The Black Petrel Electronic Monitoring Project

Key objective: Are cameras a reliable way to monitor seabird captures?

History: In 2015, a trial commenced to monitor flax seabirds, using video footage of line hauling to detect the capture of seabirds. The results showed that 89 percent of the flax seabirds were detected when the footage was viewed (increasing to 94 percent with multiple viewings).

Current programme: From 2016 to 2018, the fishing industry, with support from the Black Petrel Working Group, continued this research and installed cameras on 12 bottom longline vessels fishing for snapper and bluenose in Fisheries Management Area 1 along the north east coast of the North Island. This footage was reviewed to detect real seabird captures and this included multiple reviews to ensure any missed captures were identified. Since 2019, the programme has been continued by Fisheries New Zealand.
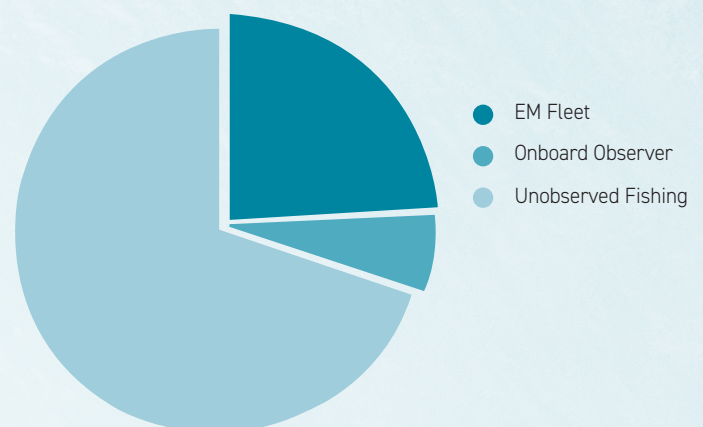
Results: Results indicate that cameras are a reliable way to monitor seabird captures.

Fishing Effort: The nine vessels that make up the current EM fleet in the FMA 1 snapper and bluenose bottom longline fishery set 8,300,000 hooks between October 2016 and September 2018. The other 32 vessels set 11,700,000 hooks. The cameras on those nine vessels covered four times as much effort compared to onboard observers.

Seabird Captures: Between October 2016 and September 2018 there were 79 seabird captures (including 19 black petrel captures) reported by fishers on the nine vessels making up the EM fleet, compared to 20 captures (including 8 black petrel captures) from the 32 other vessels in the fishery. Results up to 2020 are due at the beginning of 2021.

Proportion of coverage by EM and onboard observers between 2016 and 2018

- EM Fleet
- Onboard Observer
- Unobserved Fishing

Next steps: Funding for the program has been guaranteed by Fisheries New Zealand until 2021. Operational roll-out of the program is being considered as part of the broader program to introduce on-board cameras to the inshore commercial fishing fleet.