



Harbour Porpoise Bycatch Management Option 6: Bycatch monitoring and reporting

This option is to introduce dedicated bycatch monitoring and reporting as part of an adaptive risk management plan and/or supporting tool within the MPAs or wider MMO waters. An adaptive risk management plan is a dynamic and iterative approach to management with increased monitoring and reporting as an initial step.

Bycatch monitoring and reporting could be considered within the Stage 4 porpoise MPAs and/or in wider seas (areas of the Management Units within MMO's remit). The advantages, disadvantages and considerations of each option would depend on the scale at which the management option would be implemented. For further detail on spatial scales please see the handout on spatial scales for harbour porpoise bycatch management.

Monitoring and reporting options for harbour porpoise bycatch could include:

- **Self-reporting** - for example, through a campaign to ensure consistent self-reporting and/or voluntary questionnaires on bycatch;
- **Observers** – for example, increased observer coverage in MPAs and/or bycatch hotspots outside the MPAs; and
- **REM** - for example, through compulsory or voluntary use of REM by vessels fishing within the MPAs and/or bycatch hotspots outside the MPAs.

Advantages	Disadvantages
• Provides information to better understand bycatch including potential bycatch hotspots. • Opportunity to collaborate with fishing industry. • Potentially limited socio-economic costs as fishing can still occur. • Can be rolled out simultaneously with other mitigation options.	• Does not reduce porpoise bycatch. • Self-reporting is difficult to enforce and verify. • At-sea observers have high costs and may not be easily accommodated on small vessels. • Remote electronic monitoring (REM) has costs for purchasing systems and reviewing data.



Other considerations:

- Each method (self-reporting, REM and at-sea observers) has different pros and cons.
- Voluntary vs compulsory – if voluntary consider that incentives may be required
- Consider linking to wider schemes.
- For self-reporting, need to consider the process and interaction with other fisheries regulations.
- For REM, need to consider the set-up, costs and balance of vessel coverage versus video-analysis coverage.
- REM data have allowed hotspots to be identified in the Danish gillnet fishery¹.

Summary

The three main methods for monitoring and reporting bycatch each have their own advantages and disadvantages, though none of these methods alone can reduce bycatch. However, monitoring could form part of an adaptive risk management plan.

If data indicate that filling bycatch evidence gaps is initially required, monitoring could be introduced as a first step of a dynamic management approach. After which, mitigation options to reduce bycatch informed by monitoring information could be implemented. Alternatively, if the evidence indicates that options to reduce bycatch are imminently required, monitoring could be rolled out simultaneously with other options, for example, expanding the use of ADDs or voluntary changes to fishing practices. Monitoring could then provide iterative information on the effectiveness of any mitigation options and an opportunity to continually improve mitigation options in collaboration with fishers.

Questions to discuss:

- What are the current issues and barriers for bycatch monitoring and reporting?
- Suggestions for improving bycatch monitoring and reporting?
- What are the main benefits of this option at either spatial scale?
- What are the main challenges of this option at either spatial scale?
- What are the socio-economic impacts of this option at either spatial scale?
- What are the environmental impacts of this option at either spatial scale?
- What are the practical implications of the option at either spatial scale?
- How feasible is this option to implement at either spatial scale?
- Would you be interested in the ability to report harbour porpoise sightings (not just bycatch) to assist in highlighting high and low risk areas?

¹ <https://royalsocietypublishing.org/doi/10.1098/rspb.2022.2570>