



Common dolphin strandings summary Scotland

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Scottish Marine Animal Stranding Scheme

*6th Meeting of the ASCOBANS Common
Dolphin Group*

13th January 2026



Common dolphin strandings summary

- Jan 1st-1992-Dec 31st 2025
(30.7% of all pelagic delphinids reported)
- Increase over time:
1992-2008: n= 124 individuals
 - average of 7.3 per year.
 - 4 individuals part of a MSE (3.2% of total)
- 2009-2025 n= 681 individuals
 - average 40 per year
 - 110 individuals part of MSE's (16% of total)



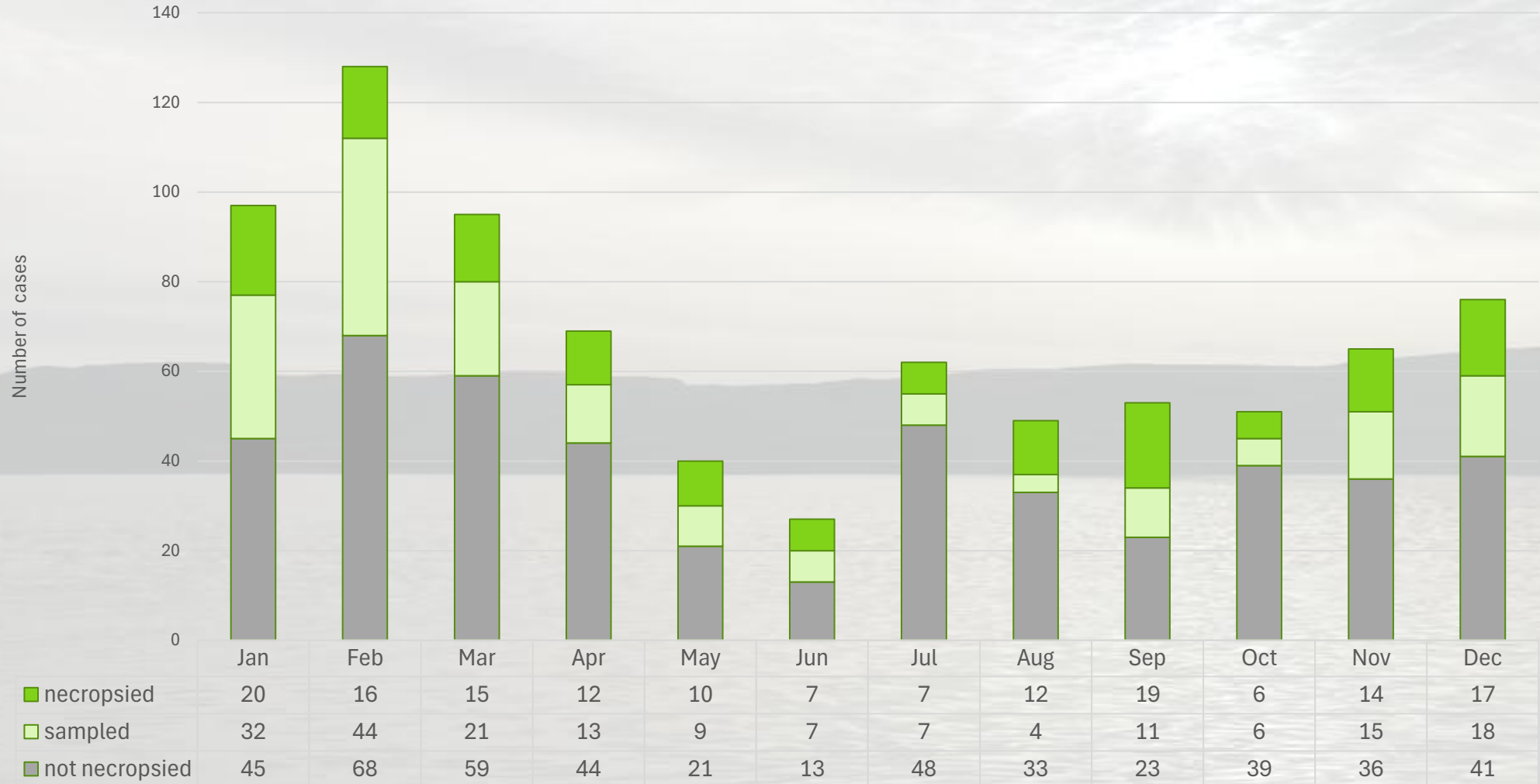
Findings

- Necropsied n=155
- Not necropsied n= 466
- Sampled n=184

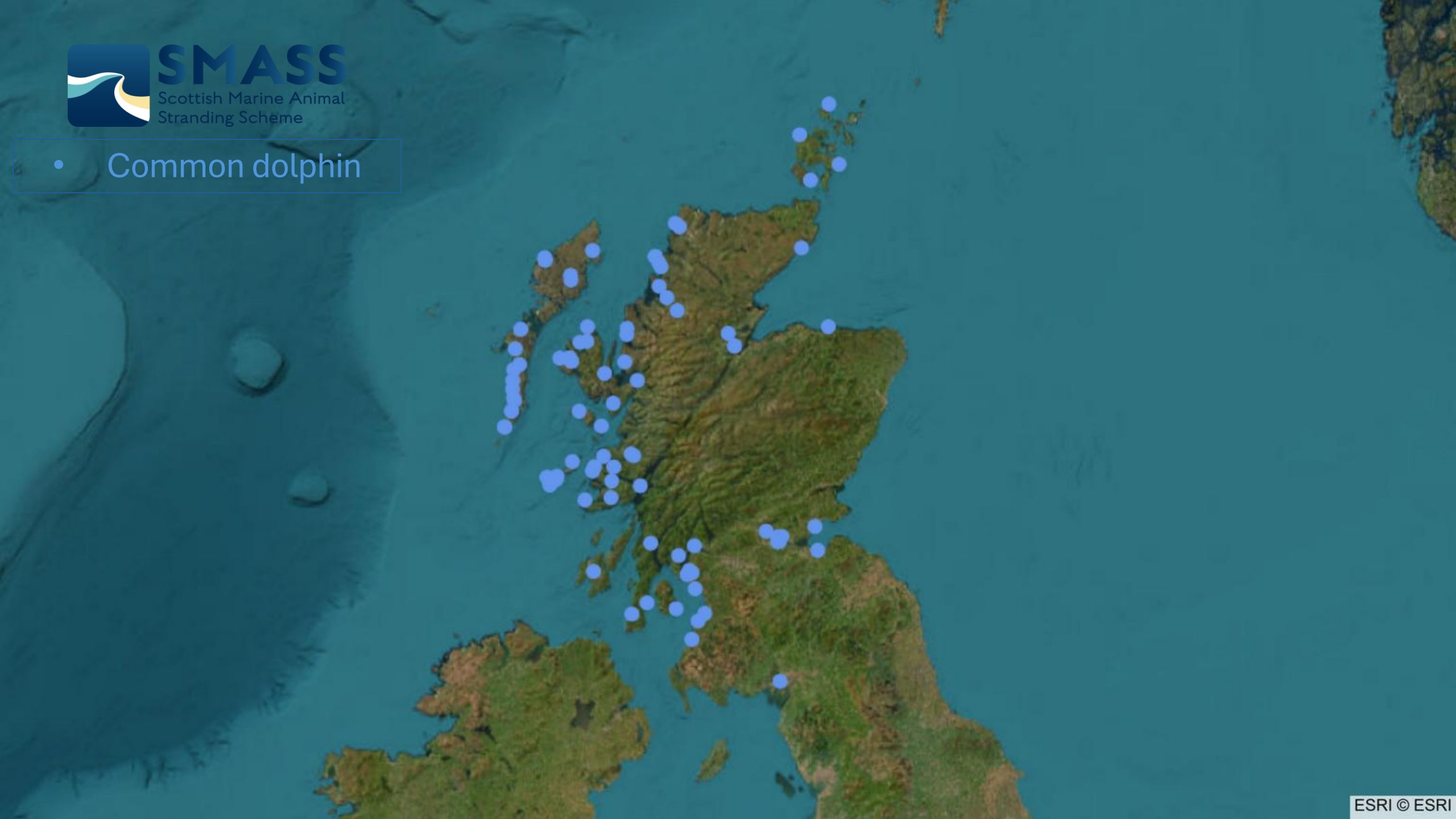
- Live stranding n=73
- Meningoencephalitis n=10
- Pneumonia n=7
- Bycatch n=2



Common dolphin strandings by month and examination level SMASS 1992-2025



- Common dolphin



Common Dolphin (*Delphinus delphis*) Strandings in Scotland (≈1992–2025)

- **When:** Strandings occur all year
- **Peak:** Late winter–early spring (Feb highest; Jan–Mar elevated)
- **Where :** Predominantly west and north coasts
- **Trends:** High inter-annual variability with episodic peaks
 - Clear long-term increase in strandings
 - Highest annual counts in the last decade, especially post-2015
 - Increase in mass stranding events

Common Dolphin (*Delphinus delphis*) Strandings in Scotland (≈1992–2025)

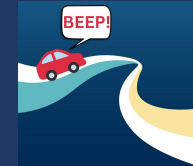
- Causes of death identified at necropsy were diverse; live stranding was most common. Infectious disease was a contributor, particularly *Brucella meningoencephalitis*. Poor condition/ debilitation
- **Overall:** Winter-biased strandings, concentrated on Atlantic-facing coasts, with a sustained increase in reported incidence over time. The upward trend likely reflects a combination of factors, including population distribution changes,, reporting effort, and surveillance intensity
- Diagnosed fisheries interactions are low but indications underreported in NW Scotland



University of Glasgow



SMASS
Scottish Marine Animal Stranding Scheme



Cornwall Wildlife Trust



University of Exeter

Common Dolphin Stranding Rates in Scotland and Bycatch Monitoring with BEEP

Rachel L. Lennon, Nicholas J. Davison, Anthea Hawtrey-Collier, Ruth Williams, James Barnett, Mariel T.I ten Doeschate, Rebecca Allen, Rosie Williams, Simon A. Babayan, Andrew Brownlow



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Background CD Strandings in Scotland

scientific reports

OPEN

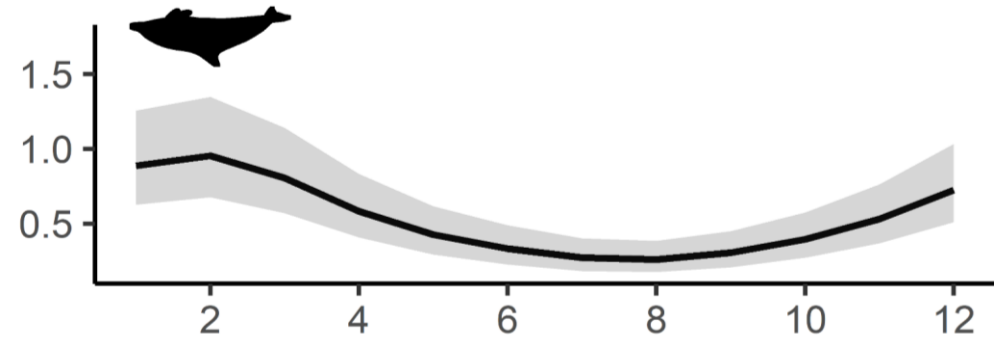
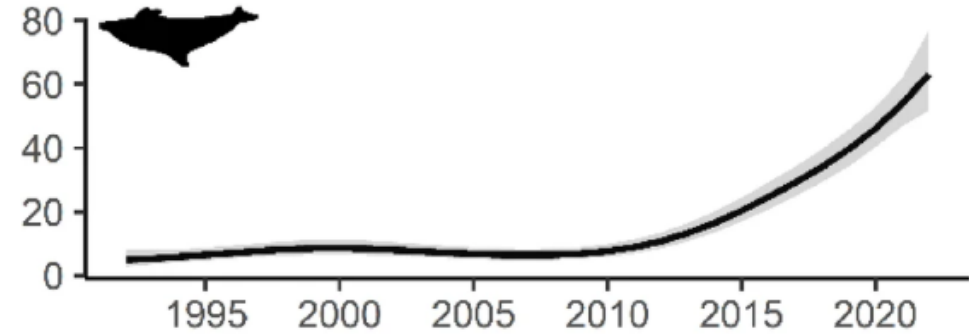
An approach to using stranding data to monitor cetacean population trends and guide conservation strategies

Rachel L. Lennon^{1,2}, Rosie S. Williams³, Kathryn J. Allan¹, Mariel T.I. ten Doeschate¹, Nicholas J. Davison¹, Simon A. Babayan¹ & Andrew C. Brownlow¹

Growing anthropogenic pressures increasingly impact marine wildlife, with cetaceans being particularly vulnerable to cumulative effects of stressors due to their position as top predators. As sentinels and sentinels of ocean health, cetaceans offer critical insight into known and emerging threats to marine ecosystems. Stranding schemes provide a cost-effective means to assess mortality rates and population demographics, offering insights that are often challenging to obtain through live monitoring. Using a 30-year dataset from the Scottish Marine Animal Stranding Scheme (SMASS) we demonstrate how opportunistically obtained stranding data can be used to monitor populations and guide conservation strategies. Species were clustered into broad ecological groups - baleen whales, short-beaked common dolphins, deep divers, harbour porpoises and pelagic dolphins - for spatiotemporal analysis of stranding patterns. All groups showed increases in annual stranding rates over the study period, with common dolphins and baleen whales exhibiting exponential increases, suggesting these species may be facing heightened pressures. Distinct seasonal and spatial trends were detected, with harbour porpoises predominantly stranding on the east coast and other groups clustering to Scotland's west coast. Identifying these trends helps focus surveillance and mitigation efforts, underscoring the importance of this approach for monitoring vulnerable species.

Keywords Cetaceans, Spatiotemporal analysis, Strandings, Opportunistic, Monitoring

Check for updates



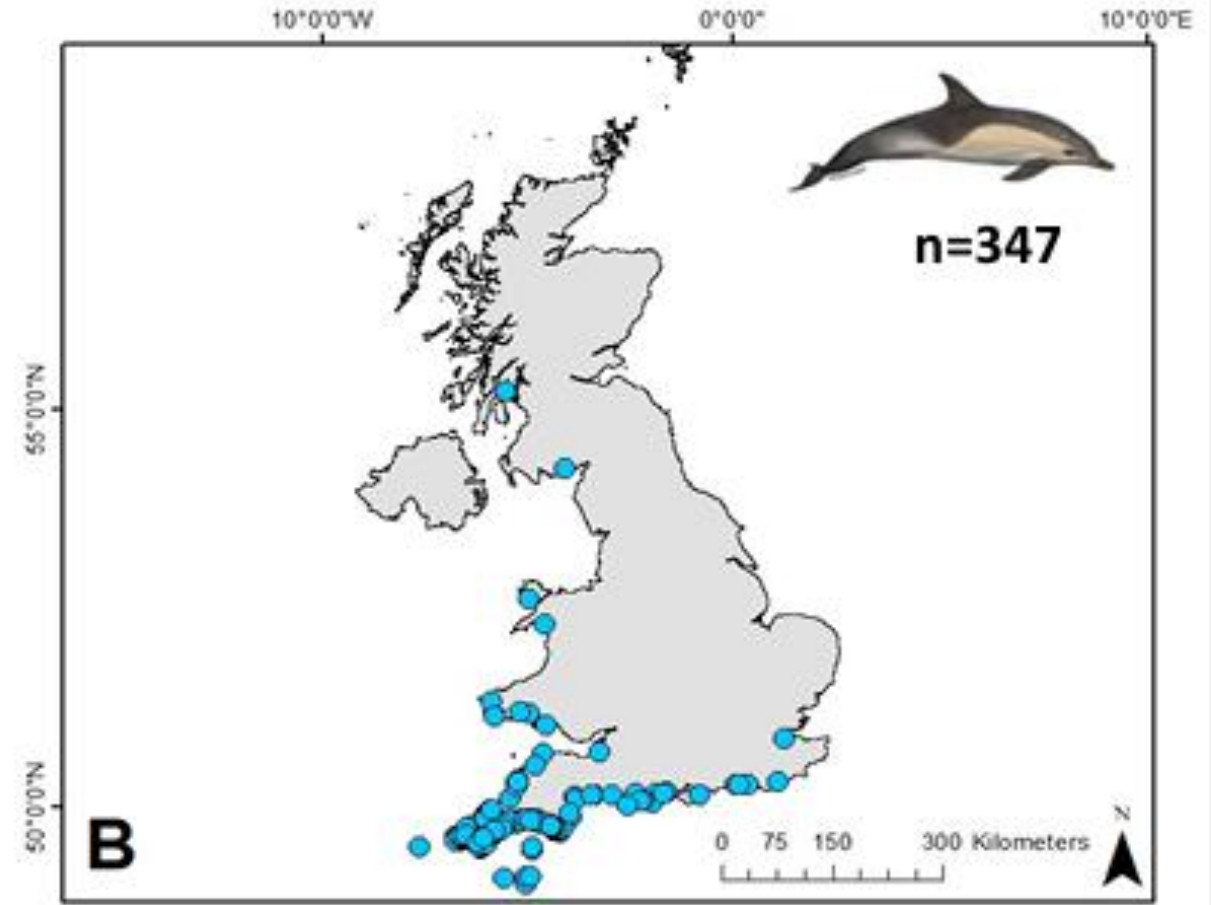
Lennon, R.L., et al. 2025. An approach to using stranding data to monitor cetacean population trends and guide conservation strategies. *Scientific Reports*, 15(1), p.28417.

Background Bycatch in the UK

Bycatch predominantly in SW England

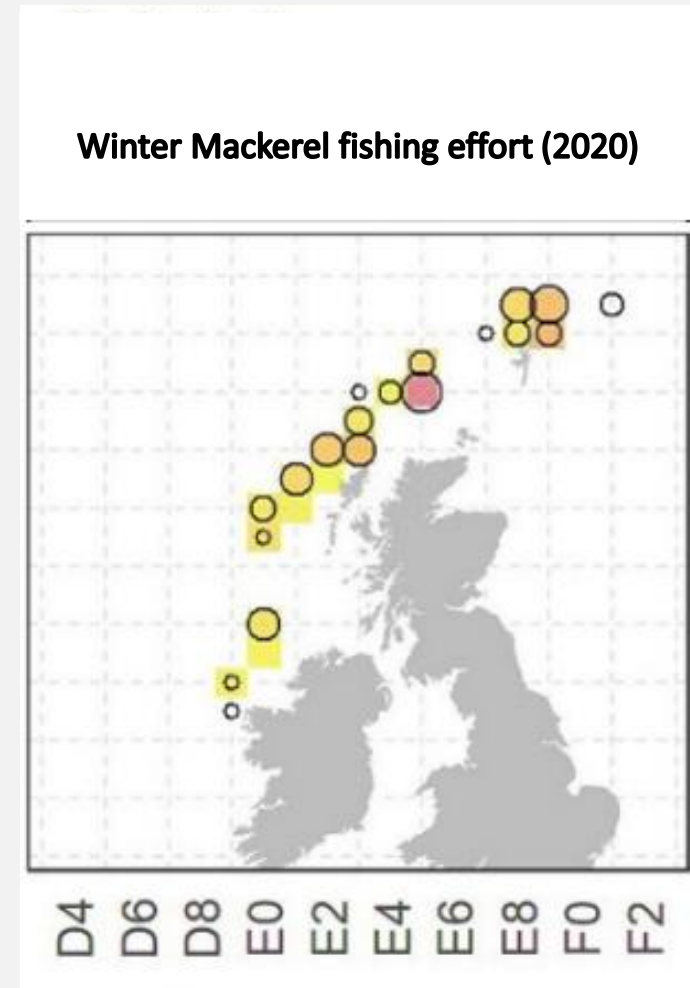
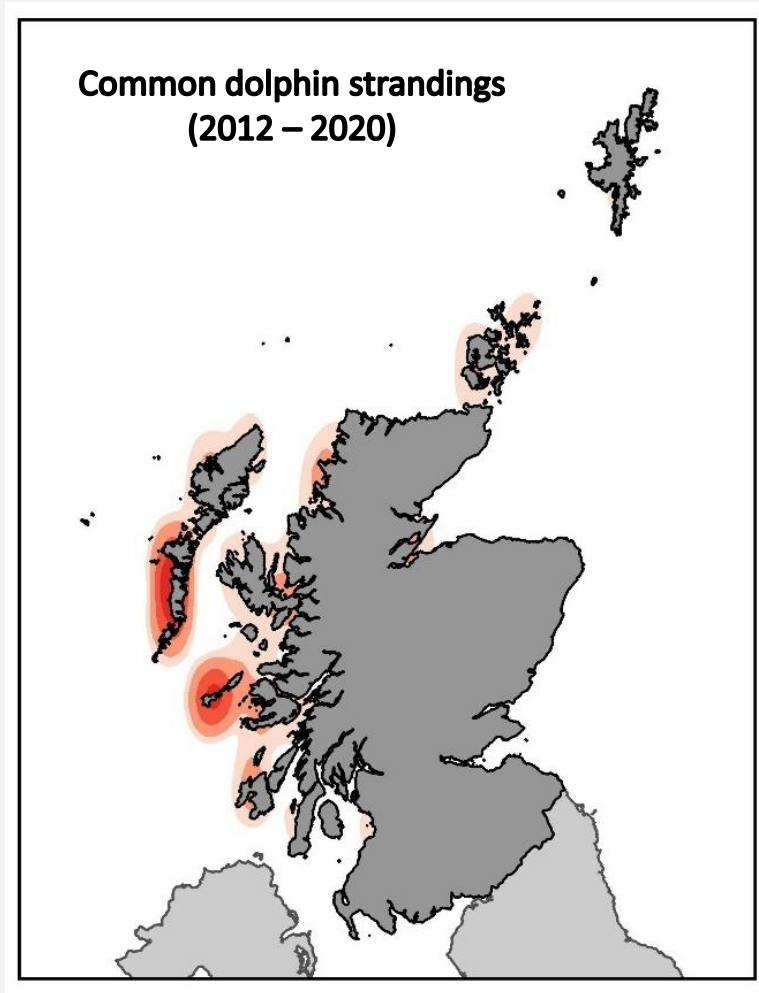
- Minimal bycatch in Scotland
- 107 since 1992

Is that the true number?



Chadwick et al., in prep

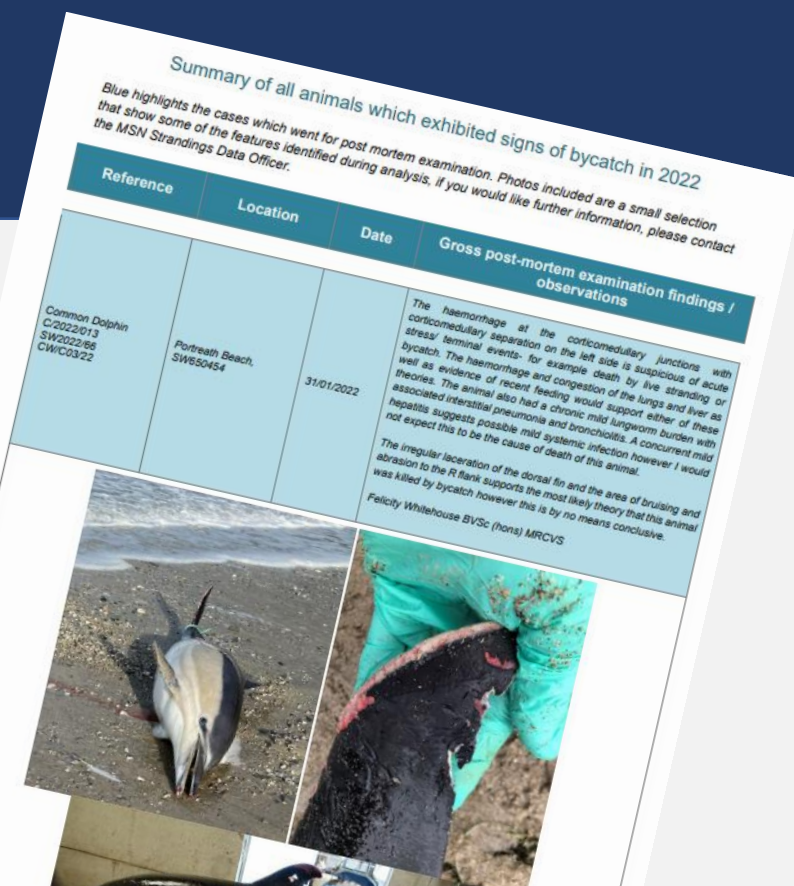
Background Stranding in Scotland



Background BEEP Project

Bycatch Evidence Evaluation Protocol

- Aims to improve bycatch estimations when PM not possible



BEEP Conclusion	Total Assessed	% BEEP Assessed Records
Definite bycatch	7	10
Inconclusive	26	37.1
No features	21	30
Possible bycatch	11	15.7
Probable bycatch	2	2.9
Trauma	1	1.4
Trauma - BND Attack	2	2.9
Grand Total	70	100

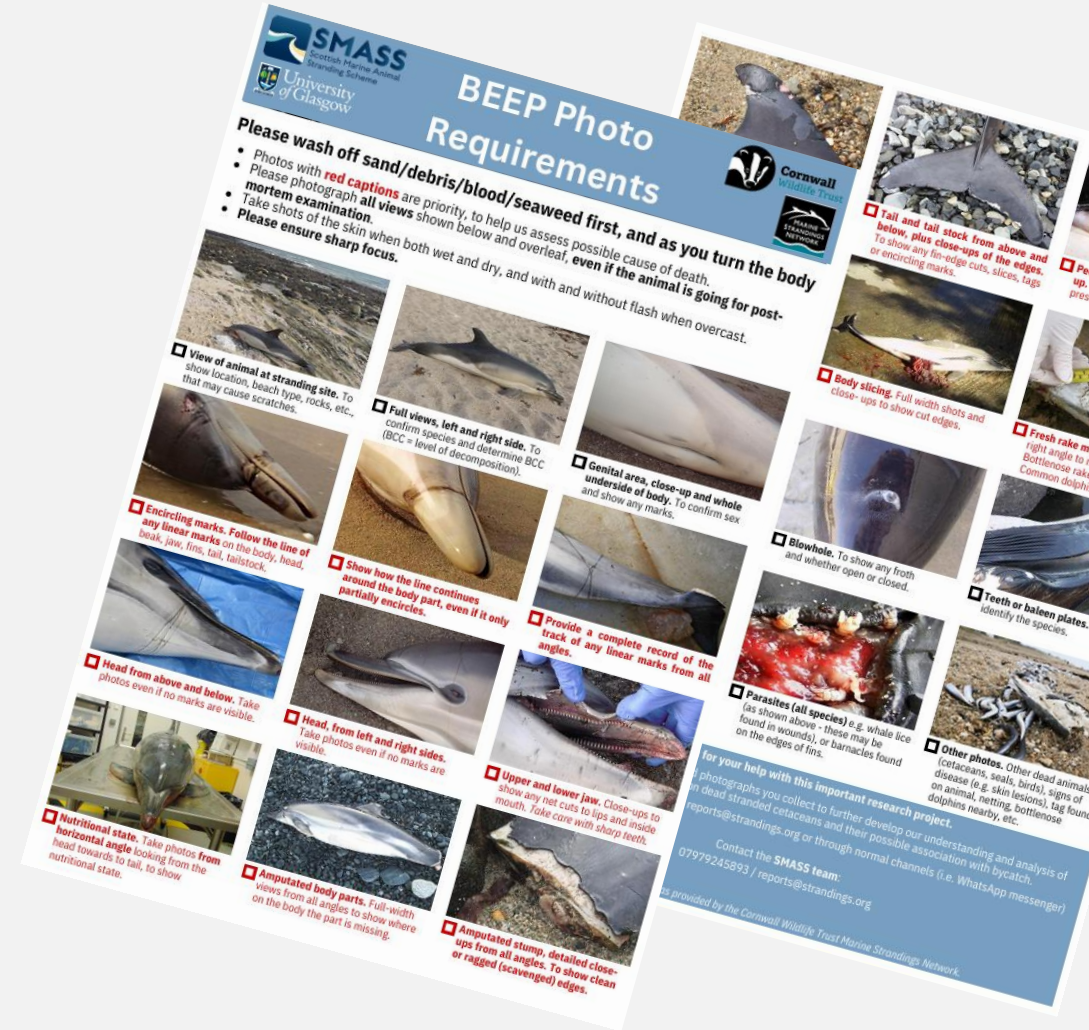
Appendix Table 2: A summary of BEEP conclusions from cetacean cases assessed in situ in 2022.

Methods

BEEP Trial

6 month BEEP trial

- SMASS volunteers
- Specific & detailed images of carcasse
- 13 bycatch features
- Make assessment of bycatch confidence



BEEP Features Lip cuts

Cuts along the upper or lower lip



BEEP Features Fin/fluke cuts

Cuts to the corners/edges of limbs



BEEP Features Hyphema

Blood and
or bubbles
in eyes



Results

BEEP results

BEEP trial Oct '24 – Mar '25:

- 26 SMASS volunteers
- 135 small odontocetes (7 species) stranded
- 75 total suitable for assessment
- X2 rounds of expert validation
- 14 potential bycatch cases (19%)



Conclusions Evidence of bycatch

Evidence need for enhanced monitoring

- Particularly in remote areas

Improve estimation of bycatch rates

- Guide conservation

BEEP is applicable for other stranding schemes

