

Recent surveys in the English Channel, Bristol Channel & Celtic Seas

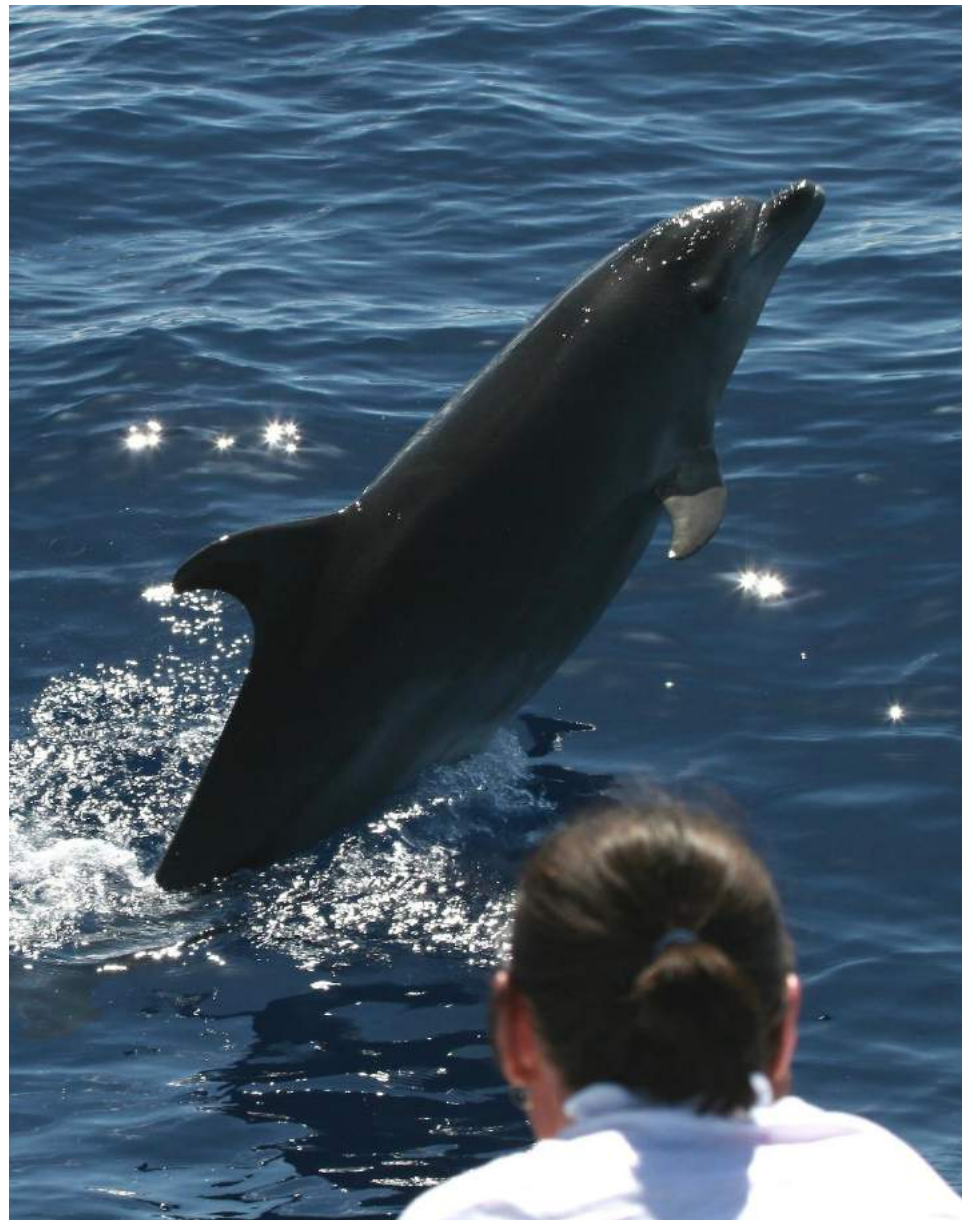




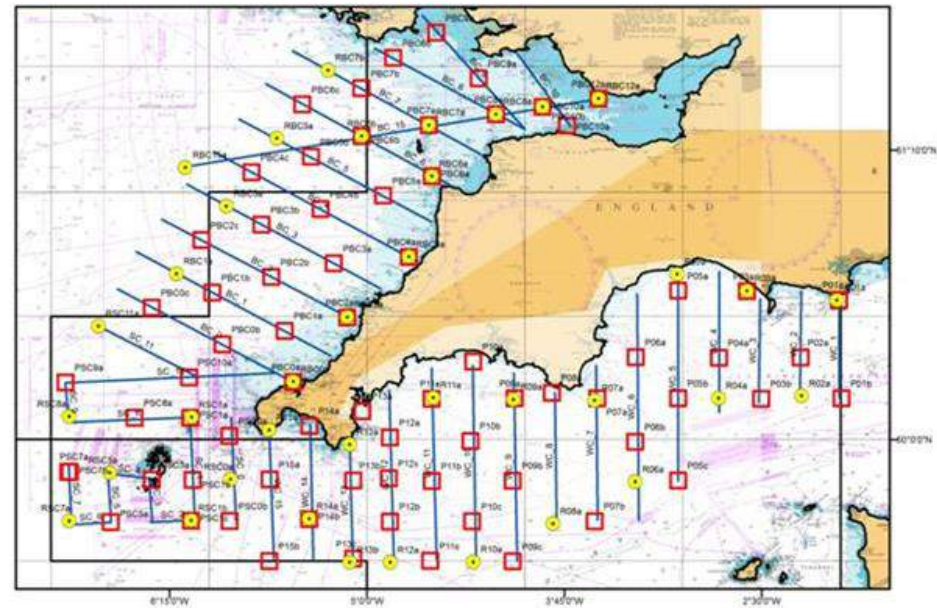
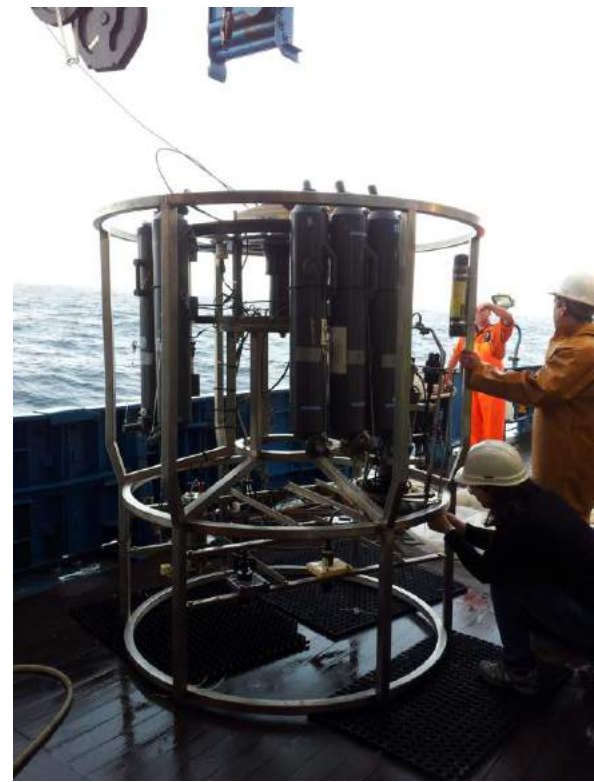
Recent activity



Recent activity

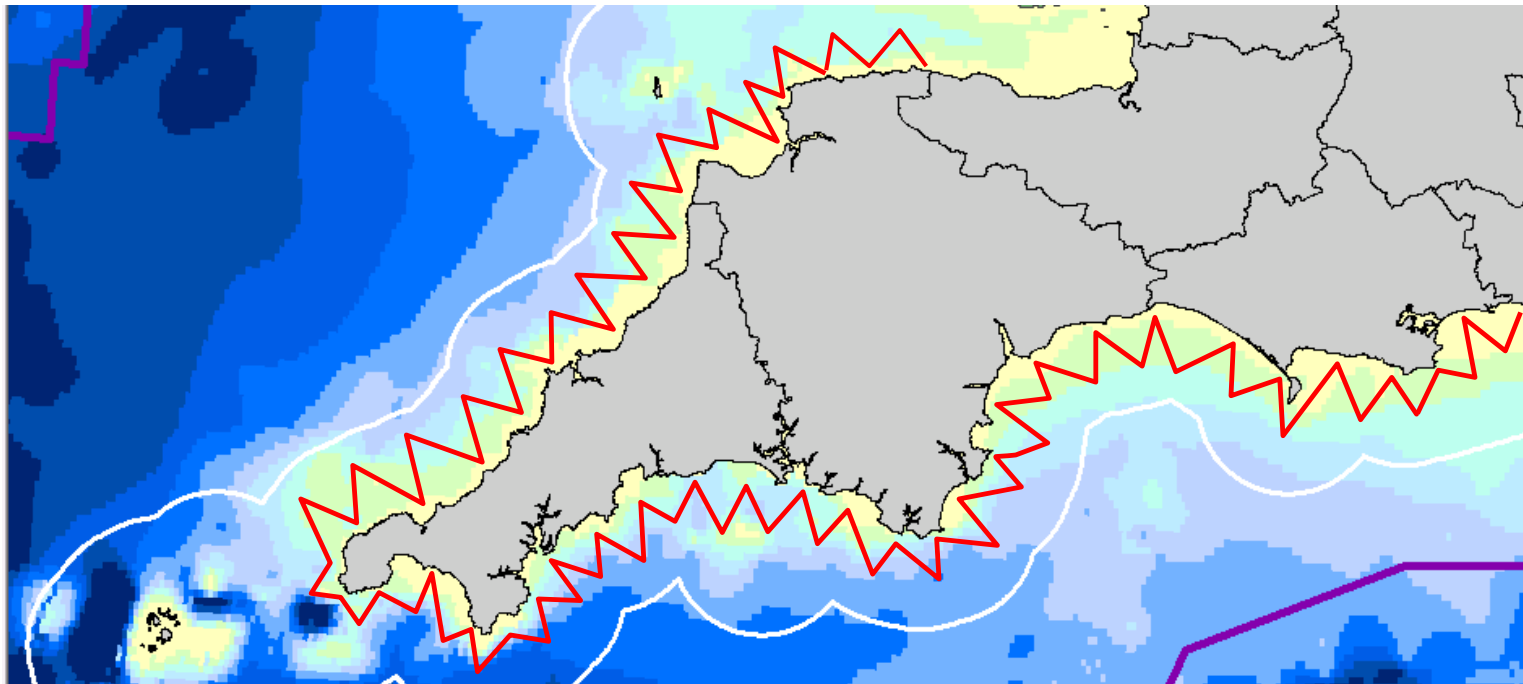


Recent activity



Recent activity – small boats

inshore survey August 2015

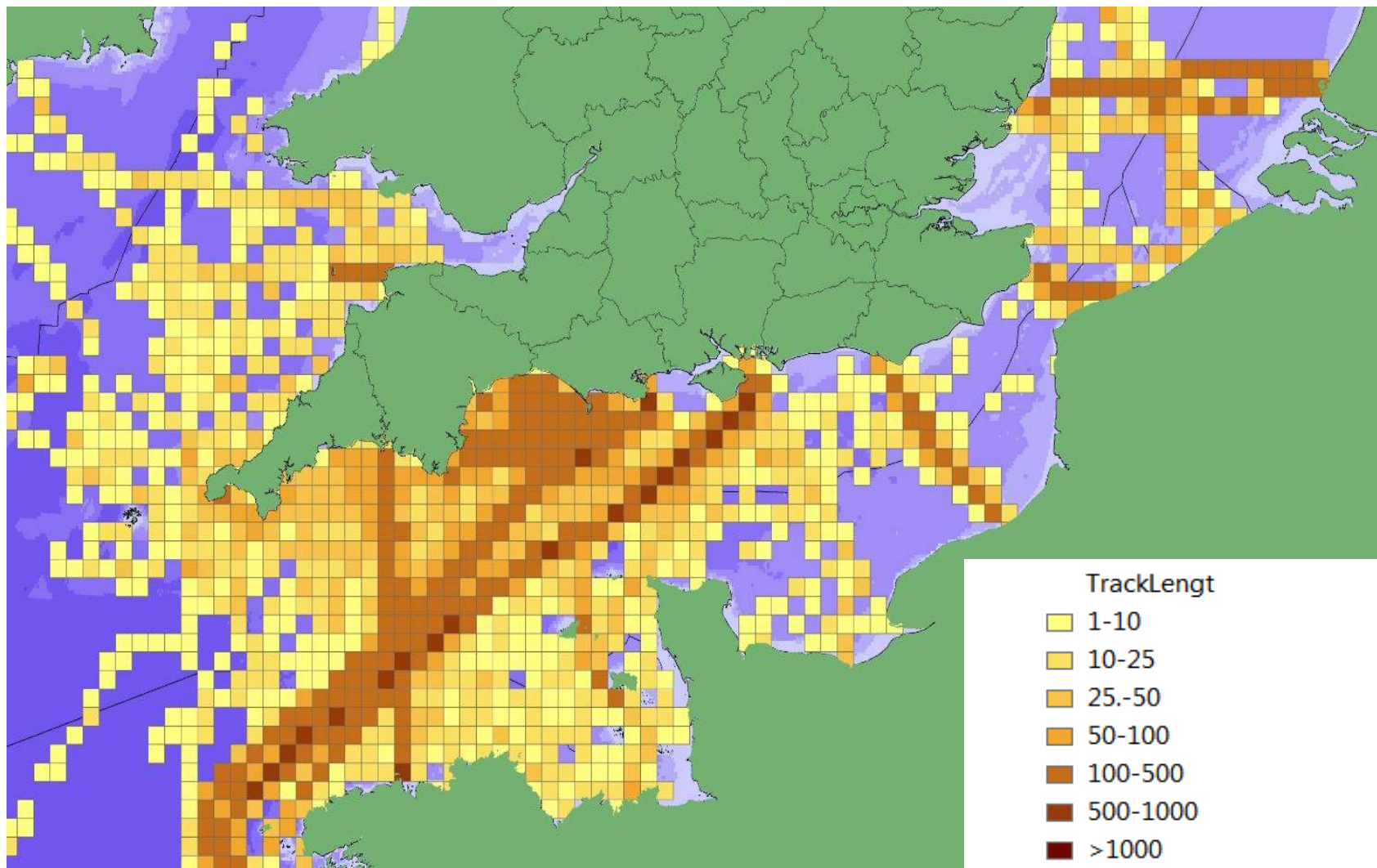


Survey methods



Summary of SW surveys 1995-2014

- 57,024km survey effort in the English Channel
- >80% survey effort since 2006
- 674 of 932 (72%) of English Channel 10X10km grid cells sampled



Results on selected Priority Species

1. White-beaked Dolphin



2. Bottlenose Dolphin

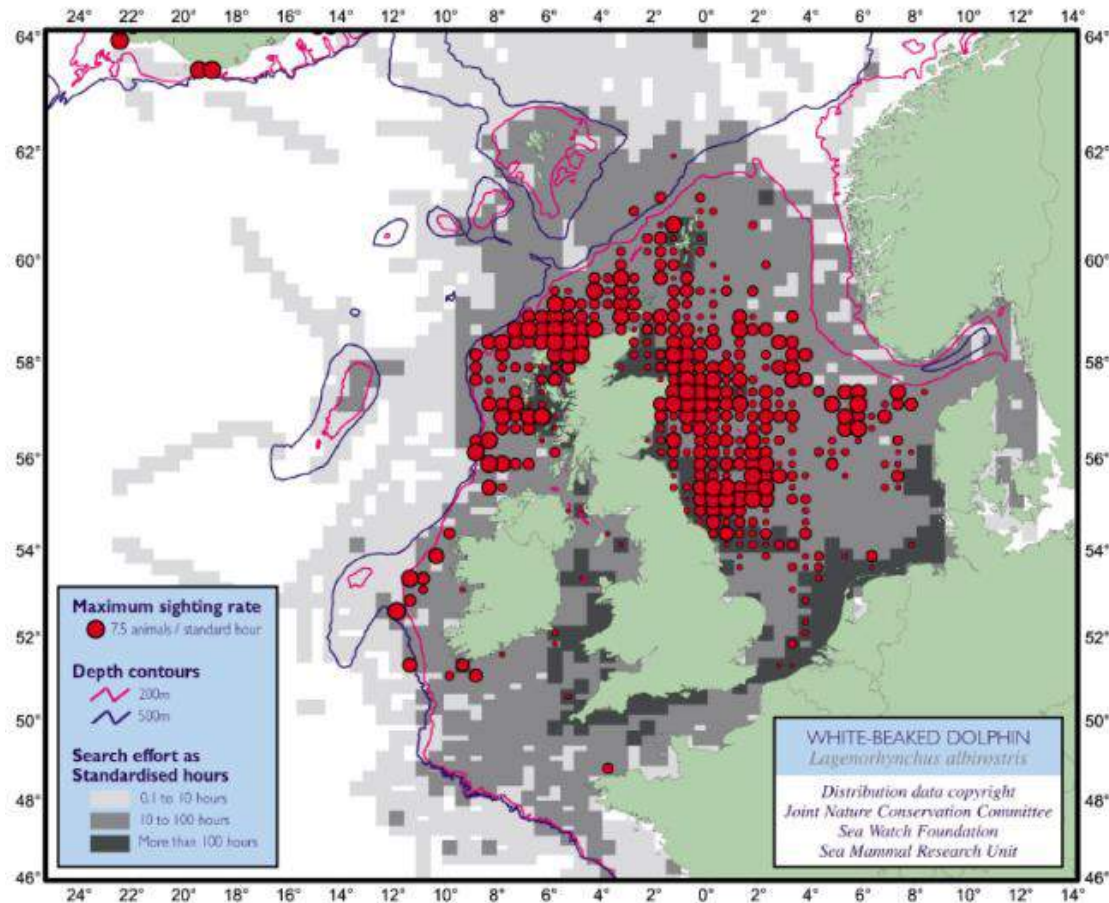


3. Balearic Shearwater



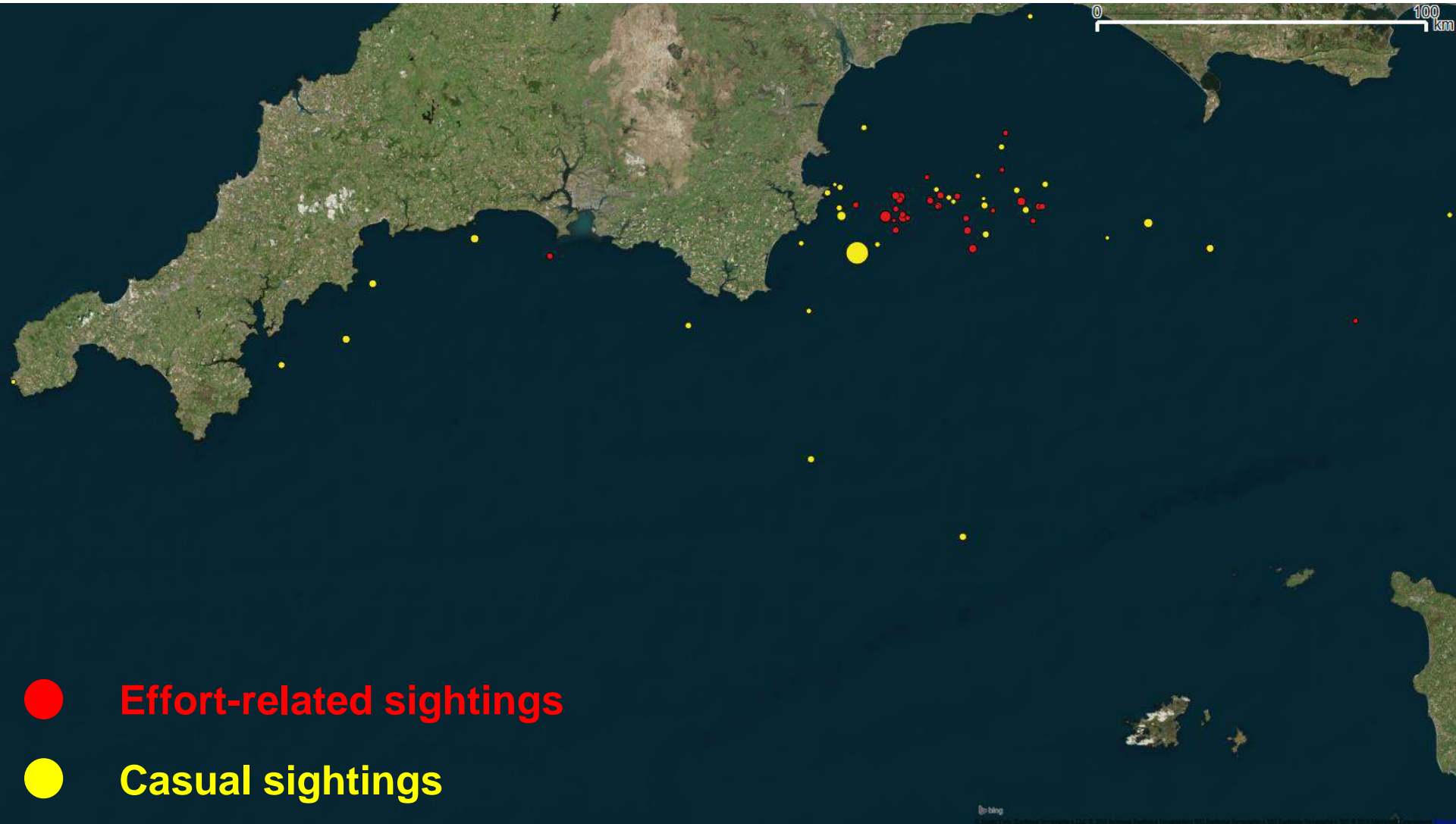
White-beaked Dolphin

'Historical' distribution 1979-2002



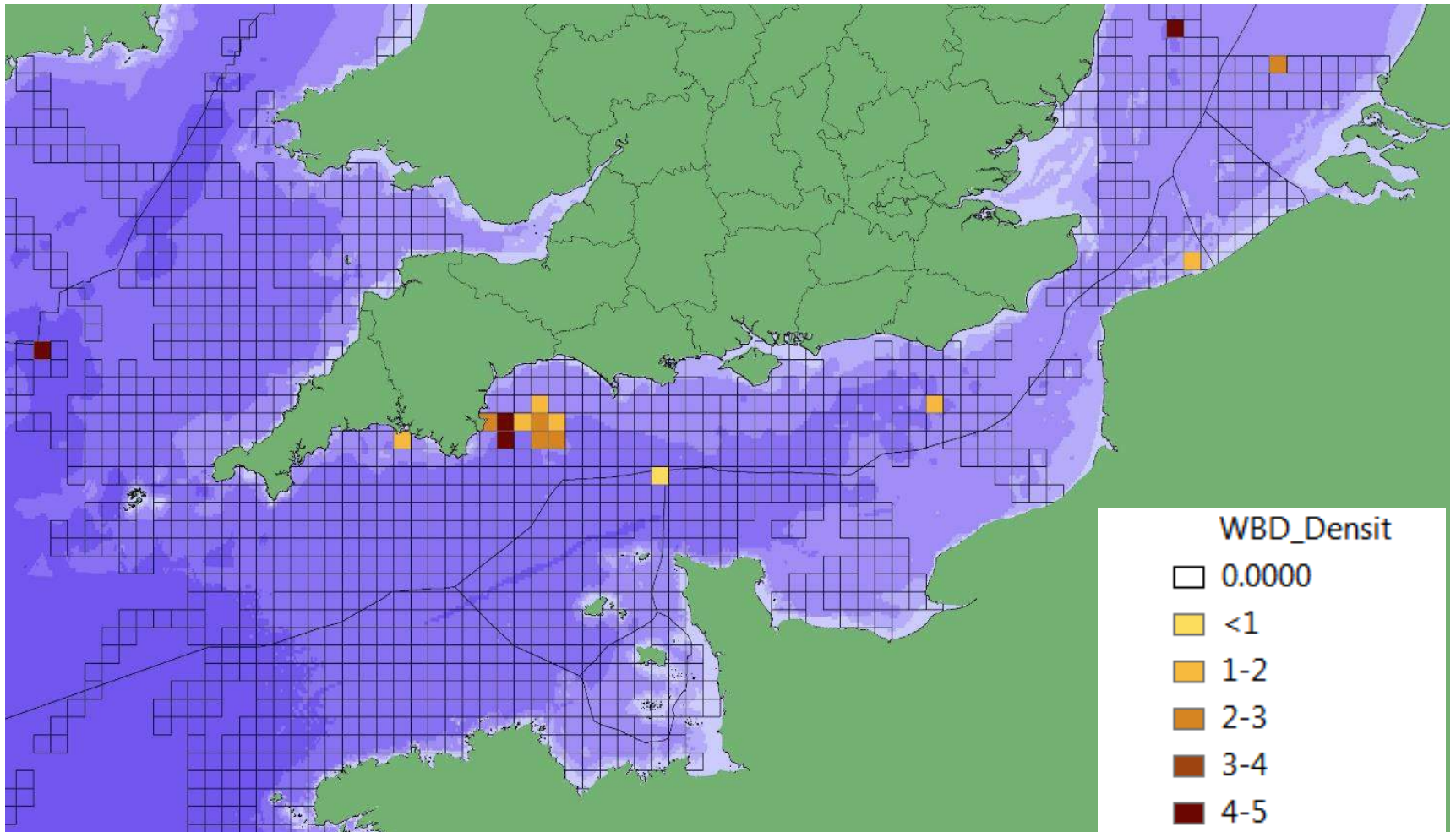
White-beaked Dolphin

Current distribution 2007-2015



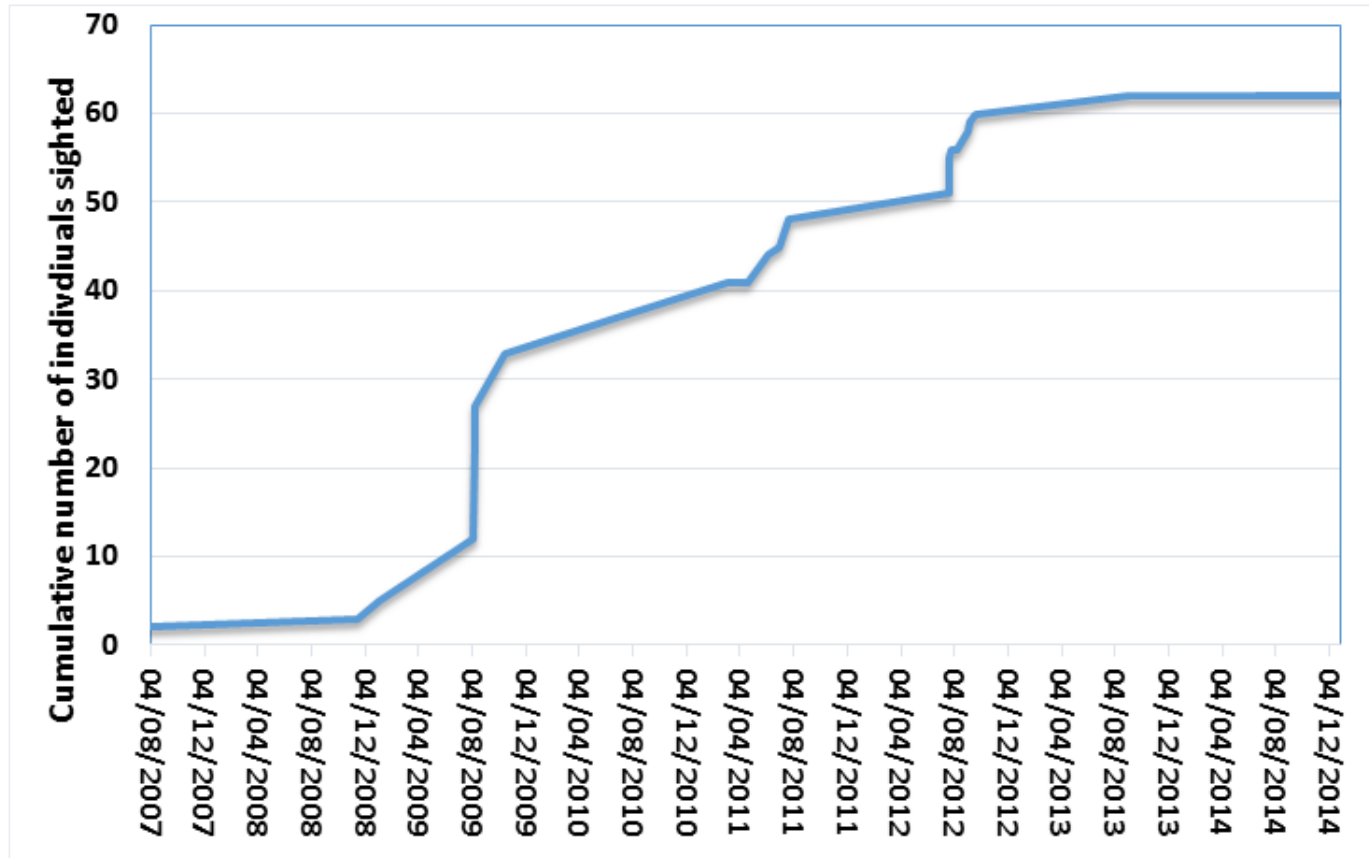
White-beaked Dolphin

Relative density 2007-2015



White-beaked Dolphin photo-id results

- 142 'captures' of 62 identifiable animals
- 50% re-sighted

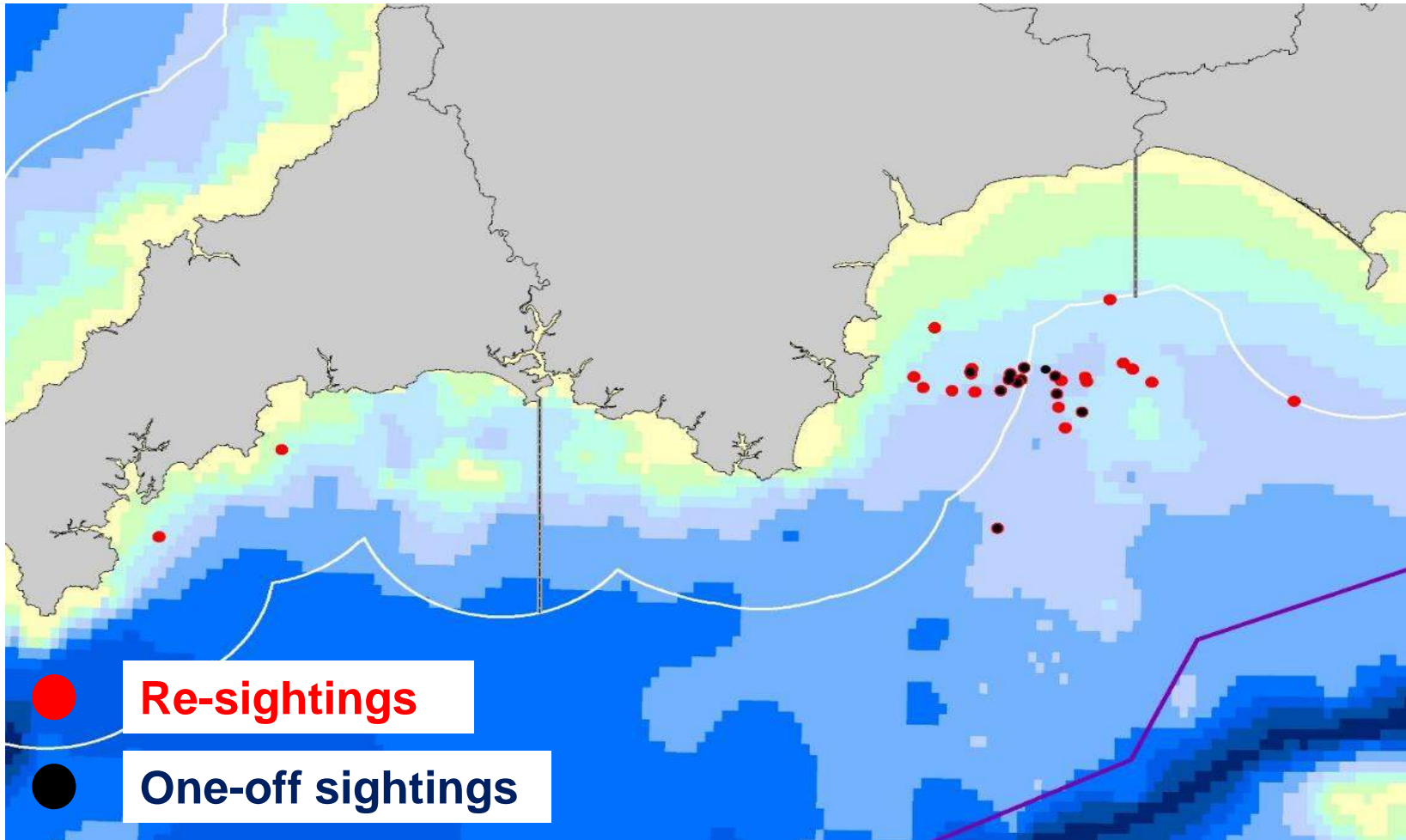


- Population estimates (1) 80 (2) 131 [CL 99-211]
- ~1% of English Channel & North Sea total

White-beaked Dolphin photo-id results

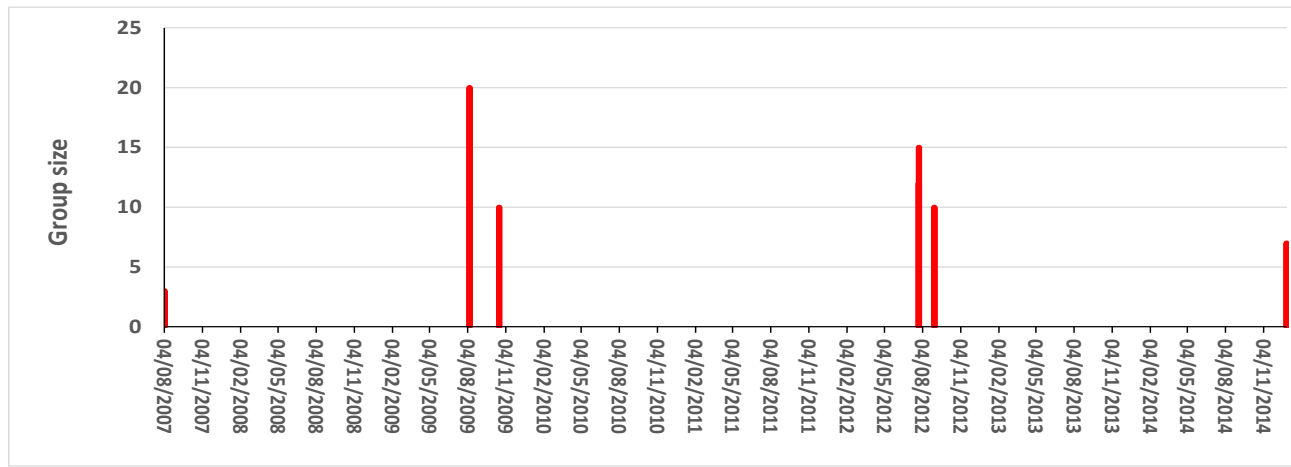
‘Closed population’ structure

High degree of site fidelity to Lyme Bay

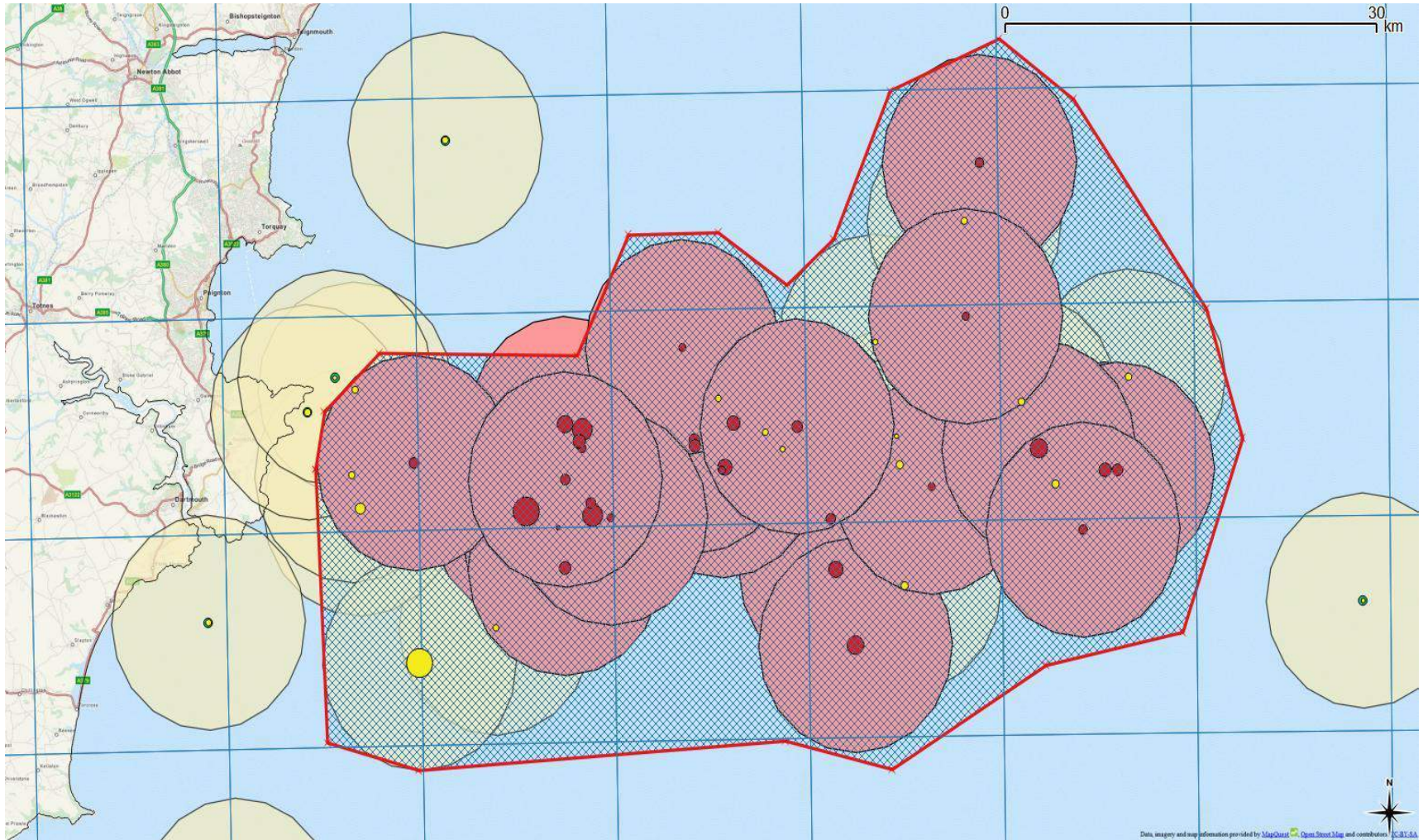


White-beaked Dolphin photo-id results

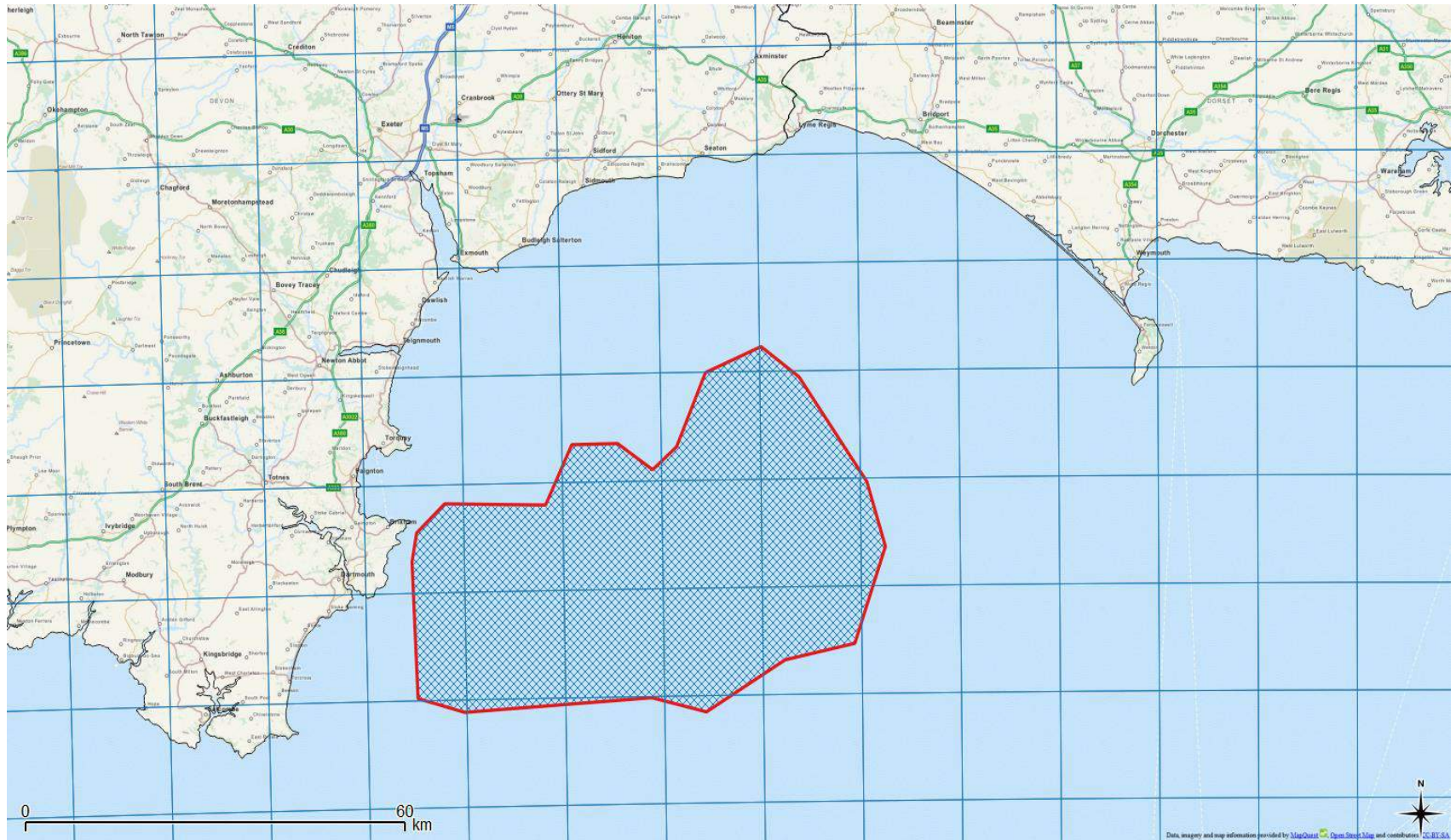
Population very well-mixed



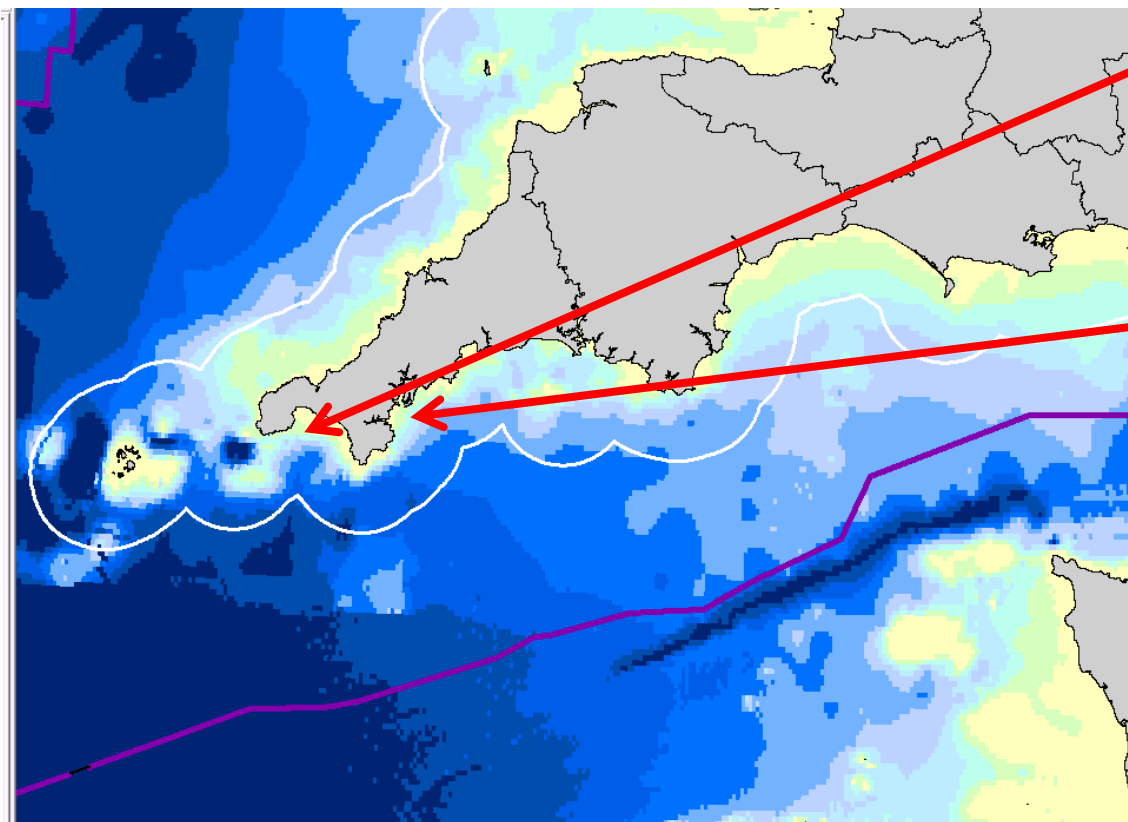
White-beaked Dolphin proposed MCZ



White-beaked Dolphin Candidate MCZ – 1000km² in western Lyme Bay



Bottlenose Dolphin photo-id results



n=309 (63%)



n=48 (10%)



n= 41 (8%)



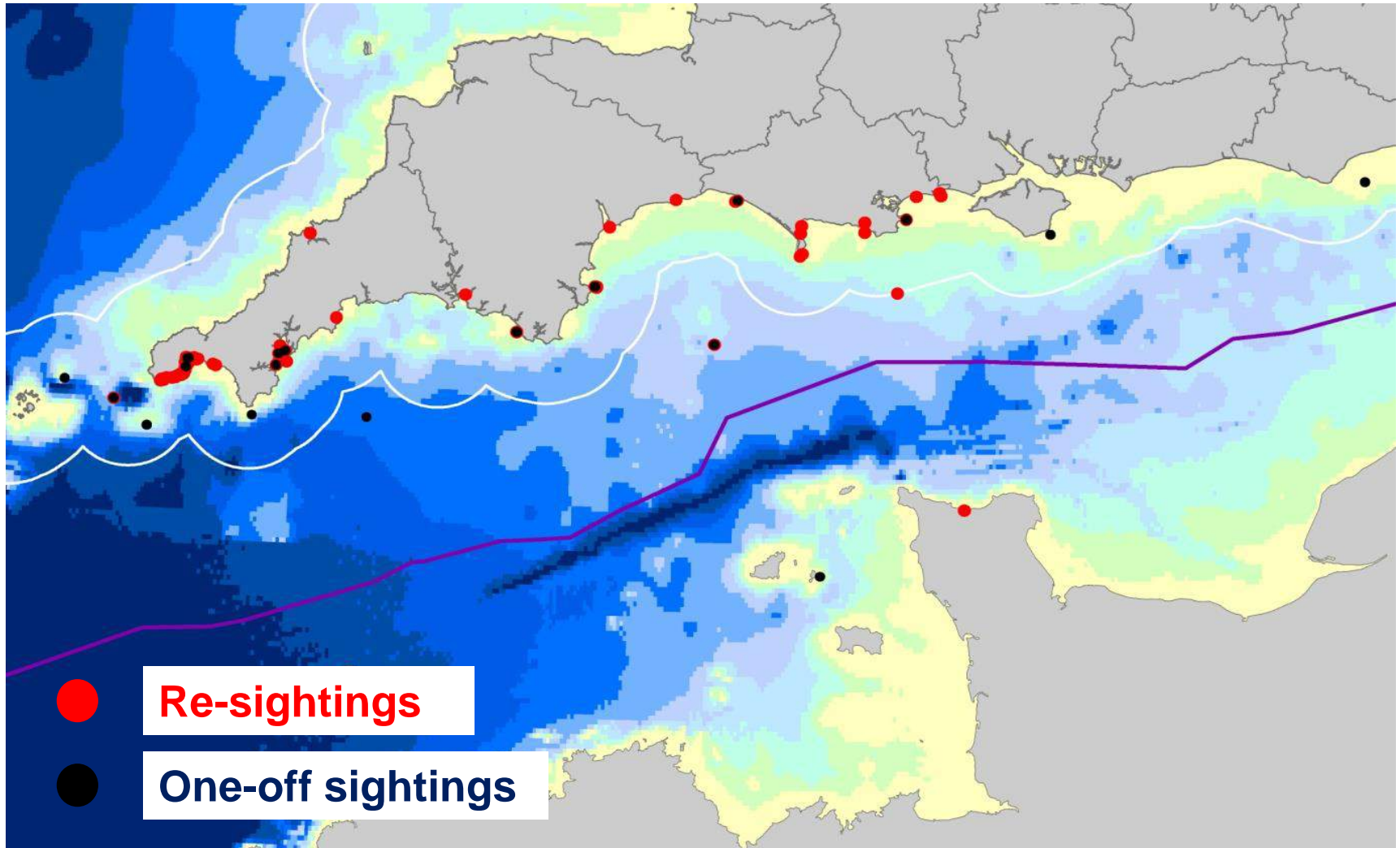
n= 87 (19%)



485 photographic sightings of 117 individuals, with 26% of animals (n=32) being re-sighted

Bottlenose Dolphin photo-id results

Coastal areas - 'Open population' structure, well mixed



Bottlenose Dolphin photo-id results

Example

English Channel (UK waters) Bottlenose Dolphin Photo-id Catalogue

Name: HH_BND_040/MD_BND_11/ AK9_Pilot/ BT_BND_023

No. sightings: 25

Period: 5/2008

No. associated animals: 32



Notes: Also labelled as a different individual LB_BND20

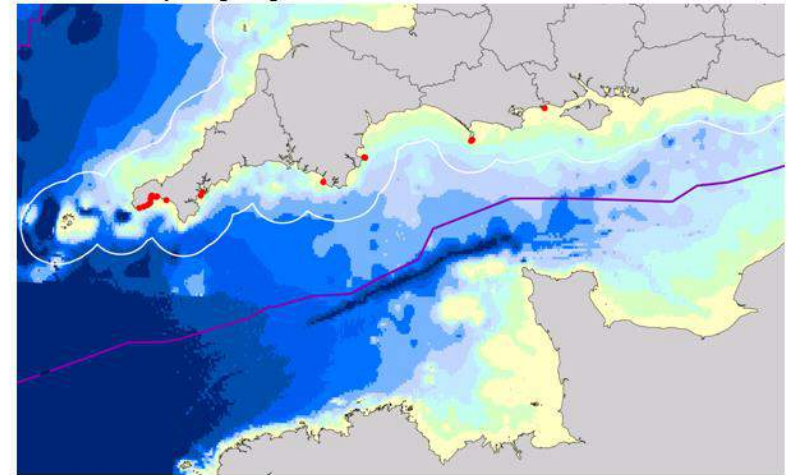
English Channel (UK waters) Bottlenose Dolphin Photo-id Catalogue

Seasonal and yearly distribution of sightings:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												

Cornwall Devon Dorset Hants Sussex Offshore UK Channel Islands France

Distribution map of sightings

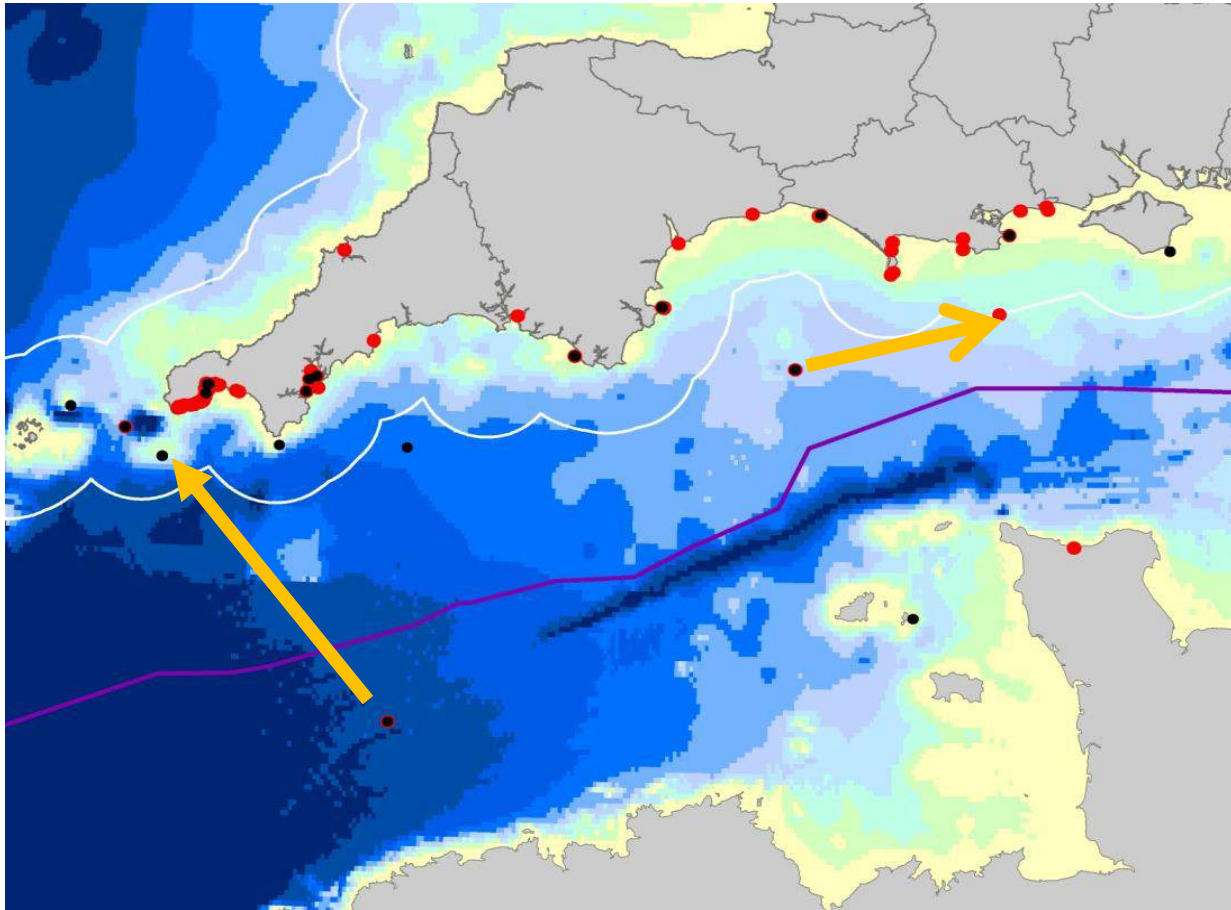


Bottlenose Dolphin photo-id results

Some offshore-offshore movements detected

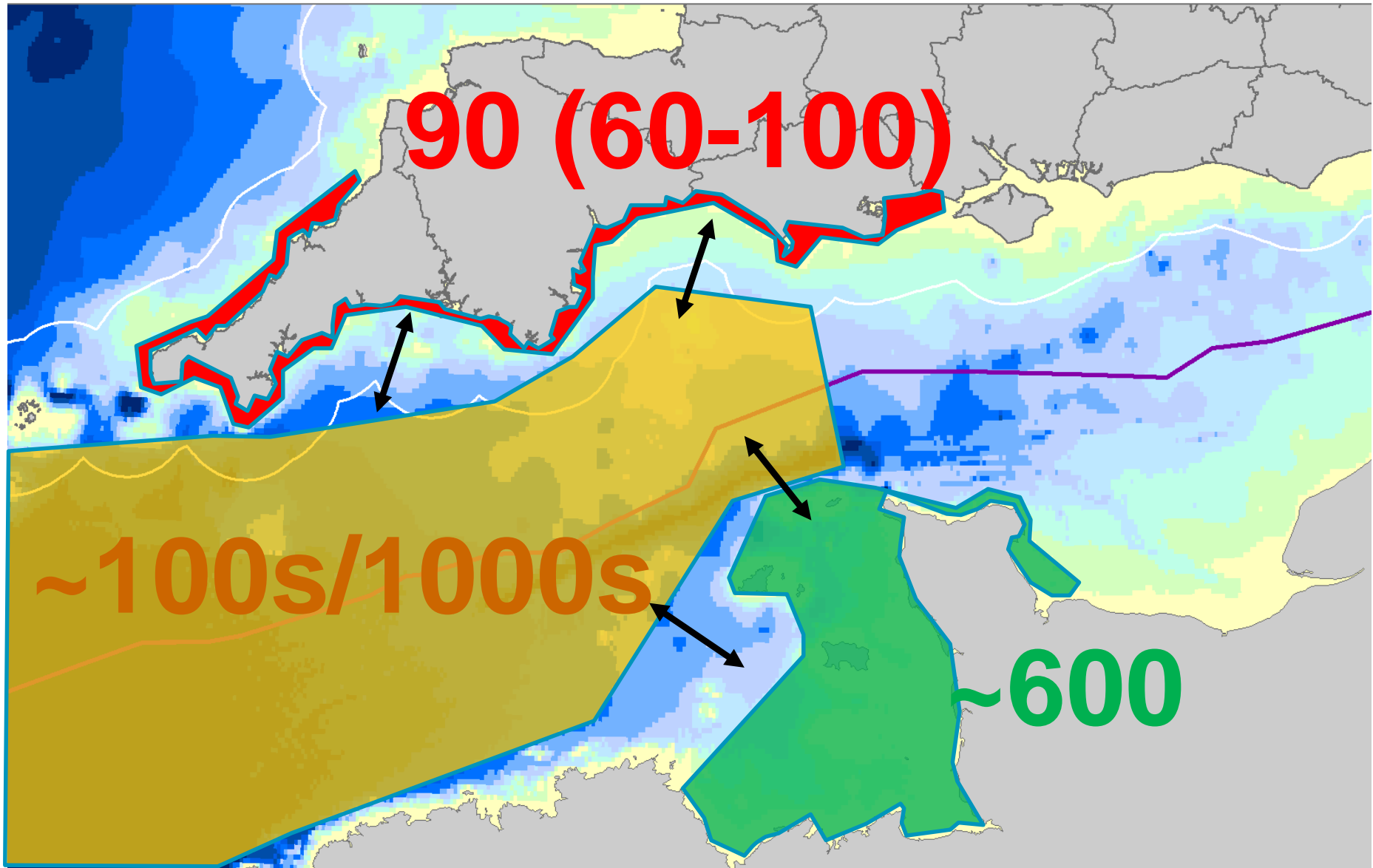
No inshore-offshore movements detected

No matches with Irish, Welsh, Scottish, French catalogues



Bottlenose Dolphin photo-id results

Summary population size & structure



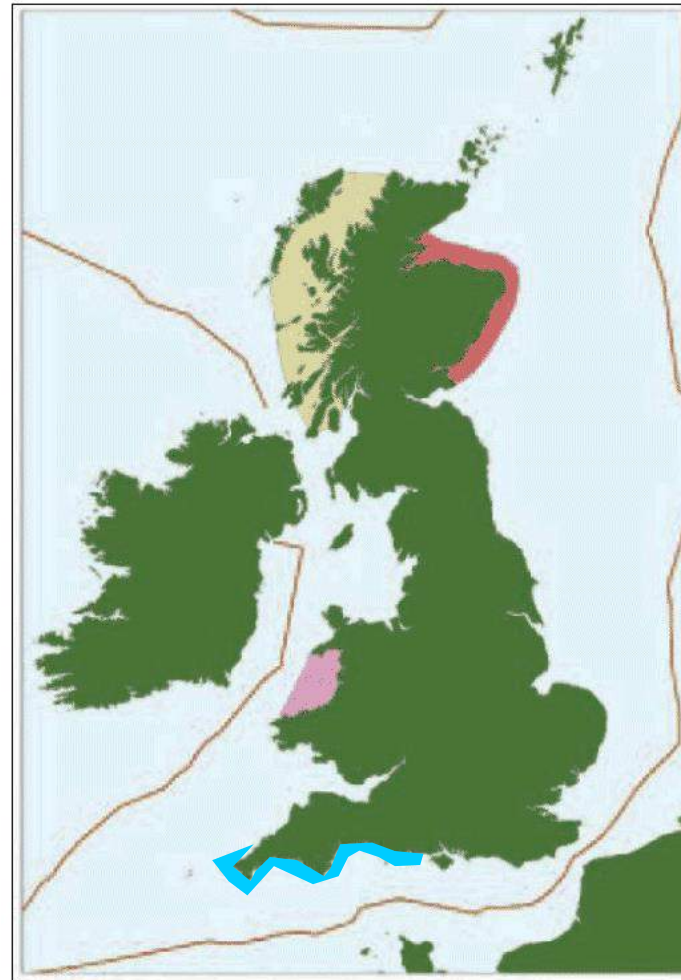
Bottlenose Dolphin Conclusions

More abundant and wide-ranging
in coastal areas
than previously thought

Discrete population inshore SW
England waters may be nationally
important

Candidate SAC?

Further research needed

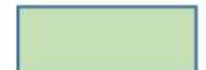


Estimated
number of
animals using
area:

Thompson
et al. 2009



193 (162-245)



45 (32-71)

Pesante
et al. 2008



154-248



60-100

Balearic Shearwaters: CEFAS Peltic Cruise



Balearic Shearwaters CEFAS Peltic Cruise

Sightings 2013-15 SW England waters

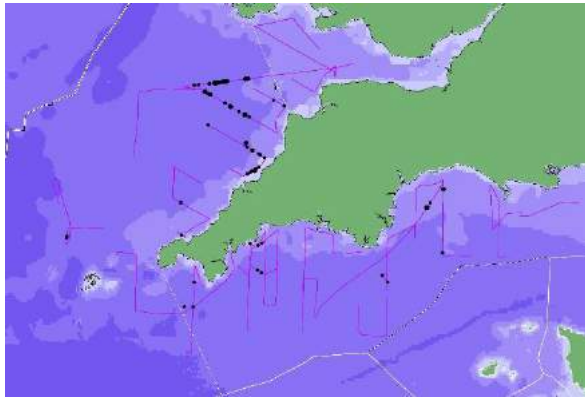
	2013	2014	2015
Transect length (km)	2092 (+278*)	3058	2447
No 10km squares sampled	201 (+31*)	313	289
No. survey days	16 (+2*)	20	18
Mean sea state	5.01	3.78	3.08
Modal wind direction (% of effort)	SW (33)	SW (30)	NE (30)
Total no. sightings	58	79	42
Total no. birds counted on transect	81	199	102
Modal count (% sightings singletons)	1 (72)	1 (59)	1 (68)
Max. count	5	49	22
No birds/km effort	0.041	0.066	0.042

Population estimate Oct 2015

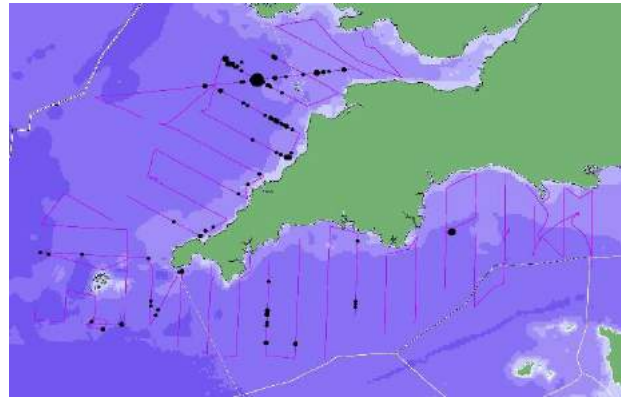
~800 birds across 53,000km² **(3-4% World's Population)**

Balearic Shearwaters CEFAS Peltic Cruise

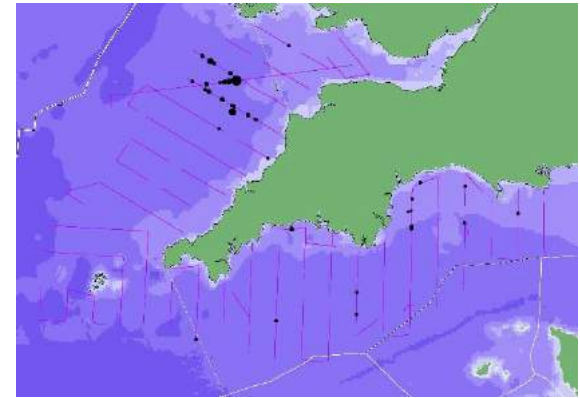
Mapped counts



2013

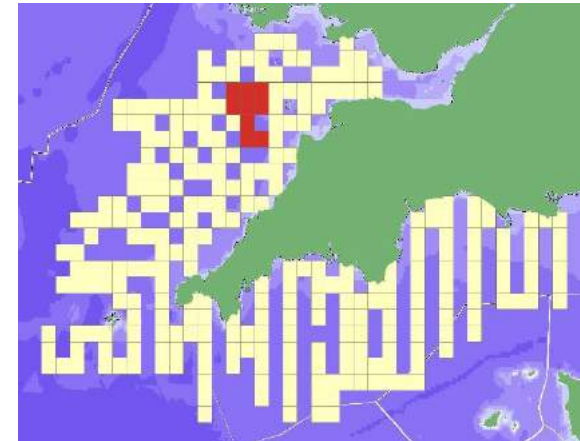
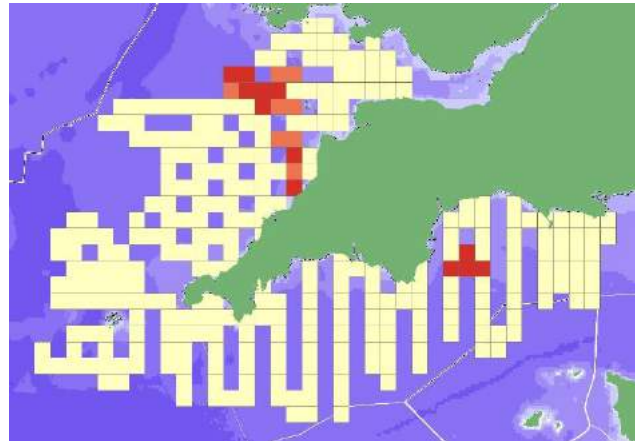
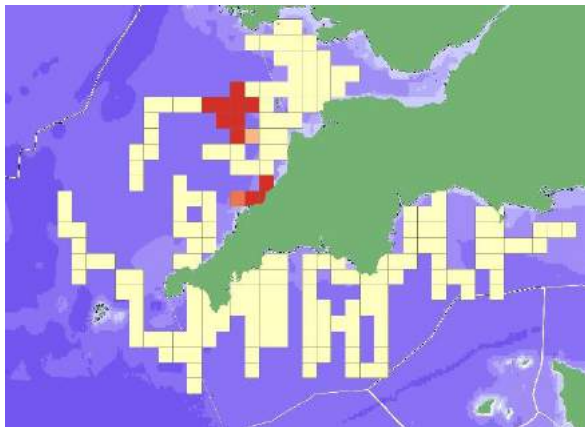


2014



2015

Hotspot analysis - west of Lundy as a Candidate SPA?



Acknowledgements

Marinelife: staff & volunteer observers

Collaborators: Jeroen van der Kooij (CEFAS), Duncan Jones (Marine Discovery), Keith Leeves (AK Wildlife Tours), Alex Banks (Natural England), Becca Walker, Trudy Russel, Fiona McNie (Natural England)

Funding bodies: Natural England, Wildlife Trusts, RSPB.

Sponsors: Ferry companies, CEFAS

