

Tenth Meeting of the Seabird Bycatch Working Group

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Making money and saving seabirds:

An exploratory economic analysis of seabird bycatch reduction

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SUMMARY

At SBWG9 it was recognised that socio-economic approaches may be useful to investigate in considering ways to enhance the implementation of best practice seabird bycatch mitigation measures. This study was commissioned by the New Zealand Department of Conservation to support a New Zealand led initiative on seabird bycatch with the Asia-Pacific Economic Cooperation (APEC) Ocean and Fisheries Working Group (OFWG) during New Zealand's APEC host year in 2021.

Seabird bycatch reduction measures are well understood for longline fisheries, and whilst identifying best practice measures involves considering cost effectiveness, any broader economic benefits of reducing seabird bycatch are seldom evaluated. Accreditation programmes that deliver market benefit offer another avenue to secure economic gains for demonstrably sustainable fisheries more broadly. This study provides a framework to explore how seabird bycatch reduction measures can affect fishers' profitability. It considers the costs and benefits of three seabird bycatch mitigation regimes against a counter-factual of fishing without bycatch mitigation measures. These costs and benefits are characterised in hypothetical small and large scale fisheries, characterised using real-world information.

This exploratory analysis illustrates that direct economic benefits can result from the implementation of seabird bycatch mitigation measures. It also highlights that fishery-specific information is essential to build a robust understanding of economic benefits and costs. For example, differences in bycatch profiles and gear configurations may have significant flow-on effects determining economic outcomes.

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Market benefit can also accrue from demonstrating fishery sustainability, such as through the global third-party accreditation programme developed by the Marine Stewardship Council, although quantifying the benefits from publicly available data is challenging.

The ultimate agents of change in fisheries are the people on vessels, on the water, harvesting the catch. Within sometimes complex seafood supply chains, this study reflects that the distribution of economic benefits among agents of change is imperative for the best possible outcomes to be reached. The extent of any economic benefit can be affected by many different factors. However, market growth around sustainable seafood has been rapid and ongoing over the last 20 years. Therefore, investing in seabird mitigation and broader fishery sustainability initiatives appears likely to continue to generate benefits, including economic gains, in the years ahead.

This initial exploratory analysis provides a framework that can be developed further by considering specific fisheries where bycatch reduction strategies are developing, or there is interest or intent in seeking sustainability accreditation, especially in areas where high-risk seabirds occur. In such cases sustainability gains may be substantial and economic analysis can inform the strategic pathway chosen to maximise returns on investment.