A multi-method approach to understanding the ecology of harbour porpoise in Irish waters

Harbour porpoise are a cetacean species listed under Annex II of the EU Habitats Directive, requiring designation of Special Areas of Conservation (SACs) for their conservation. Understanding patterns of occurrence and behaviour, as well as disturbance from human activity, is essential for ensuring adequate protection of this species. This research will use acoustic monitoring to detect harbour porpoise occurrence from their echolocation 'clicks' and assess patterns of seasonality and inter-annual variability. Acoustic data will also be used to identify specific behaviours such as feeding to understand how these dolphins use their environment, and how this varies between regions. Temporal patterns of occurrence and feeding behaviour will be modelled alongside robust environmental data to predict wider habitat usage and identify potential 'hot spots' of occurrence in poorly surveyed areas. The data collected will feed into Ireland's EU reporting requirements and will provide insights for future management decisions for small cetaceans worldwide.

Publication:

- Todd, N.R., Cronin, M., Luck, C., Bennison, A., Jessopp, M. and Kavanagh, A.S., 2020. Using passive acoustic monitoring to investigate the occurrence of cetaceans in a protected marine area in northwest Ireland. Estuarine, Coastal and Shelf Science, 232, p.106509. https://doi.org/10.1016/j.ecss.2019.106509

Quick Facts

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