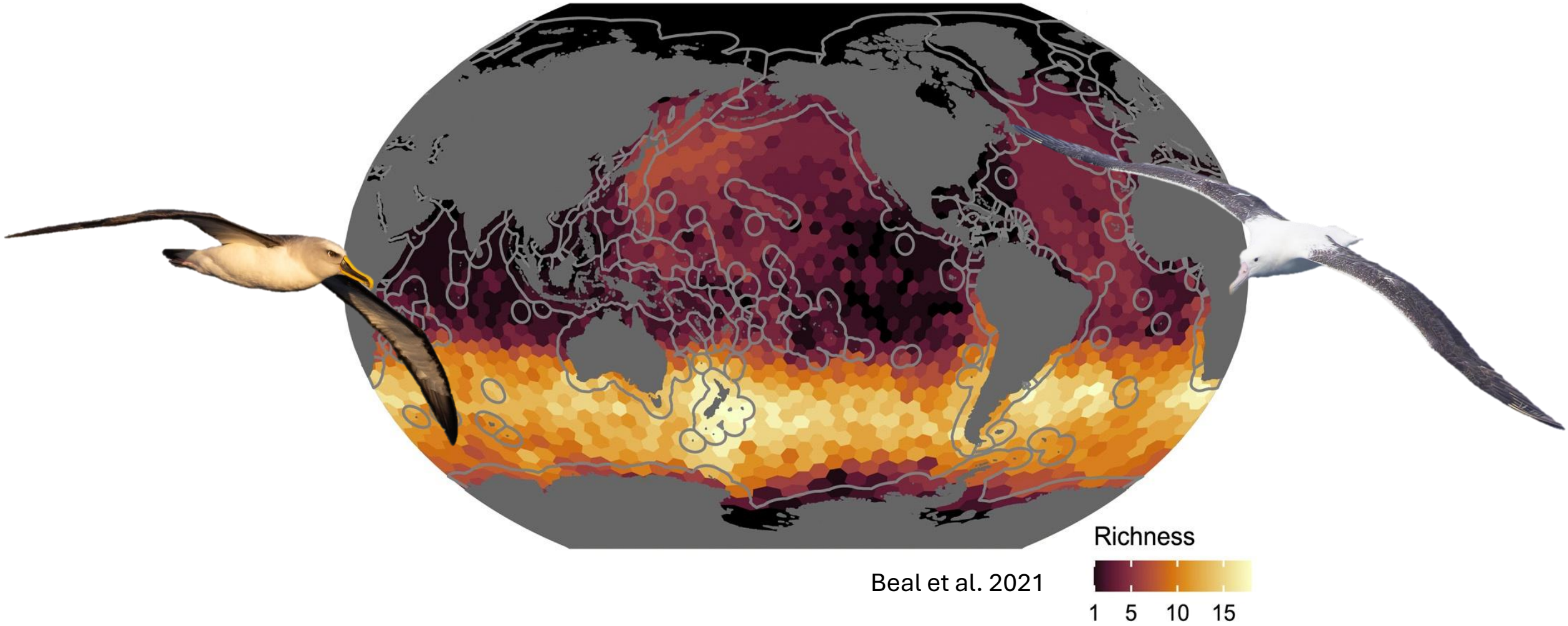
Review of *Conservation and Management Measure to mitigate the impact of fishing for highly migratory fish stocks on seabirds* (CMM 2018-03)

SC21-EB-WP-07

(SC21-EB-IP-09 & SC21-EB-IP-17)

14 Aug 2024

The WCPO - particularly the Southern Ocean around NZ - is a seabird hotspot



For instance, 77% (17/22) albatross species depend on the WCPO

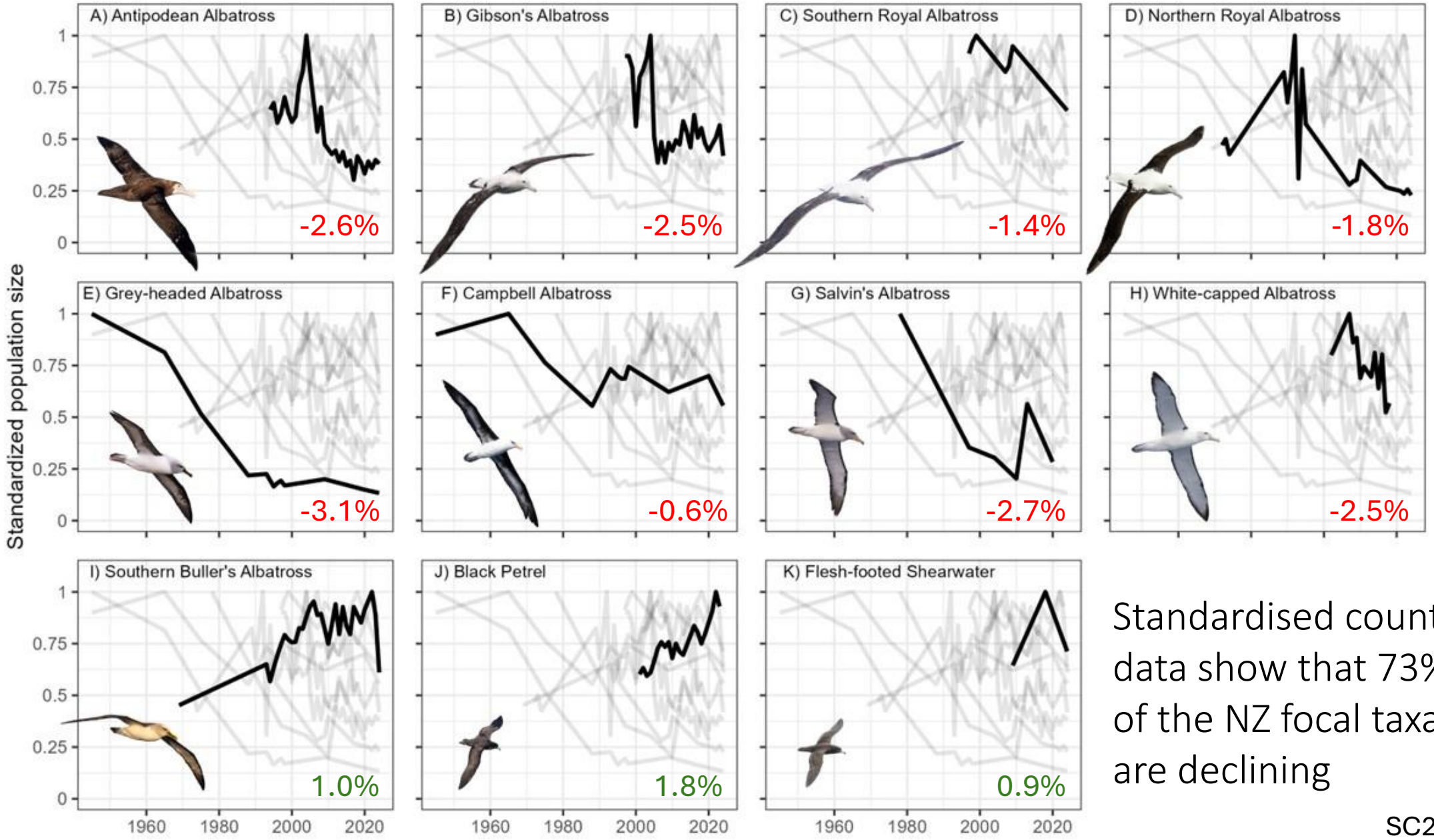
Status of Southern Hemisphere seabirds susceptible to PLL bycatch

Species	IUCN status 2025 [A]	CMS & ACAP listed [B]	Breeds WCPFC CA [C]	Forages in WCPFC CA [C]	Population size within WCPFC CA [G]	Trend (% change p/a) [H]
Antipodean Albatross [I] *	EN	✓	100%	89%	7,565	↓ (-5%)
Northern Royal Albatross*	EN	✓	100%	27%	4,005	↓ (-2%)
Indian Yellow-nosed Albatross	EN	✓	-	10%	?	↓
Grey-headed Albatross*	EN	✓	8%	7%	3,762	↓ (-3%)
Westland Petrel*	EN	✓	100%	45%	6,332	↑ (+4%)
Wandering Albatross	VU	✓	<1%	13%	?	↓
Southern Royal Albatross*	VU	✓	100%	41%	6,006	↓ (-1%)
Salvin's Albatross*	VU	✓	100%	46%	49,953	↓ (-1%)
Chatham Albatross	VU	✓	100%	21%	5,296	↔
Campbell Albatross*	VU	✓	100%	68%	11,853	↓ (-1%)
White-chinned Petrel	VU	✓	18%	5%	232,400	↓
Black Petrel*	VU	✓	100%	56%	6,970	↔

Extract of SC21-EB-WP-07

Ongoing conservation crisis for albatross and petrels recognised by ACAP in 2025 (SC21-EB-IP-08)

New Zealand seabirds are showing concerning declines



Figures show p/a decline across full time period

Standardised count data show that 73% of the NZ focal taxa are declining

Background to the review of CMM 2018-03

WCPFC19 agreed to conduct a review of CMM 2018-03 in 2023 and 2024 whereby new bycatch mitigation studies would be evaluated with respect to bycatch mitigation effectiveness and compared against current ACAP Best Practices.

Review scope (as per **SC19**):

I. The spatial extent of required mitigation methods

II. The Southern Hemisphere mitigation options and specifications

III. The Northern Hemisphere mitigation options and specifications

As noted by **WCPFC20** New Zealand led informal intersessional meetings with interested CCMs to review the latest scientific evidence on seabird bycatch mitigation and gather views. Full review was presented to **SC20** (SC20-EB-WP-06) and recommendation made **WCPFC21** (WCPFC21-2024-21).

WCPFC21 tasked New Zealand to lead further review, and **SC21** to provide advice on the supporting material provide by CCMs ad the SSP.

Staged and prioritised recommendations now presented to **SC21** (SC21-EB-WP-07).

New Zealand's review over 2025

Review process was set out in Circular No. 2025/24, and included an invitation for CCMs to provide further comment and new science information.

Based on feedback from CCMs, more information on the threat status of WCPFC seabirds, species specific bycatch rates, the practicality of some measures, and the potential impacts of the proposals on fishing operations is provided in SC21-EB-WP-07.

New Zealand has revised the scope of proposed amendments to CMM 2018-03 and proposes that amendments to CMM 2018-03 be presented in stages:

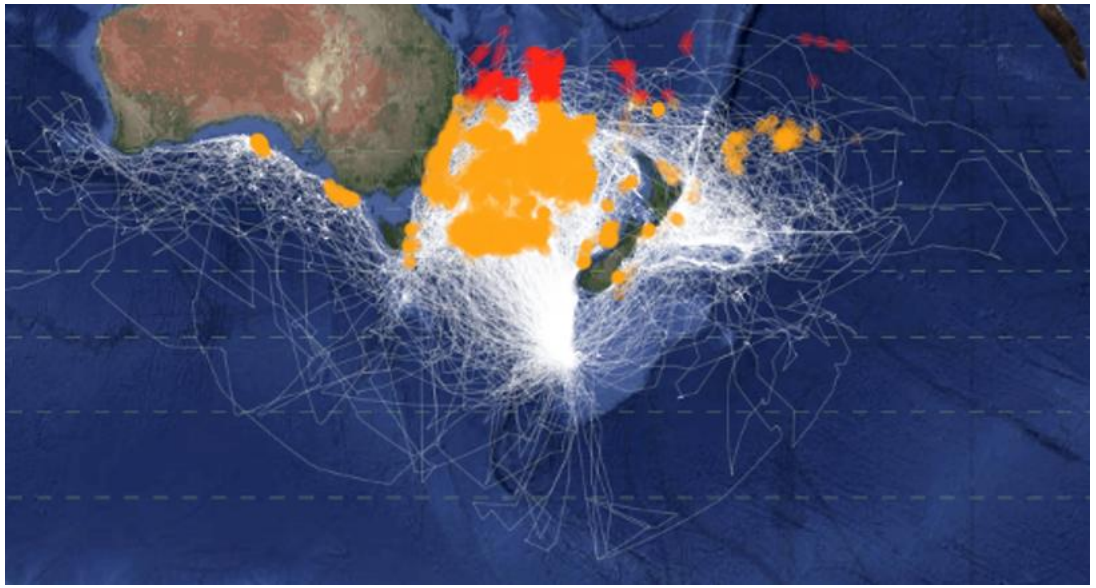
- For the first stage in 2025, New Zealand proposes to focus efforts to improve the Southern Hemisphere measures to address bycatch risk to the most endangered species.
- A second stage would focus on improving other measures, such as those used in the Northern Hemisphere.

Rationale for review and staged approach

- The conservation status of WCPFC seabirds is poor and worsening.
- Southern Hemisphere species are at greater risk and some, such as the Antipodean Albatross, may face extinction within 50 years.
- Longline bycatch is a top threat for seabirds in the Convention Area and is likely the main driver of extinction risk for several Southern Hemisphere species.
- The most important habitat for endangered Southern Hemisphere species is the high seas South of 25°S.
- The endangered Antipodean and Gibsons albatrosses are at particular risk when they are in the high seas area between 25°S to 30°S due to their overlap with fishing effort, and because vessels are required to use only one mitigation method in this area under CMM 2018-03.
- There is high probability of seabird bycatch by longline fishing vessels South of 30°S due to the high numbers of seabirds.

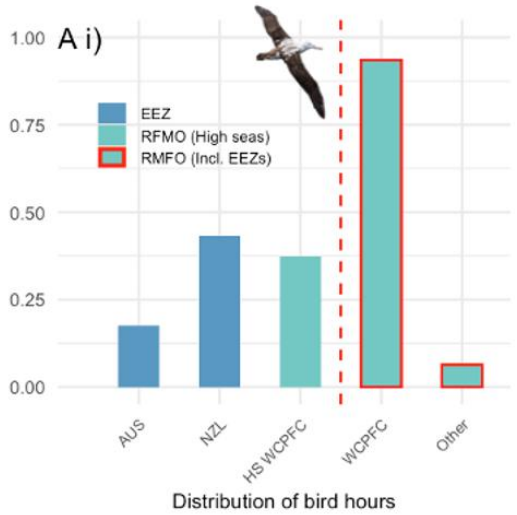
Case study: Gibson's Albatross

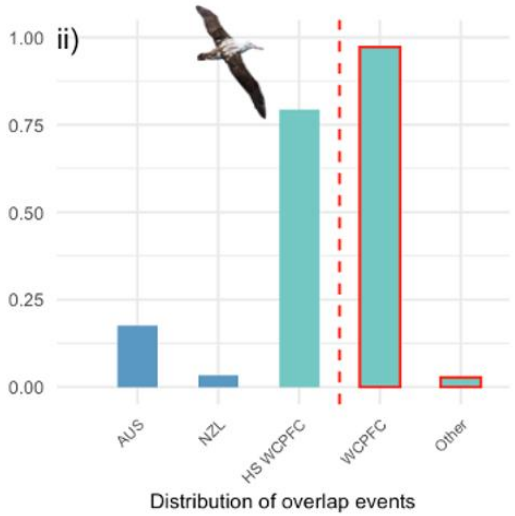
- Has declined by 58% since 2004
- Continues to decline at 4% each year
- 80% of tracked birds overlapped with PLL vessels
- 79% overlap in high seas

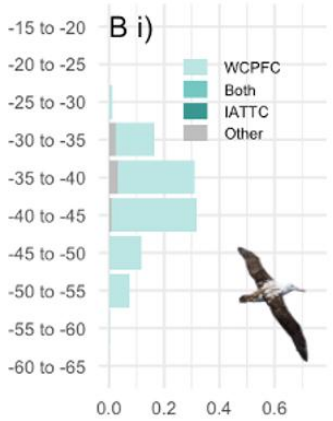


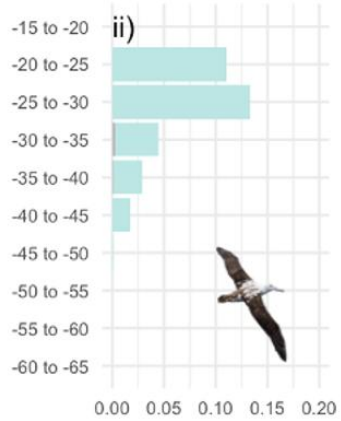
SC21-EB-IP-09

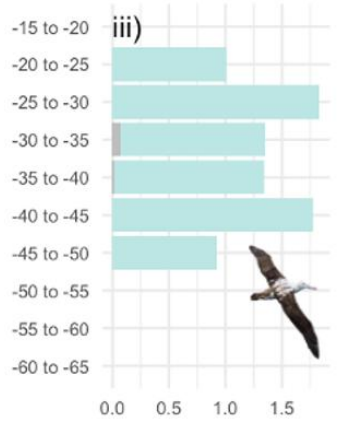
(SC20-EB-WP10)











Recommendation 1: improve mitigation in the area 25°S - 30°S

In the area 25°S to 30°S, *require* the combined use of two measures from the following: tori lines, branch line weighting, and night setting. Or use hook shielding devices as a standalone option.

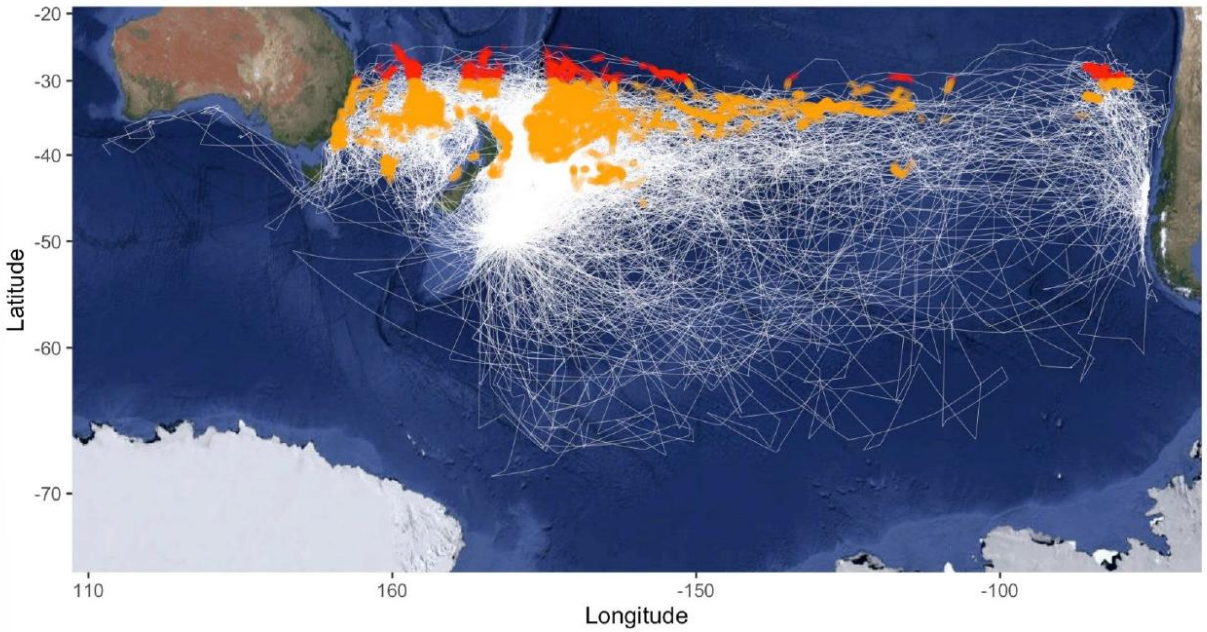


Figure 3. Tracks of 153 Antipodean Albatross (white lines) and spatiotemporal overlap with pelagic longline fishing effort South of 30°S (orange circles) and in the area between 30°S and 25°S (red circles). Analyses followed steps outlined in Fischer et al. (2024a).

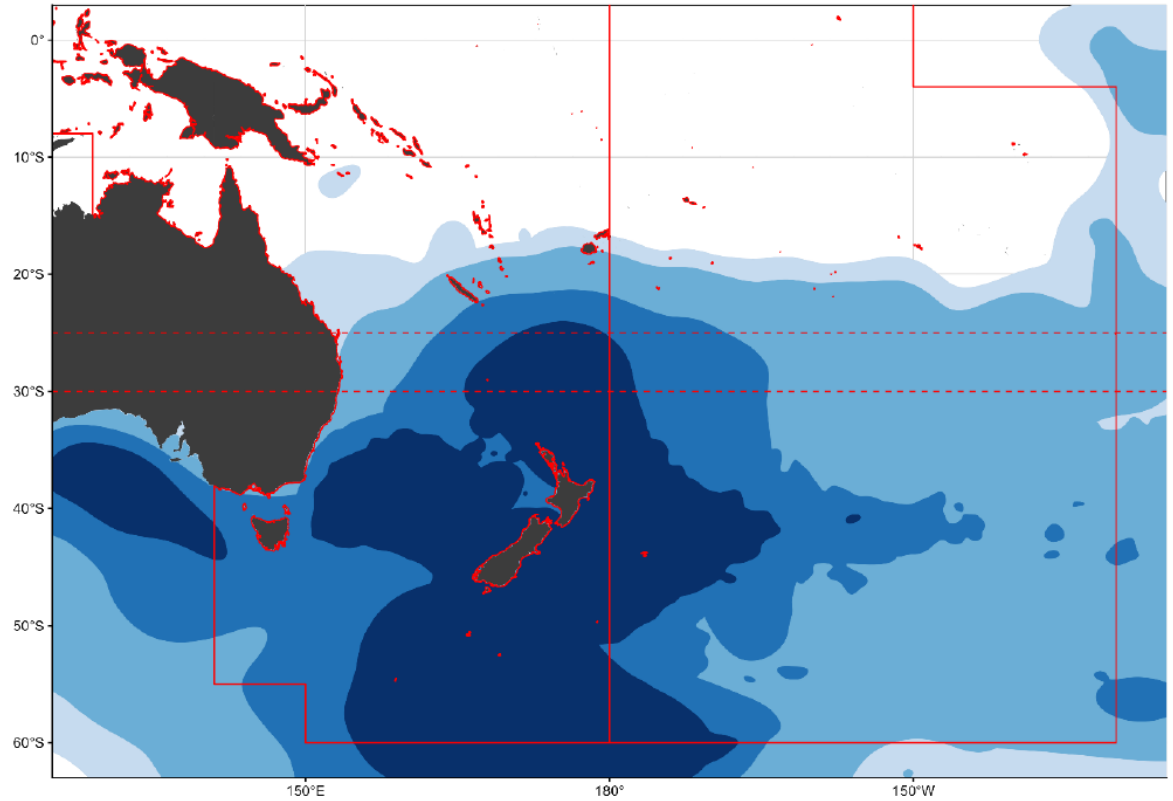


Figure 2. Distribution of eight Southern Hemisphere seabird species that are listed as endangered and vulnerable in the IUCN Red List and are susceptible to bycatch in pelagic longline fisheries in relation to the WCPFC Convention Area and relevant latitudinal zones (dashed lines, representing 25°S and 30°S). Generation of utilisation distributions followed steps outlined in Fischer et al. (2024a). Refer to Table 1 for details of the eight endangered and vulnerable species.

Recommendation 1: improve mitigation in the area 25°S - 30°S

In the area 25°S to 30°S, *require* the combined use of two measures from the following: tori lines, branch line weighting, and night setting. Or use hook shielding devices as a standalone option.

High Seas vs exempt EEZs (SC21-EB-IP-17):

- Consistently extremely low proportions of effort occur in exempt EEZs compared to the High Seas, always below 0.003 of hooks set
- Supports risk-based approach to maintain exemption for EEZs as per Paragraph 4 to avoid undue burden

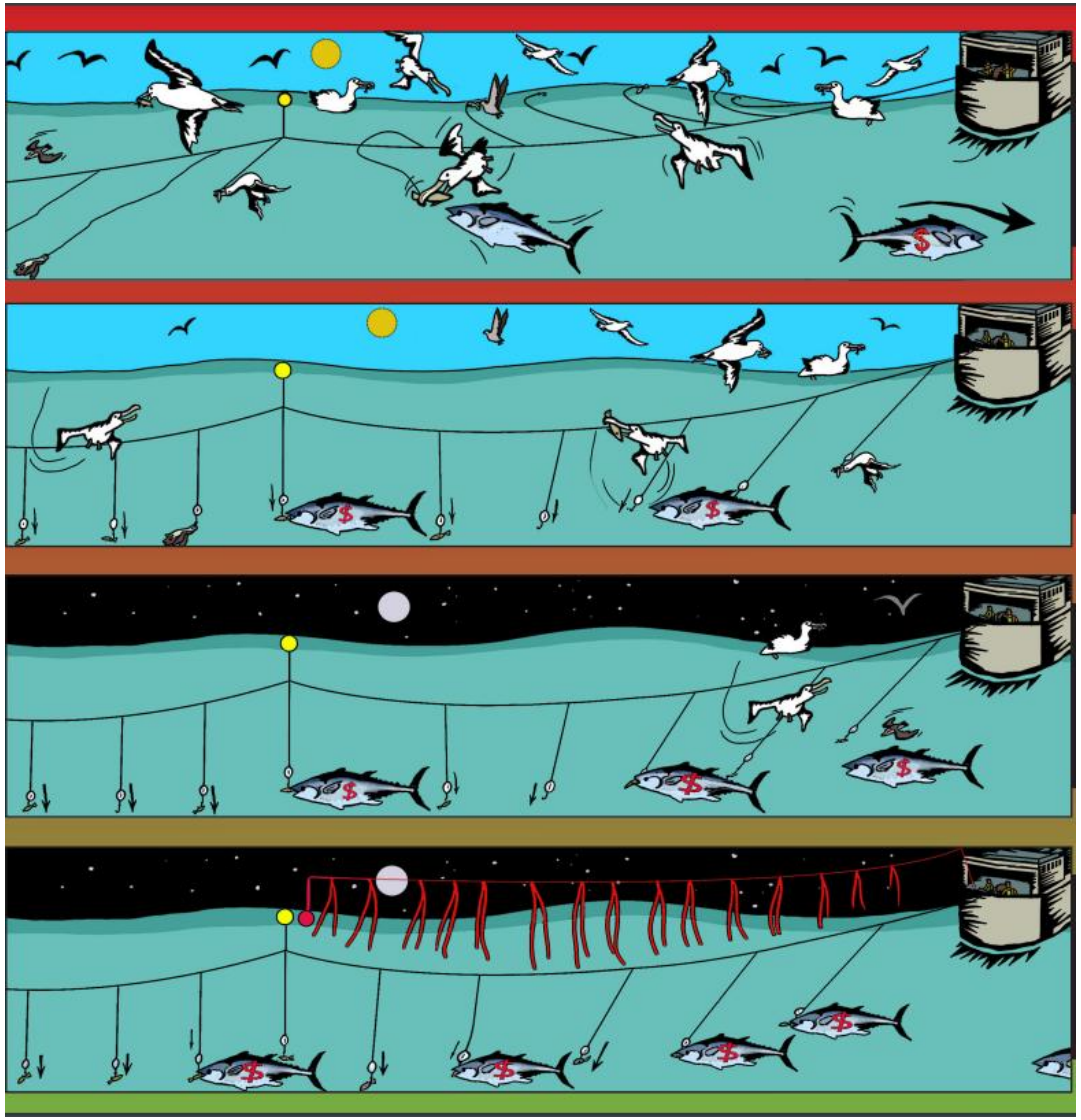
Year	EEZ Hooks	Total Hooks
2020	55,390	37,717,812
2021	48,451	22,794,612
2022	20,006	19,072,495
2023	14,793	10,333,364
2024	0	17,356,160
Mean	27,728	21,454,889

Extract of Table 10, SC21-EB-IP-17. Comparison of the number of hooks set in the area 25°S to 30° S between exempt EEZs and total effort (including high seas).

Recommendation 2: improve mitigation requirements south of 30°S by requiring effective combinations of mitigation methods

In the area south of 30°S, *require* the combined use of tori lines, branch line weighting, and night setting. Or use hook shielding devices as a standalone option.

- Extensive review of mitigation studies shows that a combination of three methods: night setting, tori lines, and branch line weighting in combination, or the standalone use of hook shielding devices, is most effective way to reduce seabird bycatch (SC19-EB-IP-21; SC20-EB-WP-06 , SC20-EB-WP11, Bell et al. 2025; Hutchinson et al. 2025).
- Combining the three effective mitigation methods addresses the limitations of each individual method (SC19-EB-IP-21).
- Implementing the combined three mitigation methods South 30°S could provide relative improvements of seabird bycatch mitigation performance of 61% (SC20-EB-WP11).

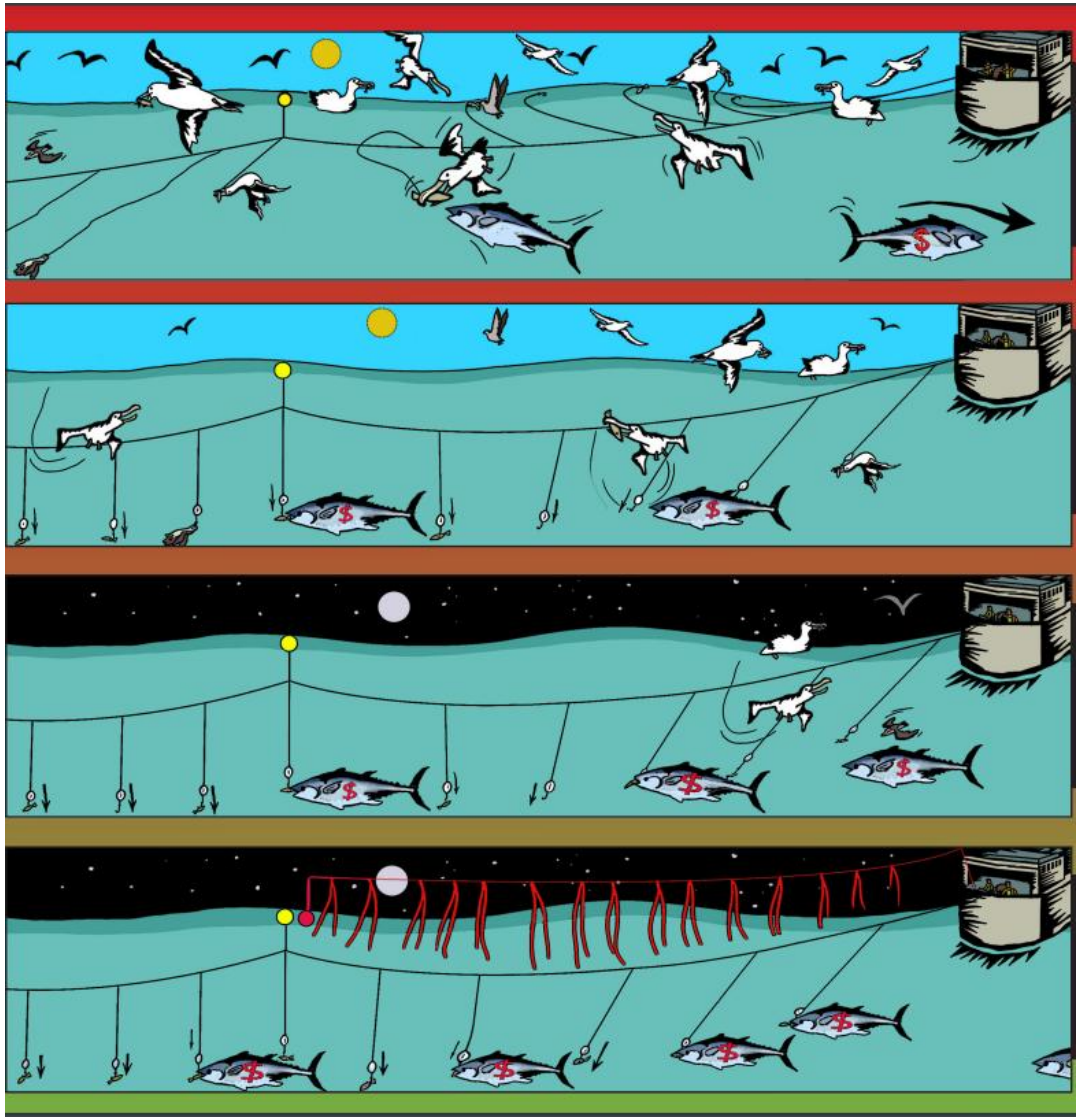


SC21-EB-WP-07

Recommendation 2: improve mitigation requirements south of 30°S by requiring effective combinations of mitigation methods

In the area south of 30°S, *require* the combined use of tori lines, branch line weighting, and night setting. Or use hook shielding devices as a standalone option.

- The average annual pelagic longline fishing effort South of 30°S is only 6.6% of total effort (TCC20-2024/IP-04).
- A quarter of the observed pelagic longline fishing effort in the area south of 30°S within the WCPFC Convention Area already reported the combined use of the three mitigation methods (WCPFC SC20-EB-IP27).
- Peer reviewed studies show that implementing these three mitigation methods does not have any significant impact on target catch rate (SC19-EB-IP-15).



Recommendation 3: improve mitigation requirements south of 30°S by improving the branch line weighting specifications

Require the following branch line weighting specifications for the Southern Hemisphere:

≥40 g within 0.5 m of the hook

≥60 g within 1 m of the hook

≥80 g within 2 m of the hook, and

specify that all branch lines must be weighted when applying this method.

- A heavy hook of 50g can also achieve similar sink rates (SC21-EB-IP-08).
- Branch line weighting is highly effective at reducing seabird bycatch as lines are being set and it is one of the only mitigation methods that can reduce bycatch during the period when hooks are soaking.
- Improving the branch line weighting specifications could result in a 52% improvement in relative bycatch reduction (SC20-EB-WP11).
- Peer reviewed studies show no or little effect on target catch (SC19-EB-IP-15).
- A range of tried and tested options are available to address crew safety risks (ACAP, 2021).
- Branch line weighting is usually integrated into the vessel's gear, which makes it easy to verify during port or on-board inspections.

Summary of proposed changes to CMM 2018-03

SC21-EB-WP-07

Section of CMM 2018-03	**Current requirements**	**Proposed requirements**
Paragraph 2. *25° South -30° South*	CCMs shall require their longline vessels fishing in the area 25°S-30°S to use one of the following mitigation measures: i) weighted branch lines; ii) tori lines; or iii) hook-shielding devices.	CCMs shall require their longline vessels fishing in the area 25°S-30°S to use either a) at least two of these three measures: i). weighted branch lines; ii). night setting; iii). tori lines; or b) hook-shielding devices.
Paragraph 1. *South of 30° South*	CCMs shall require their longline vessels fishing south of 30°S, to use either a) at least two of these three measures: i). weighted branch lines; ii). night setting; iii). tori lines; or b) hook-shielding devices.	CCMs shall require their longline vessels fishing south of 30°S, to use either a) these three measures: i). weighted branch lines; ii). night setting; iii). tori lines; or b) hook-shielding devices.
Annex 1, Paragraph 5 **Weighted branch lines**	i. Following minimum weight specifications are required: a) one weight greater than or equal to 40g within 50cm of the hook; or b) greater than or equal to a total of 45g attached to within 1 m of the hook; or c) greater than or equal to a total of 60 g attached to within 3.5 m of the hook; or d) greater than or equal to a total of 98 g weight attached to within 4 m of the hook.	i. Following minimum weight specifications are required: a) one weight greater than or equal to 40g within 50cm of the hook; or b) greater than or equal to a total of 60g attached to within 1 m of the hook; or c) greater than or equal to a total of 80g attached to within 2 m of the hook. ii. All branch lines must be weighted when applying this method.