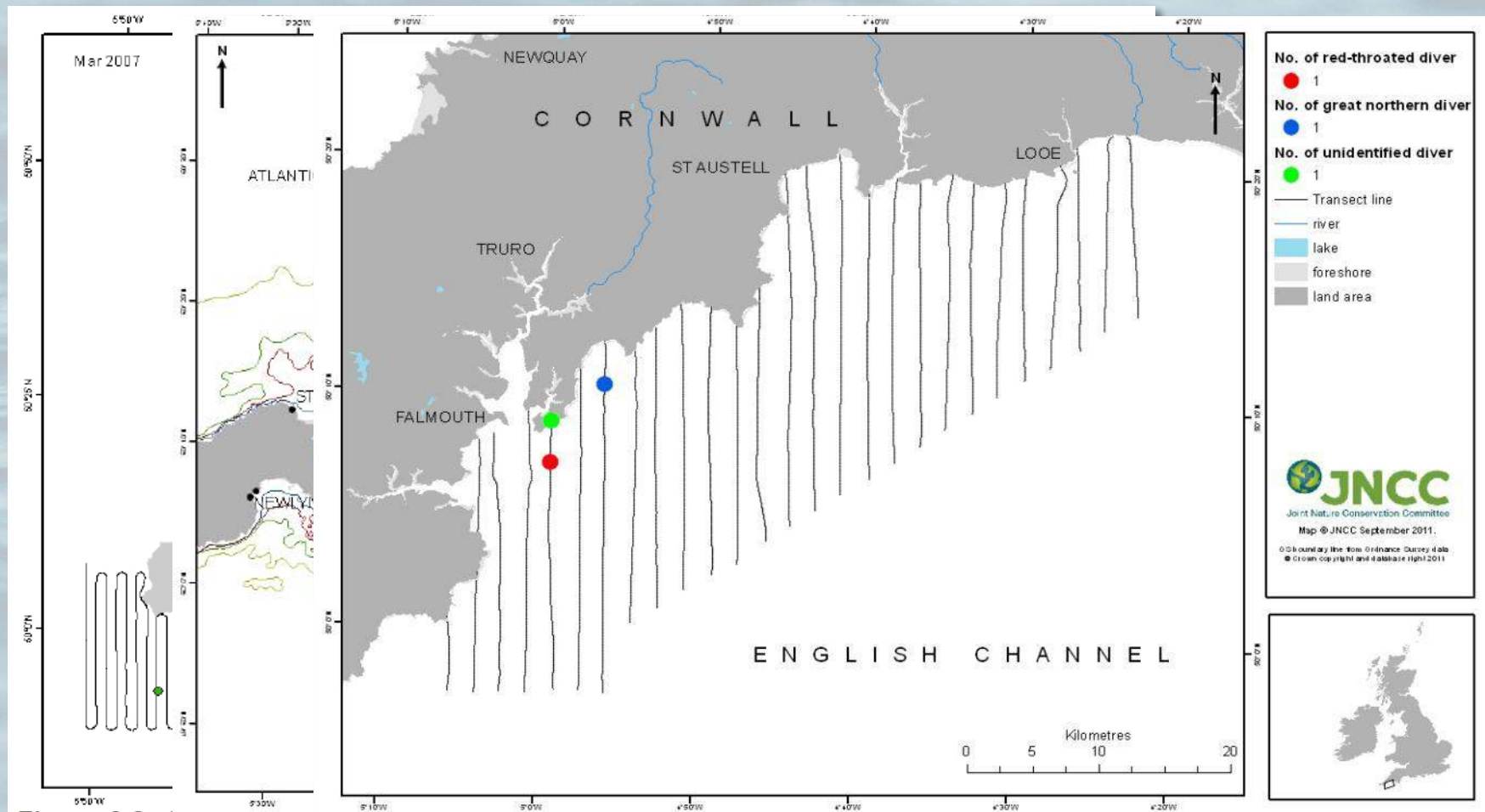


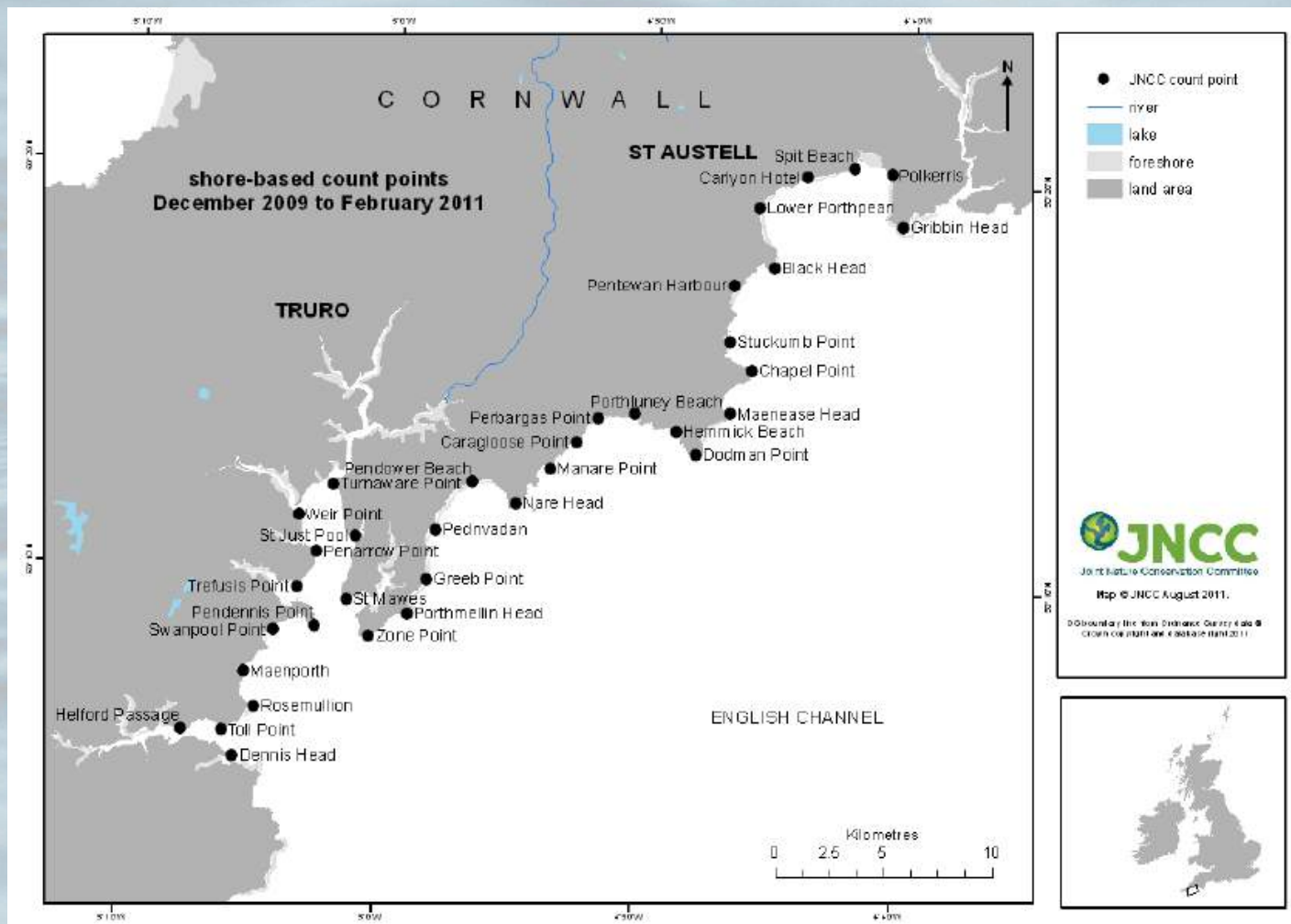
Falmouth Bay to St Austell Bay potential Special Protection Area (pSPA) Biodiversity Atlas

**Richard Cook, Brendan Godley, Stephen Pikesley,
Stephen Votier & Matthew Witt**

Falmouth Bay to St Austell Bay pSPA



Falmouth Bay to St Austell Bay pSPA



Falmouth Bay to St Austell Bay pSPA



- Site regularly supports more than 1% of the Great Britain wintering population estimate of three Annex I species: black-throated diver, *Gavia arctica*; great northern diver, *G. immer*; and Slavonian grebe, *Podiceps auritus*.
- The site qualifies for SPA classification in accordance with the UK SPA selection guidelines (stage 1.1)



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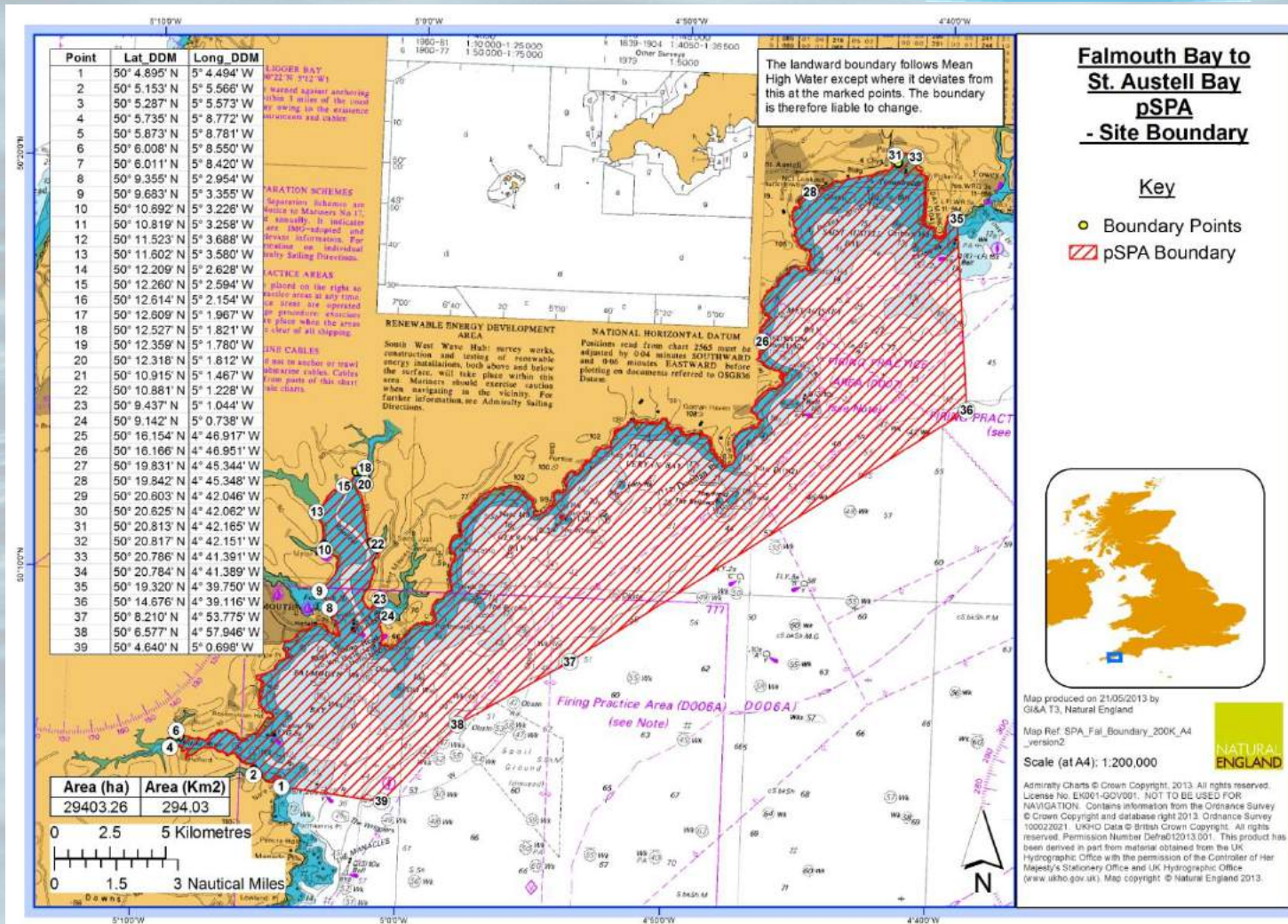


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Boundary Recommendation



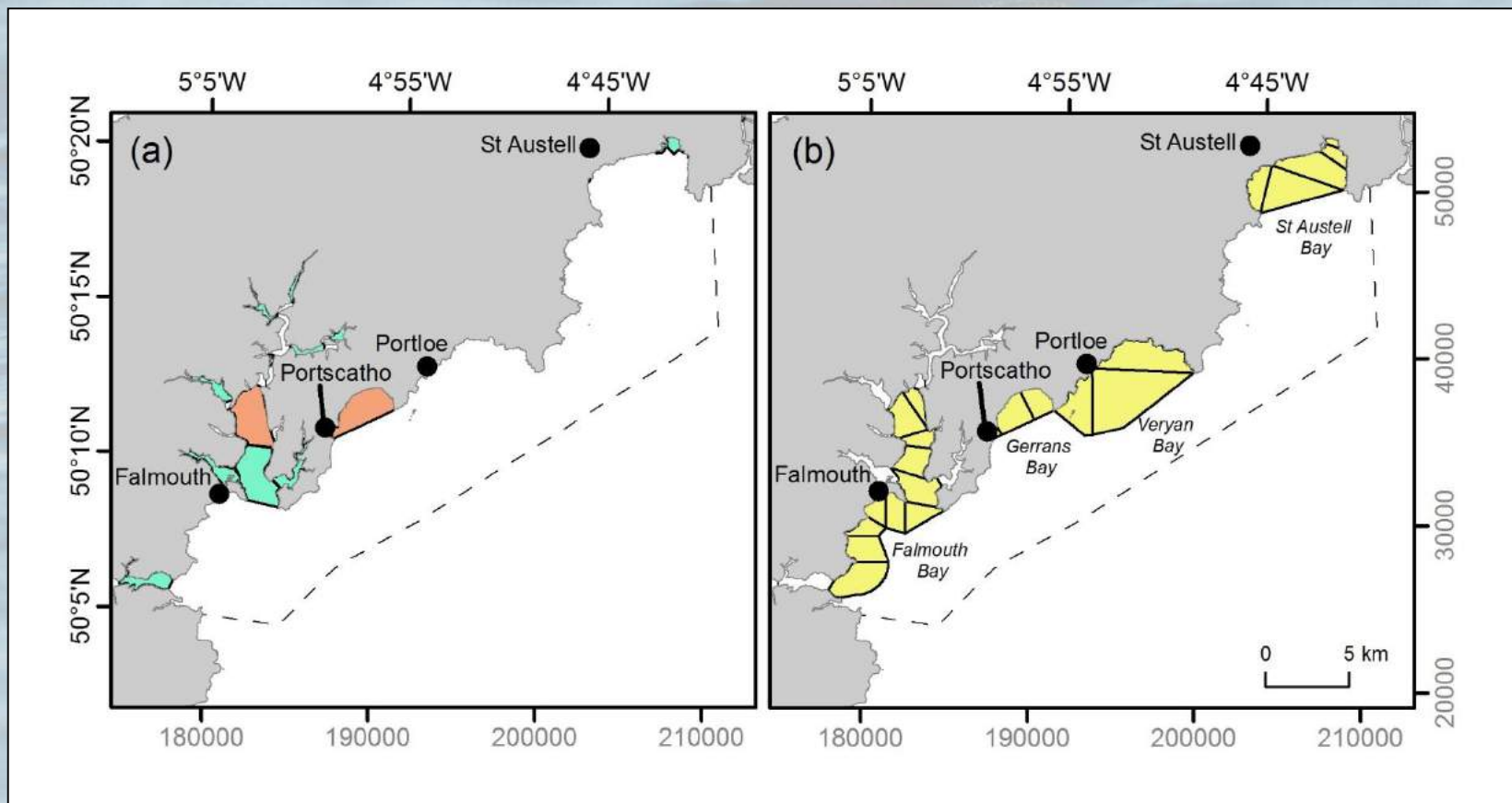
Summary of evidence/information



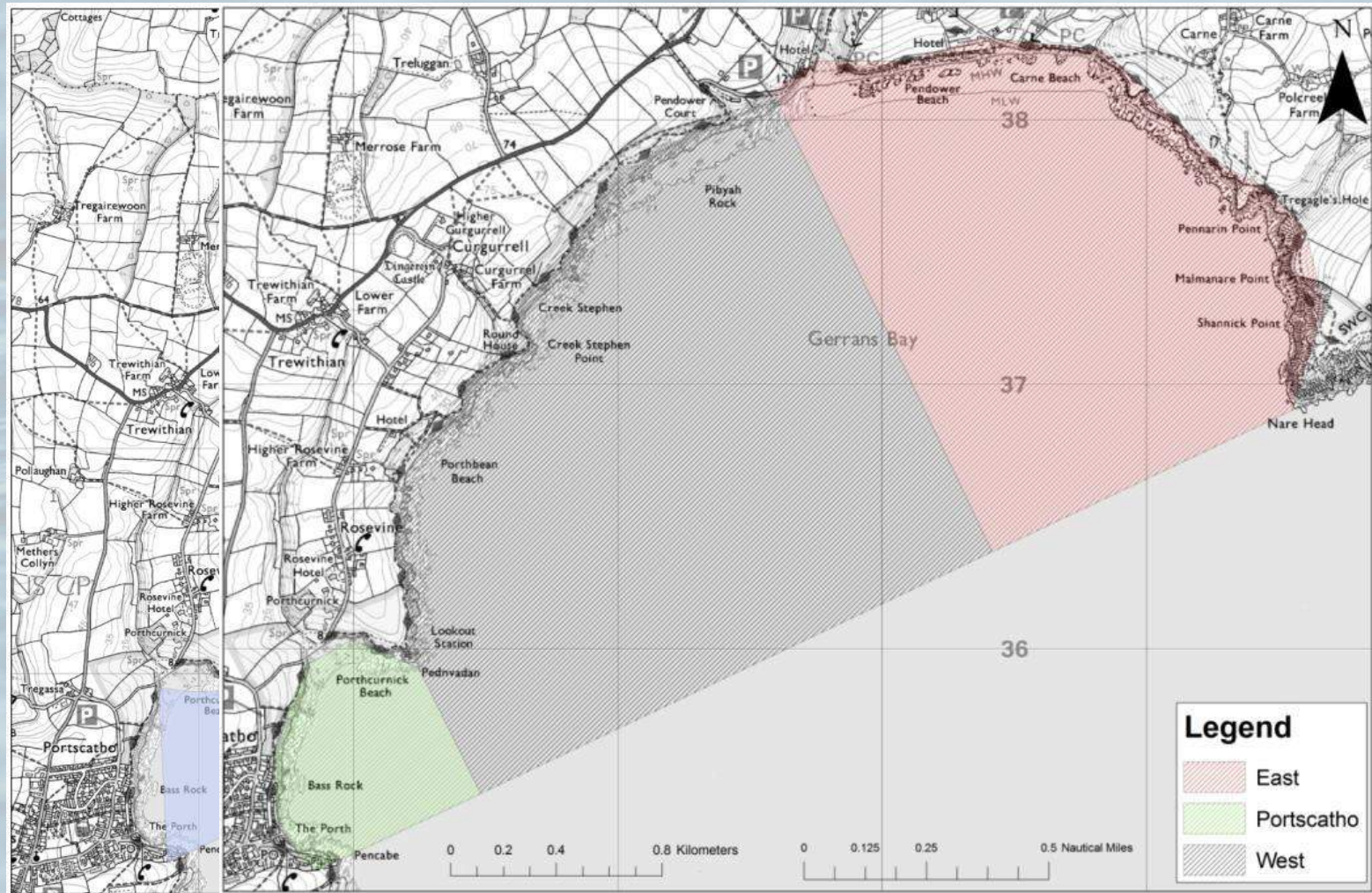
- **Historical datasets from 1970's (RSPB, WeBS etc)**
 - Coarse spatial/temporal distribution
- **JNCC/WWT aerial and shore-based surveys (2007, 2009 & 2011)**
 - Coarse spatial/temporal distribution
- **Footprint Ecology study (Jan - Mar 2014)**
 - Finer-scale spatial distribution, lacks temporal variation
 - Foraging behaviour, diet, activities and interactions
- **IFCA bird bycatch monitoring program (2014 – 2016)**
 - Assess impact of the fixed-net fishery & fisheries effort
- **WeBS volunteer network pilot project (2014 – 2016)**
 - Increase distribution resolution, behavioural observations & increase recording coverage across the site
- **Salient datasets**
 - AIS vessel data, bathymetry, tidal flow etc.

Importance of local knowledge

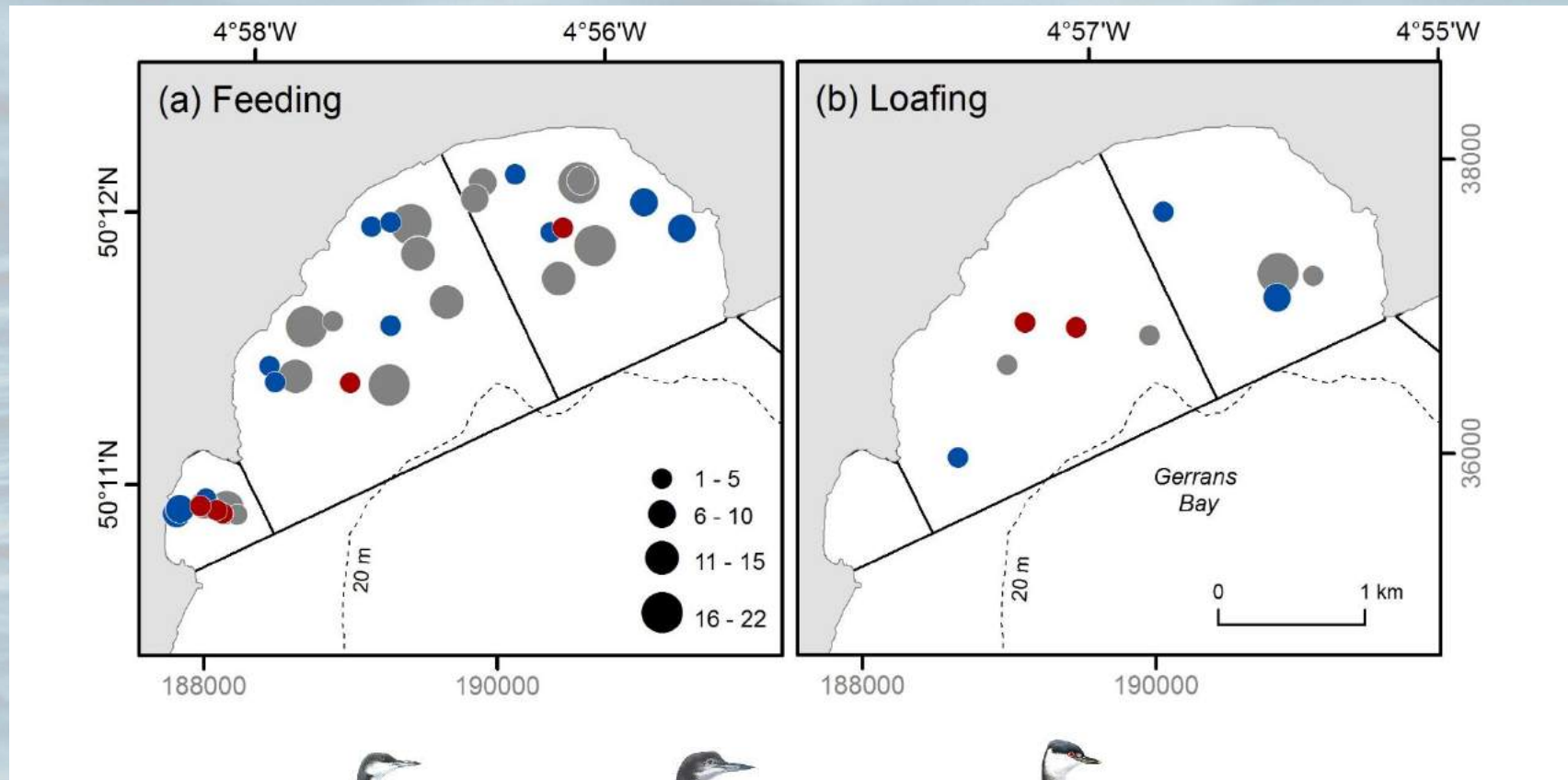
WeBS volunteer network pilot project (2014 – present)



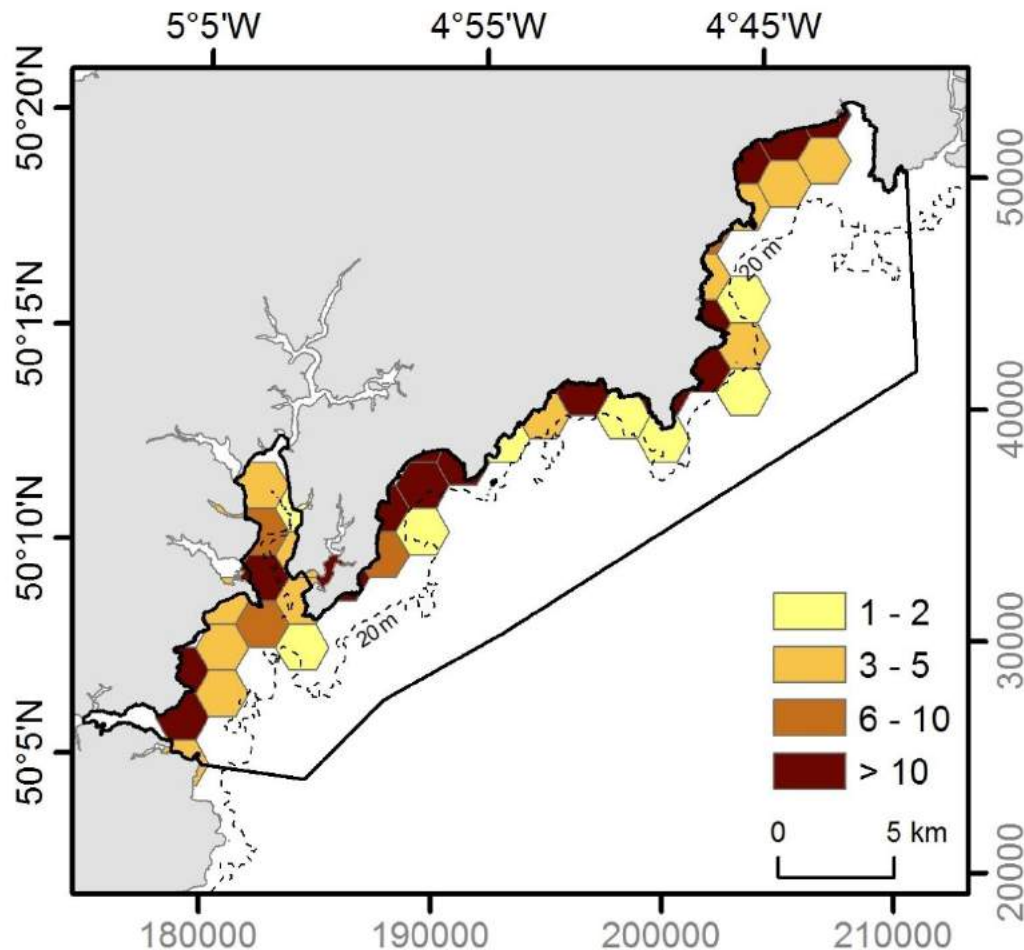
Importance of local knowledge



Importance of local knowledge



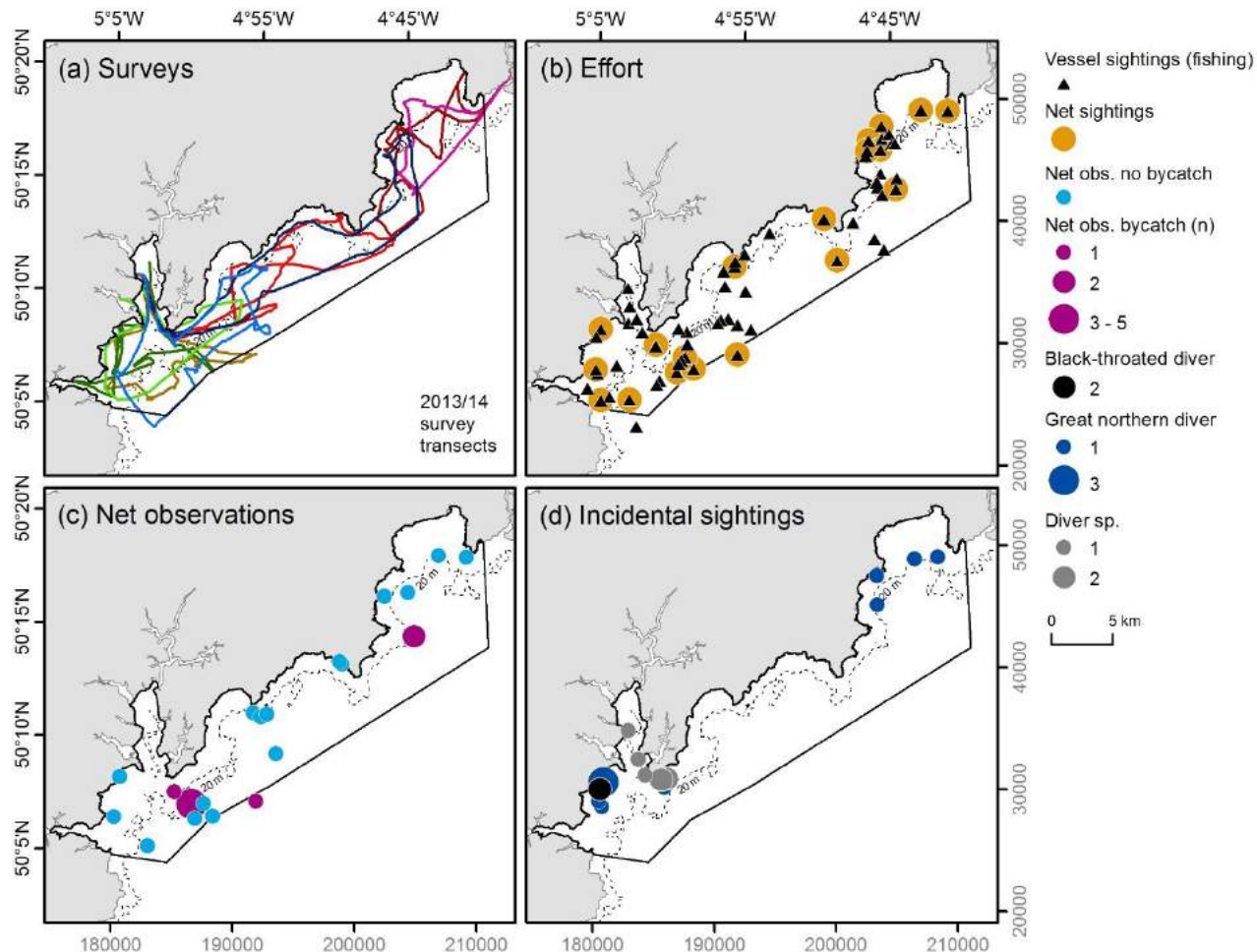
Biodiversity & Human Activity Atlas



Number of sighting events of single or multiples birds per km^{-2} ; summarised using 3.5 km^2 polygons.

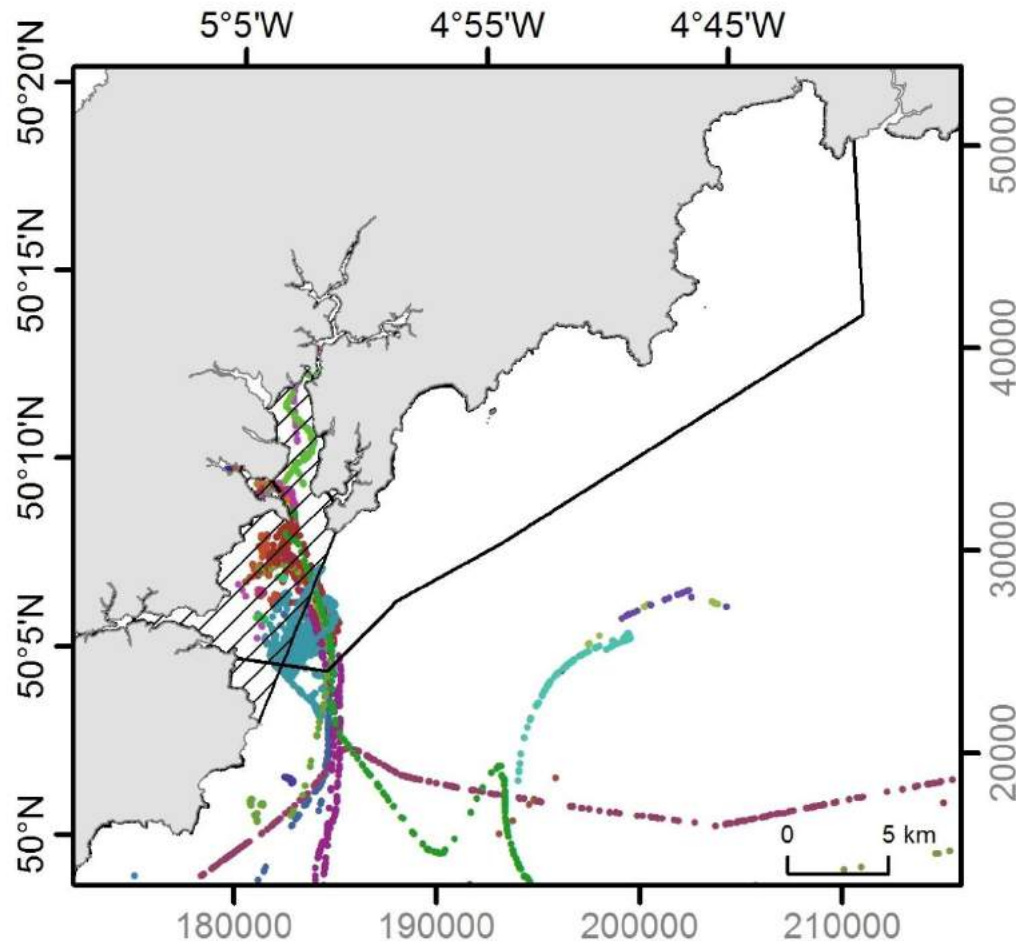
For diver and grebe species.

Biodiversity & Human Activity Atlas



CIFCA-NE funded boat surveys to investigate distribution of netting activity, smaller vessel distribution and bycatch.

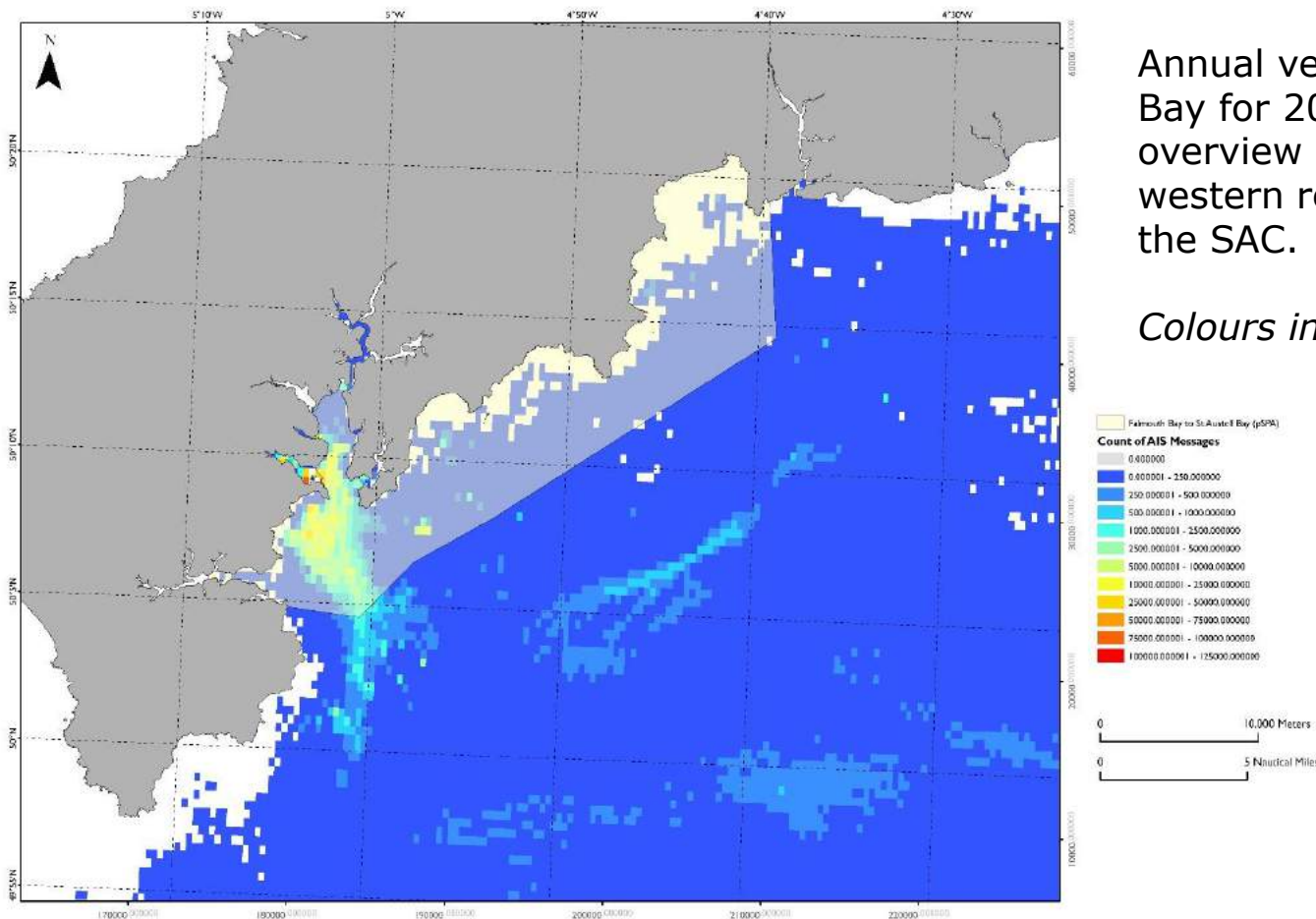
Biodiversity & Human Activity Atlas



Vessel traffic in Falmouth Bay for 18 hours (28th March 2016) from AIS. Provides an overview of human activity in the western region of the pSPA and in the SAC.

Colours indicate differing vessels.

Biodiversity & Human Activity Atlas



Conclusions & Future Work



- Develop a centralized database of information to inform long term condition monitoring
- Toolkit approach to inform site managers when considering potential management options
- Cost effective model for developing management options applicable to other marine protected sites?
- Add value to the important work of volunteers
- Inform and develop long term research initiatives for wild bird conservation
- Expected delivery summer 2016

Thank you & questions



Acknowledgements:

- Exeter University
 - CIFCA
 - Wildlife Veterinarian
 - Volunteer WeBS counters
-
- <http://webarchive.nationalarchives.gov.uk/20140605090108/http://www.naturalengland.org.uk/ourwork/conservation/designations/spa/fal-mouth-staustell-consultation.aspx>

Black-throated diver by Ian Fisher©

