

## **ACAP ADVICE FOR REDUCING THE IMPACT OF PELAGIC LONGLINE FISHING OPERATIONS ON SEABIRDS**

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### *SUMMARY*

*The incidental mortality of seabirds in pelagic longline and other fisheries continues to be a serious global concern, especially for threatened albatrosses and petrels. The Agreement on the Conservation of Albatrosses and Petrels (ACAP) was established to address this concern. ACAP routinely reviews and updates its advice, most recently in August-September 2021, at the Twelfth Meeting of ACAP's Advisory Committee (AC12) and preceding Tenth meeting of the Seabird Bycatch Working Group (SBWG10). This paper summarizes the latest advice and recent recommended changes. ACAP recommends that the most effective way to reduce seabird bycatch in pelagic longline fisheries is to use the following three best practice measures simultaneously: branch line weighting, night-setting and Bird Scaring Lines. Alternatively, the use of one of two assessed hook-shielding devices is recommended. During SBWG10, two additional mitigation measures for pelagic longline fisheries were assessed against the six best practice seabird bycatch mitigation criteria adopted by the ACAP Advisory Committee (AC). These were underwater bait setting devices, specifically the Underwater Bait Setter (Skadia Technologies) and the Hookpod-mini. The Advisory Committee is due to consider endorsement of these as ACAP best practice seabird bycatch mitigation. ACAP is working towards communicating more effectively the conservation crisis facing albatrosses and petrels, and its advice regarding how best to address the threats that these seabirds face.*

### **1. Introduction**

The incidental mortality of seabirds in pelagic longline fisheries continues to be a serious global concern, especially for threatened albatrosses and petrels. The need for international cooperation in addressing this concern was a major reason for establishing the Agreement on the Conservation of Albatrosses and Petrels (ACAP). In pelagic longline fisheries seabirds are killed when they become hooked or entangled and drowned while foraging for baits on longline hooks as the gear is deployed. Seabirds can also be hooked or entangled as the gear is hauled; however, many of these seabirds can be released alive with careful handling.

The ACAP's best practice seabird bycatch mitigation advice for pelagic longline fisheries considered that the simultaneous use of weighted branch lines, bird scaring lines and night setting is the most effective approach to mitigate seabird bycatch in pelagic longline fisheries. In 2016, ACAP considered the results of research investigating the use of line-weighting as a seabird

bycatch mitigation measure, and consequently updated its advice on the minimum line-weighting specifications. In addition, the effectiveness of two new hook-shielding devices at reducing seabird bycatch were assessed in 2016. On the basis of the assessments these two hook-shielding devices have been endorsed by ACAP as effective alternatives to the combined use of weighted branch lines, bird scaring lines and night setting to effectively reduce seabird bycatch in pelagic longline fisheries. Hence, ACAP's advice is that either of these best practice bycatch mitigation approaches (the three combined measures OR one of the endorsed hook-shielding devices) should be applied in areas where fishing effort overlaps with seabirds vulnerable to bycatch in order to reduce their incidental mortality to the lowest possible levels.

## ***2. New pelagic longline mitigation measures considered by SBWG***

The SBWG recently reviewed two new mitigation measures against criteria for assessing and recommending as best practice: underwater bait setting devices, specifically the Underwater Bait Setter (Skadia Technologies), and the Hookpod-mini. This proposed update to the ACAP best practice advice for reducing the impact of pelagic longline fisheries on seabirds has yet to be considered by Advisory Committee, which is due to meet 31 August-2 September 2021.

Underwater bait setting devices deploy baited hooks at a pre-determined depth immediately at the stern of the vessel. Underwater bait setting devices deploy baited hooks individually underwater down a track fitted to the fishing vessel's transom in a vertical manner enclosed in a capsule or similar device to eliminate any visual stimulus for seabirds following the vessel. The capsule is pulled quickly underwater to a predetermined target depth that can be adjusted in response to the dive capabilities of seabirds attending the vessel during line setting to prevent interactions. The Underwater Bait Setter (Skadia Technologies) was assessed based on experimental and operational data from the Australian Eastern Tuna and Billfish Fishery, the Uruguayan Pelagic Longline Fishery, and the New Zealand Pelagic Longline Fishery. These trials showed promising results, with impressive reductions in bycatch.

SBWG10 also reviewed the Hookpod-mini as an additional assessed hook-shielding device. Hook-shielding devices encase the point and barb of baited hooks to prevent seabird attacks during line setting until a prescribed depth is reached (a minimum of 10 metres), or until after a minimum period of immersion has occurred (a minimum of 10 minutes) that ensures that baited hooks are released beyond the foraging depth of most seabirds. Hook-shielding devices should also meet current recommended minimum standards for branchline weighting in reducing seabird bycatch. The Hookpod-mini weighs 48 g and is positioned at the hook, encapsulating the barb and point of the hook during setting, and remains attached until it reaches 10 m in depth, when the hook is released. Experimental and operational data are now available concerning the performance of the Hookpod-mini in pelagic longline fisheries in Brazil and New Zealand.

## **3. Review of Resolution 12/06**

At its 2016 meeting, the IOTC Scientific Committee recommended that Resolution 12/06 be reviewed and encouraged the updated line-weighting specifications to be updated to conform

with ACAP's latest advice. The Scientific Committee also recommended that when Resolution 12/06 is reviewed, ACAP's advice pertaining to hook-shielding devices be incorporated into the revised seabird conservation Resolution. Resolution 12/06 has yet to be updated to incorporate these changes. ACAP is working towards communicating more effectively the conservation crisis facing albatrosses and petrels, and its advice regarding how best to address the threats that these seabirds face. In this sense, the intention of the present document was to make available to the IOTC, the most recent advances in the revision of the best practices recommended by ACAP for pelagic longline fisheries, so that they can be eventually considered in the next revision of the Resolution 12/06.