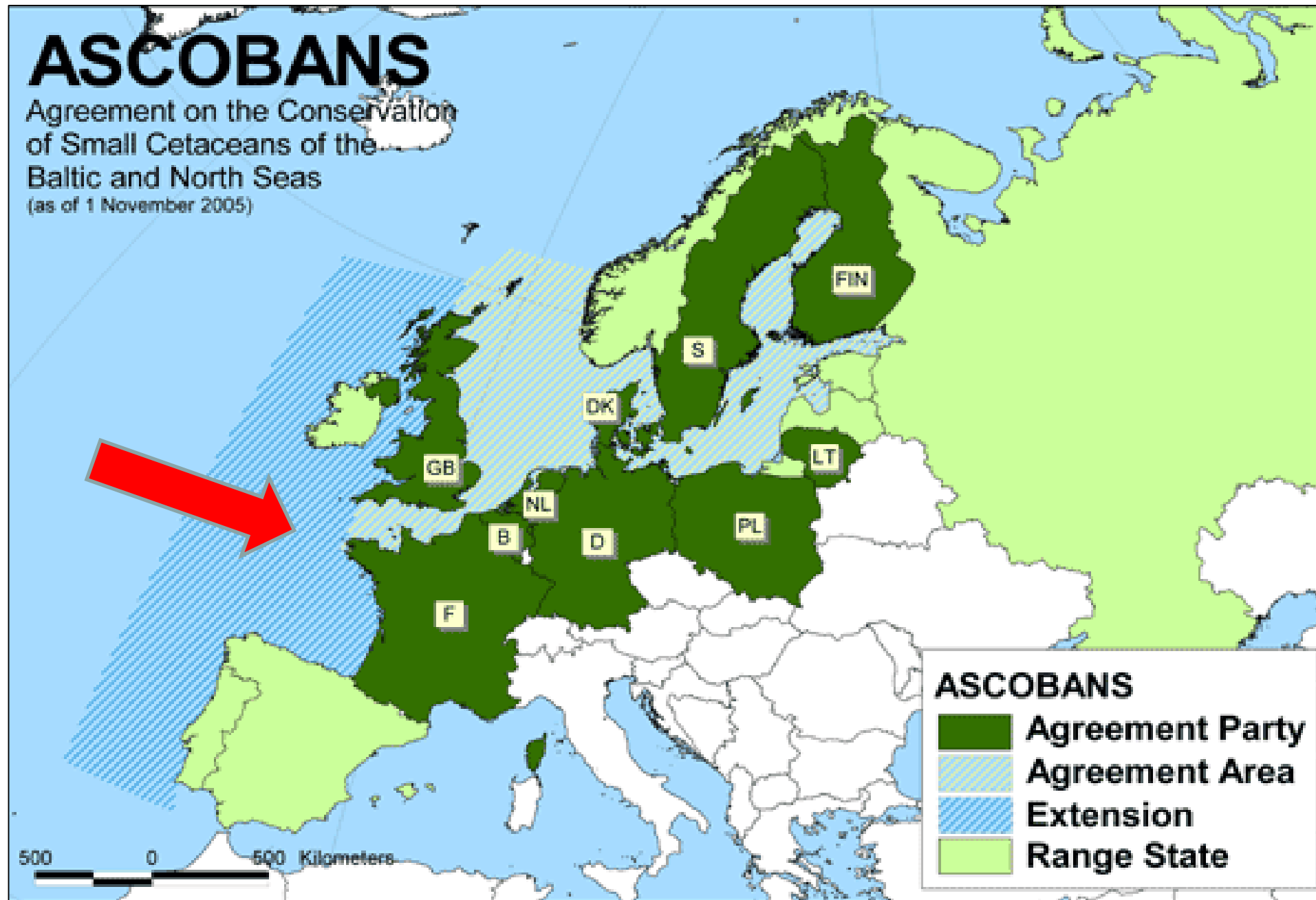


ASCOBANS Extension Area Progress Report: 2016-18

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*

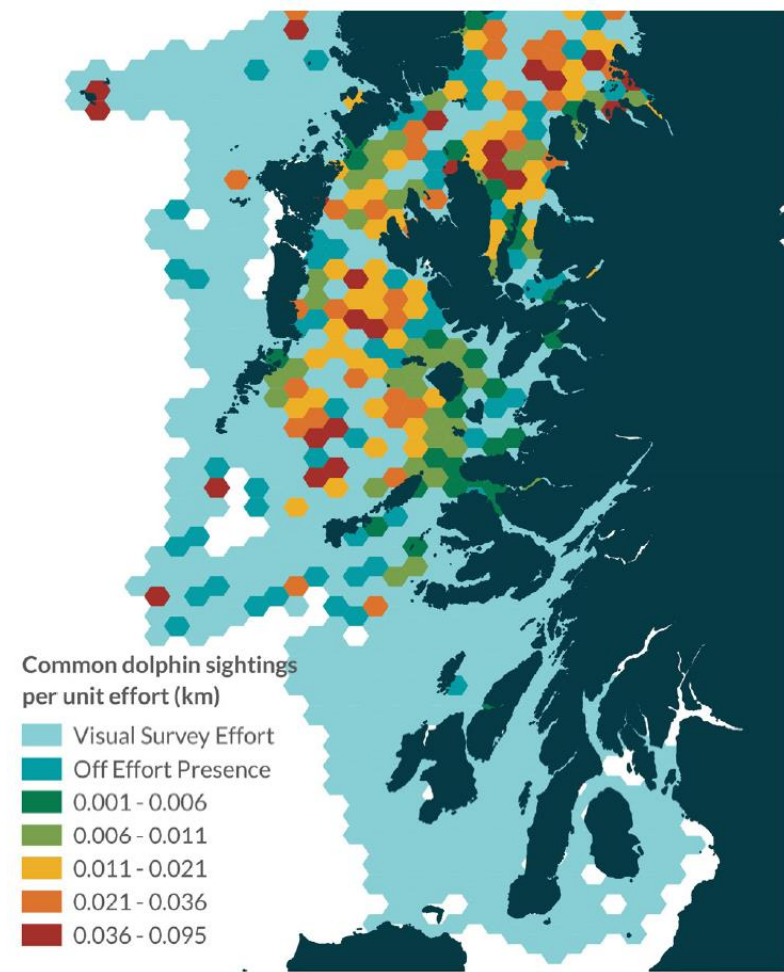
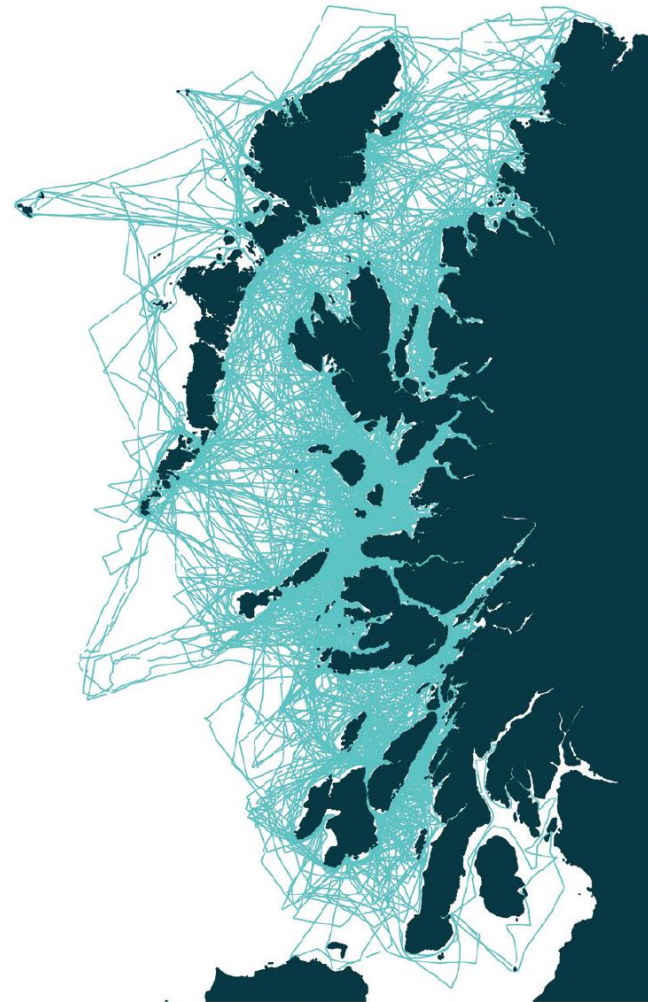


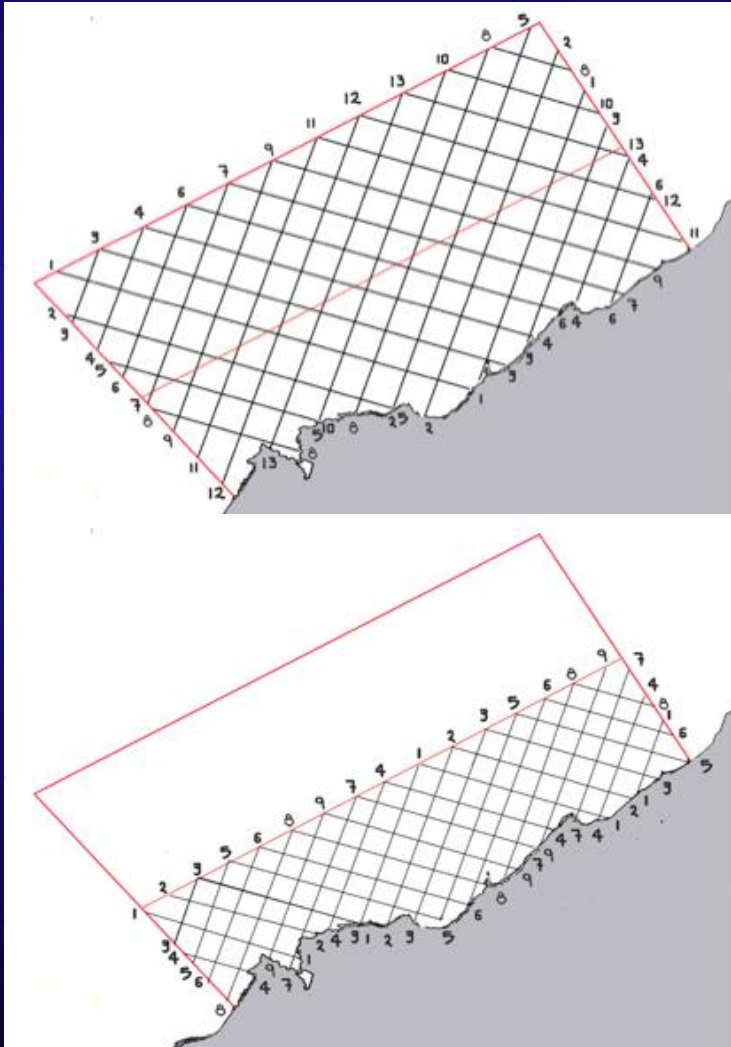
Figure 1.6. Silurian common dolphin sighting rates, 2003 to 2017.

- >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

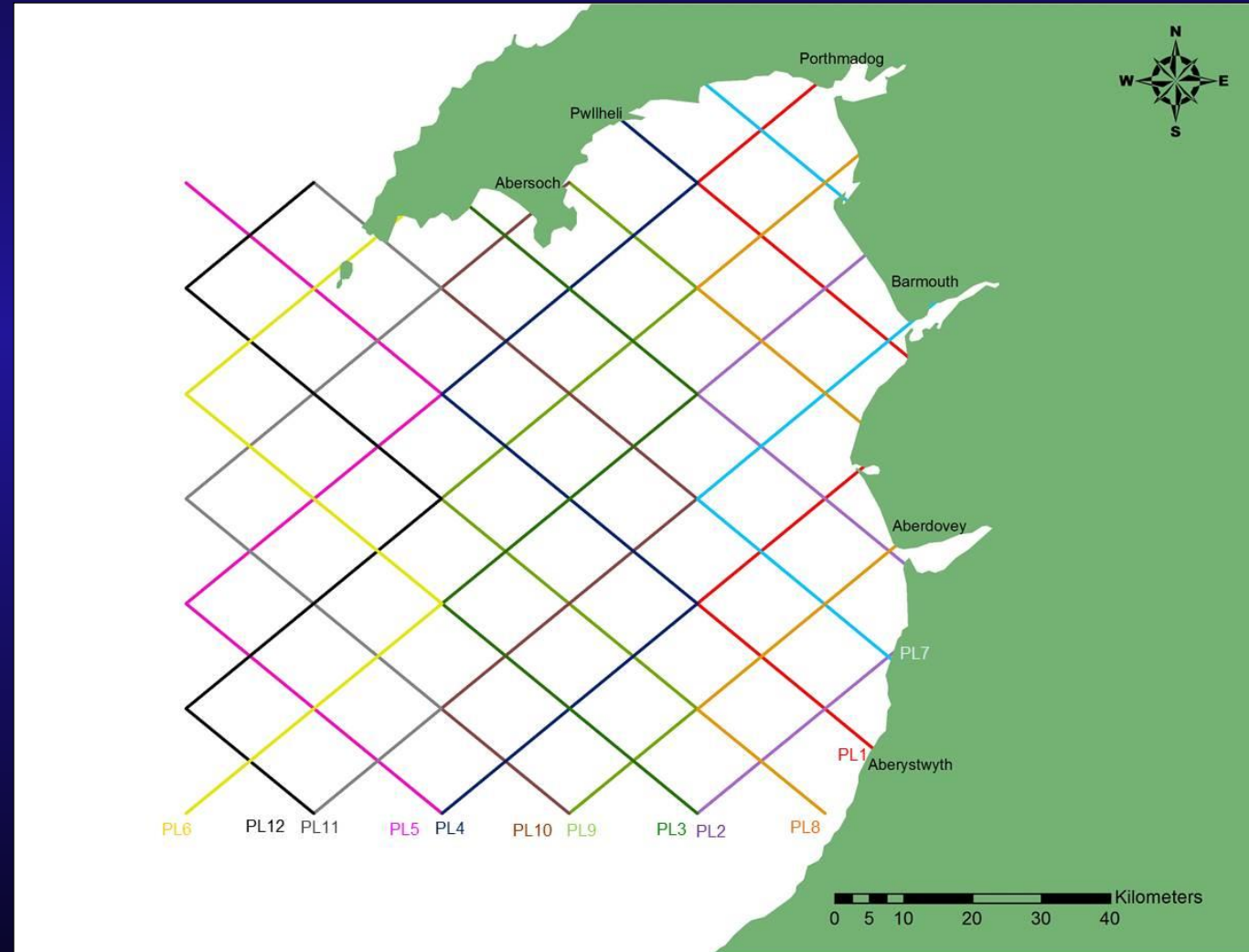
Monitoring Bottlenose Dolphins In Cardigan Bay, West Wales



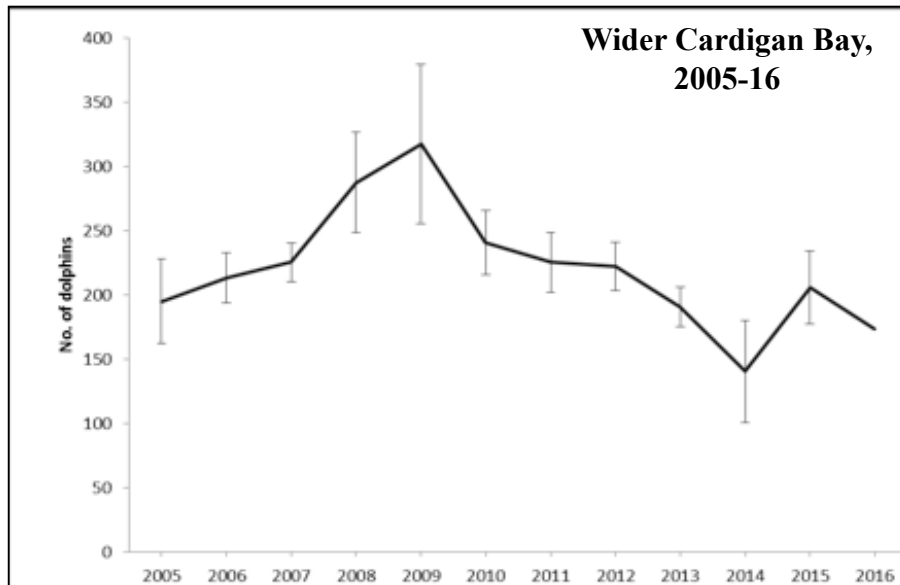
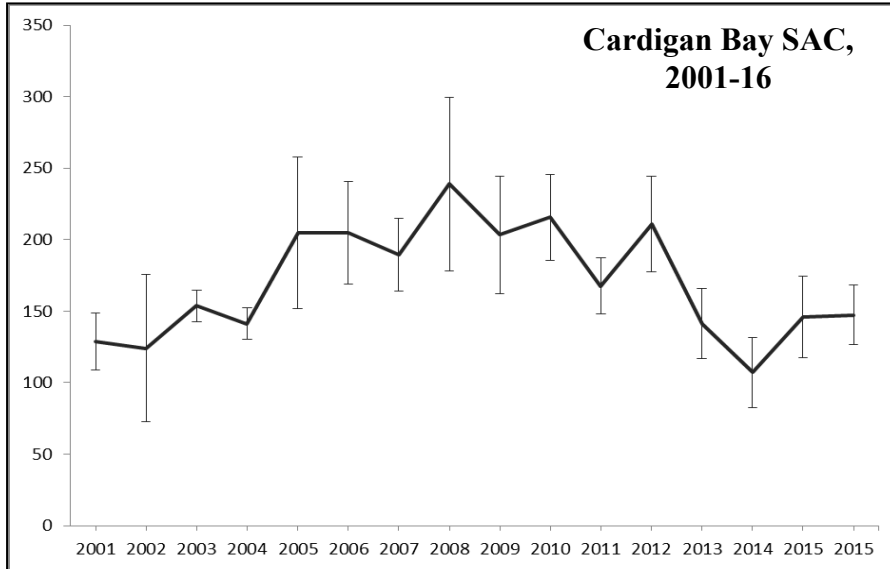
a) Cardigan Bay SAC: 2001-present



b) Northern Cardigan Bay: 2005-present



Bottlenose Dolphin Population Trends In Cardigan Bay, West Wales

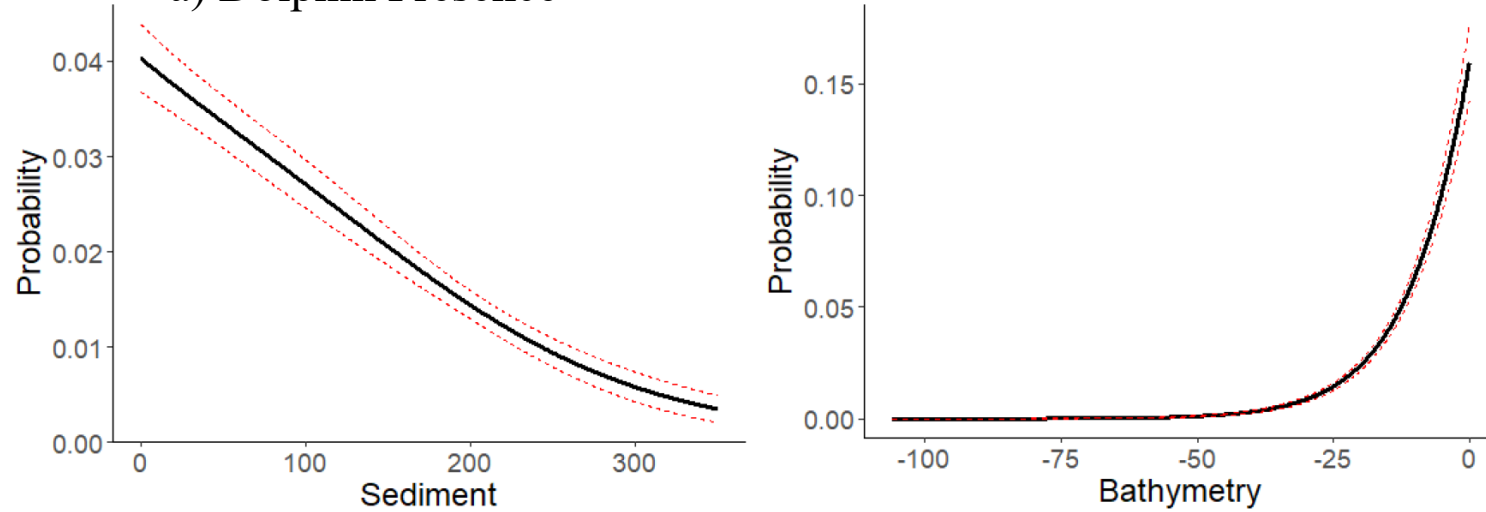


- Bottlenose dolphins are monitored mainly by Photo-ID and Capture-Mark-Recapture
- Within Cardigan Bay SAC, steady increase from 2001-08, and thereafter a decline
- In the wider Cardigan Bay, an increase to 2009, and thereafter a decline
- Probability of permanent emigration from Cardigan Bay has steadily 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)

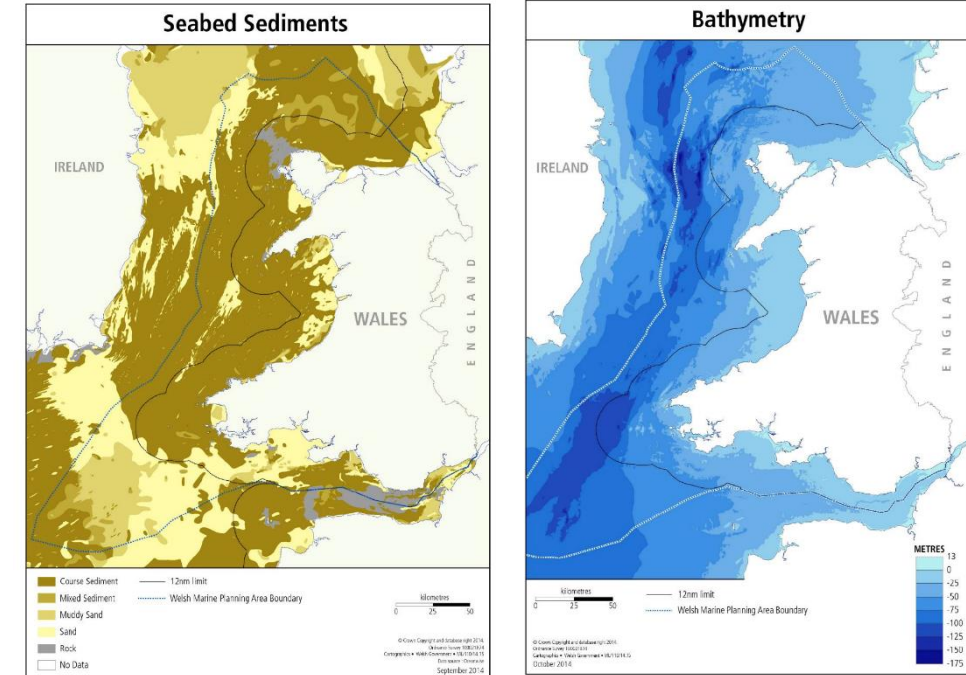
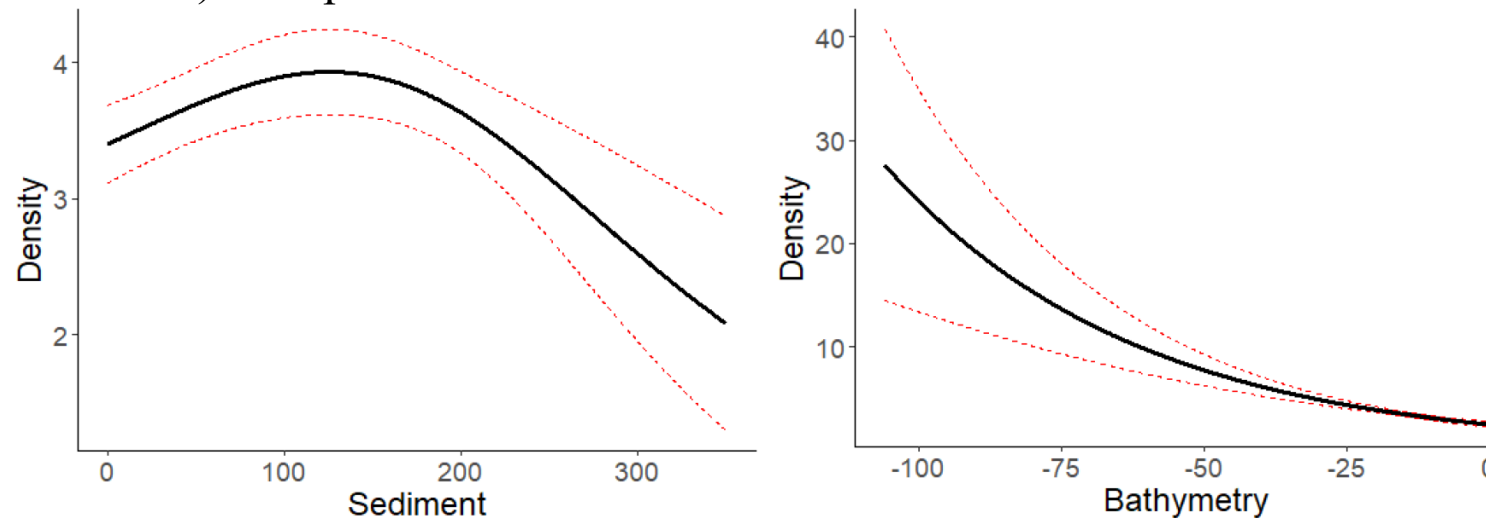
Source: Lohrengel & Evans (2017)

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



Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment



An Roinn
Cultúir, Oidhreachta agus Gaeltachta
Department of
Culture, Heritage and the Gaeltacht

Studies in Atlantic France, 2016-18

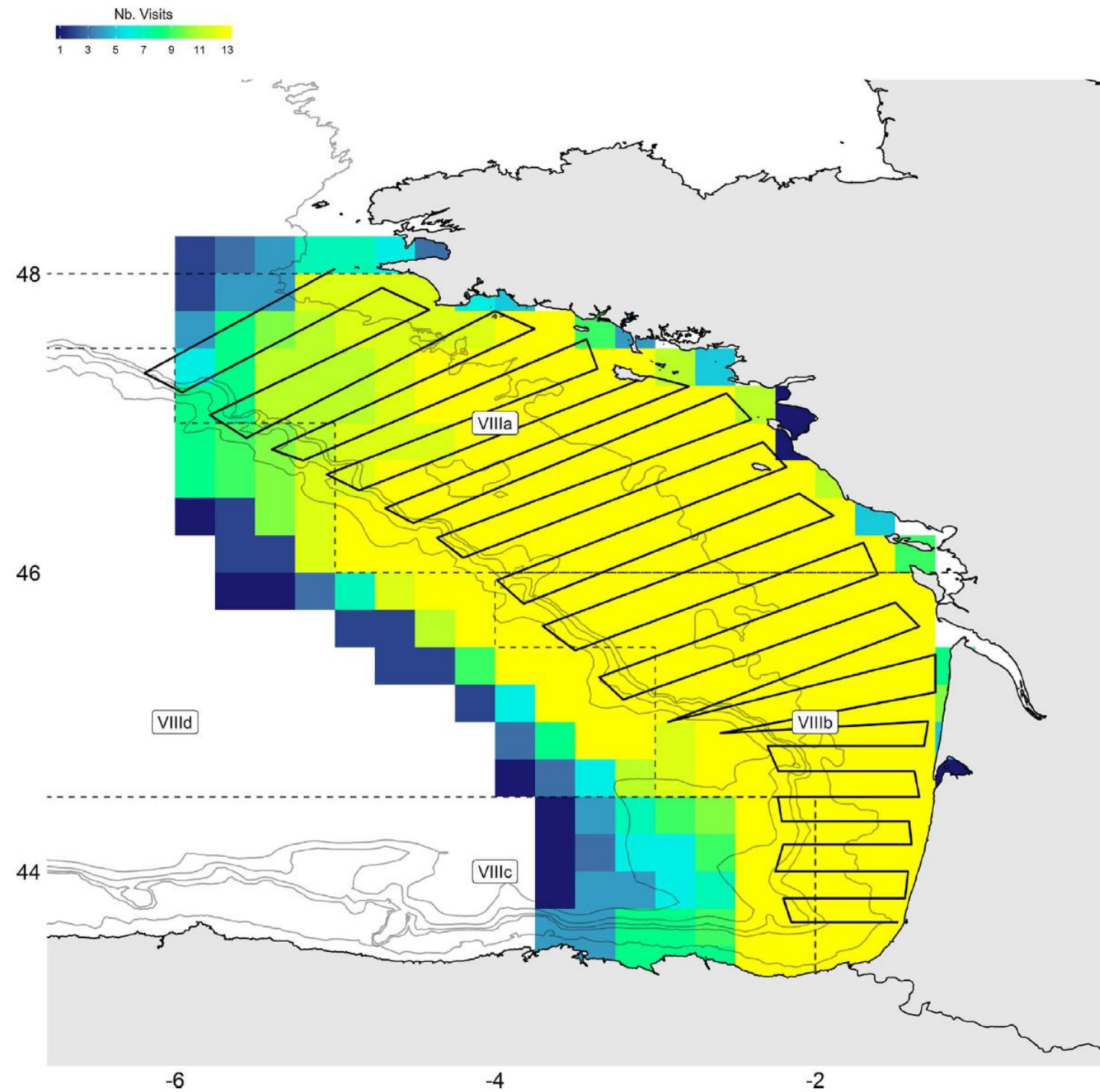
- Stranding scheme continues on a permanent basis including the French coasts of the Bay of Biscay
- Origins of common dolphin strandings are being studied using drift models and the distribution of fishing effort (analyses to be completed in 2019)
- Visual surveys conducted regularly on oceanographic 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.)

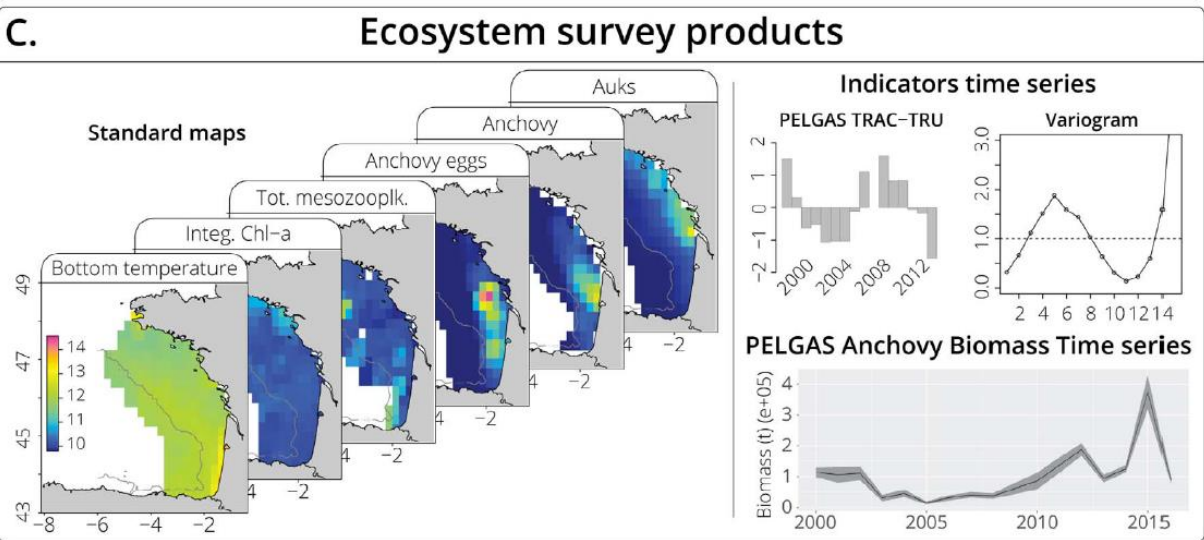
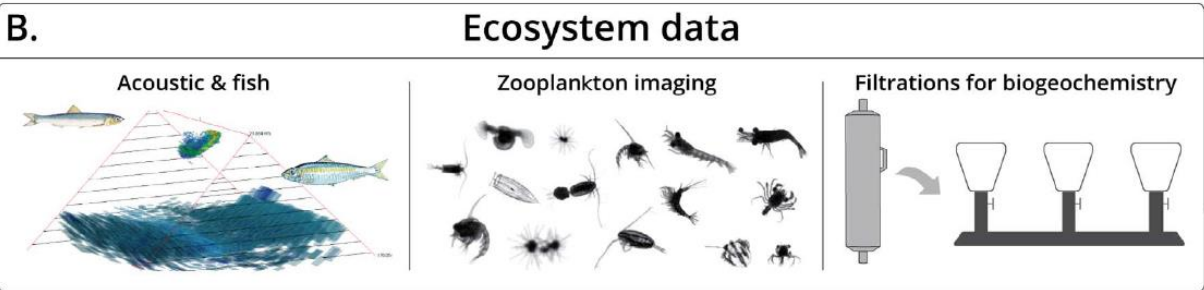
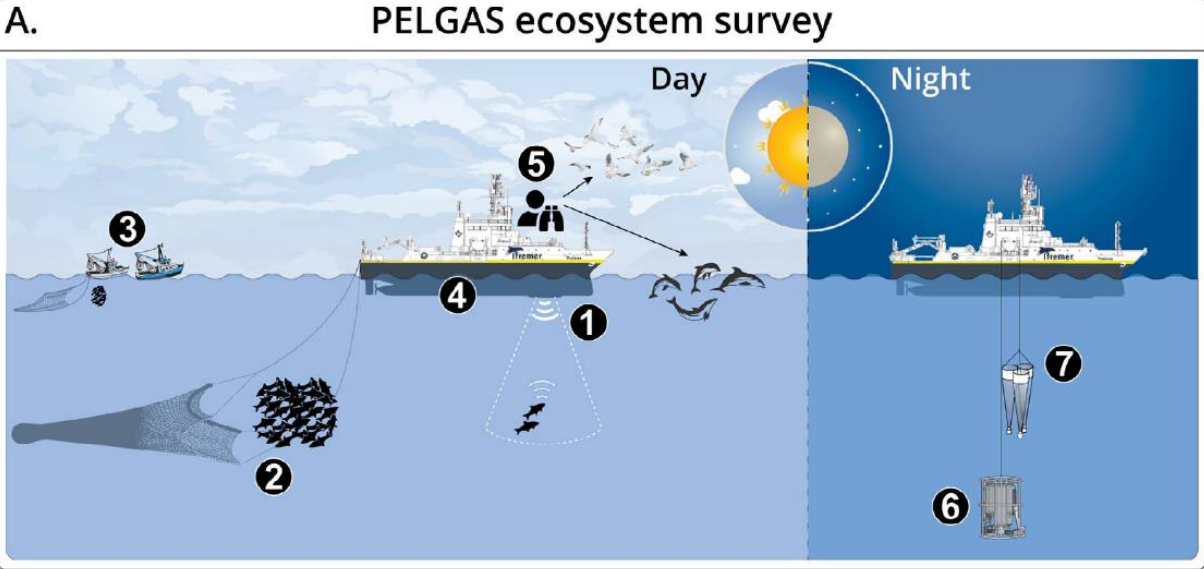
Studies in Atlantic France, 2016-18

- 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



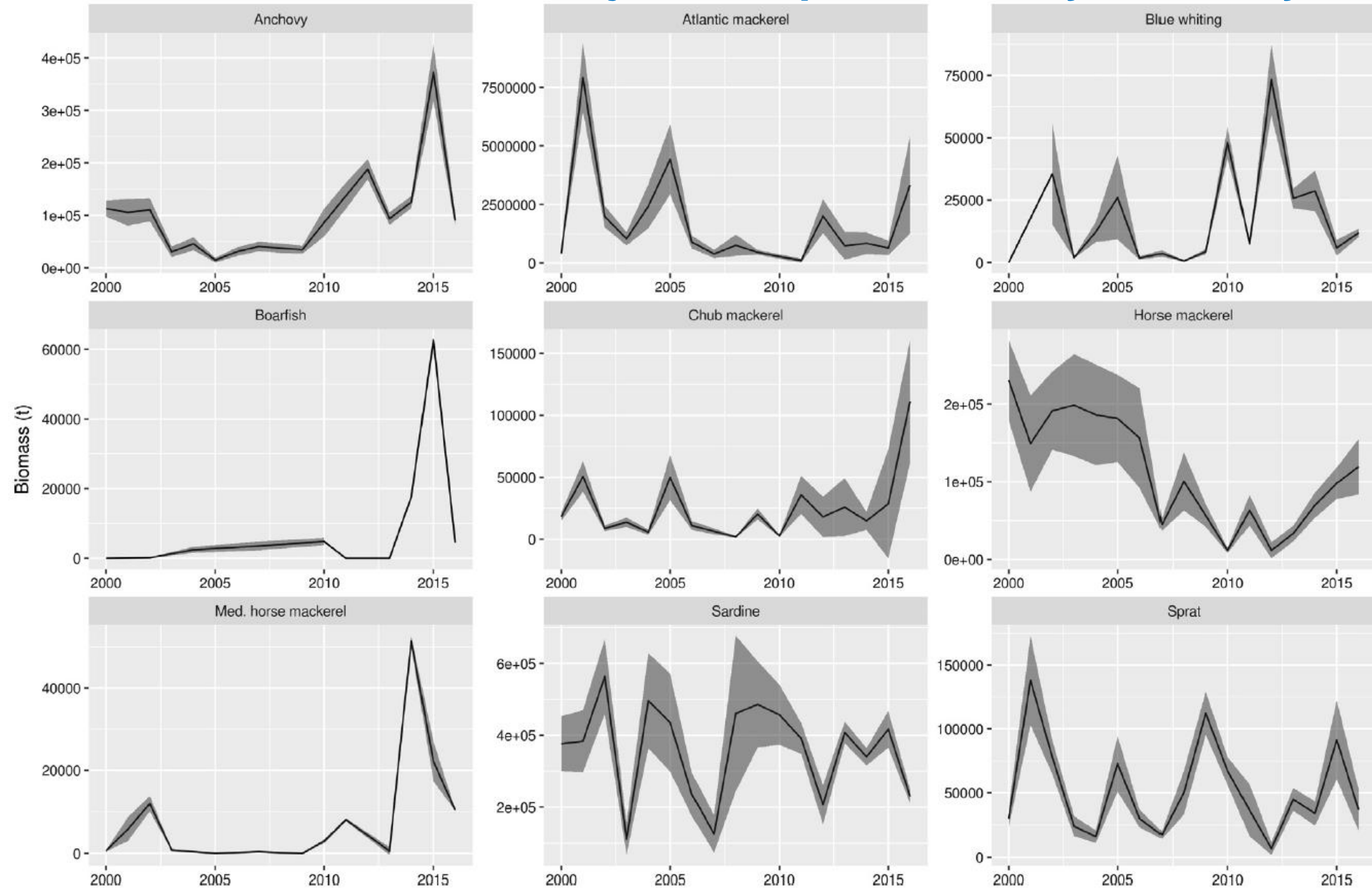


The PELGAS survey model

- 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.

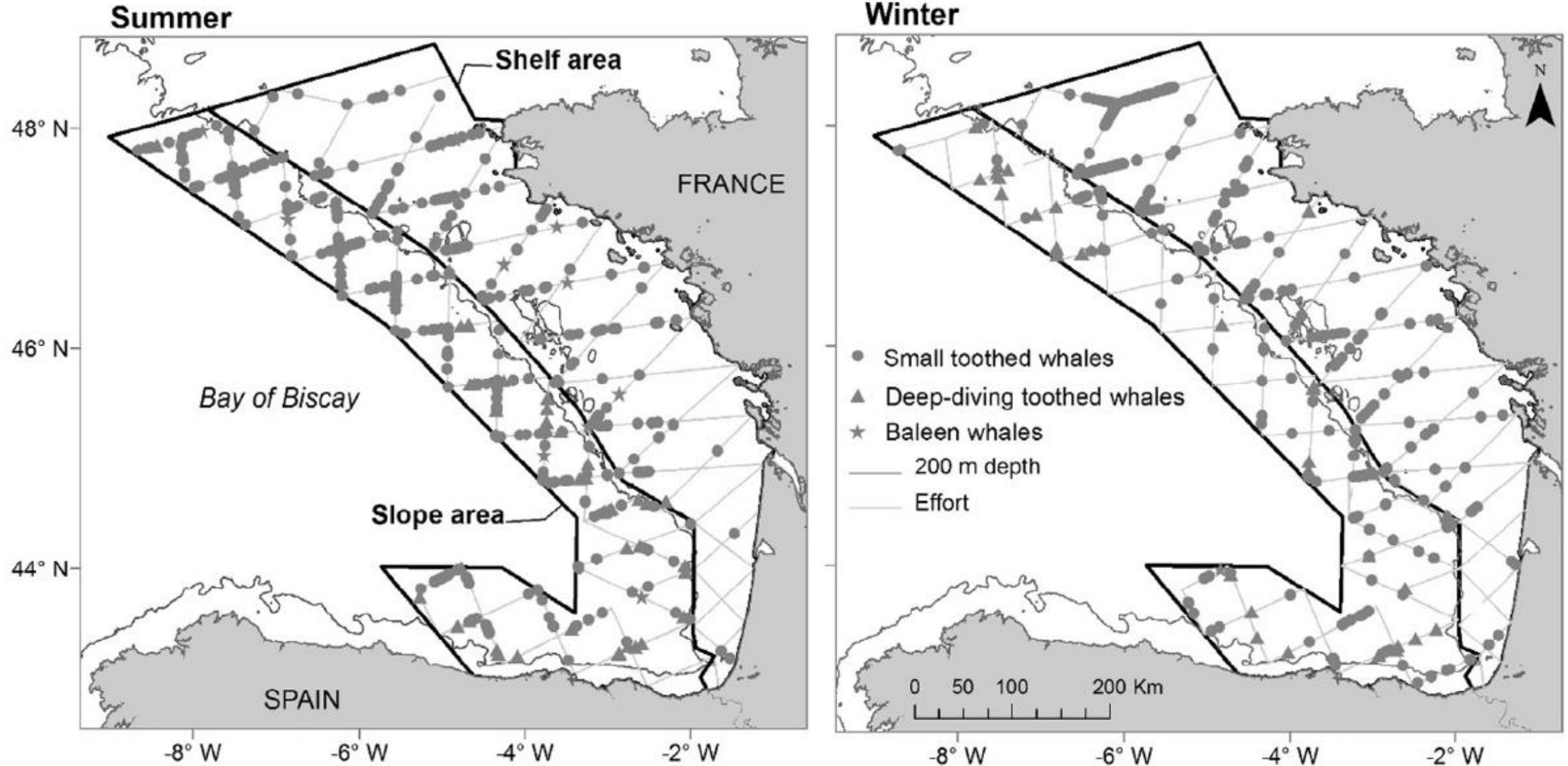
Source: Doray *et al.*, 2018

Biomass trends for major fish species in Bay of Biscay



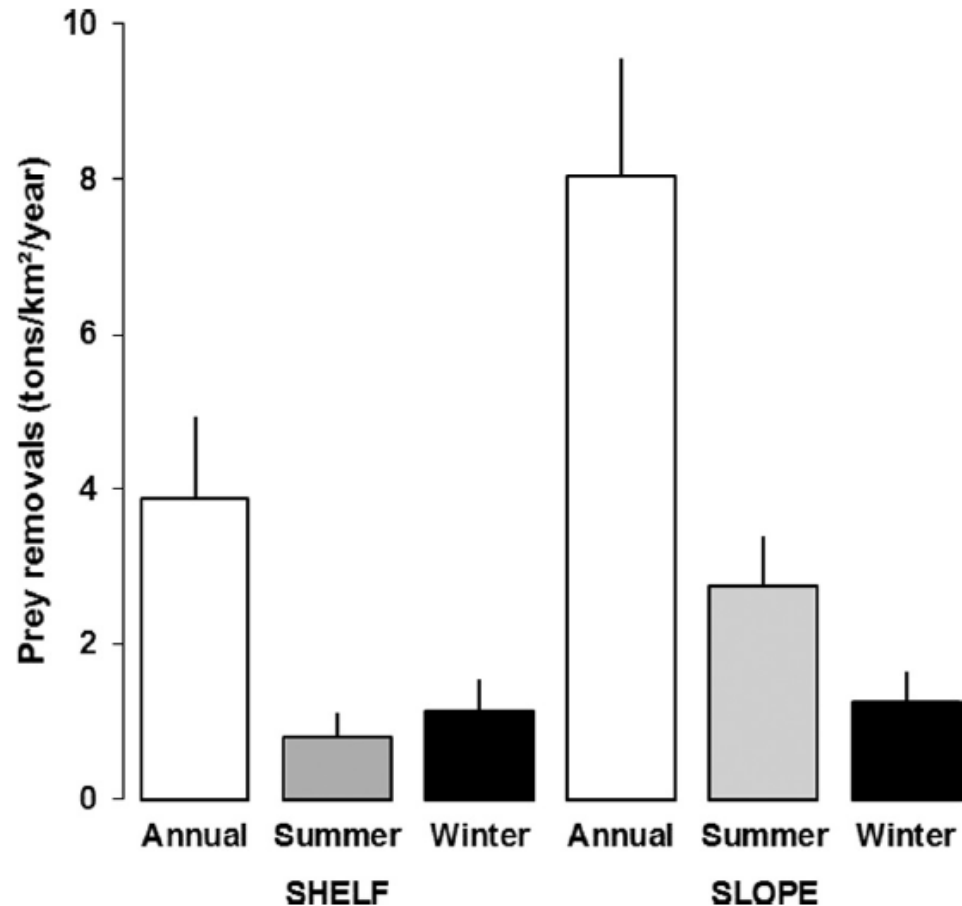
Source: Doray *et al.*, 2018

Sightings of cetacean species in Bay of Biscay

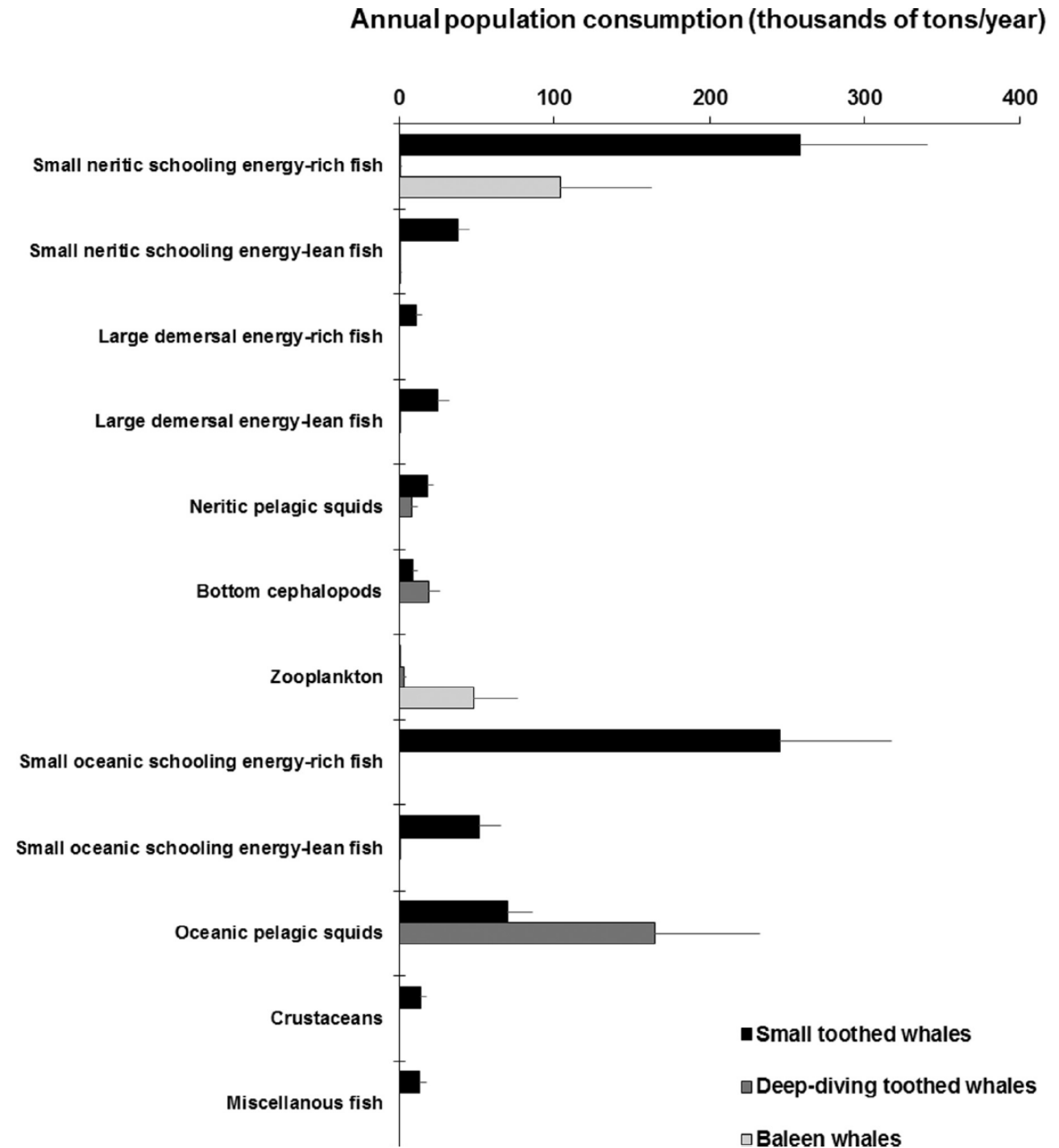


Source: Spitz *et al.*, 2018

Prey consumption by cetacean functional groups in Bay of Biscay

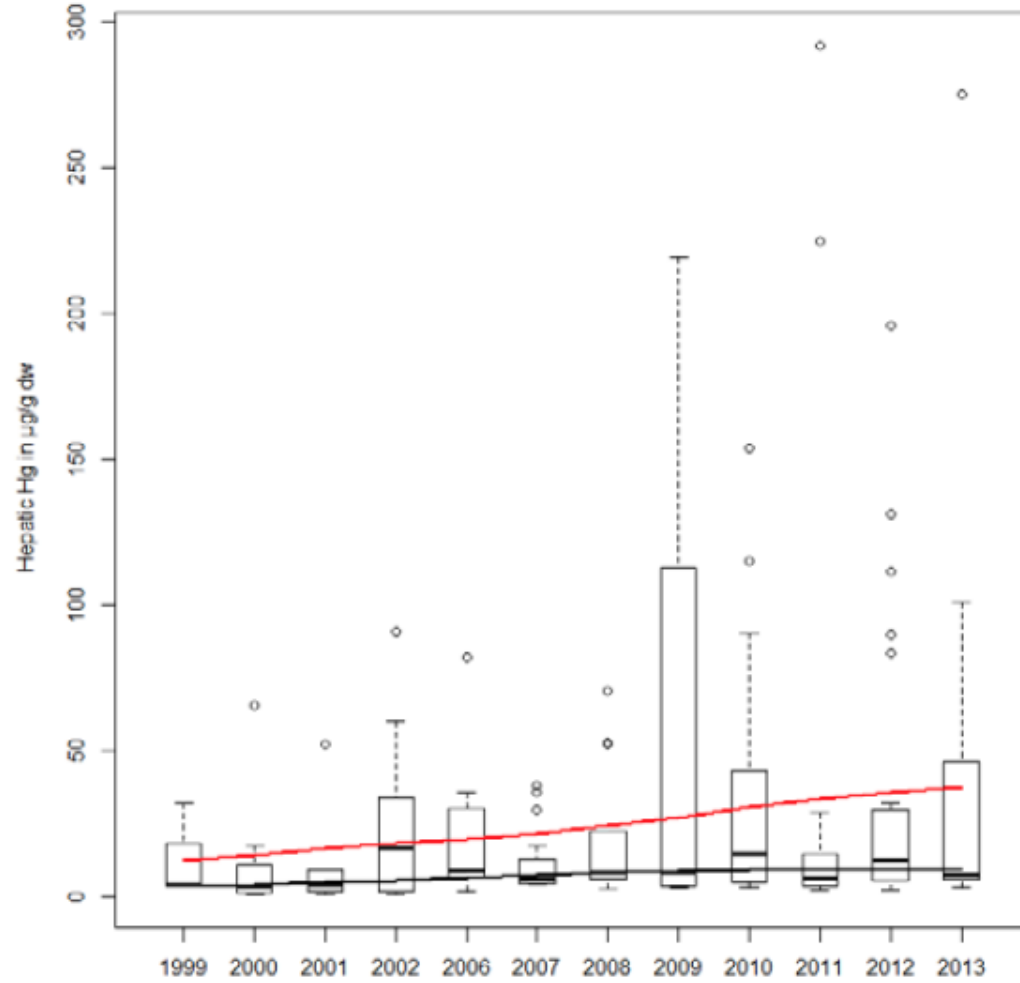


Source: Spitz *et al.*, 2018

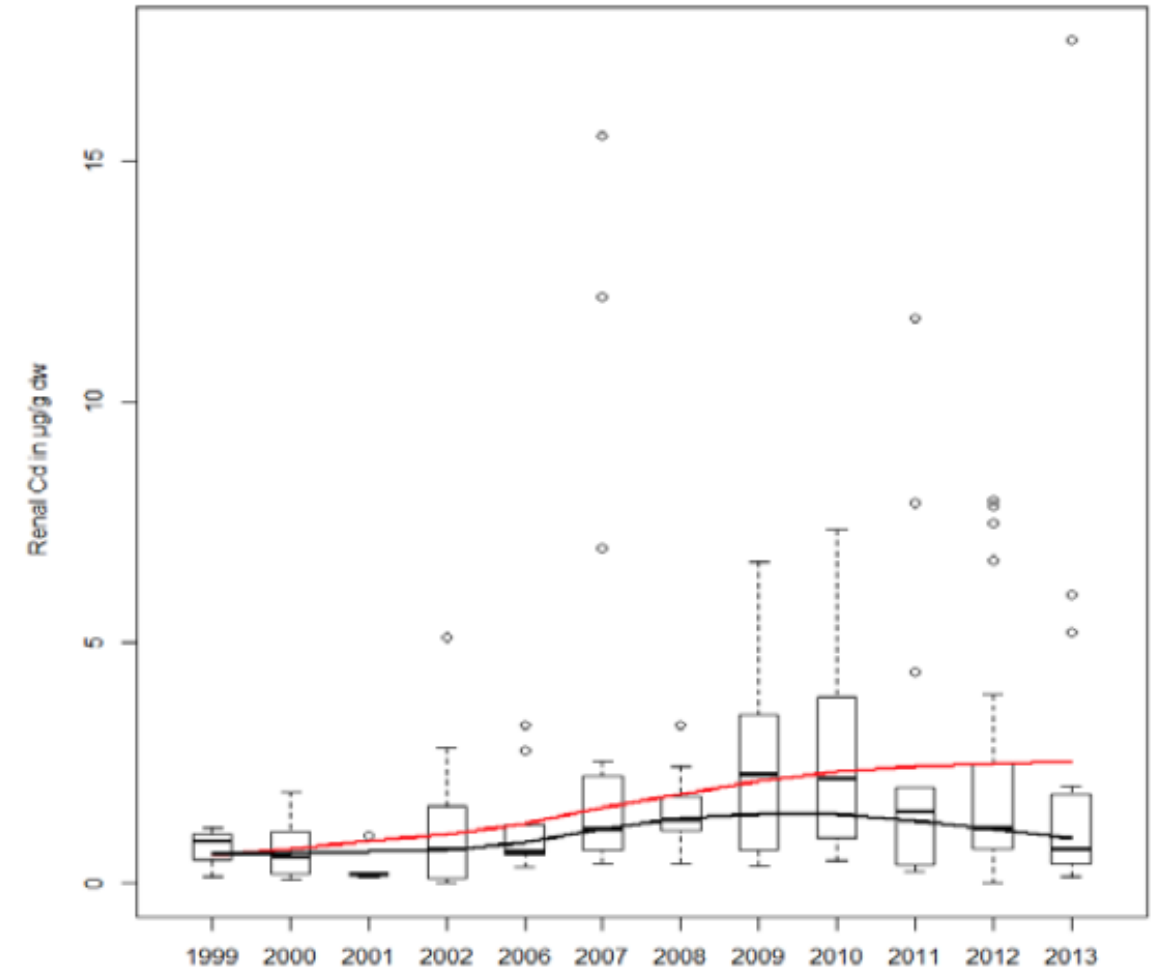


Harbour Porpoise Contaminant Trends in French Bay of Biscay

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

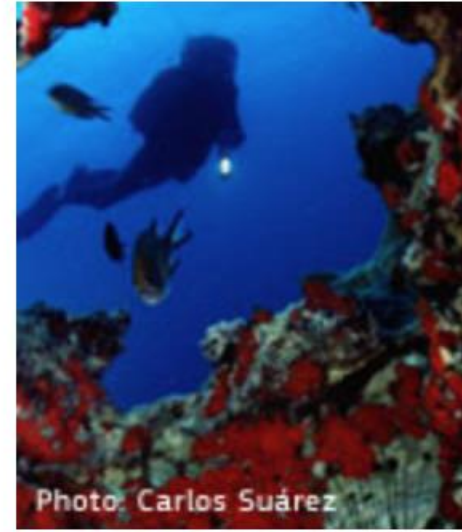


Photo: Carlos Suárez

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.



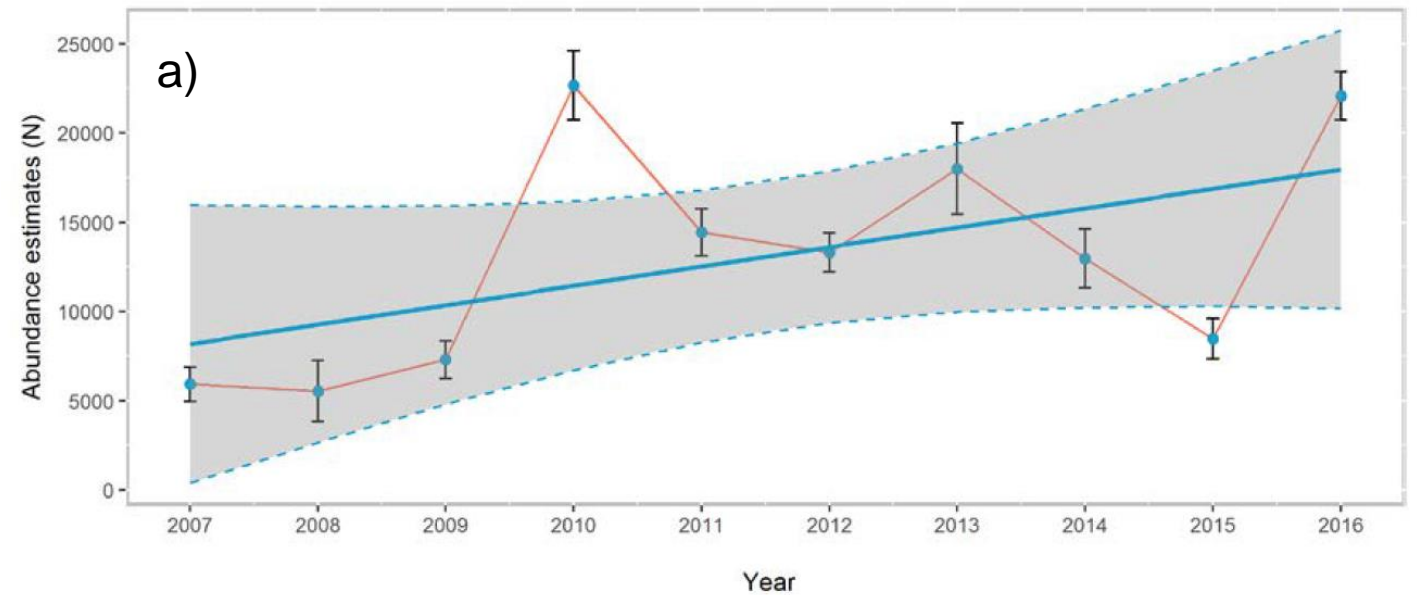
Atlantic Spain



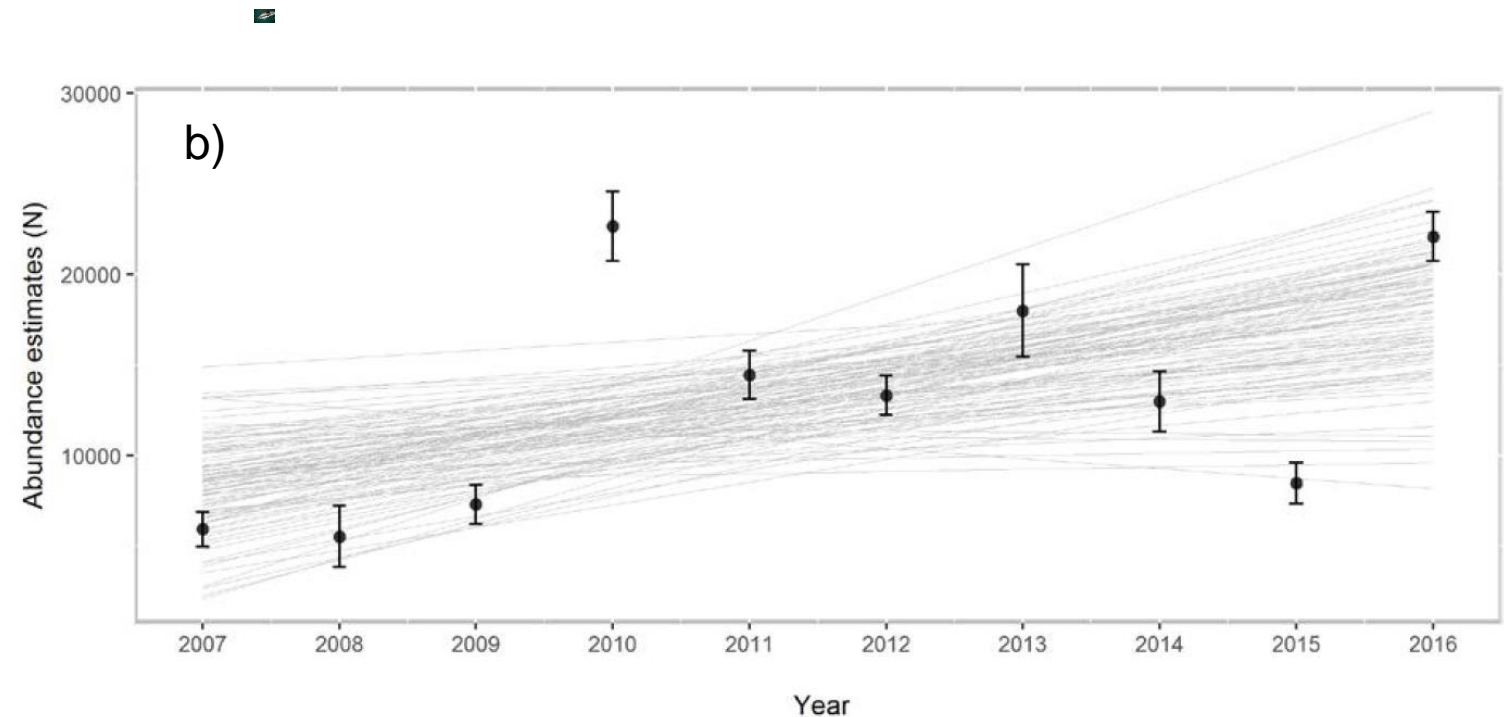
a) Time-series of common dolphin estimated abundance (blue dots) in NW Spanish shelf waters, with SE bars. Linear regression (blue line) fitted to annual estimates, with 95% CI (dashed lines and grey area)

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

Source: Saavedra *et al.*, 2018

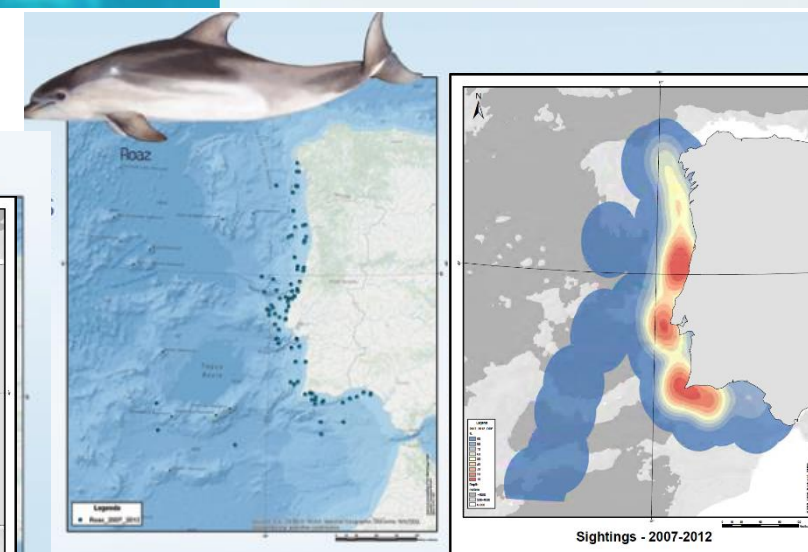
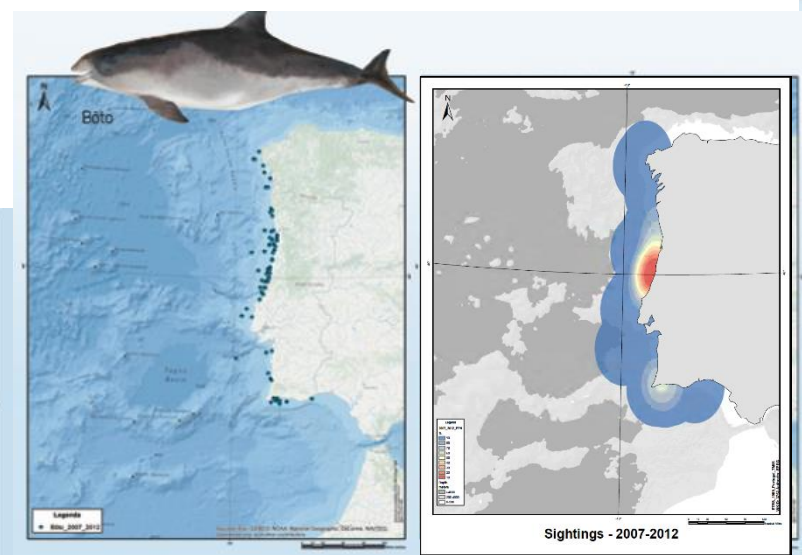
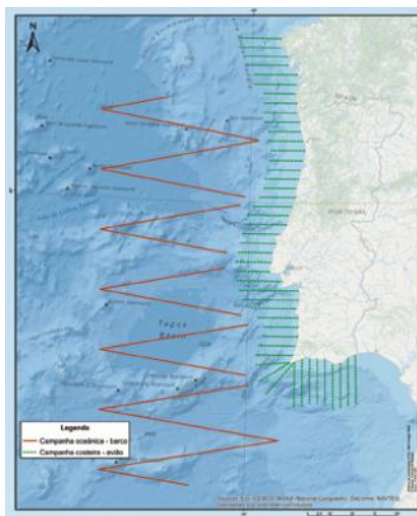


(b)





Cetacean & Seabird Surveys in Portugal



Source: MARPRO Project, 2016

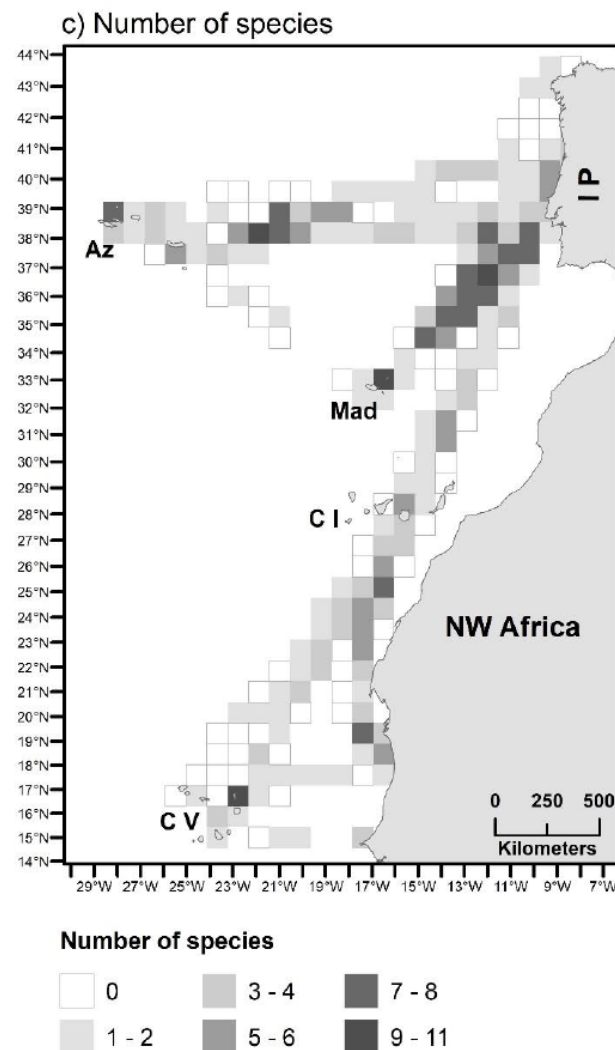
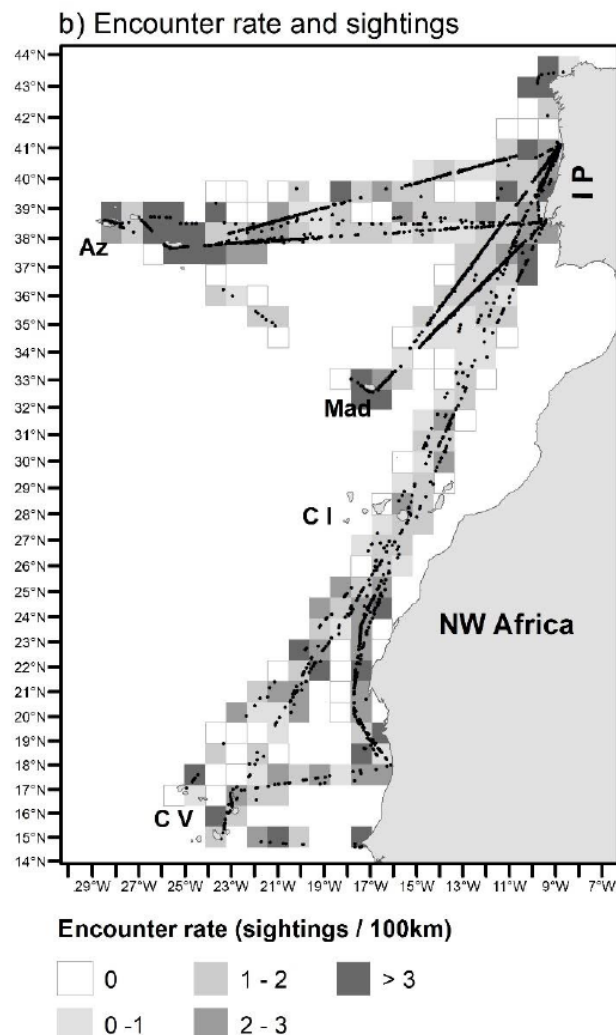
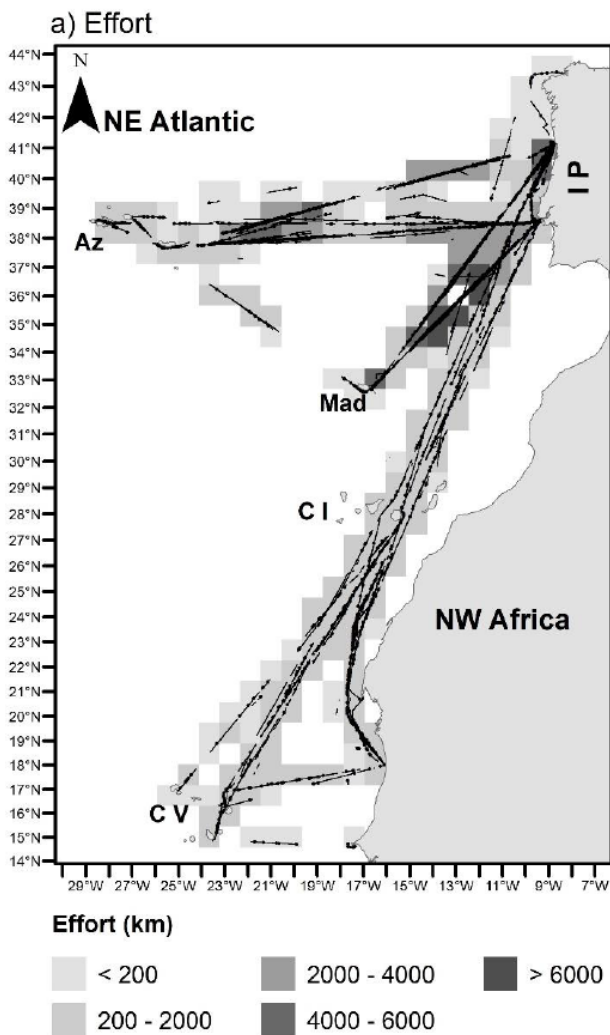
PORTUGAL CETUS PROJECT

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.

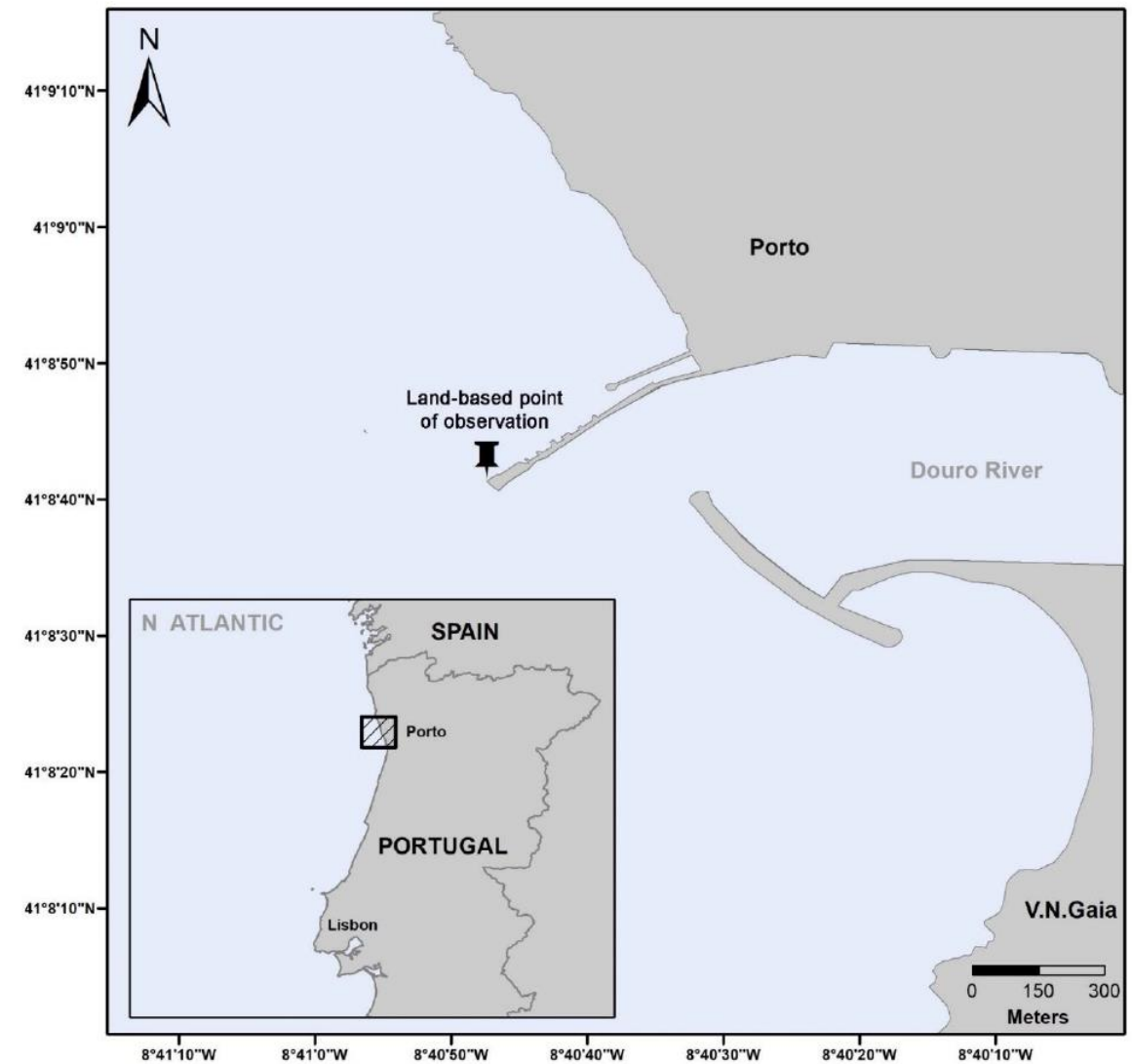
E-mail: Mafalda Correia - anamafaldacorreia@gmail.com
www.cetusproject.com

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

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)

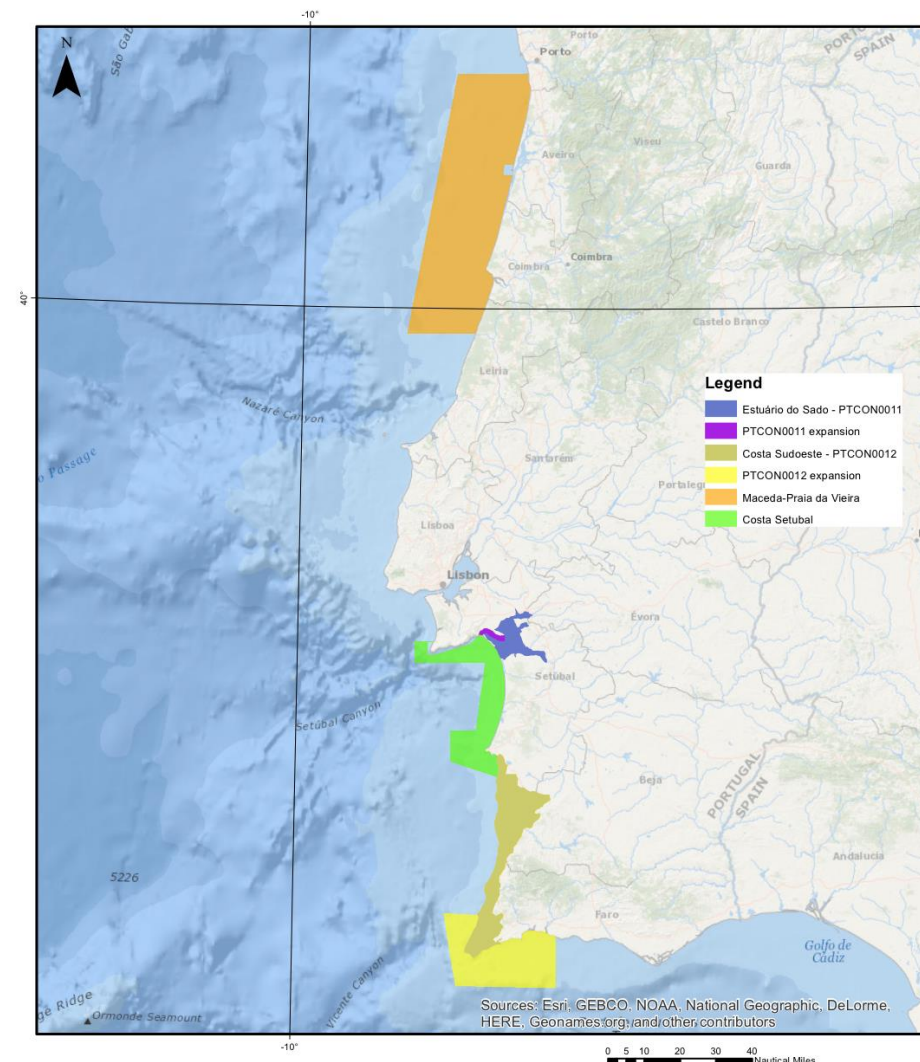
Instituto Português do Mar e da Atmosfera (IPMA)

Instituto de Conservação da Natureza e das Florestas (ICNF)



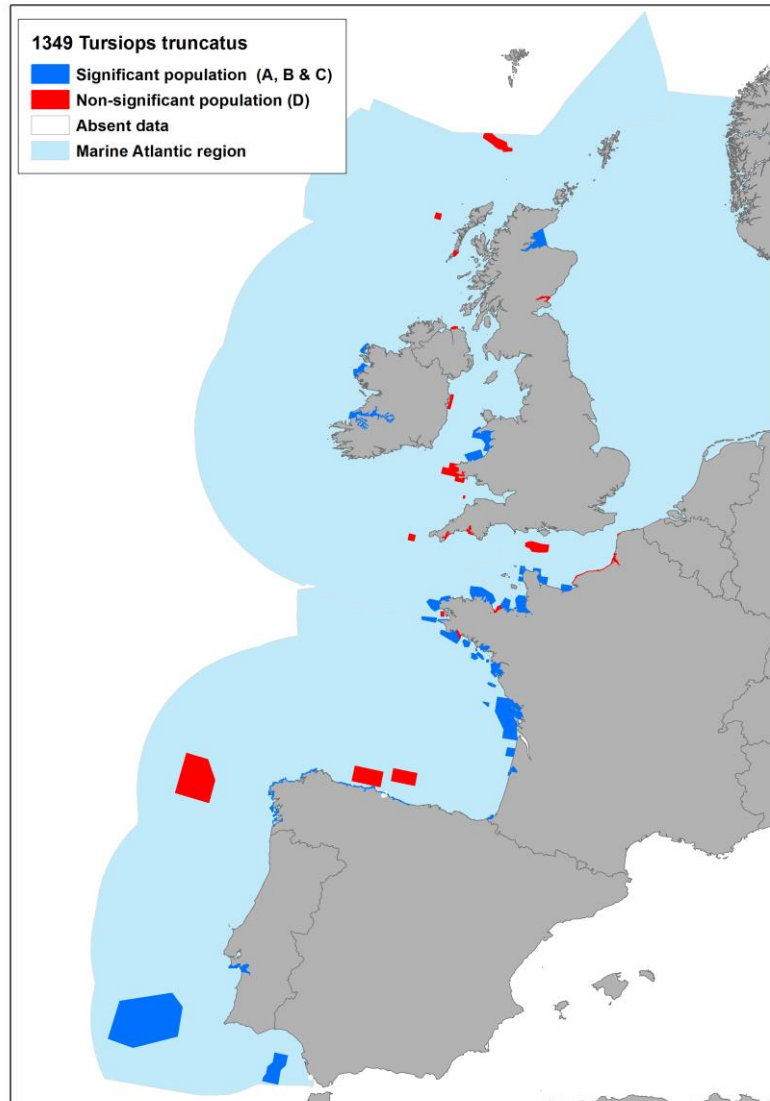
- New pSCIs submitted for public consultation in May 2016

Site Name	Code	Marine area (km ²)	<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

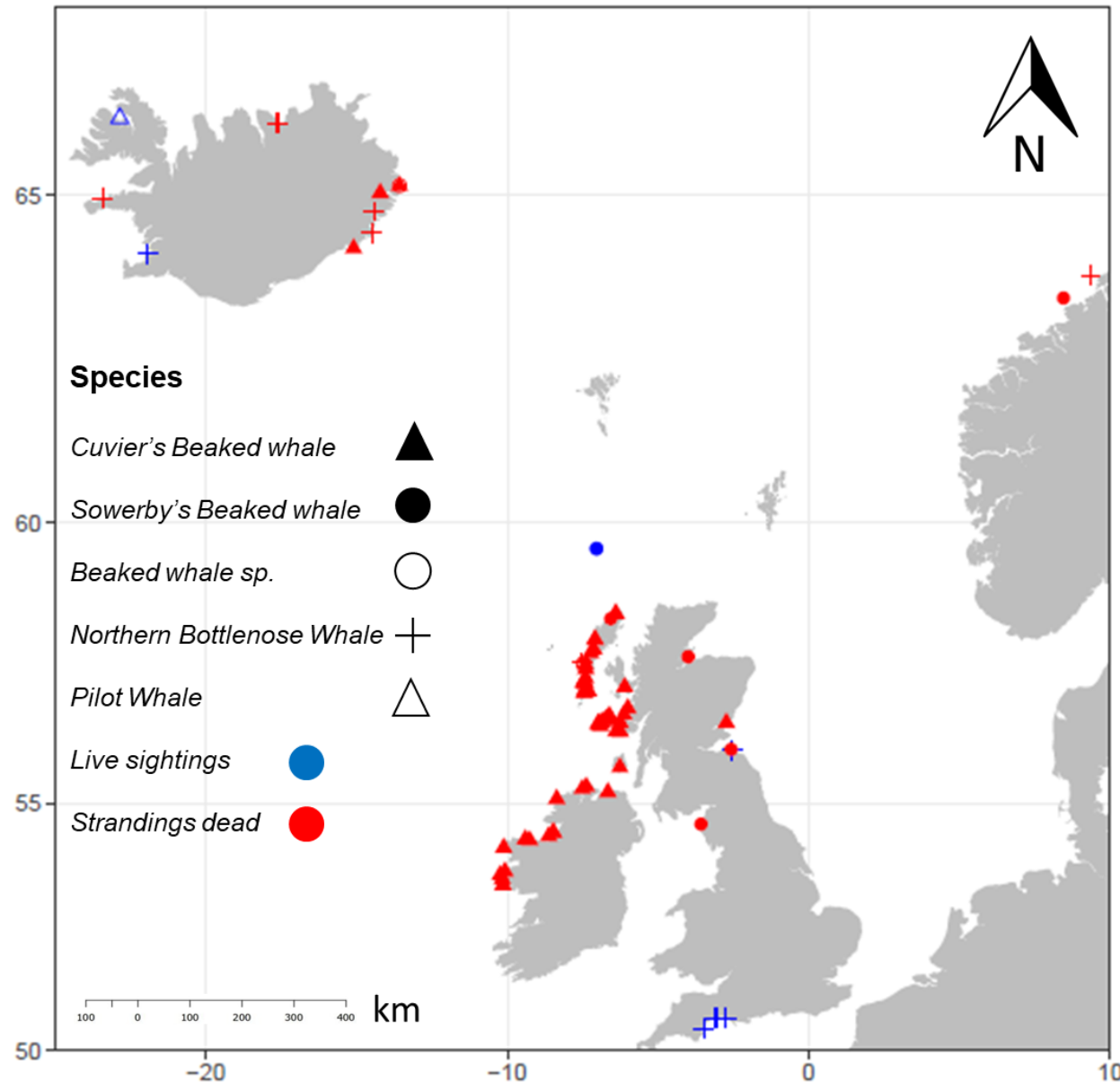
Natura 2000 Sites for Bottlenose Dolphin & Harbour Porpoise



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.