SUMMARY OF TOOLS AND GUIDELINES AVAILABLE TO ASSIST OBSERVERS IN THE IDENTIFICATION OF SEABIRD SPECIES AND THE HANDLING OF BYCAUGHT INDIVIDUALS

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1. INTRODUCTION

The incidental mortality of seabirds in fisheries continues to be a serious global concern, especially for threatened albatrosses and petrels. There have been significant efforts internationally to develop mitigation measures to avoid or minimise the risk of incidental catch of seabirds in longline fisheries. In addition, efforts have been directed towards improving the quality of bycatch data collected by observer programmes.

In order to fully understand the impact of bycatch and the efficacy of mitigation measures, it is preferable that mortality estimates are derived for each species. Consequently, efforts should be directed towards encouraging the identification of all bycaught birds to species level (as referred in IATTC Resolution C-11-02). This could be achieved by, for example, (1) improving the capacities of on-board observers, (2) the development and provision of tools (e.g. guides) to assist with the identification of bycaught individuals, as well as (3) retaining carcasses, obtaining biological samples, and taking photographs for later processing and identification.
ACAP and BirdLife International are supporting the strengthening of observer programmes. This work includes the implementation of on-board training, the engagement with national scientists, supporting the collection and curation of samples and photographic material that can subsequently be used by land-based observers and researchers, and the development of tools and guidelines. This paper was prepared to update the IATTC on the products available to assist observers in the identification of seabirds, as well as the handling of bycaught individuals that are hauled alive. Links to these products could be added to the download section of the IATTC webpage so to enrich the set of tools available.

2. TOOLS AND GUIDELINES FOR OBSERVERS

2.1. Seabird identification guide

The identification of seabird bycatch to species level (or the lowest taxonomic level possible) is essential to achieve a reliable analysis of the effectiveness of conservation measures in force. At the first meeting of the Joint Tuna RFMO Technical Working Group on Bycatch, which preceded Kobe III, ACAP offered to produce a consolidated seabird identification guide to assist with the harmonisation and improvement of data collected by RFMOs.

In 2014-15 ACAP, in collaboration with the Japan Fisheries Research Agency, produced a guide to assist observers in the identification of albatrosses and some commonly caught petrels and shearwaters killed in longline operations. This Seabird bycatch ID Guide was developed to account for several difficulties associated with the identification of seabirds bycaught in fisheries: (1) coping with the increasing demands on observers to collect additional data, (2) accounting for the range in ability of observers to accurately identify seabird species, and (3) providing tools (i.e. pictures) to identify waterlogged carcasses as they are hauled back on deck (see Attachment 1). Understanding its potential to be used by a range of observer programmes, the ID guide is now available on the ACAP website in English, French, Spanish, Portuguese, Simplified Chinese, and Traditional Chinese. Other languages might be added in the future depending on need and resources available.

This seabird ID guide also includes: (1) guidelines to assist on-board observers in taking record photographs (Attachment 2); and (2) guidelines to assist on-board observers in obtaining feather samples for DNA analysis (Attachment 3). These two sampling protocols are intended to allow the identification of bycaught birds to species level where this is not achievable aboard. ACAP is in the process of organising a register of organisations holding photographic material, as well as tissue and feather samples, in order to assist researchers wishing to make use of such resources.

The ID guide is available to adapt to generate more tailor made products for particular fleets. Chinese Taipei, BirdLife International and the Chinese Wild Bird Federation (BirdLife partner), for example, are currently collaborating on an updated version in Traditional Chinese for use by on-board observers. This revised guide will incorporate some elements of the existing observer seabird ID manuals and
feedback from observers, and will include species of albatrosses and petrels which are most at risk of accidental capture in the Chinese Taipei longline fishing operations. The intention is to distribute in hard and soft copy to observers and to the observer training programme in 2017.

2.2. Hook removal Guide

A Seabird de-hooking Guide is available on the ACAP website in English, French and Spanish (Attachment 4). These guidelines are intended to assist fishery observers and crew in the proper handling of live seabirds bycaught in longliners, and improve their likelihood of survival. The development of guidelines for removing entangled seabirds from nets is programmed for the near future.

3. PROCESS TO UPDATE TOOLS AND GUIDELINES

The above described documents were prepared on the basis of the best available information and evidence, and are meant to be living documents to be updated as and when needed. ACAP and BirdLife International would therefore welcome any inputs (including edits, new information and photographic material) from those who have used the guidelines to ensure that these tools are fit for purpose.
ATTACHMENT 1. Sample page of the Seabird ID Guide describing morphometric features for the species, distribution maps and showing pictures of bycaught individuals as they get hauled back on deck.
ATTACHMENT 2. Photographic guidelines for on-board observers to take record photographs that will assist in the subsequent land-based identification of bycaught birds.
ATTACHMENT 3. Guidelines to assist on-board observers in obtaining feather samples for DNA analysis.
ATTACHMENT 4. Guidelines to assist fishery observers in the proper handling of live seabirds bycaught in longliners and the removal of hooks from affected birds.