

## AT-SEA DISTRIBUTION AND FISHERIES BYCATCH RISK OF JUVENILE GREY-HEADED ALBATROSSES FROM SOUTH GEORGIA (ISLAS GEORGIAS DEL SUR)

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### SUMMARY

*Grey-headed albatrosses (GHA) breeding at South Georgia are an ACAP Priority Population that is threatened by bycatch due to spatial overlap with pelagic longline fisheries in its non-breeding range. Despite continued archipelago-wide population declines, little is known about the distribution of younger life-history stages. Ship-based monitoring suggests that immature GHA are killed more frequently than adults by pelagic longline vessels targeting tuna in the southeast Atlantic, but it is not clear if this is because young age classes show greater spatio-temporal overlap with this or other fleets, or if they are more vulnerable to bycatch because of their naïve scavenging behaviour. Here we filled a notable gap in knowledge of at-sea distribution and potential fishery bycatch risk by analysing tracking data collected using platform terminal transmitters (PTTs) deployed on juveniles which fledged from Bird Island, South Georgia in May-June 2018, and comparing their distribution to that of adult GHA from the same colony. In the first 6 months post-fledging, the tracked juveniles made greater use of waters in the southeast Atlantic and southwest Indian Oceans than non-breeding adults, which spent more time in the southeast Pacific and southwest Atlantic Oceans. As a result, the major life-history stages (adult breeders, non-breeders, juveniles) differed in spatio-temporal overlap with particular pelagic longline fleets. Juvenile GHAs overlapped mostly with the Japanese fleet in April-June in the central Atlantic Ocean around Tristan da Cunha, and adults with the fleet of the Fishing Entity of Taiwan in July-September in the Pacific Ocean. The high overlap of juvenile GHAs with fisheries operating east of Tristan coincides with a bycatch hotspot previously reported by the Japanese Observer Programme. This suggests that the high bycatch of GHA in this area likely represents juveniles, and potentially immatures, from South Georgia. These results highlight the very important role that reducing bycatch in the pelagic longline fleets of the Fishing Entity of Taiwan and Japan would have in terms of reducing bycatch of, and hence threat to, this ACAP Priority Population.*

**KEYWORDS:** seabird, pelagic longline, population structure, by catch, fishery regulations, international waters,

*Thalassarche chrysostoma, Thalassarche melanophris*

Full article of CCSBT-ERS/1905/Info 09 (Rev.1) is available on request to the CCSBT Secretariat. Please contact the CCSBT Secretariat if you wish to access to the full article.

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