SEABIRD BYCATCH IN THE EASTERN PACIFIC OCEAN

ACAP

Agreement on the Conservation of Albatrosses and Petrels

- Update on the conservation status, distribution and priorities for albatrosses and large petrels (ACAP and Birdlife International)
- ACAP Review and Best Practice Advice for Reducing the Impact of Pelagic Longline Fisheries on Seabirds
- Data needs and reporting - SAC-08 INF D(b)

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Status, trends and priorities

Species	Common name	Population (latest census year)[1]	Current Trend 1993-2013[2] (trend confidence)		IUCN Status 2016[3]
Phoebastria irrorata	Waved Albatross	9,615 (2001)	↓	(Medium)	CR
Diomedea sanfordi	Northern Royal Albatross	5,135 (2017)	?		EN
Thalassarche chrysostoma	Grey-headed Albatross	83,999 (1982-2017)	↓	(Medium)	EN
Diomedea antipodensis	Antipodean Albatross	6,709 (1995-2017)	↓	(High)	[4]
Procellaria westlandica	Westland Petrel	2,827 (2011)	↔	(Low)	EN[4]
Diomedea epomophora	Southern Royal Albatross	7,924 (1989-2017)	↔	(Medium)	VU
Diomedea exulans	Wandering Albatross	8,149 (1981-2017)	↓	(High)	VU
Phoebastria albatrus	Short-tailed Albatross	893 (2002-2017)	↑	(High)	VU
Procellaria aequinoctialis	White-chinned Petrel	1,257,568 (1984-2015)	↓	(Very Low)	VU
Procellaria parkinsoni	Black Petrel	1,500 (2016)	↓	(Medium)	VU
Ardenna creatopus	Pink-footed Shearwater	33,520 (2009-2016)	↔	(Low)	VU
Thalassarche eremita	Chatham Albatross	5,296 (2017)	↔	(High)	VU
Thalassarche impavida	Campbell Albatross	21,648 (2012)	↔	(Low)	VU
Thalassarche salvini	Salvin's Albatross	41,214 (1986-2014)	↓	(Low)	VU
Phoebastria nigripes	Black-footed Albatross	69,969 (1976-2017)	↑	(Medium)	NT
Procellaria cinerea	Grey Petrel	75,565 (1981-2017)	↓	(Very Low)	NT
Thalassarche bulleri	Buller's Albatross	32,701 (1971-2017)	↔	(Low)	NT
Phoebetria palpebrata	Light-mantled Albatross	10,637 (1954-2017)	?		NT
Thalassarche steadi	White-capped Albatross	95,917 (1995-2015)	?		NT
Phoebastria immutabilis	Laysan Albatross	666,658 (1976-2017)	↔	(High)	NT
Thalassarche melanophris	Black-browed Albatross	688,230 (1982-2017)	↑	(High)	LC[5]
Macronectes giganteus	Southern Giant Petrel	47,716 (1958-2017)	↑	(Medium)	LC
Macronectes halli	Northern Giant Petrel	10,691 (1973-2017)	↑	(Medium)	LC


Black petrel
Richie Robinson


Salvin's albatross
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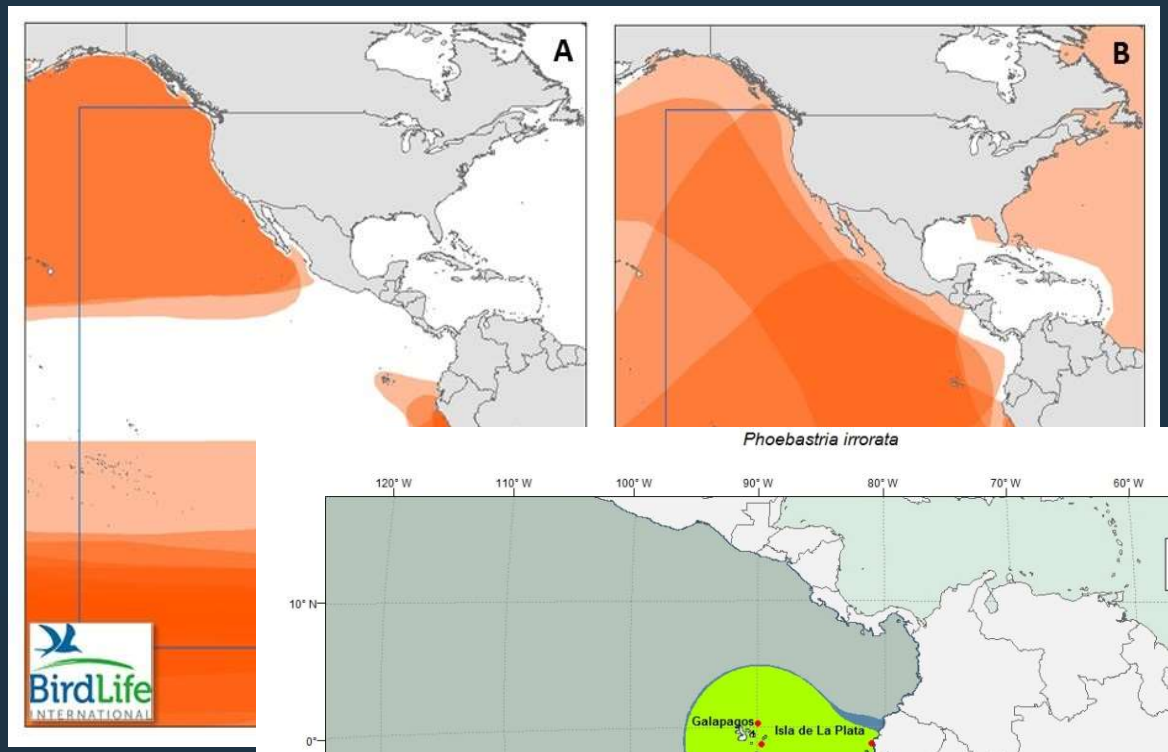
Distribution



Phoebastria irrorata

Waved albatross
© Adam Rehborg

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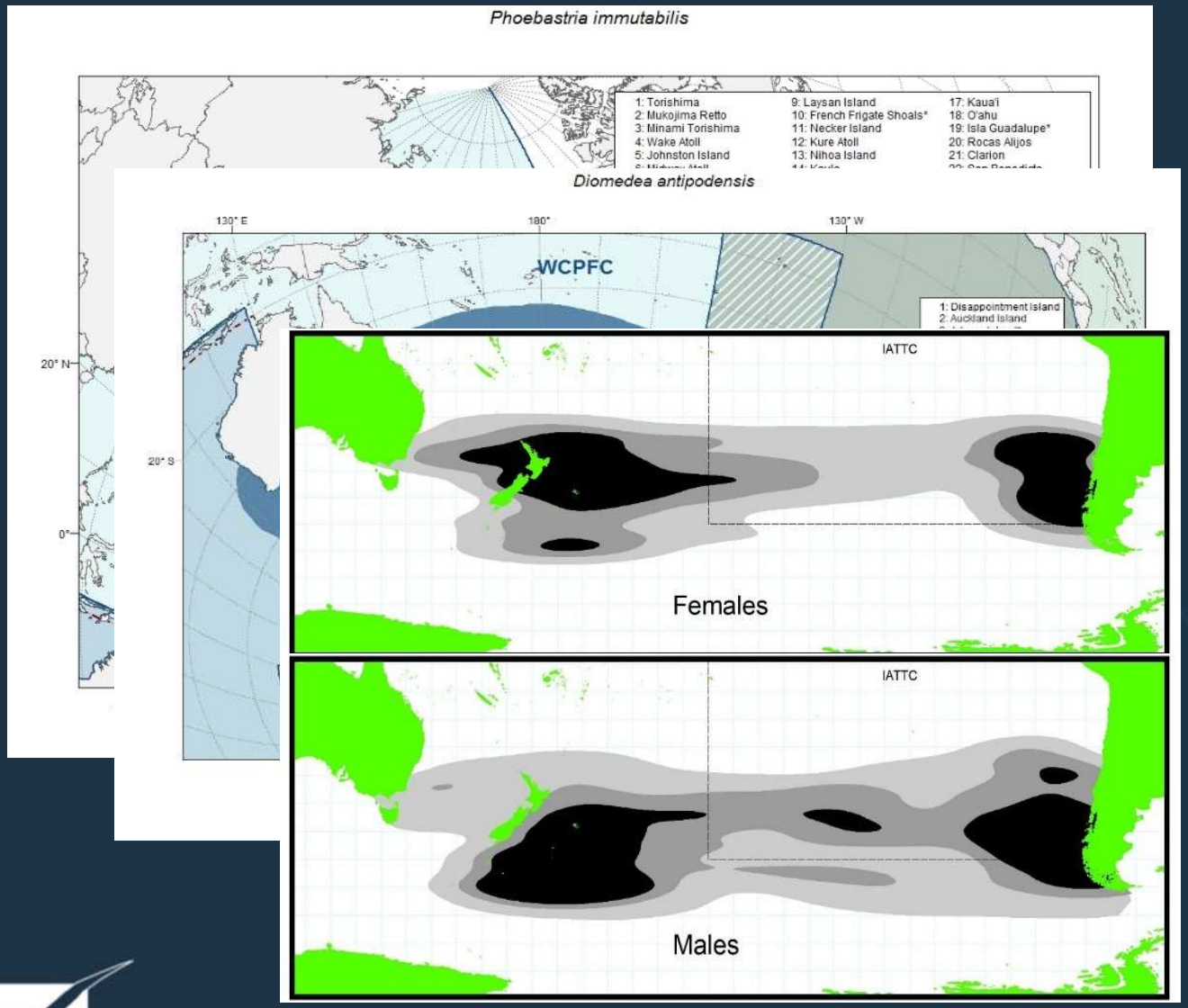
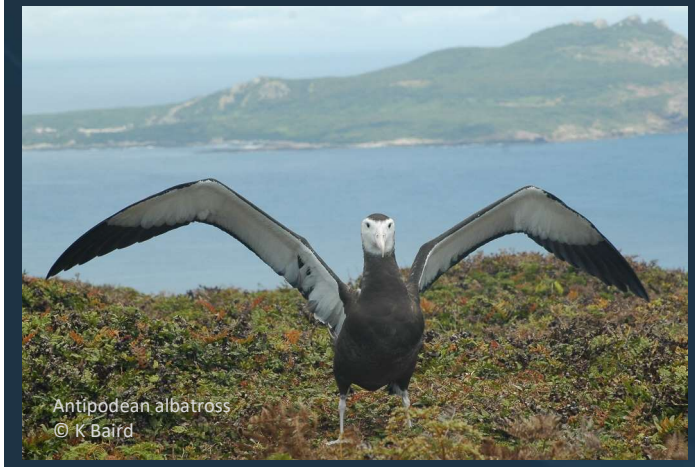
Distribution





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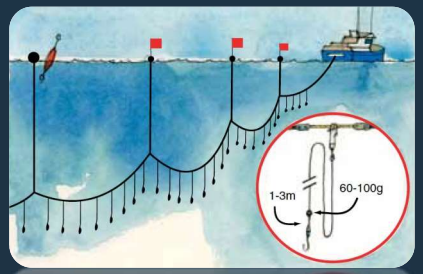
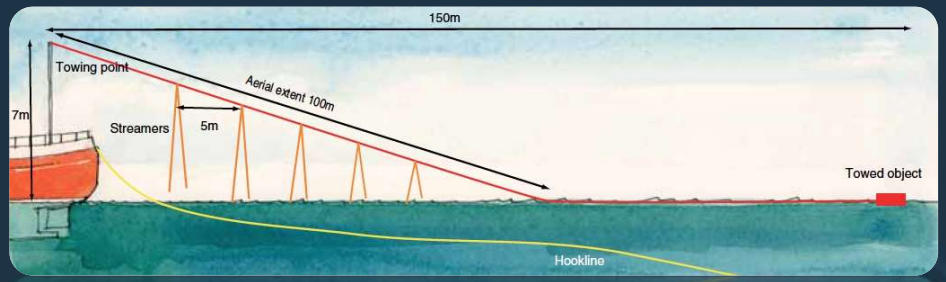
ACAP recommended best practice mitigation

- Based on comprehensive review of scientific literature and recent research
- Assessed regularly against a range of criteria
- Measures should be applied in areas where **fishing effort overlaps with seabirds** vulnerable to bycatch

Combination of weighted branch lines, BSL and night setting





OR hook shielding devices

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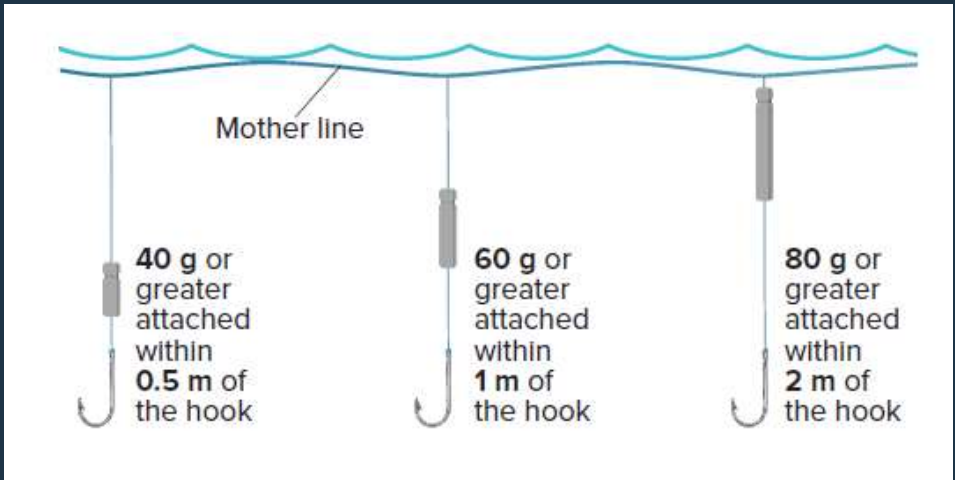
Branchline weighting

More mass close to the hook sinks the hooks most rapidly, reduces attacks on baits and is most likely to reduce mortalities. No negative effects detected on target catch rates.



Recommended minimum standards: **≥ 40 g, ≤ 0.5 m to the hook; ≥ 60 g, ≤ 1 m; ≥ 80 g, ≤ 2 m**. Distance to the hook > 2 m is no longer recommended

This varies from specifications in IATTC Resolution C-11-02

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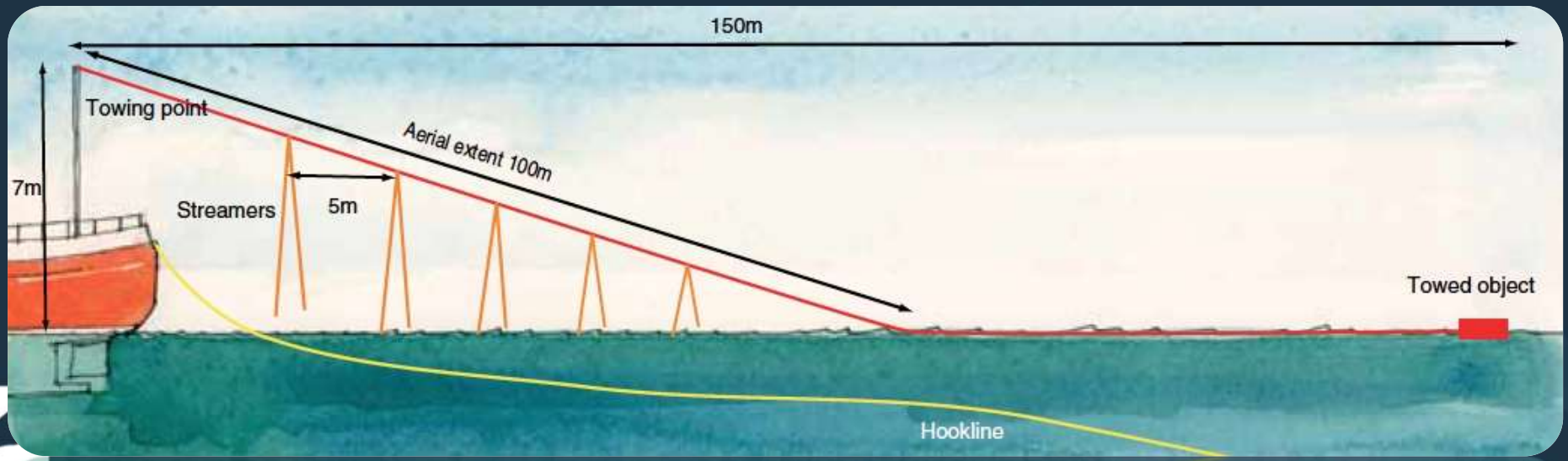
Bird scaring lines

BSL runs from a high point at the stern to a device or mechanism that creates drag. Brightly coloured streamers hanging from the line and reaching the water scare birds from reaching the sinking baited hooks

***Vessels >35 m* - Two BSLs**, one on each side of the sinking longline

***Vessels <35 m* - Single BSL**

ACAP minimum standards for vessels <35 m were revised in Sept 2017
Specifications in IATTC Resolution C-11-02 vary from ACAP minimum standards



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Hook shielding devices

Recommended subject to meeting performance requirements:

- Shield hook to at least 10 m deep or for 10 mins
- Meet minimum branch line weighting specifications
- Experimentally proven effective

Two devices currently assessed by ACAP

Hook Pod

Smart Tuna Hook

No option for use in IATTC Resolution C-11-02

Other ACAP mitigation recommendations

Side-setting with line weighting and bird curtain

- evidence from North Pacific only
- must be used in combination with branch line weighting

Mainline tension

Dead bait

Bait hooking position

Offal and discard management

Measures under development: controlled depth release of hooks

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Mitigation measures NOT recommended

Line shooters (IATTC Resolution C-11-02, column B)

Olfactory deterrents

Hook size and design

Blue dyed bait (IATTC Resolution C-11-02, column B)

Bait thaw status

Laser technology

- serious concerns regarding animal welfare

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Data needs and reporting

Previous ACAP advice in SAC-08 INF D(b)

Databases incomplete and low in detail, limiting a full understanding of global bycatch

Evaluation of performance of conservation measures requires data:

- at species level (and consider uncertainty in identification)
- across spatial and temporal strata
- across the full range of fishery operations

A range of bycatch estimation methods were identified, they should:

- consider undetected mortality
- consider uncertainty in estimation

Data collection requirements similar across other bycatch taxa

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RECOMMENDATIONS

(1) Recognise the bycatch risks posed to seabirds in the IATTC area.

(2) Recognise the conservation concern for high priority populations of seabirds foraging in the IATTC area, including Waved Albatross and Antipodean Albatross.

(3) Review the mitigation measures required in C-11-02 in light of the latest advances in seabird bycatch mitigation, and assess the level of implementation.

(4) Ensure appropriate bycatch data is collected and reported to allow robust assessment of seabird and other bycatch.

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