



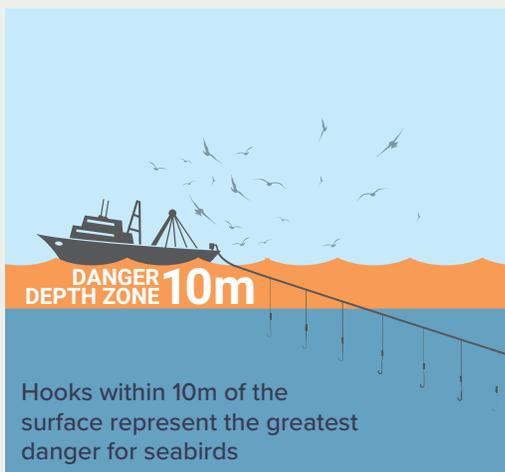
Preventing Seabird Bycatch in Pelagic Longline Fisheries

HOOK SHIELDING Factsheet

Updated May 2019

What is it and how does it work?

Hook-shielding devices encase the point and barb of longline hooks during line setting, and thus prevent seabirds from being hooked during this period. Seabirds primarily attack baited hooks in the upper reaches of the water column. Effective hook-shielding devices should therefore release hooks from their protective encasements at a depth of at least 10 m or after an immersion time of at least 10 minutes, to ensure that the baited hooks are released beyond the foraging depth of most seabirds.



Hook Pod

The Hook Pod is a hook-shielding device that is considered to meet ACAP 'best practice' criteria based on its hook shielding attributes, weight and sink rate, and the minimum depth at which the hook is released.

This device weighs 68-g and when deployed is attached directly to the hook (thus complying with ACAP minimum branch line-weighting requirements), and encases the barb and point of the hook in a plastic housing. A pressure release mechanism opens the housing at a depth of at least 10 m to release the baited hook. The Hook Pod incorporates a light emitting diode (LED) light source that is triggered by a magnetic switch when the device opens at depth. The LED is incorporated as an alternative to disposable chemical light sticks (reducing marine debris) and electric fishing lights.

Hook Pod - mini

The Hook Pod mini is a smaller hook-shielding device which has not yet been formally assessed by ACAP, and is therefore not currently on the list of ACAP Best Practice measures. It operates in the same way as the Hook Pod, protecting the baited hooks until they are released at a minimum depth of 10 m. The main differences between the two devices are that the Hook Pod mini weighs 45g and does not include an LED light source. Like the Hook Pod, it is also attached to the hook on deployment.

Problems and troubleshooting

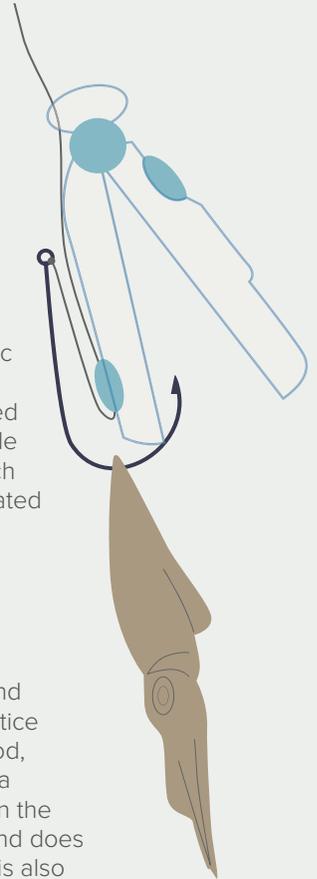
The configuration of the Hook Pod and Hook Pod mini creates a loop of branch line during setting, in which birds could become entangled. It is partly for this reason that the devices need to meet the ACAP line weighting and sink rate requirements. The length of the loop can however be manipulated by changing the point at which the device is attached to the branch line.

Combination with other measures

These devices integrate two key performance requirements:

- Shielding baited hooks until they are released beyond the foraging depth of most seabirds
- Weighting branch lines to ensure rapid sink rates.

Hook-shielding devices can be used as stand-alone measures or with other measures, such as **bird-scaring lines** and **night setting**.



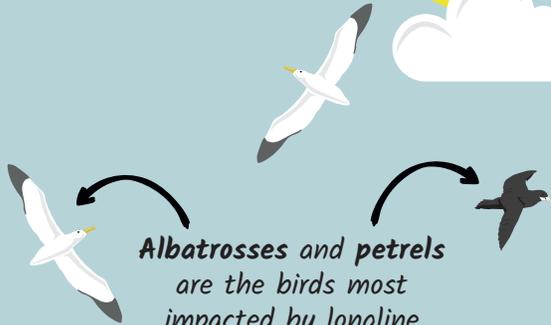
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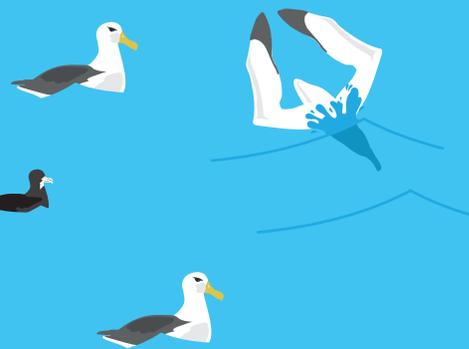
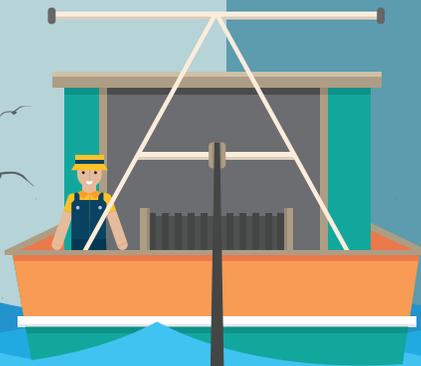
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Albatrosses and petrels are the birds most impacted by longline and trawl fisheries.



Night setting helps to limit bycatch as there are fewer birds around.



Hook-shielding devices protect the point and barb of the hook until these are beyond the foraging depth of most seabirds, and contain integrated weighting to ensure rapid sink rates



Most seabird attacks on bait are in the upper 10m of the water column.