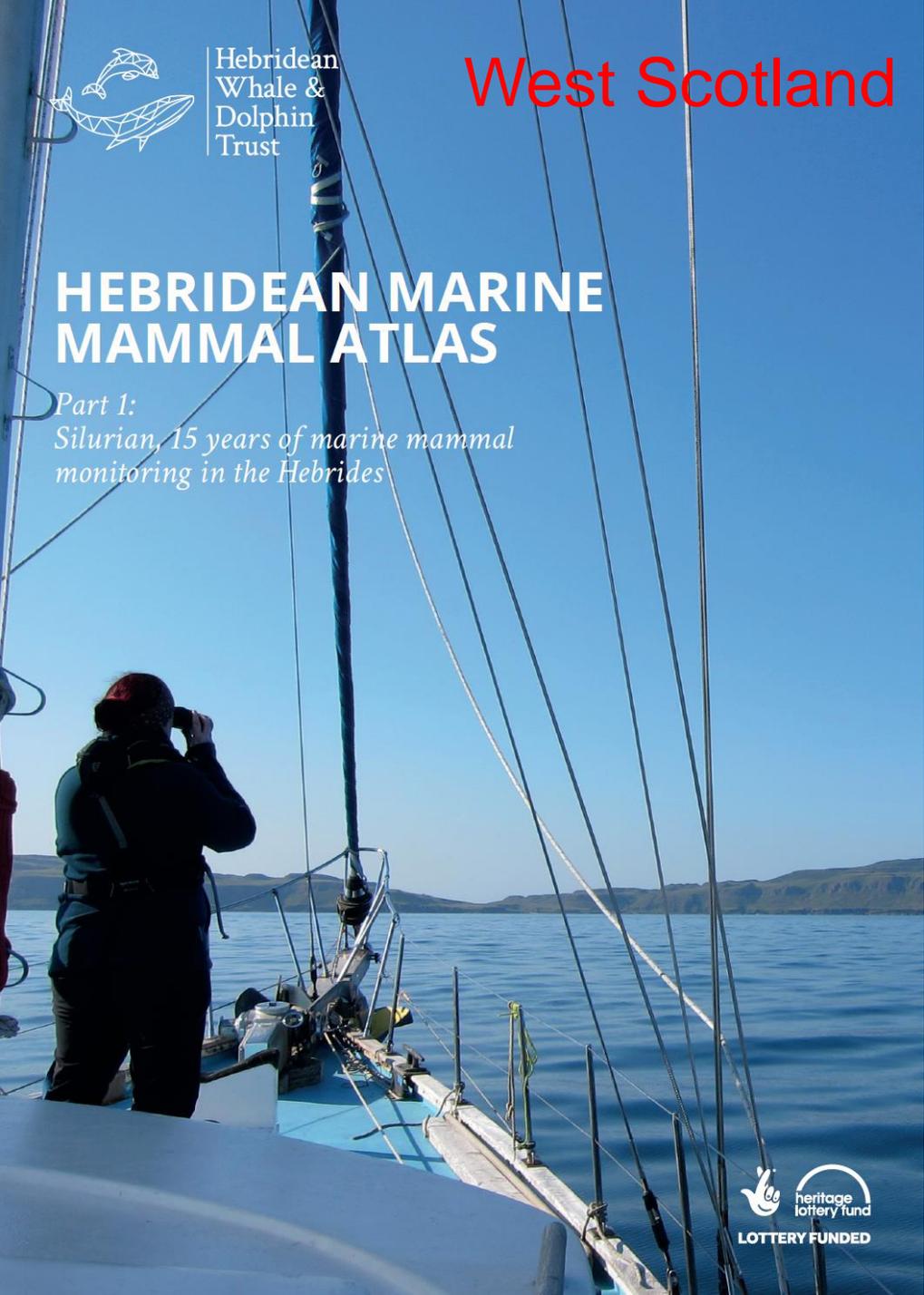


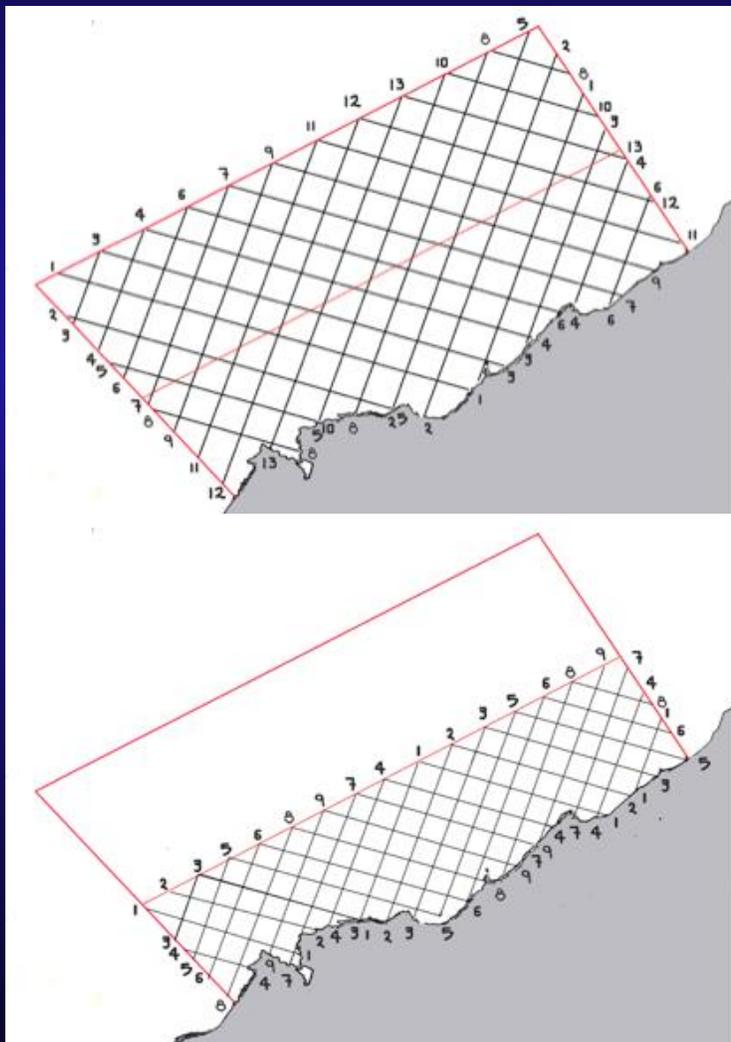
Figure 1.6. Silurian common dolphin sighting rates, 2003 to 2017.

- >100,00 km of survey effort aboard 18.5 m ketch *Silurian*
- Annual surveys over the years, 2002-17
- 13,000 sightings comprising 30,000 animals of 15 species

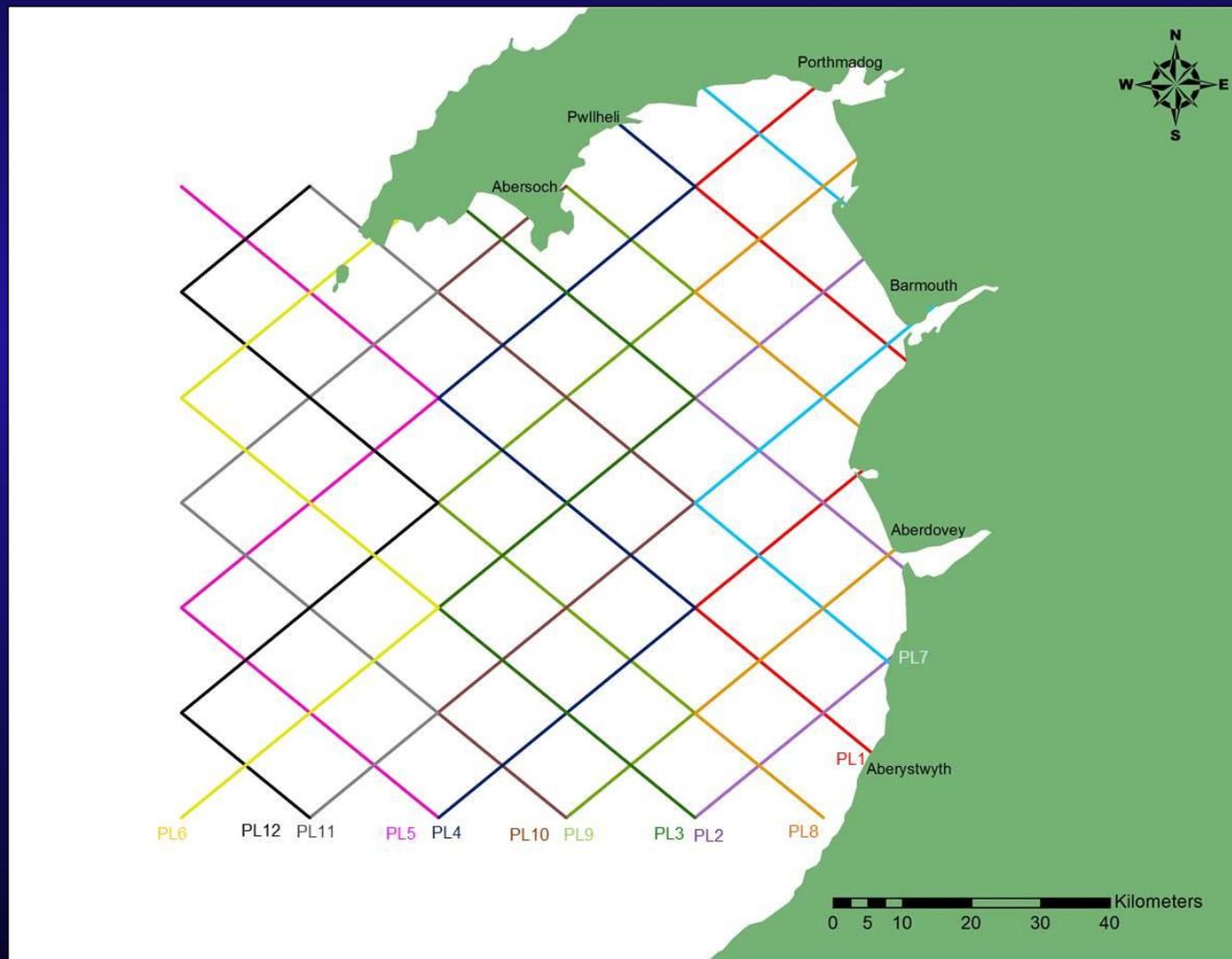
# Monitoring Bottlenose Dolphins In Cardigan Bay, West Wales



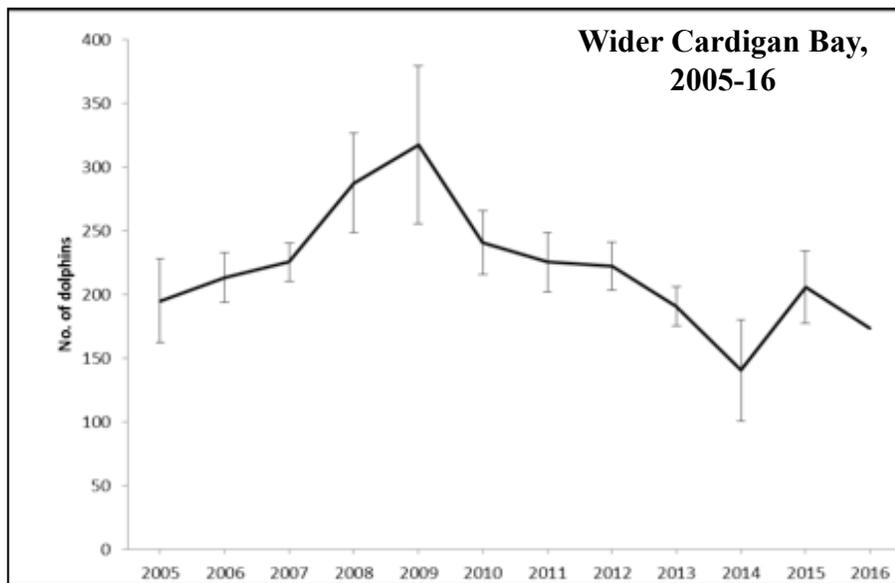
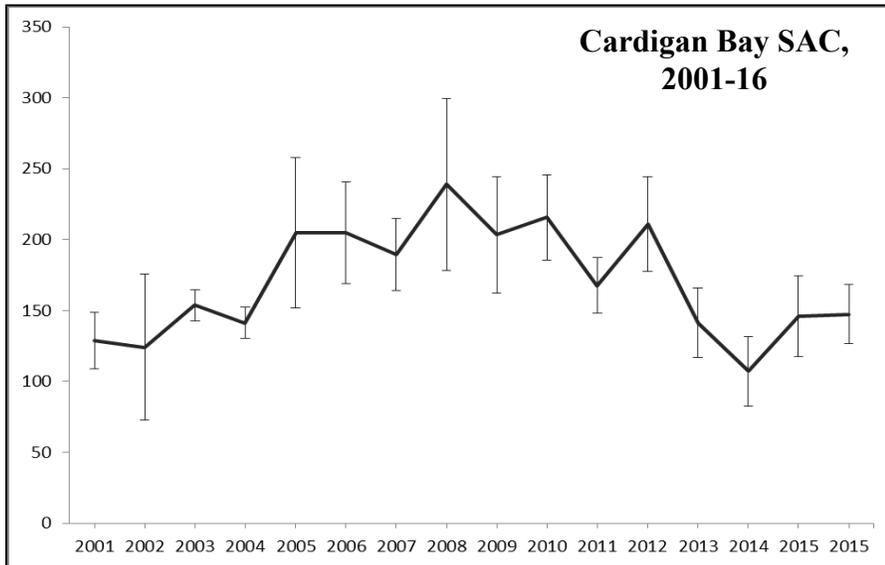
a) Cardigan Bay SAC: 2001-present



b) Northern Cardigan Bay: 2005-present



# Bottlenose Dolphin Population Trends In Cardigan Bay, West Wales

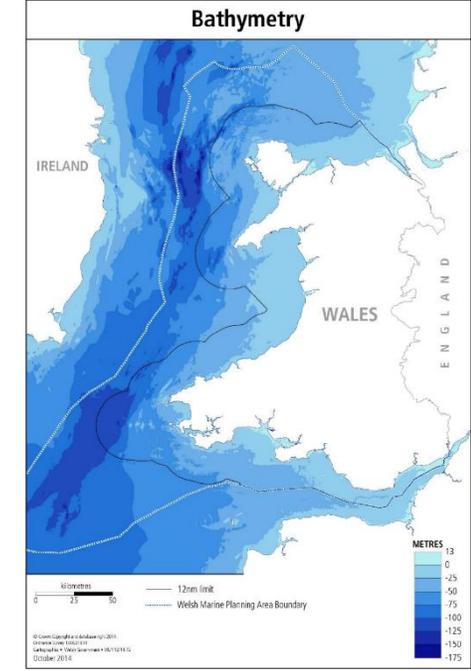
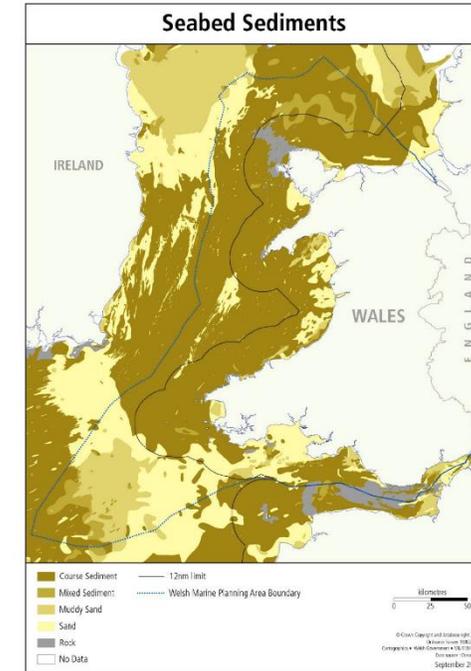
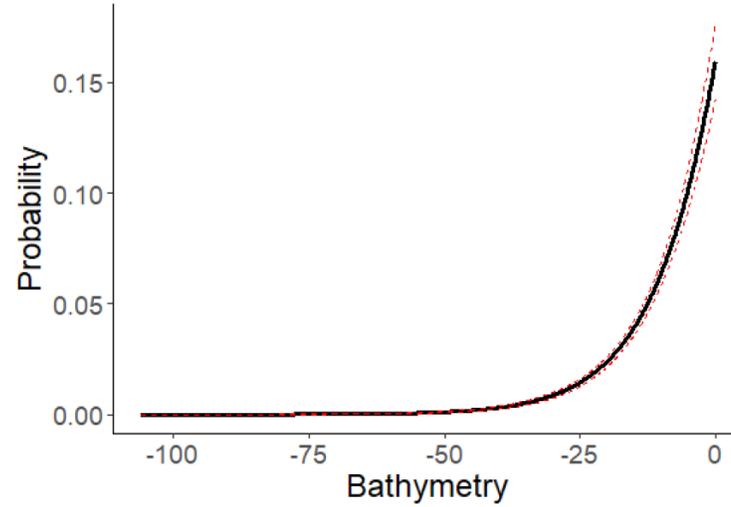
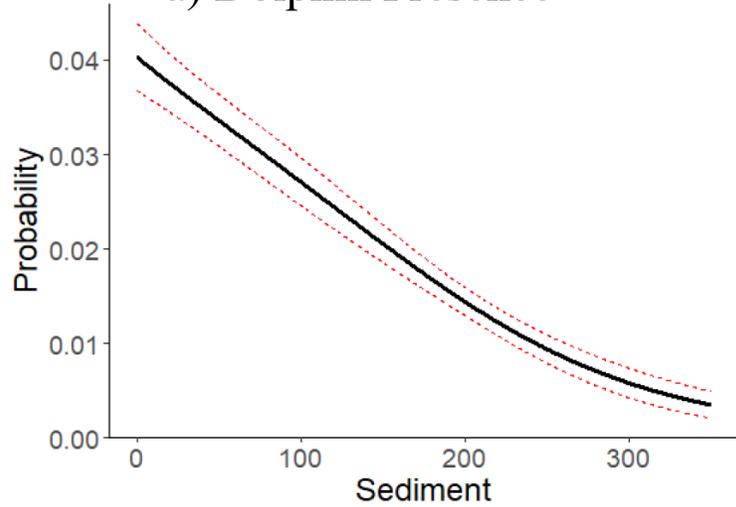


- Bottlenose dolphins are monitored mainly by Photo-ID and Capture-Mark-Recapture
- Within Cardigan Bay SAC, steady increase from 2001-08, and thereafter a decline
- In the wider Cardigan Bay, an increase to 2009, and thereafter a decline
- Probability of permanent emigration from Cardigan Bay has steadily increased since 2007-08
- Adult females give birth to a calf every 2-7 years (most commonly every 3 years)
- Calf mortality 15% (year 1), 17% (year 2), and 7% (year 3)

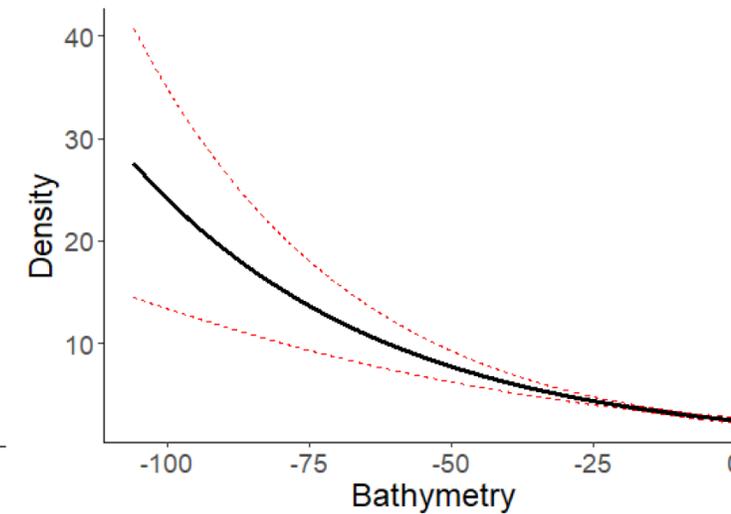
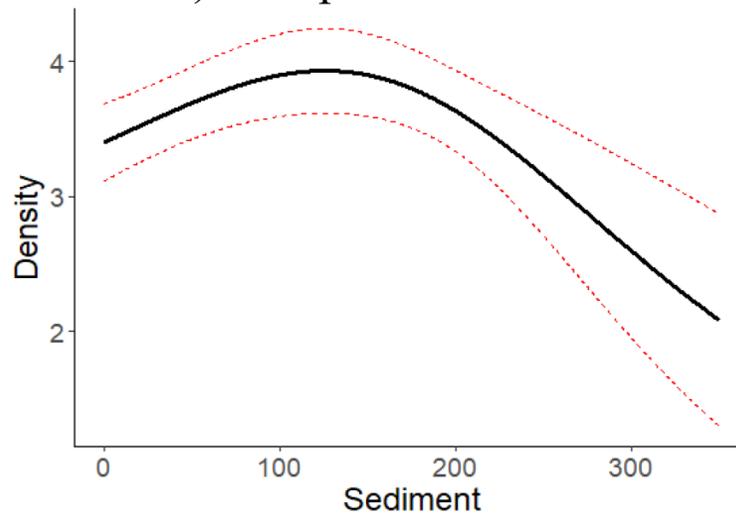
**Source:** Lohrengel & Evans (2017)

# Bottlenose Dolphin Habitat Preferences In Cardigan Bay, West Wales

a) Dolphin Presence



b) Group Size Effects



- Generalised Additive Models revealed only two environmental parameters as significant: sediment type & bathymetry
- Bottlenose dolphins in Cardigan Bay favoured shallow depths <25 m and finer grain sandy sediments

# Irish Government's ObSERVE Programme

Established formally in Oct 2014: **Identification & Management of sensitive habitats**

Primary scientific objectives to 2018:

- (1) to update & optimise ecological information on the Atlantic Margin, including the estimation of animal density and abundance (design & model-based DS methods);
- (2) to rigorously assess the importance of waters within the Atlantic study area for diverse marine mammal and seabird species;
- (3) to identify sub-areas indicating a higher ecological importance, including for vulnerable species (e.g. deep divers) and through environment/habitat modelling.

Programme also a potential ***future vehicle*** to better inform management of Ireland's offshore



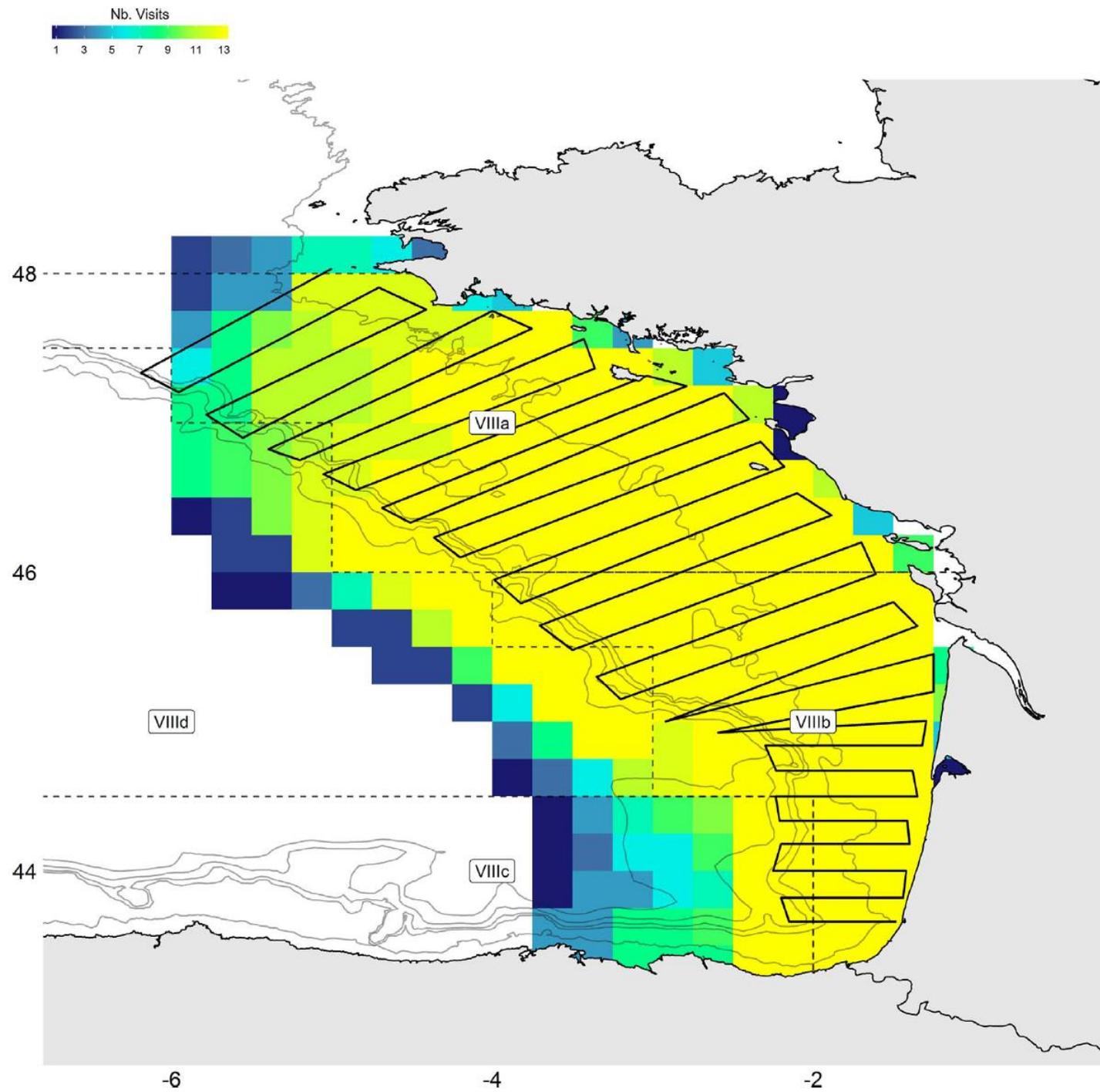
## Studies in Atlantic France, 2016-18

- Stranding scheme continues on a permanent basis including the French coasts of the Bay of Biscay
- Origins of common dolphin strandings are being studied using drift models and the distribution of fishing effort (analyses to be completed in 2019)
- Visual surveys conducted regularly on oceanographic cruises in May and in mid-October to mid-November, (shelf areas of the Bay of Biscay)
- Data analyses from the multi-target survey PELGAS, involving collaboration of University of La Rochelle with other laboratories, notably Ifremer
- Bottlenose dolphin monitoring in the Iroise Sea MPA: Ile de Sein (33 indivs.) & Molène Archipelago (>70 indivs.)

## Studies in Atlantic France, 2016-18

- Bretagne Vivante (regional association) is collecting data (sea birds and cetaceans) in South Brittany (Mor Braz) in the case of a wind farm project
- Les “Observateur de l’Atlantique” (Pelagis, La Rochelle), OBSENMER (GECC) and Océanopolis ( Observons-la-mer) are collecting opportunistic sightings on marine mammals

# French PELGAS Vessel Surveys, In Bay of Biscay, 2004-16



Source: Authier *et al.*, 2018

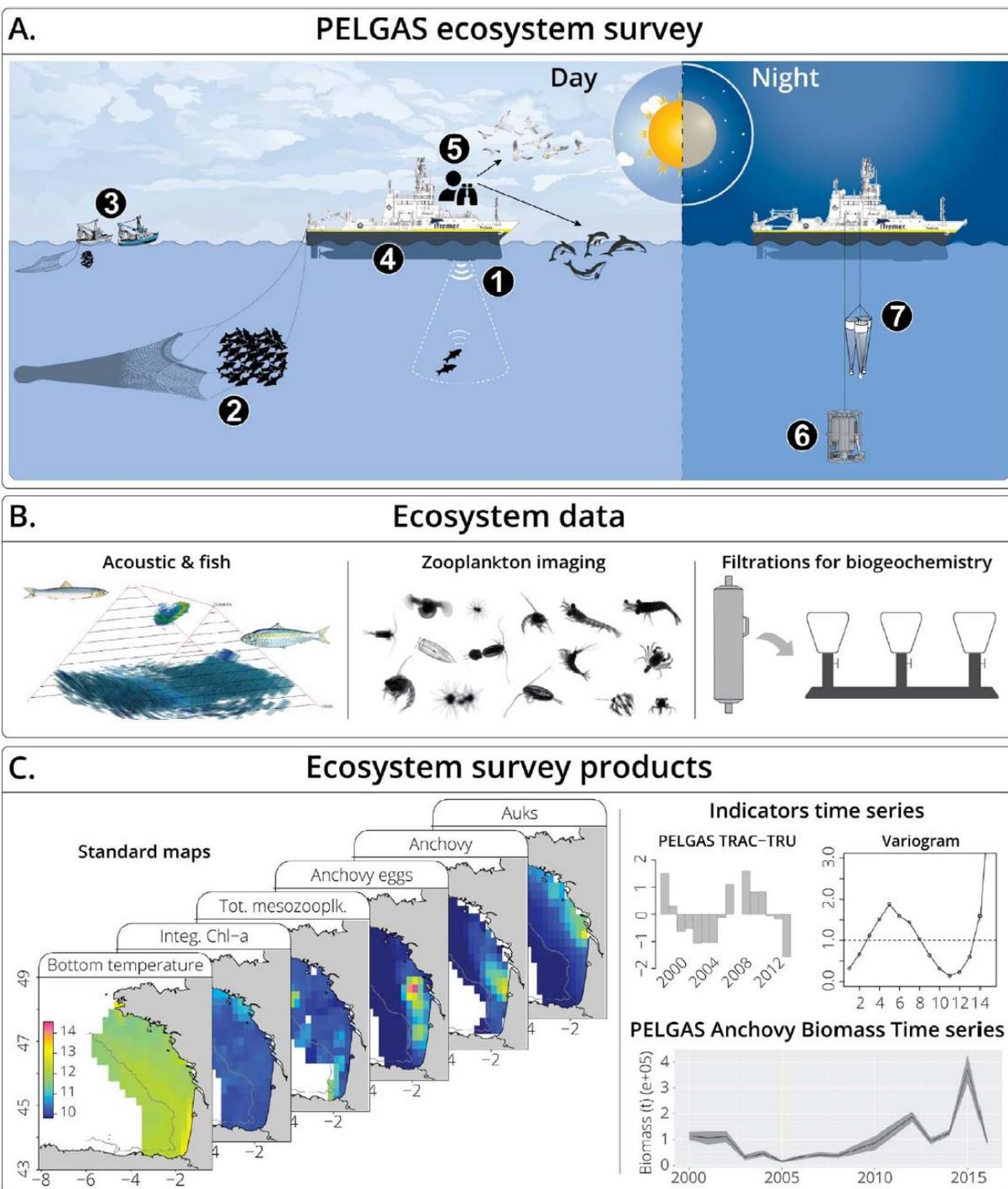
# The PELGAS survey model

A) Ecosystem data collection in spring in the Bay of Biscay. During daytime, along line transects: fisheries acoustics, midwater & pair trawling, hull-mounted thermosalinometer, & megafauna sightings. During night-time, at fixed stations, sonde-based hydrobiological sampling, meso-zooplankton nets.

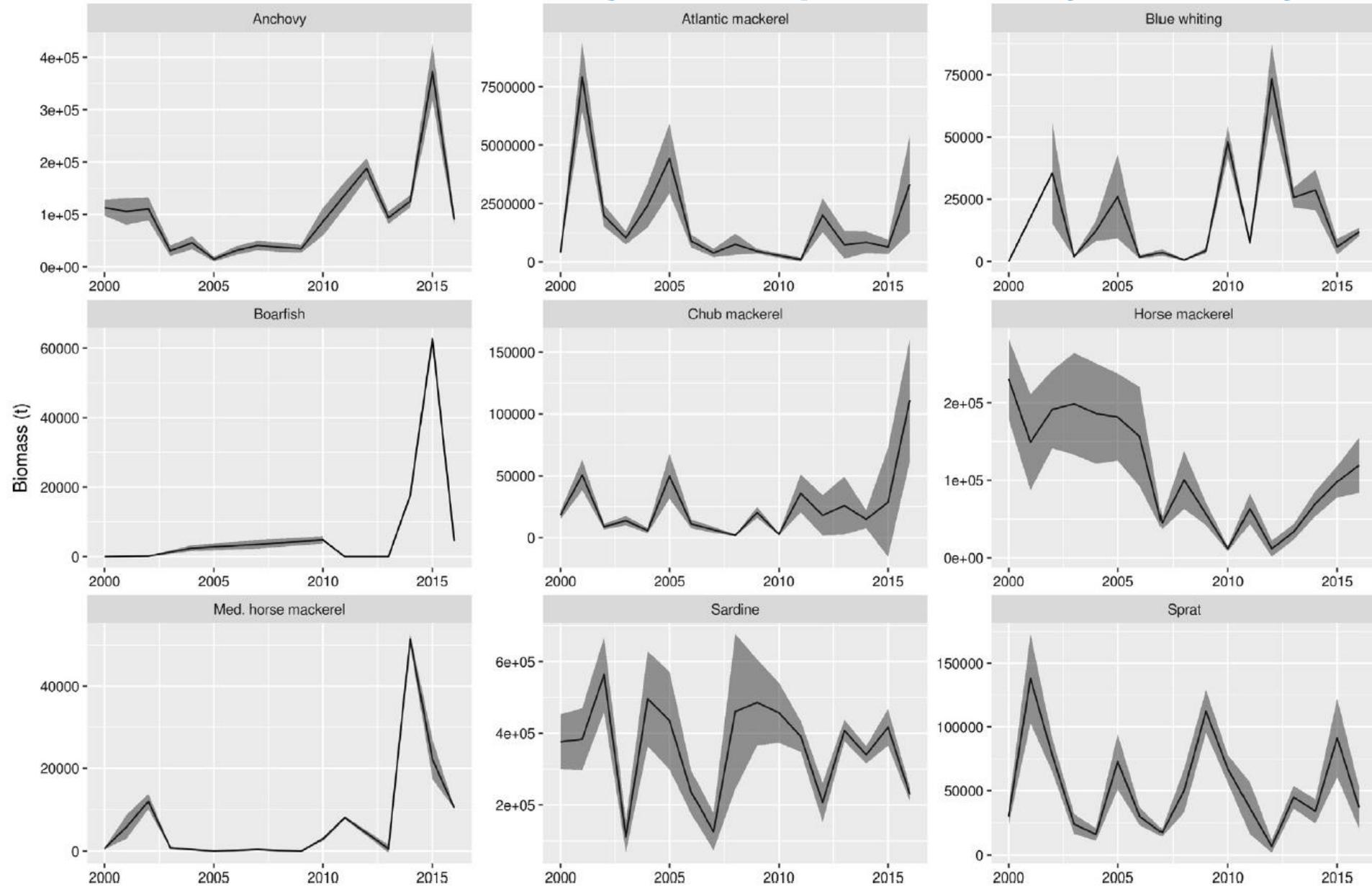
B) Onboard ecosystem data pre-processing: acoustic data scrutinising, midwater trawl catch sorting, biological parameters recording, zoo and ichthyoplankton imaging, seawater filtrations biogeochemistry.

C) Ecosystem products: standard raster maps of parameters in all pelagic ecosystem components time series of indicators of the state of Biscay pelagic ecosystem, including commercial fish stocks.

**Source:** Doray *et al.*, 2018

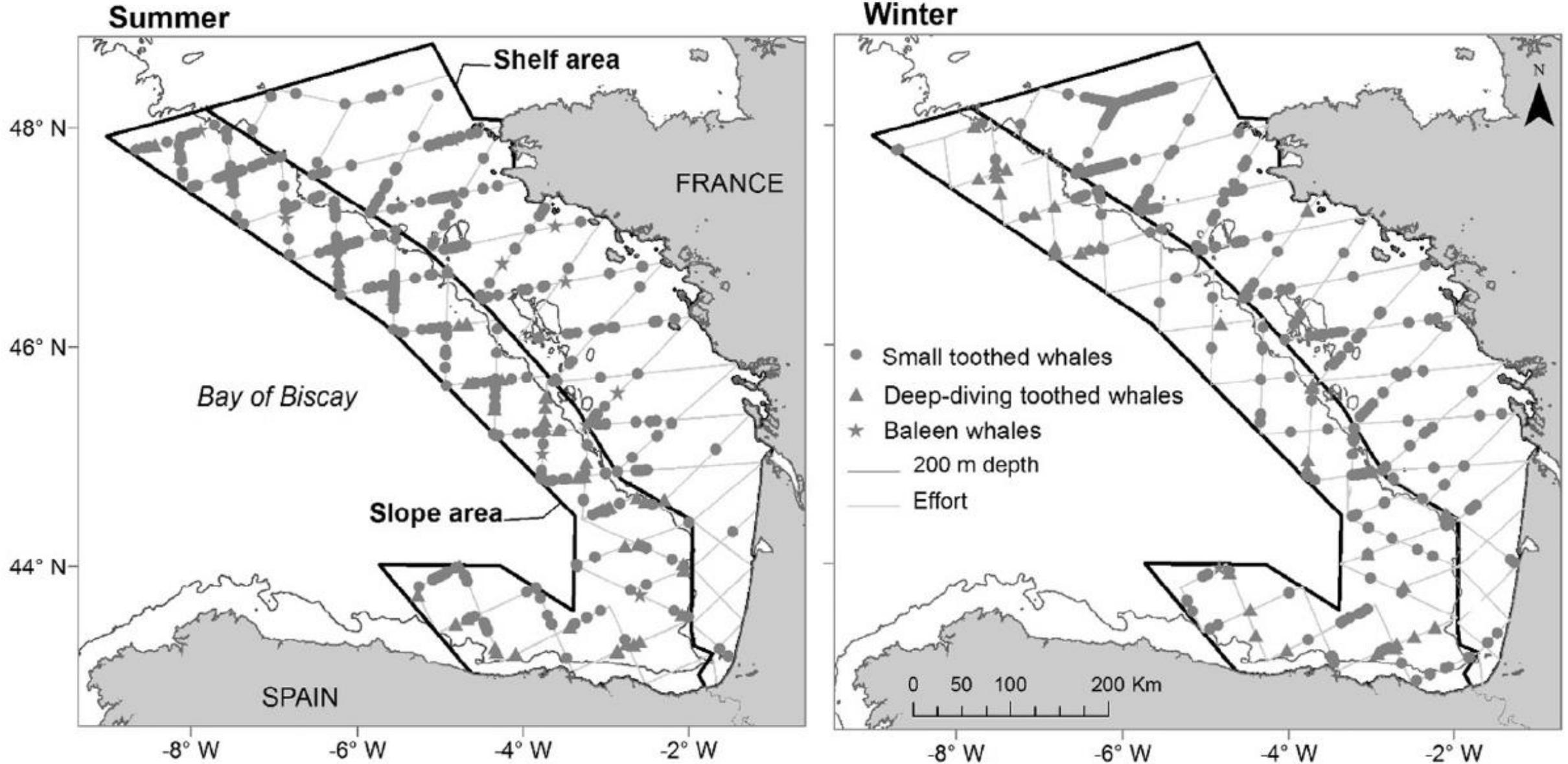


# Biomass trends for major fish species in Bay of Biscay



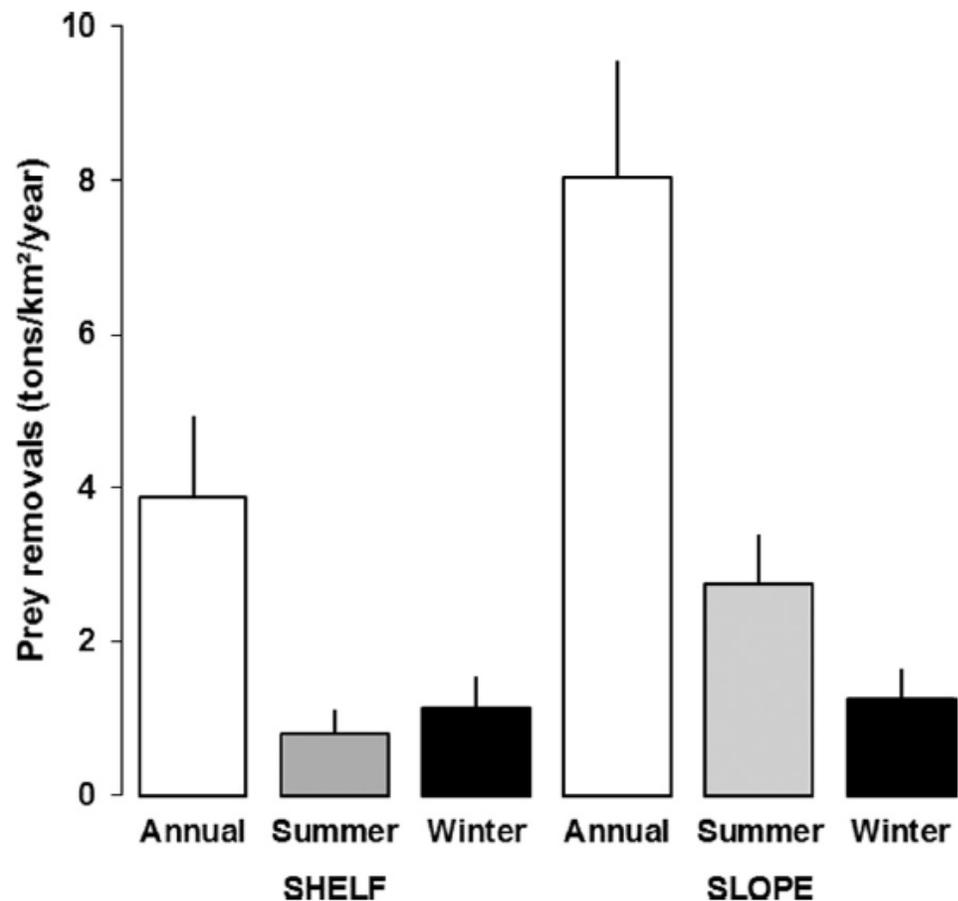
**Source:** Doray *et al.*, 2018

# Sightings of cetacean species in Bay of Biscay

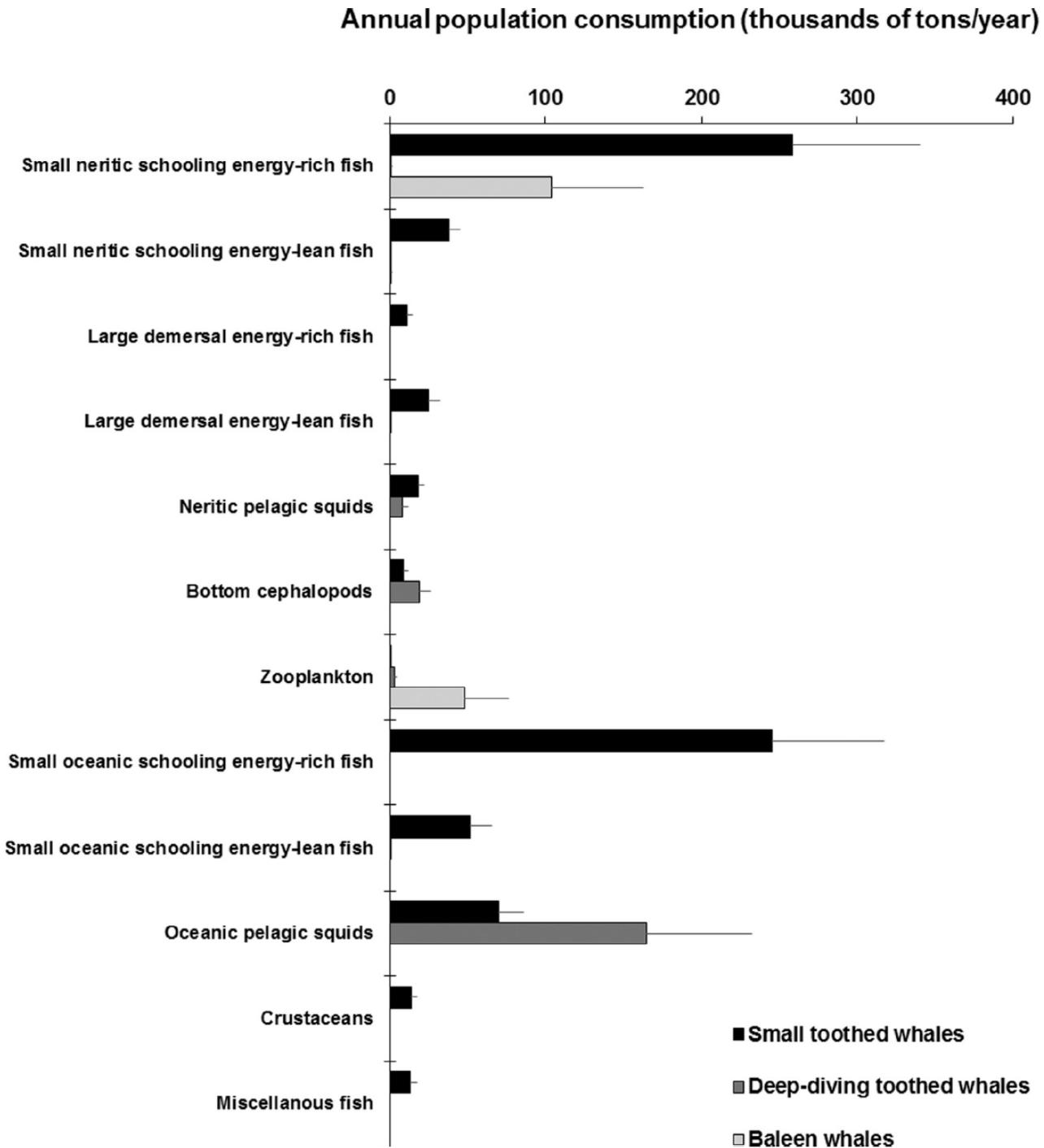


Source: Spitz *et al.*, 2018

# Prey consumption by cetacean functional groups in Bay of Biscay

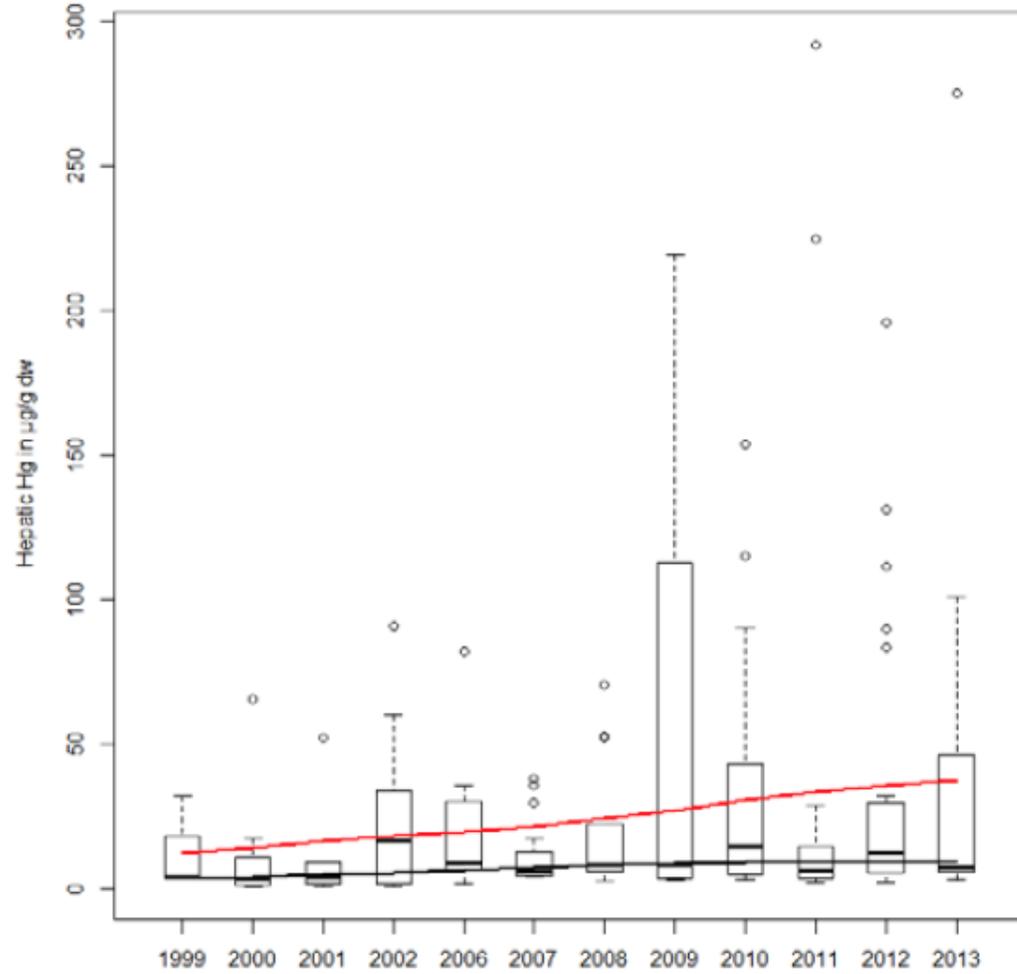


Source: Spitz *et al.*, 2018

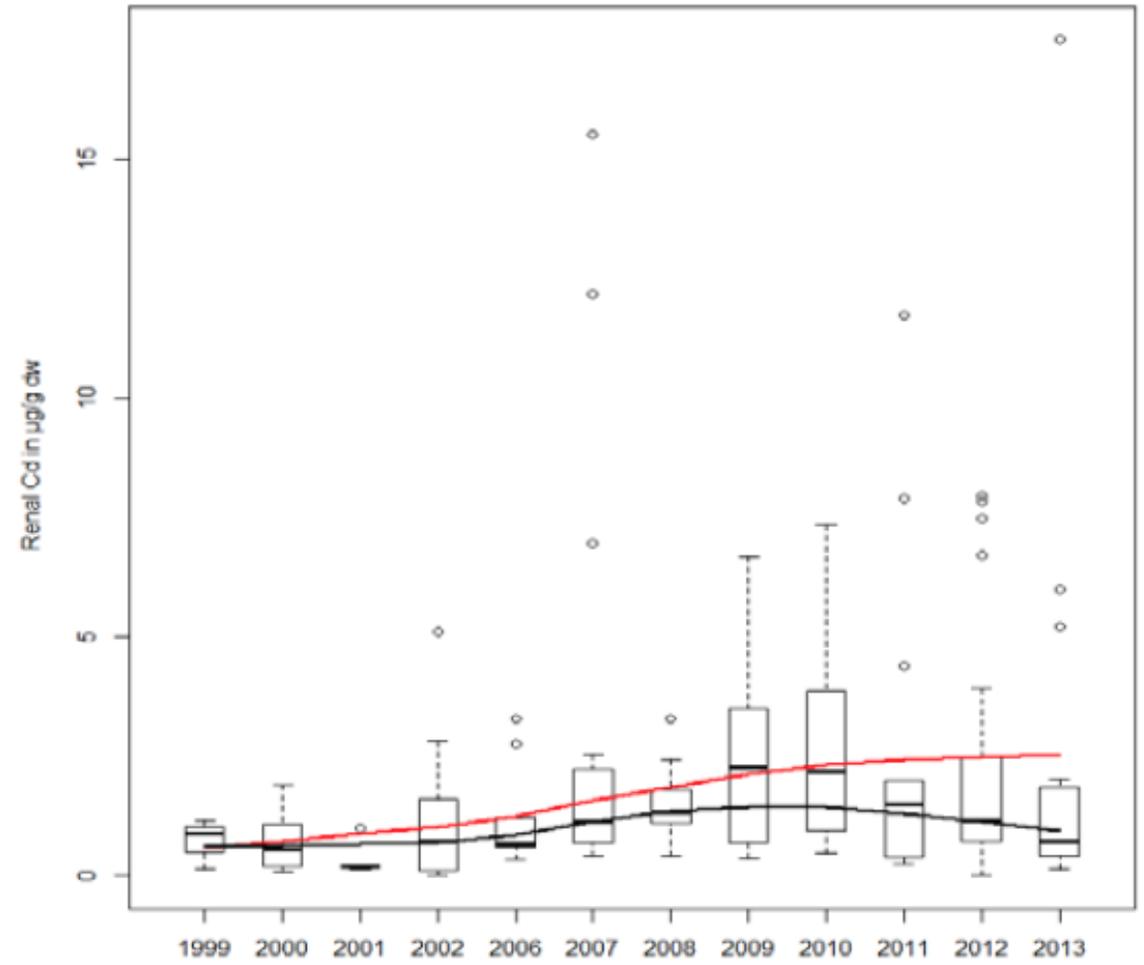


# Harbour Porpoise Contaminant Trends in French Bay of Biscay

a) Hepatic Mercury



b) Renal Cadmium



Source: Pelagis data



# Atlantic Spain



**LIFE-IP INTEMARES - Integrated, Innovative and Participatory  
Management for N2000 network in the Marine Environment**

**LIFE15 IPE/ES/000012**

**2017-2024**



Photo: Carlos Suárez

## **Specific objectives are to:**

- Ensure the maintenance or restoration of the Favourable Conservation Status of habitats and species listed in the annexes of the Habitats and Birds Directives;
- Ensure the effective management of the marine Natura 2000 Network;
- Train Natura 2000 network managers and other relevant stakeholders, and create networks to promote cooperation and the exchange of information;
- Improve critical knowledge for management;
- Improve monitoring of habitat types and species listed in the annexes of the Nature Directives for a better assessment of their conservation status;
- Promote innovative approaches to marine Natura 2000 site management (especially funding);
- Provide information, training and adequate awareness for achieving conservation targets in Natura 2000 sites; and
- Promote sustainable tourism and employment related to the Natura 2000 Network.



MAIN ORGANIZATION RESEARCH REHABILITATION DIVULGATION CONTACT



## Atlantic Spain: Galicia

2017-2018

“ Update of the conservation status of the harbour porpoise in the North Atlantic and South Atlantic demarcations and the preparation of the draft conservation plan ”

LIFE IP-PAF INTEMARES (LIFE15 IPE ES 012). 2017-2018. Financed by Spanish Ministry of Agriculture, Fisheries, Nutrition and Environment.



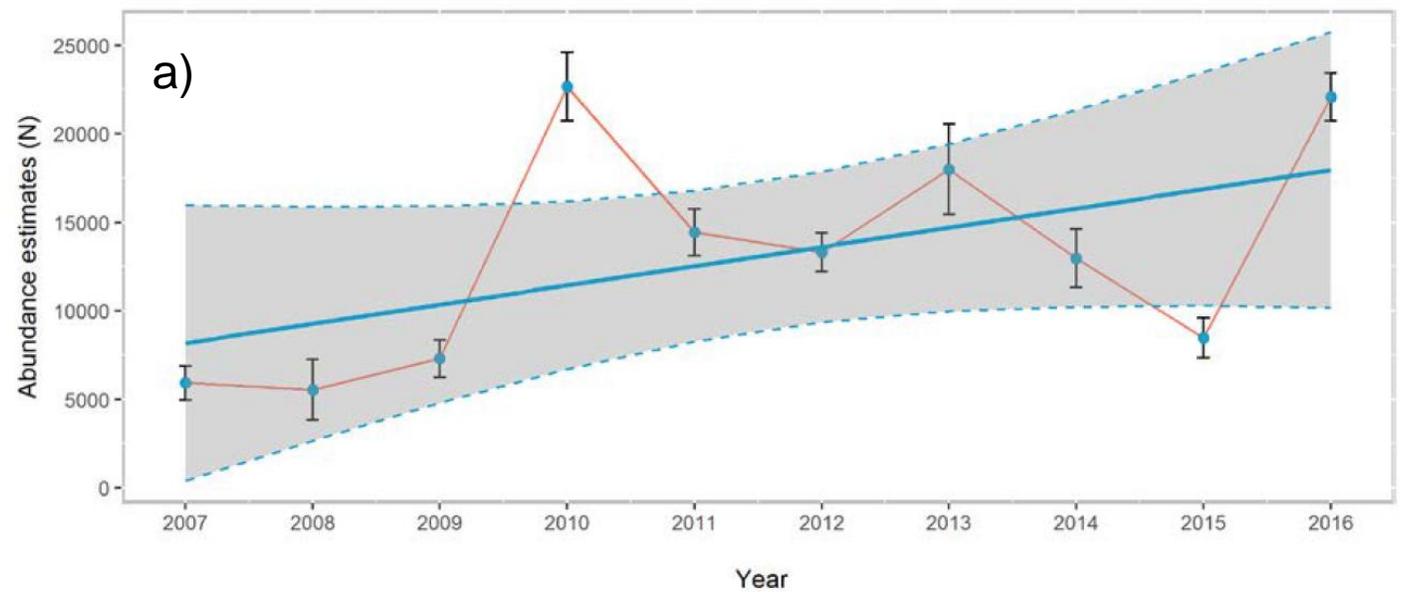
# Atlantic Spain



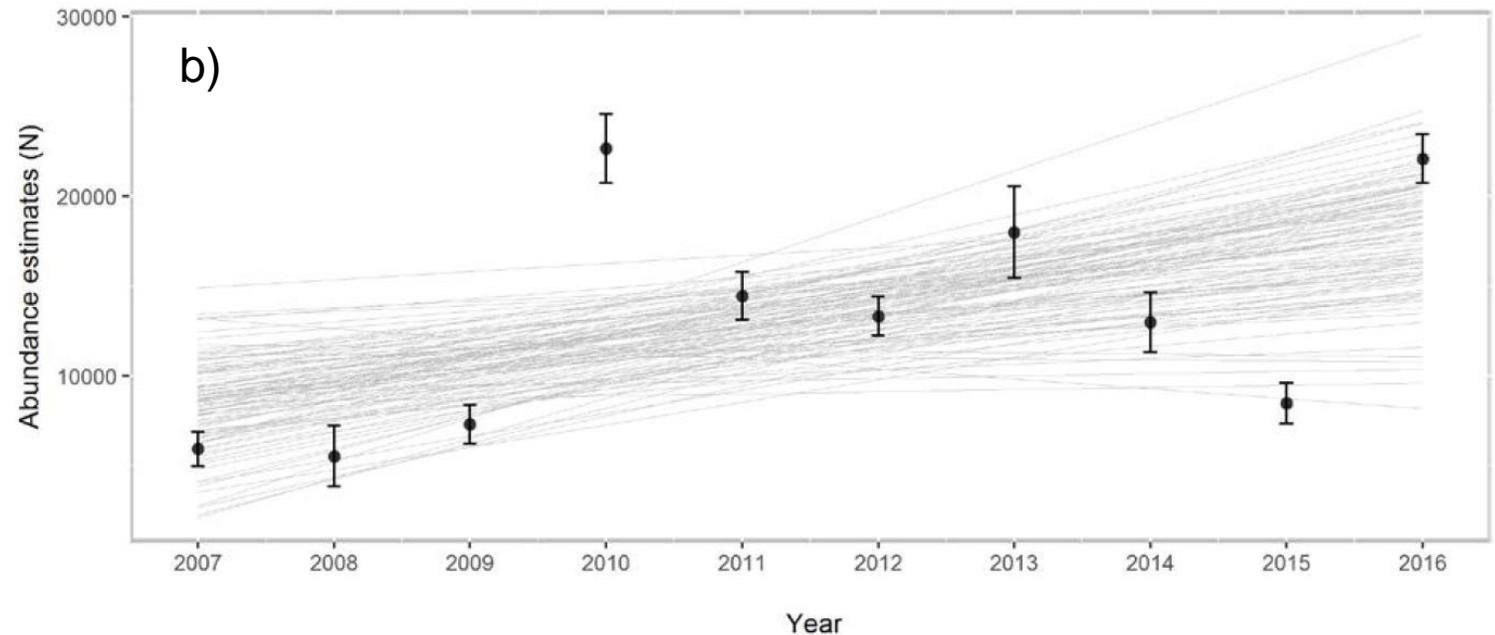
a) Time-series of common dolphin estimated abundance (blue dots) in NW Spanish shelf waters, with SE bars. Linear regression (blue line) fitted to annual estimates, with 95% CI (dashed lines and grey area)

b) The annual estimates plus simulated trends accounting for error in the annual abundance estimates.

**Source:** Saavedra *et al.*, 2018

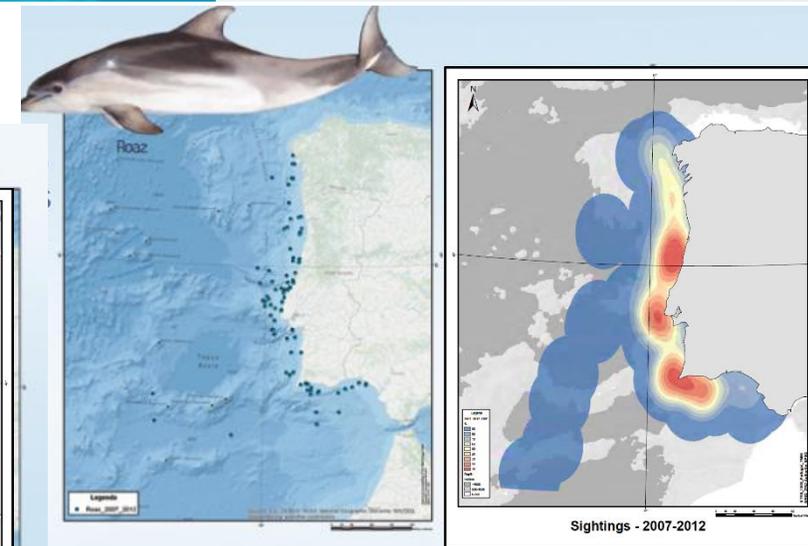
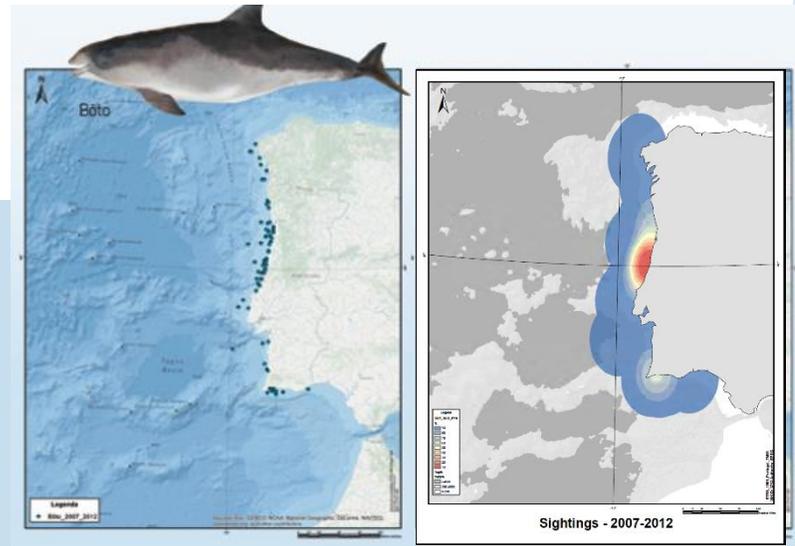
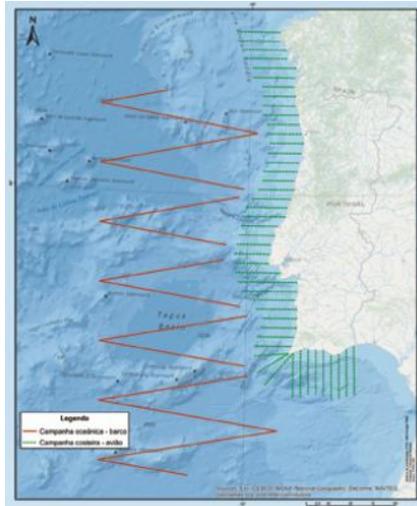


(b)





## Cetacean & Seabird Surveys in Portugal



Source: MARPRO Project, 2016

# PORTUGAL CETUS PROJECT

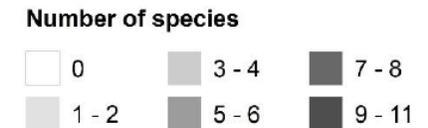
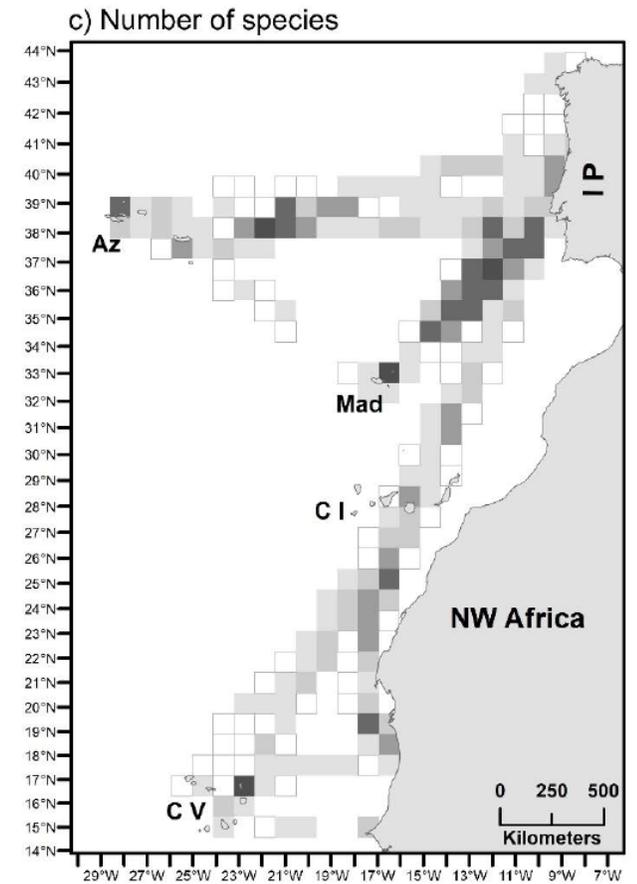
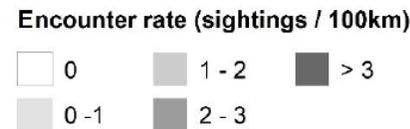
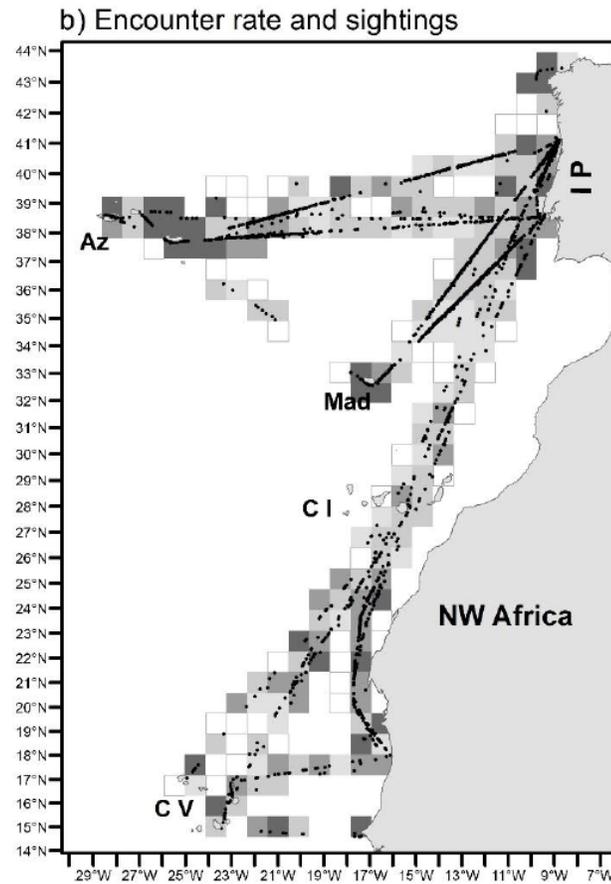
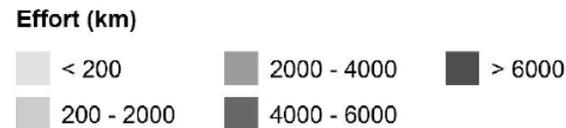
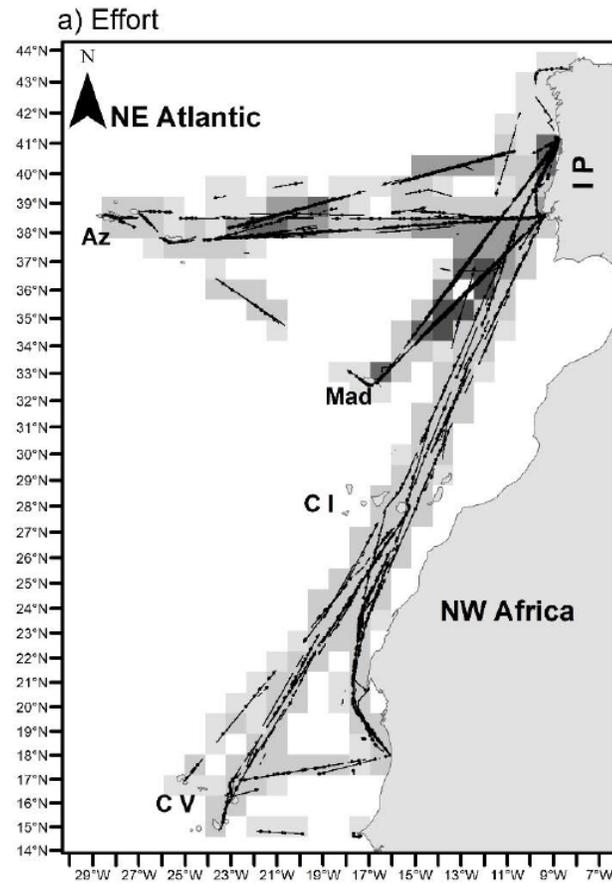
**2012 -2017**  
2807 sightings  
26 sp. identified  
(to genus)

**2016 – 2017**  
1464 sightings  
23 sp. identified  
(to genus)

**2018 - ongoing**

Spatial and temporal  
analysis; Habitat modelling  
(in prep.)

**Cetacean monitoring in the Macaronesia.** Cargo ships are being used as platforms of opportunity to monitor cetaceans along routes between Iberian Peninsula (IP) and Azores (Az), Madeira (Mad), Canary (CI) and Cape Verde (CV) islands.



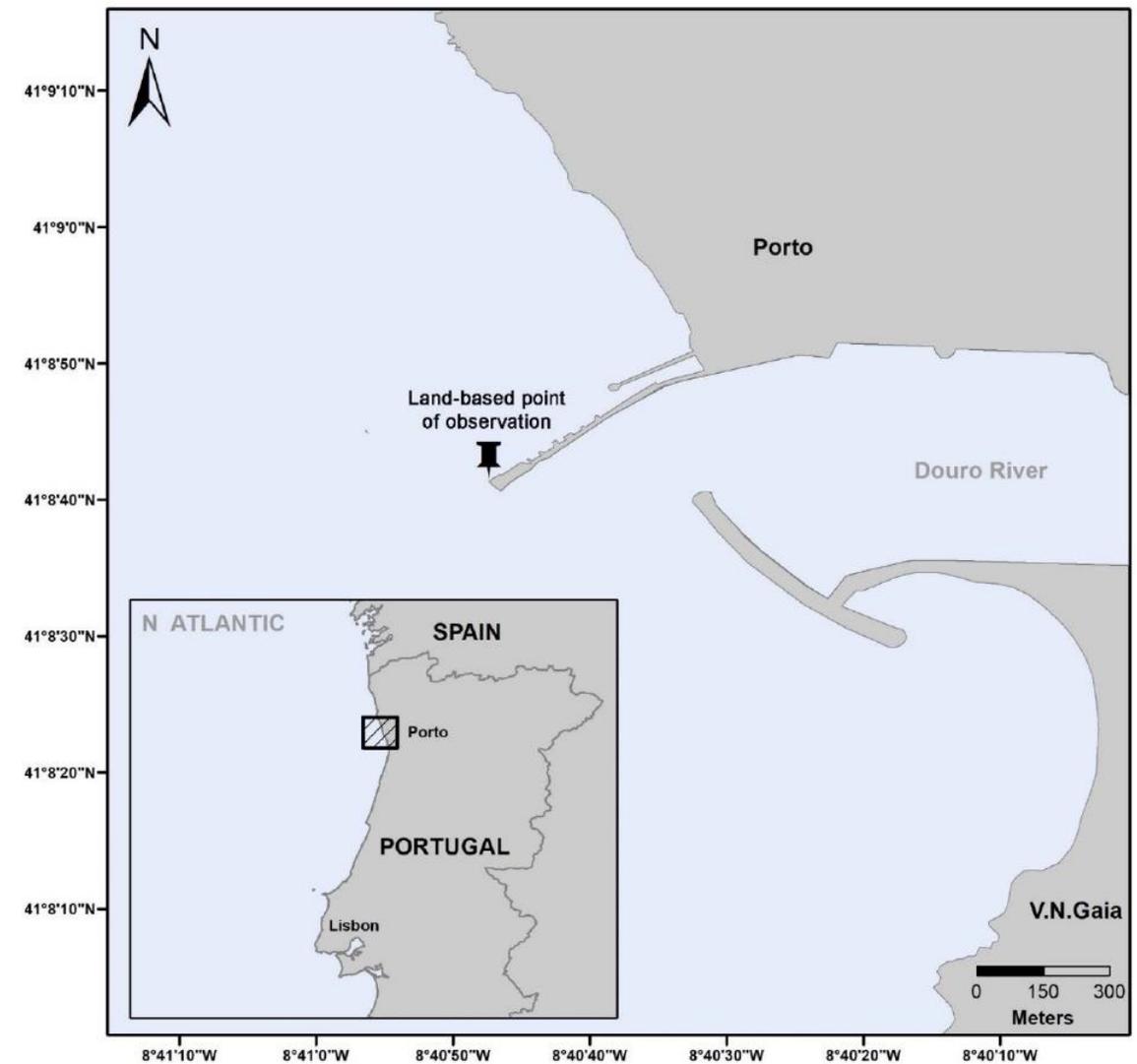
**E-mail: Mafalda Correia - [anamafaldacorreia@gmail.com](mailto:anamafaldacorreia@gmail.com)**  
[www.cetusproject.com](http://www.cetusproject.com)

# PORTUGAL CETUS PROJECT

First record of harbour porpoises in the mouth of the Douro River (NW Portugal).

Monitoring from the pier since 2017:  
At least four animals, one leucistic  
0.85 sightings per monitored day (SPUE)

Report in prep. Monitoring ongoing.



E-mail: Agatha Gil - [hthagil@gmail.com](mailto:hthagil@gmail.com)

[www.cetusproject.com](http://www.cetusproject.com)



## Establishing Natura 2000 sites in the marine environment: progress in Portugal

Project LIFE09 NAT/PT/000038

Partners:

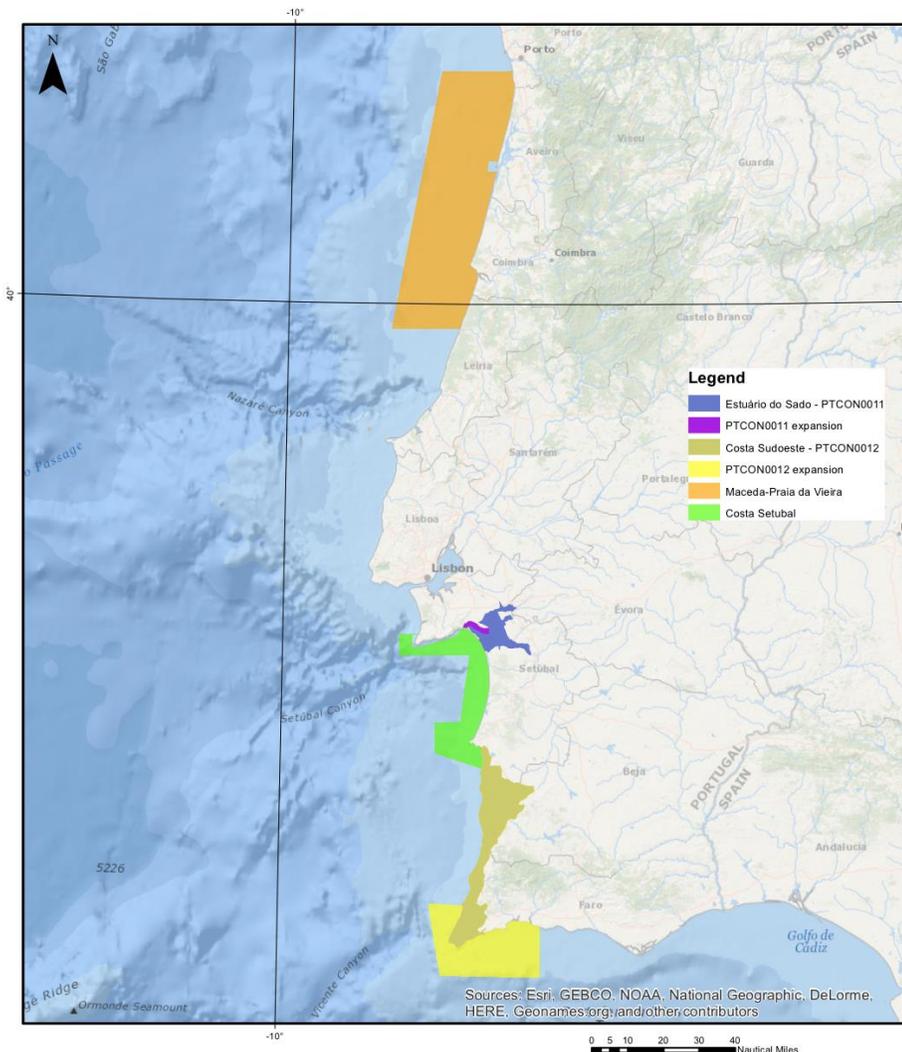
Universidade de Aveiro  
Universidade do Minho

Sociedade Portuguesa para o Estudo das Aves (SPEA)  
Instituto Português do Mar e da Atmosfera (IPMA)  
Instituto de Conservação da Natureza e das Florestas (ICNF)



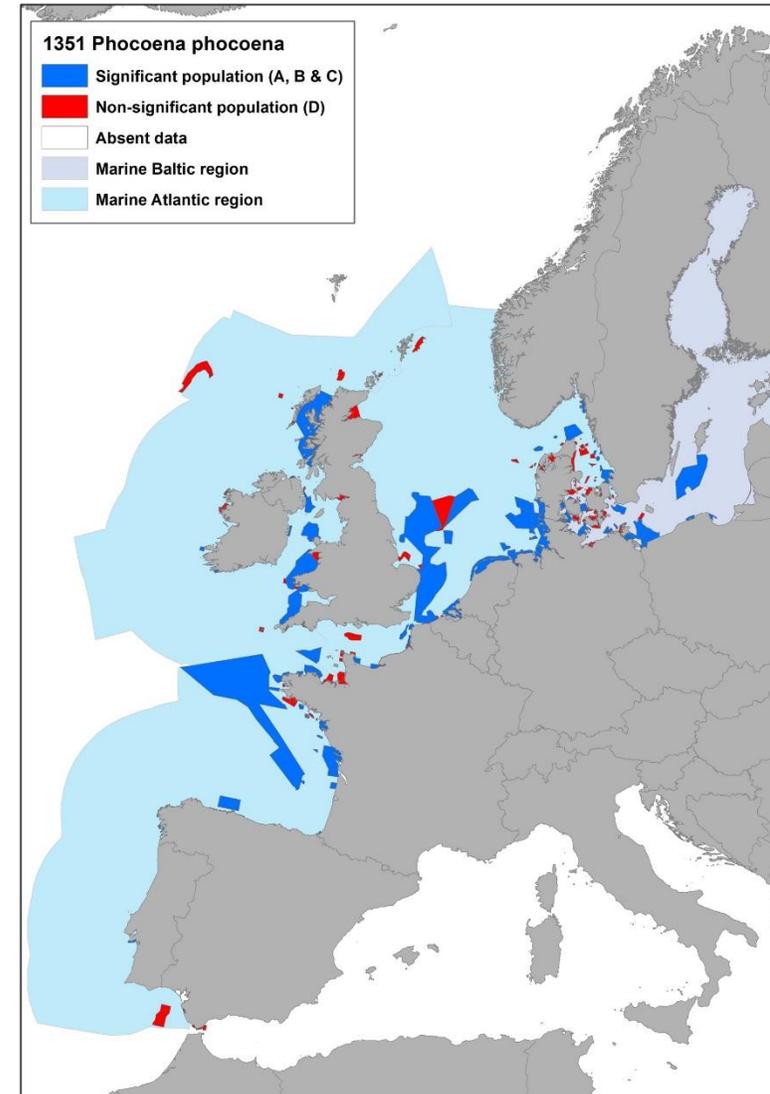
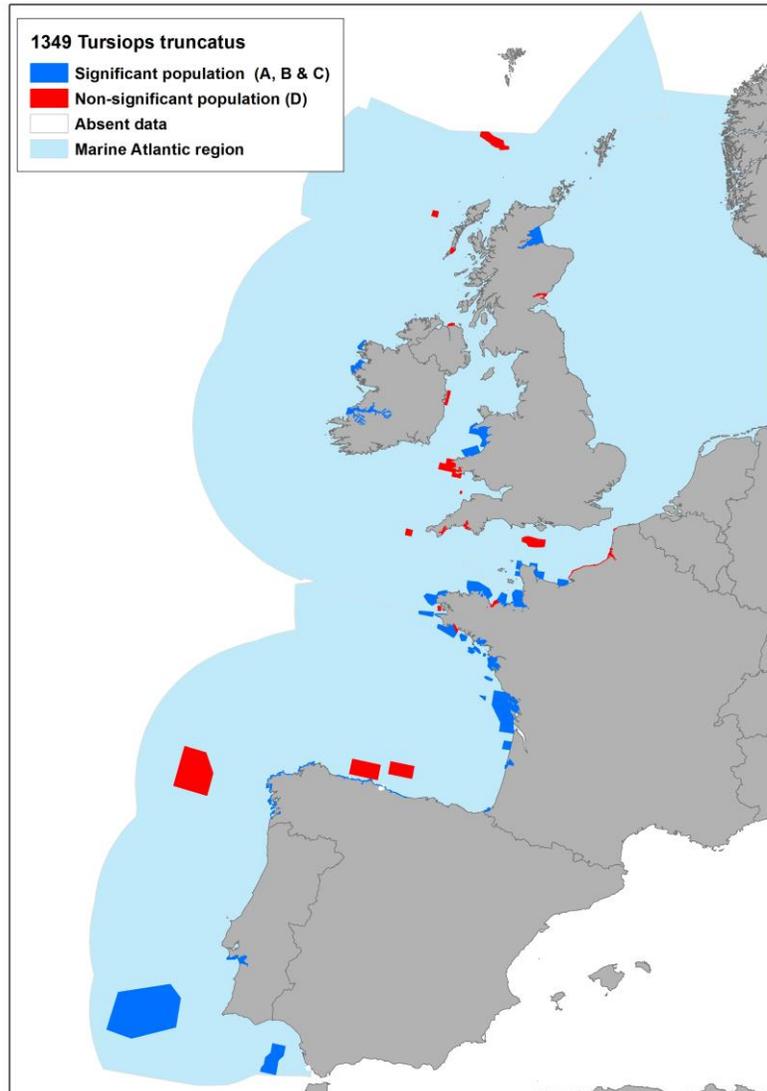
- New pSCIs submitted for public consultation in May 2016

Site Name	Code	Marine area (km <sup>2</sup> )	<u>P. phocoena</u>	<u>T. truncatus</u>
<u>Maceda-Praia de Vieira</u>	Not yet available	502 637,34	A	B
<u>Estuário do Sado</u>	PTCON0011	175,68	Not present	C
<u>Costa de Setúbal</u>	Not yet available	123 274,17	B	C
<u>Costa Sudoeste</u>	PTCON0012	163 305,07	B	C



SCIs proposed in continental Portugal:  
New areas & enlargement of already designated sites

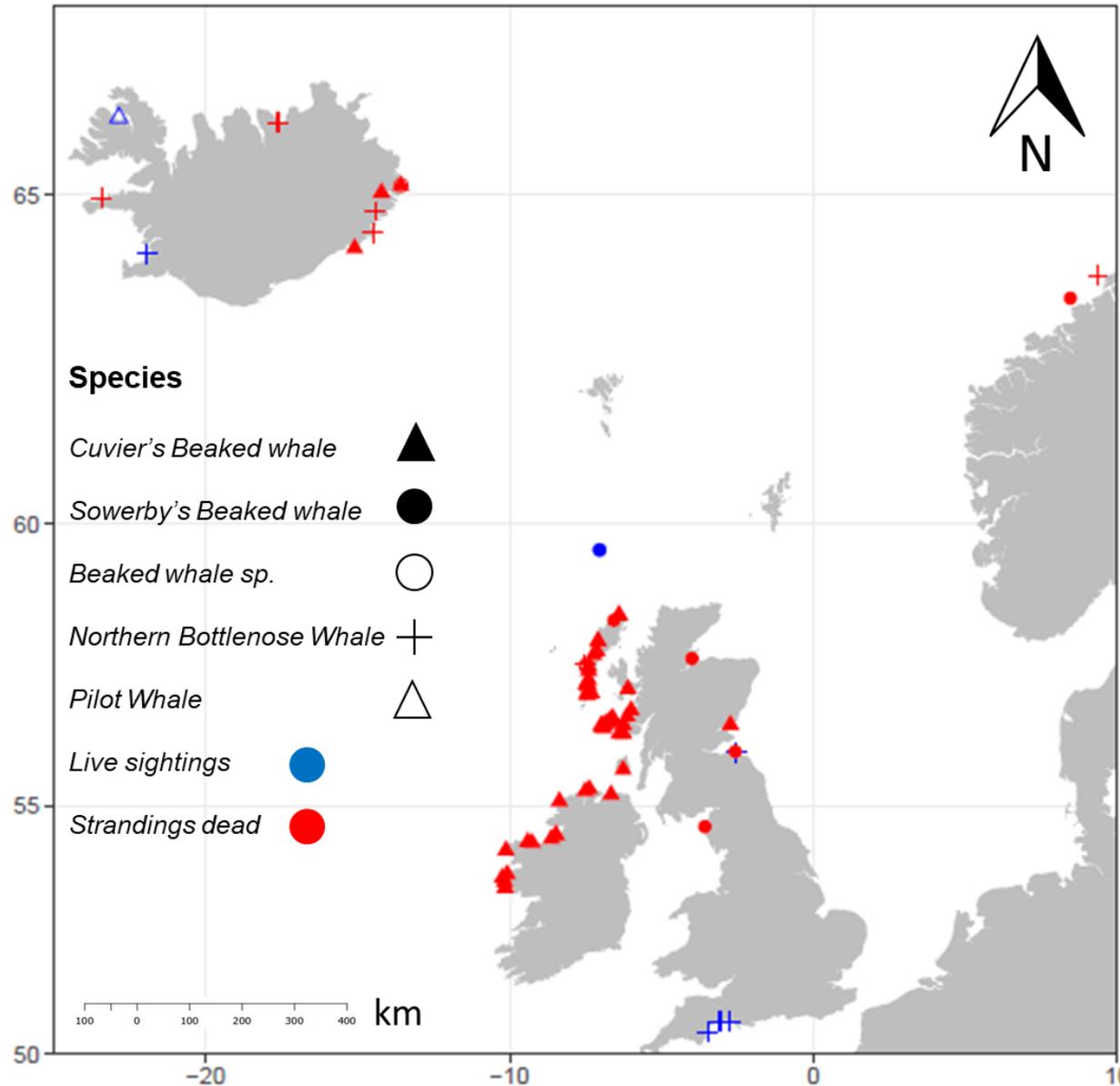
# Natura 2000 Sites for Bottlenose Dolphin & Harbour Porpoise



Source: European Topic Centre, Paris

# Beaked Whale Mass Strandings, NE Atlantic, June-Sept 2018

76 *Ziphius cavirostris*  
 5 *Mesoplodon bidens*  
 9 *Hyperoodon ampullatus*  
 4 beaked whale sp.



## Sources:

### a) UK CSIP

Andrew Brownlow  
 Rob Deaville  
 Paul Jepson

### b) IWDG, Ireland

Simon Berrow  
 Mick O'Connell

### c) Iceland

Aevar Petersen  
 Marianne Rasmussen  
 Gisli Vikingsson

### d) Norway

Arne Bjørge  
 Petter Kvadsheim  
 Nils Øien

# NATO “Dynamic Mongoose” Exercise



- 25 June – 6 July 2018
- Involving 7 warships, 3 maritime surveillance aircraft and 2 submarines
- Participating nations include Norway, Denmark, Germany, Poland, the Netherlands, Spain, Turkey and USA

**No. of strandings** 76 Cuvier’s beaked whales  
 5 Sowerby’s beaked whales  
 9 Northern bottlenose whales, 4 beaked whale sp.