



Preventing Seabird Bycatch in Pelagic Longline Fisheries

IMPROVING SAFETY WHEN HAULING BRANCHLINES

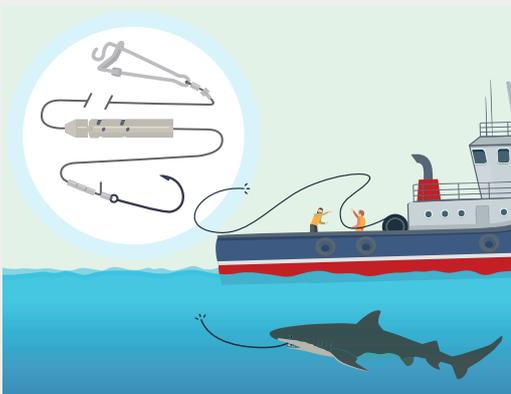
Factsheet

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What is it, and how does it work?

Adding weights to branchlines helps sink baited hooks beyond the reach of diving seabirds during the set, reducing seabird bycatch. During the haul, branchline weights may increase the hazard from “flyback” events. A flyback event is when a fish breaks away under high line tension, and may occur in two ways:

1. a ‘bite off’ event in which the branchline is bitten through, or
2. a ‘tear out’ event in which the hook is torn out of the fish.



Fishermen can be injured by weights when the line suddenly breaks. Inset shows a sliding weight, a new weighting system developed to reduce the risk of injury.

When this happens, the tensioned branchline may flyback at *high velocity* and along a *straight path*. The member of crew hauling the fish is at risk of being hit by the recoiling branchline. This is rarely reported, but a small number of events have caused serious injury and even death. The hazard to crew is greater if the flyback occurs when the weight is at, or above the waterline.

To avoid or minimise the hazard of a flyback event, crew members can use simple techniques and technologies:

Personal protective equipment

Personal safety equipment, such as helmets and face screens can help to minimise risks as part of standard workplace hazard management procedures.

Angled hauling

During a flyback the branchline recoils along a straight path. Crew members can move out of the path of a flyback by hauling branchlines around an angle, such as around a pole or feature on the vessel bulwark. This changes the direction of line recoil away from crew members in the event of a flyback.

Sliding weights

Sliding weights are not tied into fishing gear, but instead grip monofilament line with enough force to stay in place during normal fishing practices. When monofilament line is stretched under tension its diameter is reduced and sliding weights lose grip, allowing the line to pass through the sliding weight during a flyback event.

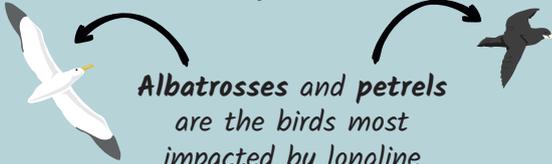
Studies have shown that replacing fixed swivel weights with sliding weights, consistent with ACAP Best Practice line weighting, reduces the risk of both bite-offs and tear-outs. Sliding weights either drop off the end of the branchline or shear off the hook.

Hook shielding devices

Hook Pods grip monofilament line in the same way as a sliding weight and reduce hazard to crew in the event of a bite-off. Hook Pods are less effective in the event of a tear-out as they can break into fragments.



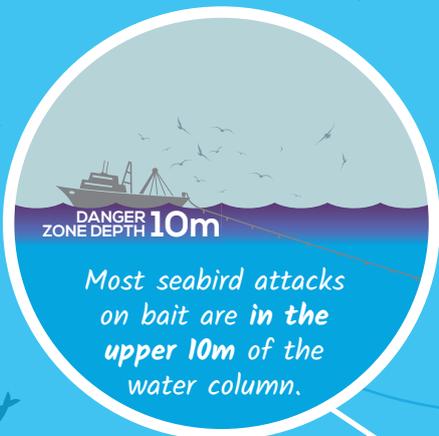
Night setting helps to limit bycatch as there are fewer birds around.



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



Bird scaring line
This helps to scare birds away from the danger zone.



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

Line weighting
Sinking hooks out of the danger zone as quickly as possible reduces bycatch.