Recommendation paper

Title: Change to Bird Scaring Lines (TL and FAA) material (all licences)

Date: 6 July 2020

Report of: Seabird and Marine Mammal Scientific Officer

1. Background:

- 1.1 Currently, Part 2 of Licence conditions for trawlers require BSL to have double streamers made from semi-flexible tubing of high visibility (red, orange or yellow), recommending Red Mazzerpur 10 mm polyurethane tubing.
- 1.2 The Red Mazzerpur 10mm polyurethane recommendation arose after research carried out by Snell (2008a,b) and Snell *et al.* (2012), who compared efficiency of flexible orange tubing versus the red semi-flexible material.
- 1.3 However, since the recommendation was implemented, vessels continue to use the flexible orange material, which easily entangles in the warp cables, snaps and commonly gets very oily and sticky.

2. Fieldwork:

- 2.1. Data collected aboard trawlers indicate the use of orange flexible material continue and presents a real hazard for seabirds.
- 2.2. The use of orange flexible material revealed to be particularly counterproductive in the FAA (Fig.1).

3. Recommendation:

- 3.1. It is recommended for BSL (TL & FAA) to have mandatory use of **double streamers made of semi-flexible red material**, *recommending* Red Mazzerpur 10 mm polyurethane tubing.
- 3.2. This measure is to improve BSL efficiency and maintenance, and will decrease seabird mortality related to streamer entanglements.
- 3.3. This recommendation is adopted into Fishing License Conditions from 1st January 2021

References:

- Snell, K.R.S. (2008a). Tori line report: testing a new tori line design. Falkland Islands Fisheries Department, 32p.
- Snell, K.R.S. (2008b). Tori line report. Falkland Islands Fisheries Department, 36p.

Snell, K.R.S; Brickle, P; Wolfaardt, A.C. (2012). Refining tori lines to further reduce seabird mortality associated with demersal trawlers in the South Atlantic. Polar Biol, 35: 677-687.



Fig.1. Black-browed albatross mortality as result of entanglement in orange flexible streamer. Note the carcass is wrapped by the streamer and covered by warp cable grease. Exposed fracture of the left wing is highlighted in yellow, while fractures in both legs are highlighted in red.

Approved:

Director of Natural Resources 8th July 2020

FIFD Scientific Section