SEABIRD BYCATCH IDENTIFICATION GUIDE

UPDATED AUGUST 2015

ACAP

FRA
Fisheries Research Agency

How to use this guide

1. Identify the bird

- Start by looking at its bill - size and position of nostrils as shown on pages **6-9** to decide if it's an albatross, a petrel or another group.
- If it's an albatross, use the keys and photos on pages **10-13**, to identify the bird to a particular species (or to the 2 or 3 species that it might be), and go to the page specified to confirm the identification. If it's a petrel, use the key on pages **14-15** , then go to the page as directed. If it's a shearwater, look at pages **66-77**.

2. Record

Record your identification in the logbook choosing one of the FAO codes, or a combination of codes from the list on pages **96-99**.

3. Take photos

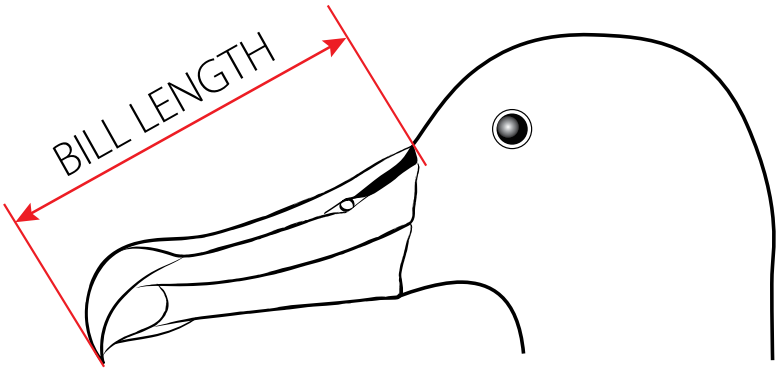
Take three photos of the bird as shown on pages **78-81** and submit with the logbook.

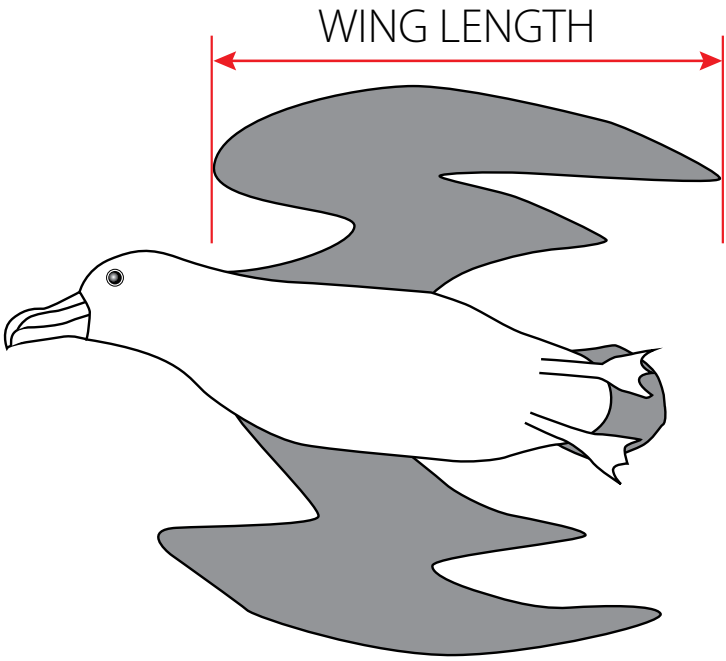
4. Sample feathers

If a sampling programme is in place, pluck some feathers for DNA analysis as shown on pages **82-83**.

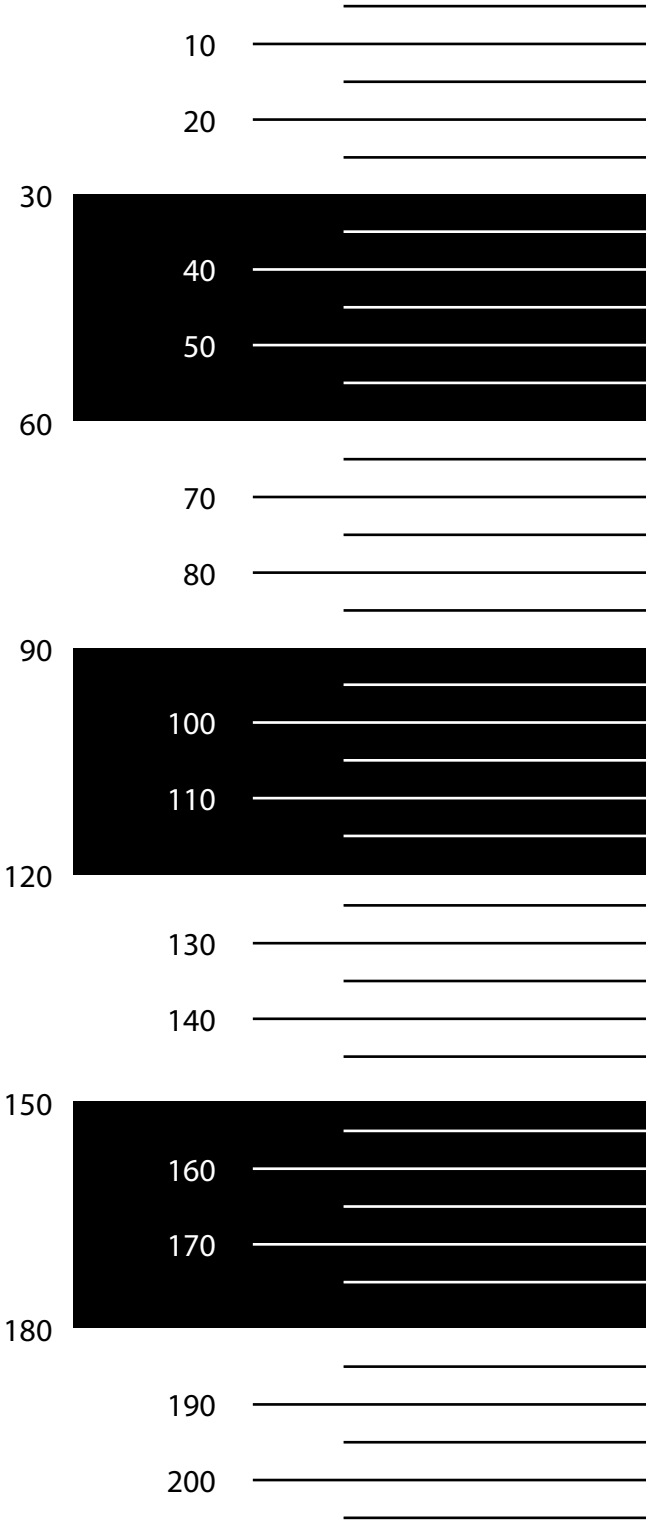
Contents

Measuring Bill & Wing Length





Ruler (mm)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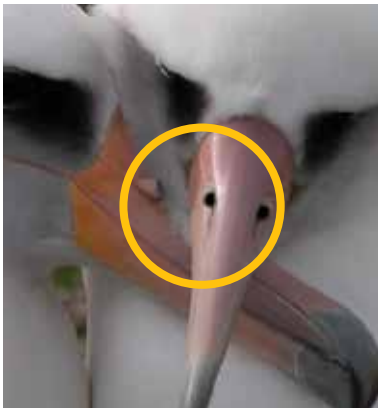
Albatross, Petrel, Shearwater

Albatrosses

Page 10

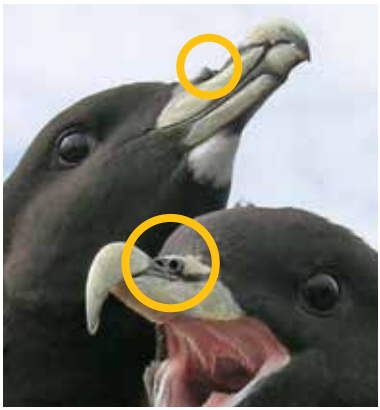
Separate nostrils.



Petrels

Page 14

Fused nostrils on top of short, thick based bill.



Or Other Seabird?

Shearwaters

Page 66-70

Fused nostrils on top of long slender bill.

Other seabirds (skuas, gulls, gannets)

No separate or fused tubes, just nasal cavities instead.

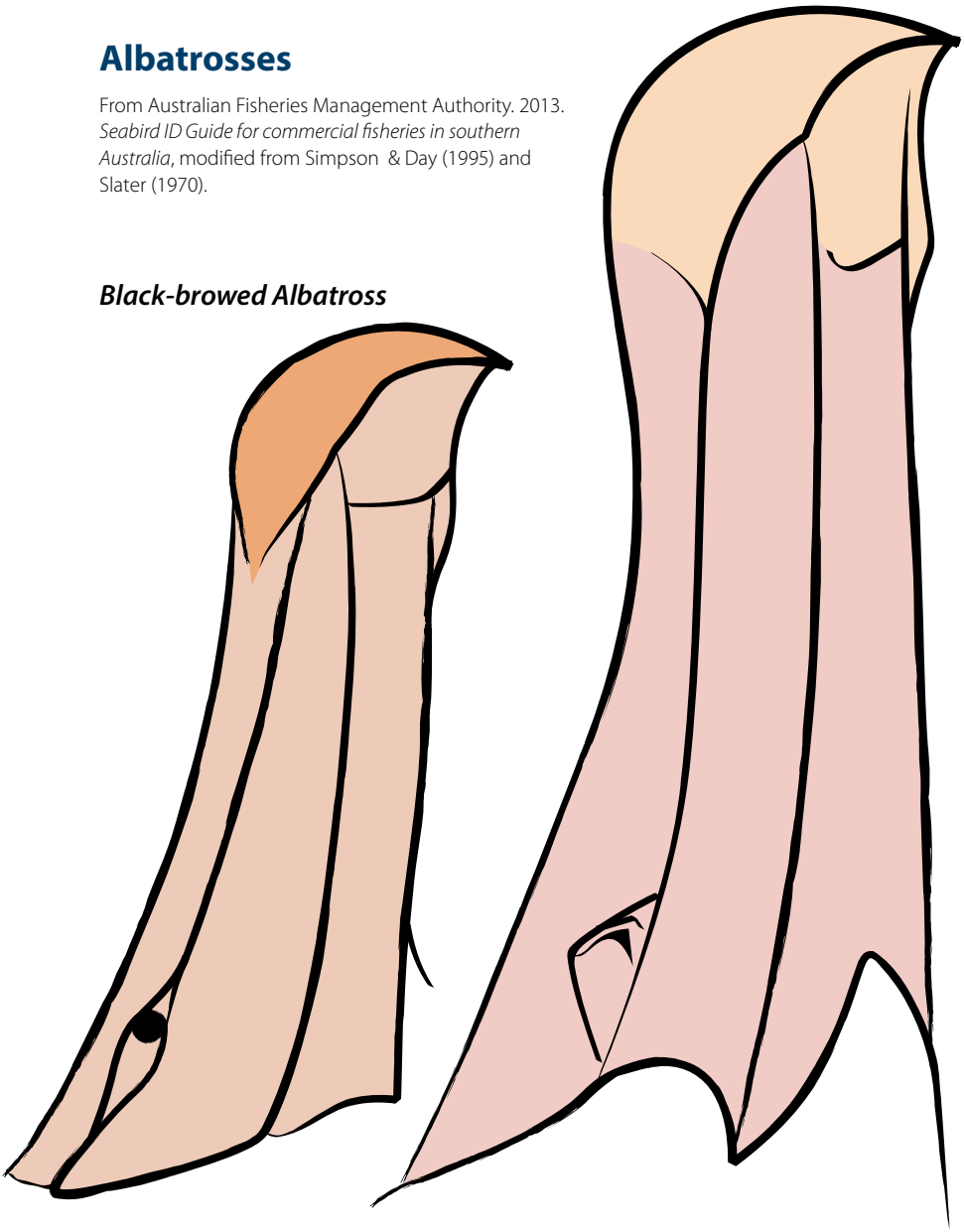
Bill guide

Albatrosses

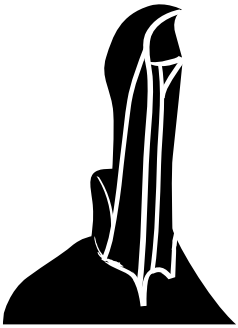
From Australian Fisheries Management Authority. 2013. *Seabird ID Guide for commercial fisheries in southern Australia*, modified from Simpson & Day (1995) and Slater (1970).

Wandering Albatross

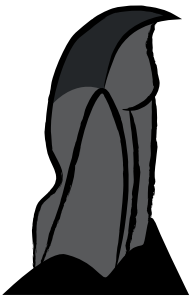
Black-browed Albatross



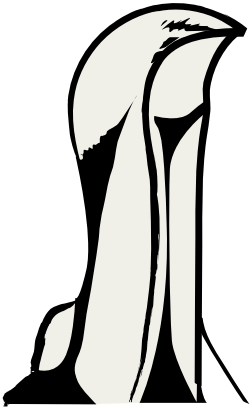
Petrels



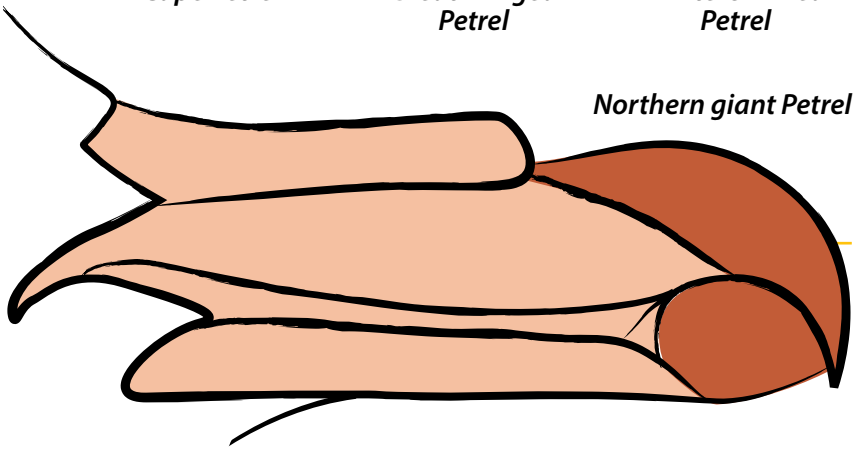
Cape Petrel



Great-winged Petrel

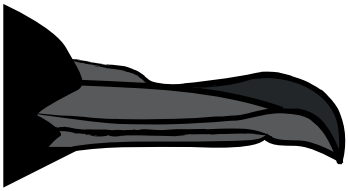


White-chinned Petrel



Northern giant Petrel

Shearwaters



Wedge-tailed Shearwater

Short-tailed Shearwater

Albatross key



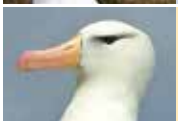
Observed North of the equator

Yellow bill >130mm, green tip, white head with yellow/buff crown/nape


Mostly black bill, dark head

Pink or flesh coloured bill >154mm, dark cutting edge


Pink or flesh coloured bill >135mm, with or without dark cutting edge, brown or white head



Orange bill, red tip, white head


Mostly black bill, yellow upper ridge only


Mostly black bill, yellow upper and lower ridges



Yellow or grey bill, white or grey head



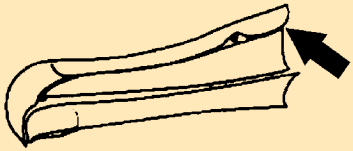
Other

Diomedea Albatross Key

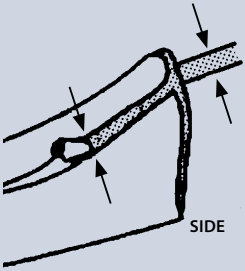
Juvenile/Immature Thalassarche Key

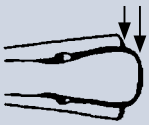
Modified from Kiyota M and Minami H. 2000. Identification key to the southern albatrosses based on the bill morphology Bull. Nat. Res. Inst. Far Seas Fish. 37: 9-17

No exposed black skin at base of bill → **Black-browed/Campbell (P. 52)**

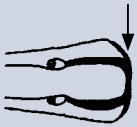


Exposed skin, constant width → Top of bill extends beyond sides → **Buller's (P. 52)**

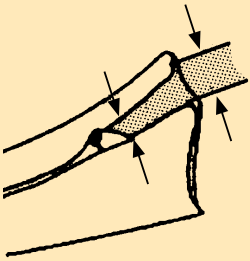


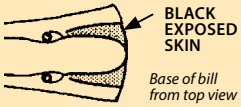


Top of bill flush with sides → **Shy Group (P. 53)**

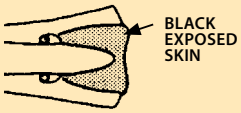


Exposed skin, broader at base → Top of bill flush with sides → **Grey-headed (P. 53)**





Exposed skin extends beyond top of bill → **Yellow-nosed (P. 52)**



Petrel Key

1. Bill length >80 mm, **reddish** tip
2. Bill length >80 mm, **greenish** tip

Yellow bill, pale tip, >44 mm, white chin, white markings on face

Yellow bill, pale tip, >44 mm, usually white chin, no white markings on face

Yellow bill, black tip, >44 mm, dark head, Pacific Ocean

Yellow bill, black tip, <44 mm, dark head, Pacific Ocean

Yellow bill, pale tip, <44mm, grey head, white belly

Black bill >34 mm, dark head, grey face

Black bill <34 mm, dark head, white belly

Black-footed Albatross

Phoebastria nigripes

FAO CODE: DKN **NEAR THREATENED**

Bill length: 94-113 mm
Wing length: 48-53 cm
Body length: 81 cm

- North Pacific species
- **All dark bill**
- Dark plumage, pale patch behind eye and around base of bill, white at base of tail
- Juveniles similar to adults

Similar species: Unlikely to be mistaken. Distinguished from juvenile Short-tailed Albatrosses (p 20) by all dark bill.


Front


Back

Laysan Albatross

Phoebastria immutabilis

FAO CODE: DIZ **NEAR THREATENED**

Bill length: 100-112 mm
Wing length: 47-50 cm
Body length: 79-81 cm

- Northern Pacific species
- **Peach/pink bill, grey tip**
- White head, dark patch around eye extending to grey colouration on face, dark back
- Juveniles similar to adults

Similar species: Unlikely to be mistaken. Distinguished from Short-tailed Albatrosses (p 20) by dark eye patch, dark back and absence of yellow colouration on head.


Front


Back

Short-tailed Albatross

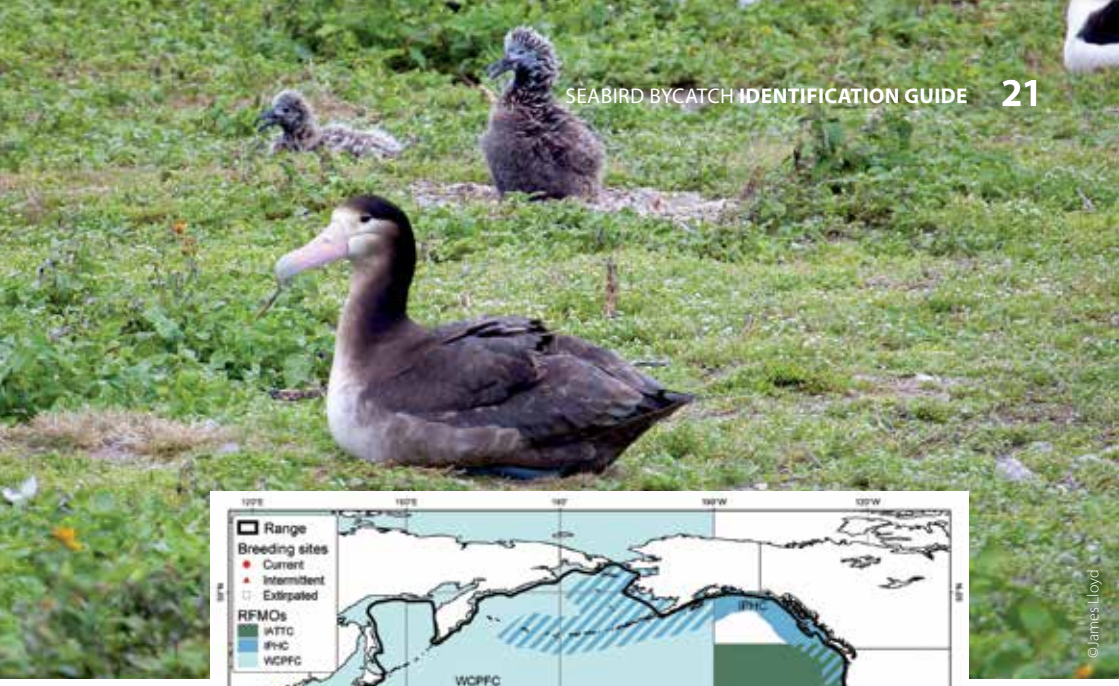
Phoebastria albatrus

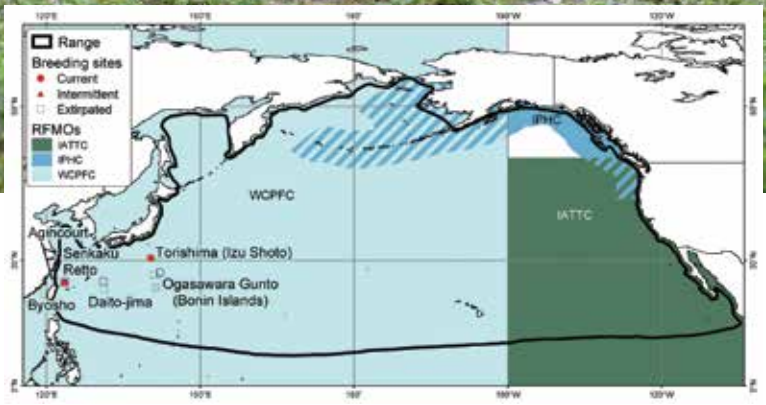
FAO CODE: DAQ **ENDANGERED**

Bill length: 129-141 mm
Wing length: 53-57 cm
Body length: 84-91 cm

- North Pacific species
- **Large pink bill, bluish tip**
- **Adults** have white body and back, yellow head colouration
- **Juveniles** dark chocolate brown with large pink bill

Similar species: Unlikely to be mistaken. Only albatross with white body and back found in North Pacific. Juveniles distinguished from Black-footed Albatrosses (p 16) by pink bill.





We currently do not have a dead or bycaught photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

Waved Albatross

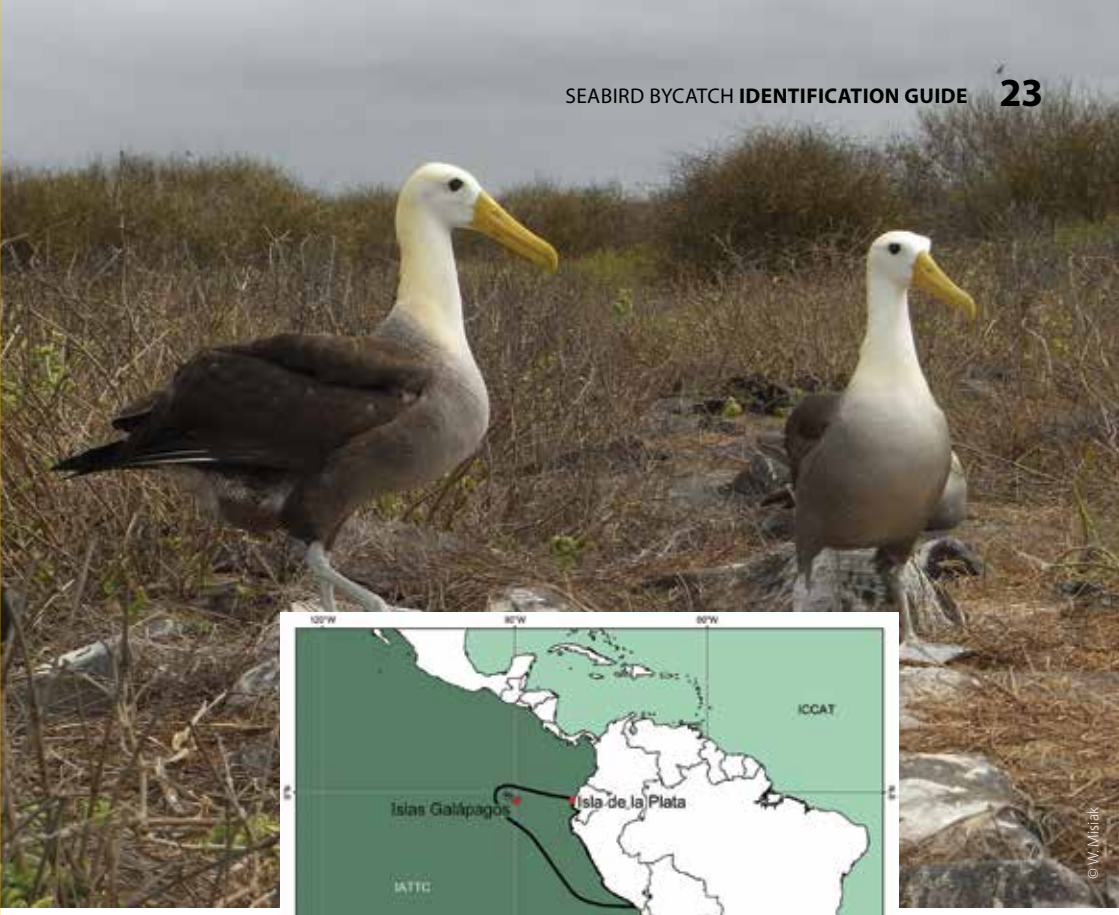
Phoebastria irrorata

FAO CODE: DPK **CRITICALLY ENDANGERED**

Bill length: 134-160 mm
Wing length: 51-59 cm
Body length: 90 cm

- Ranges only around the Galapagos Islands and off the coast of Ecuador and Peru
- **Long yellow bill with greenish tip**
- Brown plumage, white head with yellow/buff crown/nape
- Prominent eyebrows (observable on dead birds?)
- **Juveniles** similar to adults. No yellow head colouration, paler bill

Similar species: Range overlaps with some *Thalassarche* species off the coast of Peru. Unlikely to be confused but distinguished by brown plumage on belly and breast and yellow head colouration.



We currently do not have a dead or bycaught photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

Sooty Albatross

Phoebetria fusca

FAO CODE: PHU **ENDANGERED**

Bill length: 101-117 mm
Wing length: 49-54 cm
Body length: 84-89 cm

- **Black bill with yellow stripe**
- With Light-mantled, only all-dark albatrosses in southern hemisphere
- White eye crescent
- Generally not found in Pacific Ocean
- **Juveniles** similar to adults, lacking eye crescent & bill stripe

Similar species: Distinguished from Light-mantled (p. 26) by dark back and yellow rather than pale blue bill stripe. Juveniles of the two species may be difficult to distinguish. Distinguished from giant petrels (p. 54) by dark, slender bill.

Light-mantled Albatross

Phoebetria palpebrata

FAO CODE: PHE **NEAR THREATENED**

Bill length: 98-117 mm
Wing length: 49-55 cm
Body length: 78-90 cm

- **Black bill with pale blue bill stripe**
- With Sooty, only all-dark albatrosses in southern hemisphere
- Light grey back
- White eye crescent
- **Juveniles** similar to adults, lacking eye crescent & bill stripe

Similar species: Distinguished from Sooty (p. 24) by lighter back and pale blue rather than yellow bill stripe. Also, Sooty generally not found in Pacific Ocean. Juveniles of the two species may be difficult to distinguish. Distinguished from giant petrels (p. 54) by dark, slender bill.

Northern Royal Albatross

Diomedea sandfordi

FAO CODE: DIQ **ENDANGERED**

Bill length: 154-172 mm
Wing length: 61-67 cm
Body length: 115 cm

Southern Royal Albatross

Diomedea epomophora

FAO CODE: DIP **VULNERABLE**

Bill length: 166-190 mm
Wing length: 65-72 cm
Body length: 107-122 cm

- **Pink bill with black cutting edge**
- White head, body, back and underwing
- **Juveniles/immature** similar to adults, dark flecking on head and back
- **Can only be separated by white on upper wing of Southern.**
- **Juveniles/immature** of the two species may be indistinguishable

Similar species: Distinguished from the wandering albatross (p. 32) by large bill (>154 mm) with dark cutting edge.

Northern Royal Albatross

Southern Royal Albatross

Amsterdam Albatross

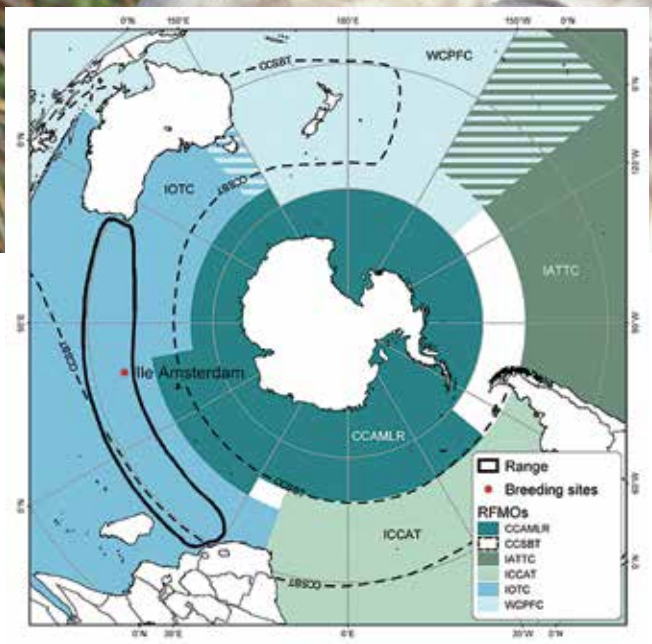
Diomedea amsterdamensis

FAO CODE: DAM **CRITICALLY ENDANGERED**

Bill length: 138-156 mm
Wing length: 62-68 cm
Body length: 100-110 cm

- **Dark cutting edge on pink bill**
- Darkest of the wanderers. Similar to juveniles of other wanderers
- **Very rare**, range primarily restricted to Indian Ocean.

Similar species: Easily confused with juveniles of other wanderers but distinguished by dark cutting edge to bill. Distinguished from Royal Albatrosses (p. 28) by shorter bill length.



© Scott Shaffer,

We currently do not have a dead or bycaught photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

Wandering Albatross

Diomedea exulans

FAO CODE: DIX **VULNERABLE**

Bill length: 155-180 mm
Wing length: 63-71 cm
Body length: 110-135 cm

- **Pale pink bill with yellowish tip**
- Largest and whitest of the wanderers
- **Juveniles** chocolate brown with white face mask and underwing and pink bill

Similar species: Distinguished from other wanderers by size and from Royal Albatrosses (p. 28) by lack of dark cutting edge to bill. Juveniles may be difficult to distinguish from other wanderers.


Front


Back

Antipodean Albatross (including 'Gibson's Albatross')

Diomedea antipodensis

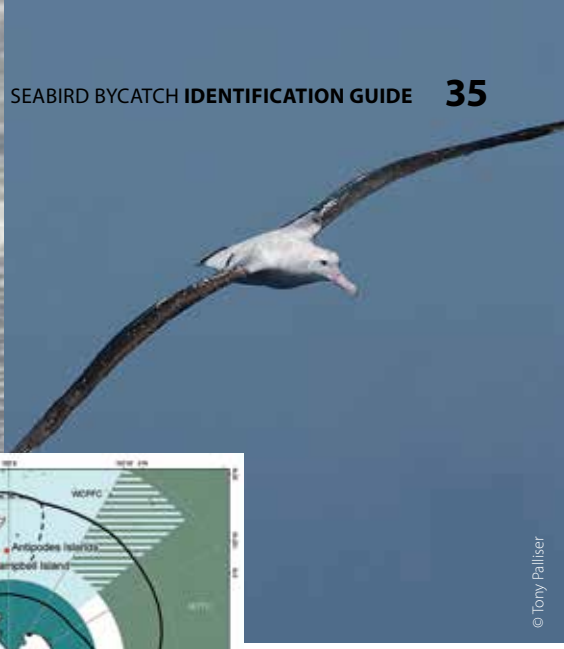
FAO CODE: DQS/DIW **VULNERABLE**

Bill length: 139-155 mm
Wing length: 60-70 cm
Body length: 110-115 cm

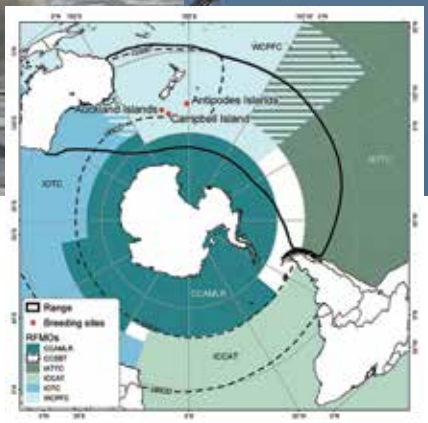
- **Pink bill with yellowish tip**
- Similar to other wanderers
- Mostly white plumage with brown markings
- Range primarily restricted to the Pacific Ocean and Tasman sea
- Most common wanderer in New Zealand waters
- **Juveniles** chocolate brown with white cheeks and underwing, pink bill

Similar species: Easily confused with other wanderers. Distinguished from Wandering Albatross (p. 32) by size and from Royal Albatrosses (p. 28) by lack of dark cutting edge to bill. Juveniles may be difficult to distinguish from other wanderers.

© Tony Palliser



© Tony Palliser



Tristan Albatross

Diomedea dabbenena

FAO CODE: DBN **CRITICALLY ENDANGERED**

Bill length: 144-150 mm
Wing length: 60-65 cm
Body length: 110 cm

- Pink bill with yellowish tip
- Similar to other wanderers
- Mostly white plumage with brown markings
- Range primarily restricted to the South Atlantic and Indian Ocean
- Juveniles chocolate brown with white cheeks and underwing, and pink bill

Similar species: Easily confused with other wanderers. Distinguished from Wandering Albatross (p. 32) by size and from Royal Albatrosses (p. 28) by lack of dark cutting edge to bill. Juveniles may be difficult to distinguish from other wanderers.

Black-browed Albatross

Thalassarche melanophris

FAO CODE: DIM

NEAR THREATENED

Bill length: 114-122 mm
Wing length: 51-56 cm
Body length: 80-95 cm

Campbell Albatross

Thalassarche impavida

FAO CODE: TQW

ENDANGERED

Bill length: 105-118 mm
Wing length: 49-54 cm
Body length: 80-95 cm

- **Bright orange bill, reddish tip**
- White head, white body, dark mantle and upper wings, dark eye patch
- **Juveniles** similar to adults, pale grey head and neck, pale brown/grey bill with black tip, dark underwings (p. 52)
- **Adults only separated by pale iris in Campbell** (also see distribution)
- **Juvenile** Black-browed and Campbell indistinguishable

Similar species: Distinguished from Chatham (p. 50) by white rather than grey head.


Black-browed Albatross
© Graham Robertson, AAD


Back


Front


Campbell Albatross

Atlantic yellow-nosed Albatross

Thalassarche chlororhynchos

FAO CODE: DCR

ENDANGERED

Bill length: 107-122 mm
Wing length: 48-52 cm
Body length: 75 cm

Indian yellow-nosed Albatross

Thalassarche carteri

FAO CODE: THQ

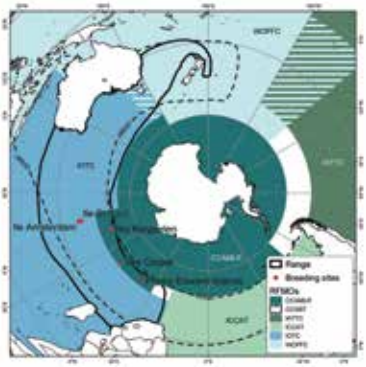
ENDANGERED

Bill length: 111-124 mm
Wing length: 46-50 cm
Body length: 75 cm

- **Mostly black bill, yellow upper ridge only**
- White head and body, dark eye patch, black upper wings and back
- **Adults - greyer head** and yellow stripe on upper bill **rounded** at base of bill on **Atlantic**, vs. **whiter head** and yellow stripe **pointed at** base of bill on **Indian** - not always reliable (see also distribution)
- **Juveniles** similar to adults, all black bill (see p. 52), indistinguishable between the two species

Similar species: Distinguished from Grey-headed (p. 42) and Buller's (p. 44) by yellow on bill upper ridge only.

Atlantic yellow-nosed Albatross



Indian yellow-nosed Albatross

Grey-headed Albatross

Thalassarche chrysostoma

FAO CODE: DIC **ENDANGERED**

Bill length: 109-121 mm
Wing length: 50-55 cm
Body length: 70-85 cm

- Mostly **black bill** with **yellow upper and lower ridges**
- **Yellow ridge tapers towards base of bill**
- Grey head with white eye patch
- White body, dark upper wings and back
- **Juveniles** similar to adults, greyer head, black bill (p. 53), dark grey underwing

Similar species: May be confused with Buller's (p. 44). Separated by lack of white cap, yellow upper ridge tapers rather than broadens at base of bill, yellow lower ridge does not extend to tip of bill (see also distribution). Distinguished from Yellow-nosed (p. 40) by yellow lower ridge.


Front

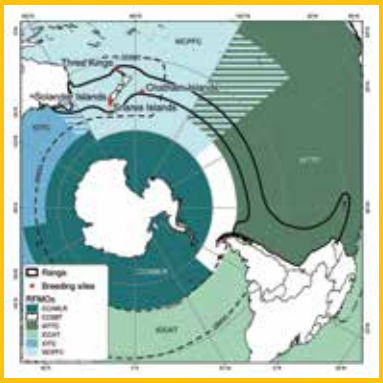

Back

Buller's Albatross

Thalassarche bulleri

FAO CODE: DIB

NEAR THREATENED



Bill length: 113-129 mm
Wing length: 47-55 cm
Body length: 76-81 cm

- **Mostly black bill with yellow upper and lower ridges**
- **Yellow ridge broadens at base of bill**
- Grey head with white cap and dark eye patch
- White body, black upper wings and back
- **Juveniles** similar to adults, grey bill with black tip (p. 52), white underwing

Similar species: May be confused with Grey-headed (p. 42). Separated by white cap, yellow upper ridge broadens rather than tapers at base of bill, yellow lower ridge extends to tip of bill (see also distribution). Distinguished from Yellow-nosed albatross (p. 40) by yellow lower ridge on bill.


Front


Back

White-capped Albatross

Thalassarche steadi

FAO CODE: TWD

NEAR THREATENED

Bill length: 126-141 mm
Wing length: 56-63 cm
Body length: 90 cm

Shy Albatross

Thalassarche cauta

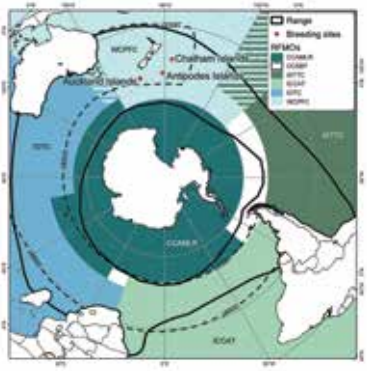
FAO CODE: DCU

NEAR THREATENED

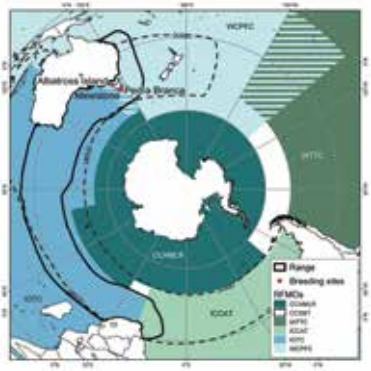
Bill length: 122-138 mm
Wing length: 53-59 cm
Body length: 90-110 cm

- **Grey bill, yellow tip**
- Often indistinguishable, some Shys may have yellow at base of bill (see also distribution)
- Pale grey head, white crown, dark eye patch
- White body, black back and upper wings
- **Juveniles** similar to adults, grey head, grey bill with black tip (p. 53)
- **Juvenile** Shy and White-capped indistinguishable

Similar species: Easily confused with Salvin's (p. 48). Distinguished by lighter head, grey upper ridge on bill with no dark tip.



White-capped Albatross



Shy Albatross

Salvin's Albatross

Thalassarche salvini

FAO CODE: DKS **VULNERABLE**

Bill length: 109-121 mm
Wing length: 55-60 cm
Body length: 90-100 cm

- **Grey bill, yellow upper ridge, black lower tip**
- Grey head, dark eye patch
- White body, black upper wings and back
- **Juveniles** similar to adults, grey bill with black tip (p. 53)

Similar species: Easily confused with Shy/White-capped (p. 46). Distinguished by greyer head, dark lower bill tip.

Chatham Albatross

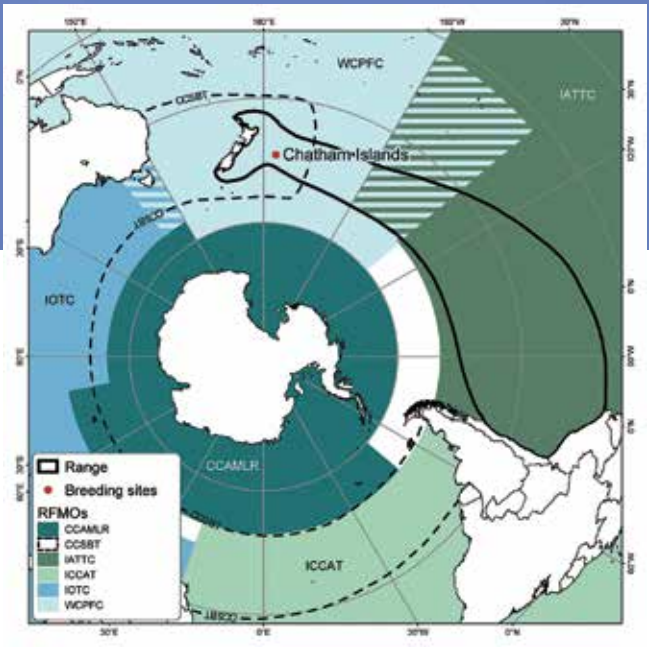
Thalassarche eremita

FAO CODE: DER **VULNERABLE**

Bill length: 113-130 mm
Wing length: 53-59 cm
Body length: 70-85 cm

- **Yellow bill, black lower tip**
- Dark grey head, dark eye patch
- White body, black upper wings and back
- **Juveniles** similar to adults, greyer, dark bill with black tip

Similar species: Distinguished from Salvin's (p. 48) by darker grey head.



We currently do not have a dead or bycaught photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

Black-browed

T. melanophrys and T. impavida

pale grey head, pale brown/ grey bill with black tip, dark underwings

Yellow-nosed

T. chlororhynchos and T. carteri

white head, black bill, white underwings with black edges

Buller's *(T. bulleri)*

grey head with white cap, pale grey bill with black tip, white underwings with dark edges

Grey-headed

T. chrysostoma

grey head, dark bill with black tip, may have some yellow on upper and lower ridges, dark underwings

Shy-type

T. cauta, T. steadi, T. salvini

pale grey head, grey bill with dark tip, white underwings with thin dark edges, 'thumbprint' at base of wing

Descriptions modified from Onley D and Scofield P . 2007. Albatrosses, petrels & shearwaters of the world. Princeton Field Guides .

Southern giant Petrel

Macronectes giganteus

FAO CODE: MAI

LEAST CONCERN

Bill length: 84-111 mm
Wing length: 46-56 cm
Body length: 87 cm

- Pinkish bill with **pale green coloured tip**
- Sooty black plumage becoming paler with age, up to 10% of population **can be all white, usually with few black feathers**

Northern giant Petrel

Macronectes halli

FAO CODE: MAH

LEAST CONCERN

Bill length: 85-111 mm
Wing length: 48-57 cm
Body length: 87 cm

- Pinkish bill with **reddish coloured tip**
- Sooty black plumage becoming paler with age
- Juveniles may lack bill tip colour – **may be difficult to distinguish** between Northern and Southern

Similar species: Distinguished from *Phoebetria* spp. (p 24-27) by heavy, flesh-coloured bill".


Southern Giant Petrel (juvenile)


Southern Giant Petrel


Southern Giant Petrel


Northern Giant Petrel

Spectacled Petrel

Procellaria conspicillata

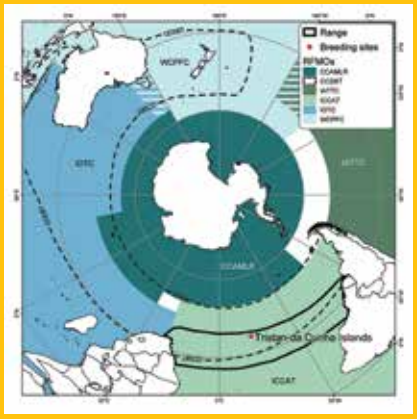
FAO CODE: PCN

VULNERABLE

© R. Wanless

Bill length: 48-54 mm
Wing length: 40-47 cm
Body length: 55 cm

- **Yellow bill, with variable amount of dark on tip**
- Black with white face markings
- Atlantic Ocean only



We currently do not have a dead or bycaught photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

White-chinned Petrel

Procellaria aequinoctialis

FAO CODE: PRO **VULNERABLE**

Bill length: 48-55 mm
Wing length: 42-47 cm
Body length: 50-55 cm

- **Yellow bill, no black tip**
- Entirely black, with white chin (although this feature is highly variable and may not be reliable)

Similar species: Distinguished from Black and Westland petrels (p. 58) and Flesh-footed Shearwater (p. 68) by all yellow bill.

Black Petrel

Procellaria parkinsoni

FAO CODE: PRK

VULNERABLE

Bill length: 39-43 mm
Wing length: 33-36 cm
Body length: 46 cm

Westland Petrel

Procellaria westlandica

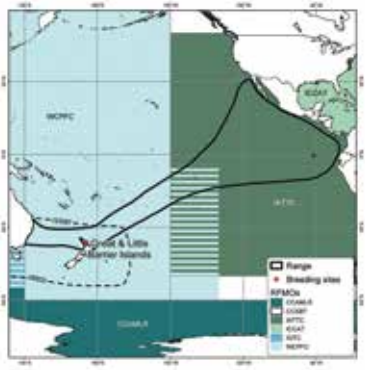
FAO CODE: PCW

VULNERABLE

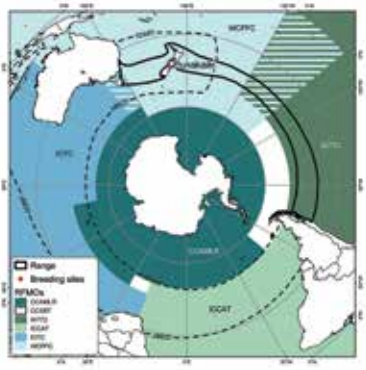
Bill length: 46-53 mm
Wing length: 37-40 cm
Body length: 50-55 cm

- Large, all-black petrels
- **Yellowish bill with black tip**
- Distinguished from each other by size - Westland larger than Black, longer billed

Similar species: Distinguished from White-chinned Petrel (p. 57) by **black bill tip** and absence of white chin (although this feature is highly variable in White-chinned petrels and may not be reliable)



Black Petrel



Westland Petrel

Grey Petrel

Procellaria cinerea

FAO CODE: PCI

NEAR THREATENED

Bill length: 44-50 mm
Wing length: 29-35 cm
Body length: 50 cm

- **Pale bill, yellow tip**
- Grey upper wings and back with darker tail and head
- White underparts with grey tail and underwings


Front


Back

Great-winged Petrel

Pterodroma macroptera

FAO CODE: PDM **LEAST CONCERN**

Bill length: 34-39 mm
Wing length: 29-32 cm
Body length: 41-45 cm

- **Black bill**
- Entirely dark plumage except for pale feathers around base of bill and throat

Similar species: Distinguished from White-chinned Petrel (p. 57) by **black bill**

We currently do not have a dead or bycaught photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

Cape Petrel

Daption capense

FAO CODE: DAC

LEAST CONCERN

Bill length: 28-33 mm
Wing length: 26-28 cm
Body length: 35-40 cm

- **Black bill**
- Black head and neck
- Black and white checkered upperparts and upper wing
- White underparts and underwing


Front


Back

Short-tailed Shearwater

Puffinus tenuirostris

FAO CODE: PFT **LEAST CONCERN**

Bill length: 29-35 mm
Wing length: 26-29 cm
Body length: 40-45 cm

- **Slender dark/ brown bill**
- Dark brown upper and lower parts
- Paler underwing


Front

Flesh-footed Shearwater

Puffinus carneipes

FAO CODE: PFC **LEAST CONCERN**

Bill length: 39-44 mm
Body length: 40-45 cm

- **Pink bill with black tip**
- Pink feet


Front

Wedge-tailed Shearwater

Puffinus pacificus

FAO CODE: PFZ **LEAST CONCERN**

Bill length: 42-50 mm
Body length: 40-45 cm

- Long, slender dark grey bill but may be **pale with black tip**
- Entirely dark plumage **but** can be grey brown upperparts with dark head and tail, mainly white underparts and underwing with dusky undertail, dark wing margins and variable dark markings on inner wing

We currently do not have a dead or bycaught photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

Sooty Shearwater

Puffinus griseus

FAO CODE: PFG **NEAR THREATENED**

Bill length: 38-47 mm
Wing length: 28-32 cm
Body length: 44 cm

- **Dark brown/grey thin bill**
- Dark brown plumage with paler panel on underwing

Similar species: Distinguished from Short-tailed Shearwater (p. 66) by **longer bill**


Front


Back

Great Shearwater

Puffinus gravis

FAO CODE: PUG **LEAST CONCERN**

Bill length: 43-50 mm
Wing length: 30-35 cm
Body length: 47 cm

- **Blackish bill**
- Dark brown cap, white collar, grey-brown upper parts
- White crescent at base of tail
- Underparts white except for dark brown patch on belly.
- Underwings mostly white with dark margins and two dark bars on inner wing.


Front


Back

Pink-footed Shearwater

Puffinus creatopus

FAO CODE: PUC **VULNERABLE**

Bill length: 41-46 mm
Wing length: 32-34 cm

- **Pinkish-yellow bill with dark tip**
- Grey-brown upper parts
- Dark under tail and around feet
- Mostly white underparts, with brown markings

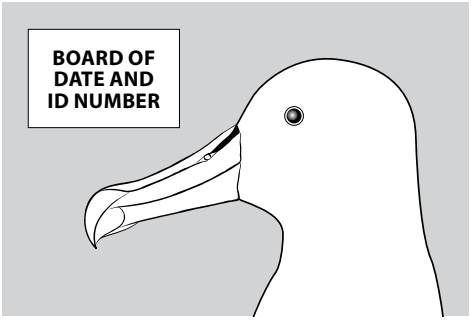
We currently do not have a live at sea photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

We currently do not have a dead or bycaught photo of this species . If you can contribute a photo to improve this guide please email: secretariat@acap.aq

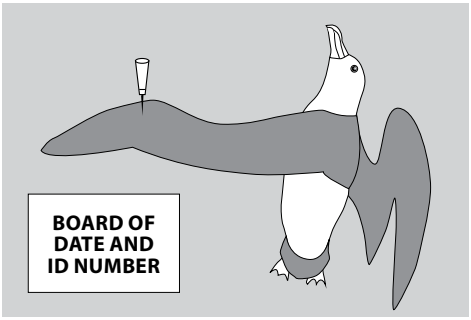
Photos

At least three pictures should be taken:

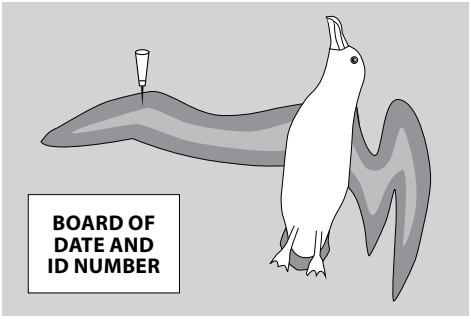
1. Head



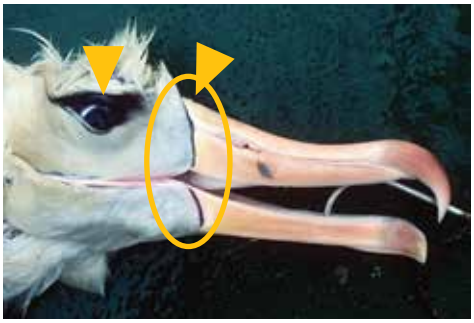
2. Whole body
- back side



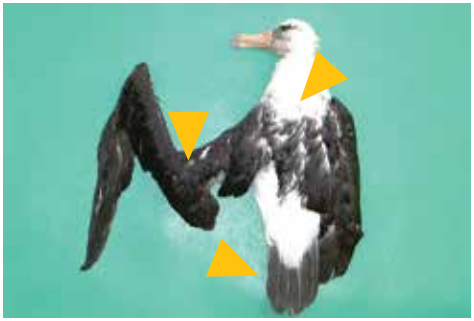
3. Whole body
- belly side



Modified from Southern bluefin tuna Japanese observer manual 2012, National Research Institute of Far Seas Fisheries, Shizuoka, Japan.



Show eye colour and bill base shape



Show wing, body and tail colour

Show upper edge and base of wing

Examples of photos

The whole body may be taken through a number of photos

Modified from Southern bluefin tuna Japanese observer manual 2012, National Research Institute of Far Seas Fisheries, Shizuoka, Japan.

Good examples showing eye and base of upper bill

Good example showing tail and upper edge of wing

Good example showing bill and upper edge and base of wing

Feather samples for DNA analysis

If possible, it is useful to pull out a few feathers for DNA identification of the species:

1. Pinch and pull 1 - 3 feathers at once until you get 5 - 6 feathers from either the back or the belly
2. Put the feathers in a plastic bag with a label (ID number etc.)
3. Store samples in a freezer (at least -20ºC)

Establishment of DNA sampling programmes

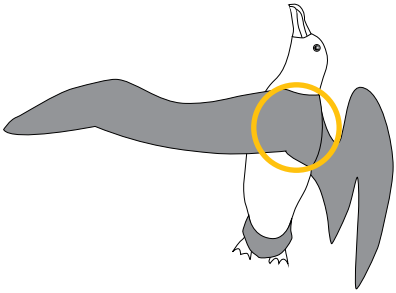
Each RFMO/observer body will decide on their sampling programme. Once established, feathers and/or tissue should be submitted as specified by each programme.

ACAP will maintain a register of organisations holding photos and/or tissue/feather samples, to assist researchers wishing to make use of this material. It would be appreciated if the custodians of these photos/samples could contact ACAP (secretariat@acap.aq) and provide their details for inclusion in the register.

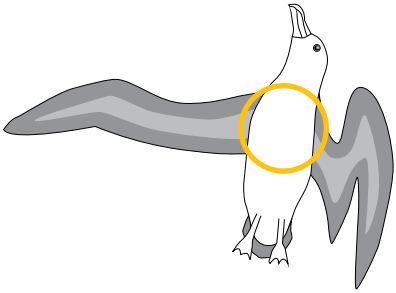
Modified from Southern bluefin tuna Japanese observer manual 2012, National Research Institute of Far Seas Fisheries, Shizuoka, Japan.

Pick 5 - 6 feathers either on the back or the belly.

Back side



Belly side



DO NOT CUT FEATHERS - PULL

Analysis is done using the base of the feather

Leg Bands

If you capture a bird with any leg bands, or read the plastic band of a bird behind the vessel, you can either report band numbers directly to the address given on the metal band, or to the national bird-banding scheme in your home country. Please supply the following information:

- The entire metal band number, or plastic band colour and code (letters and/or numbers), or colour band combination (reported in order of left leg - top to bottom, then right leg - top to bottom)
- Date of recovery or sighting
- Position (latitude and longitude)
- Whether the bird was seen or caught (by what type of fishing operation - e.g. pelagic longline - what target species)
- If captured, whether it was dead or released injured or healthy
- If captured, you can also take a photo clearly showing band number and attach to your letter/email

If the bird is dead, for metal bands, if possible:

- take the band off;
- straighten it to avoid puncturing the envelope;
- stick it to some cardboard with sticky tape;
- write the band number onto the cardboard and send the band to the address given or to the banding scheme in one of the countries listed here.

If you supply your name and address or email, you will generally receive a letter of acknowledgement giving details of when, where, and by whom the bird was banded.

Bands should never be removed from live birds. No financial reward is offered for returning bird bands.

Addresses of Major seabird banding schemes

Australian Bird and Bat Banding Scheme (ABBBS)

GPO Box 8, Canberra ACT 2601
AUSTRALIA

Tel: + 61 2 6274 2407
Fax: +61 2 6274 2455
Email: abbbs@environment.gov.au

environment.gov.au/science/bird-and-bat-banding

National Banding Office

PO Box 108, Wellington 6140
NEW ZEALAND

Tel: +64 4 4713294
Email: bandingoffice@doc.govt.nz

osnz.org.nz/nz-national-banding-scheme

Yamashina Institute for Ornithology

Bird Migration Research Center
ZIP Code 270-1145 JAPAN

Tel :+81-4-7182-1107
Fax: +81-4-7182-4342
Email: BMRC@yamashina.or.jp

Museum National D'Histoire Naturelle

C.R.B.P.O.
Case Postale 51
55 rue Buffon
75005 PARIS
FRANCE

Email: bagues@mnhn.fr

crbpo.mnhn.fr/spip.php?rubrique4&lang=fr

All albatrosses, giant petrels and Procellaria petrels with metal bands inscribed OIS MUSEUM PARIS, please contact:

Henri Weimerskirch / Dominique Besson
CNRS CEBC
79360 Villiers en Bois
FRANCE

Email: henriw@cebc.cnrs.fr
besson@cebc.cnrs.fr

South African Bird Ringing Unit (SAFRING)

Animal Demography Unit
University of Cape Town
Rondebosch 7701
SOUTH AFRICA

Tel: +21 650-2421
Fax: +21 650-3301 (Zoology)
Email: safring@adu.org.za

safring.adu.org.za

United Kingdom/Europe

Including metal bands inscribed "NH Museum, London SW7":
British Trust for Ornithology (BTO)
The Nunnery
Thetford, Norfolk IP24 2 PU
ENGLAND

Tel: +44 1842 750050
Fax: +44 1842 750030

app.bto.org/euring/main/

Metal bands
Email: recoveries@bto.org

Colour bands
Email: colourringing@bto.org

OR find colour band project leaders directly:
www.cr-birding.org/colourprojects

The North American Bird Banding Program

Bird Banding Laboratory
USGS Patuxent Wildlife Research Center
12100 Beech Forest Road
Laurel MD 20708-4037
USA

Toll free tel: 1-800-327-2263
Email: bandreports@usgs.gov

reportband.gov

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CCSBT Identification sheet of seabird species incidentally caught in SBT longline fisheries

Chung. 2008. *Overview of the interaction between seabird and Taiwanese longline fisheries in the Pacific Ocean. WCPFC SC4 EB-WP5*. Western and Central Pacific Fisheries Commission Scientific Committee, Fourth Regular Session. 11-22 August 2008, Port Moresby, Papua New Guinea.

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ICCAT bycatch species http://www.iccat.es/en/bycatchspp.htm

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WCPFC Bycatch Mitigation Information System http:// bmis.wcpfc.int/species_list.php

Your Feedback

This guide is a work in progress. Further photos and the input of observers, fishermen and the coordinators of relevant observer programmes are welcome, e.g.

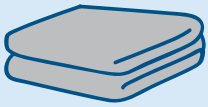
1. Are there any additional species which should be included in the guide?
2. Is the species identification information accurate?
3. Can the ID information be easily and accurately used by observers at sea?
4. Is there additional information that could assist identification?
5. Is the skin at the base of the bill a reliable characteristic for observers to distinguish between juvenile/immature Thalassarche?

Please email your feedback to secretariat@acap.aq

Hook Removal from Seabirds

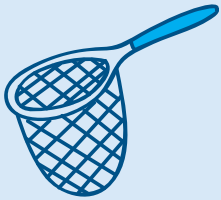
Agreement on the Conservation of Albatrosses and Petrels

Release Kit

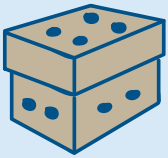


Towel / Blanket

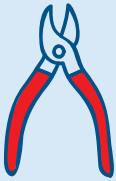
Knife



Net



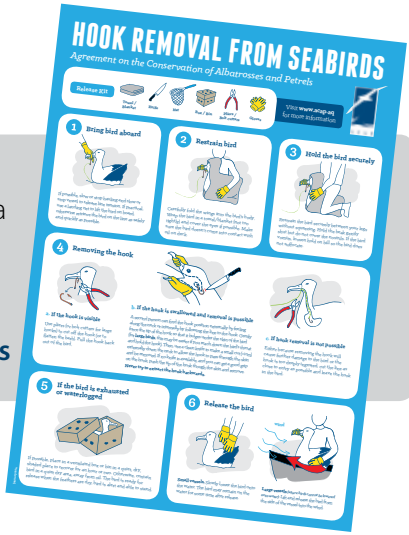
Box / Bin



Pliers /
Bolt cutters

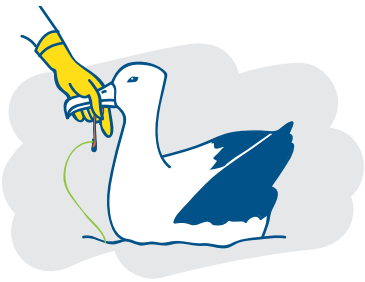
Gloves

This guide is available as a poster from **www.acap.aq/en/resources/acap-conservation-guidelines**



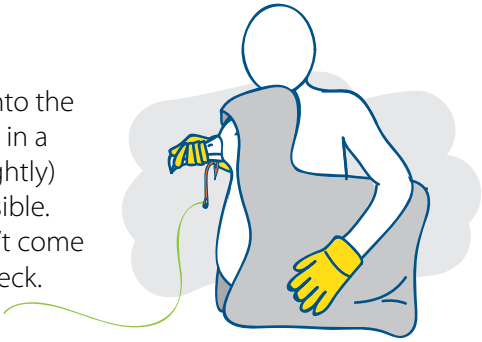
1. Bring bird aboard

If possible, slow or stop hauling and slow or stop vessel to release line tension. If practical, use a landing net to lift the bird on board, otherwise retrieve the bird on the line as safely and quickly as possible.



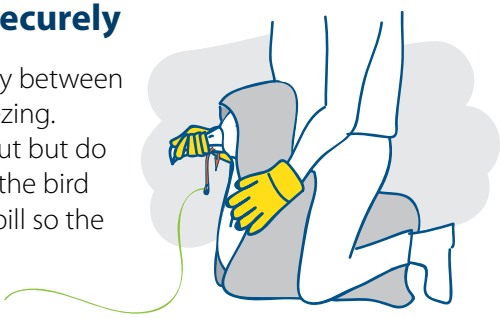
2. Restrain bird

Carefully fold the wings into the bird's body. Wrap the bird in a towel/blanket (not too tightly) and cover the eyes if possible. Make sure the bird doesn't come into contact with oil on deck.

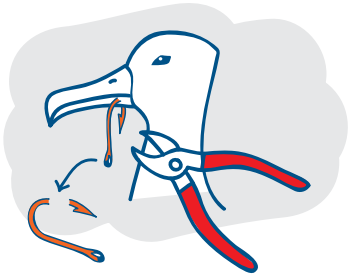


3. Hold the bird securely

Restrain the bird securely between your legs without squeezing. Hold the beak gently shut but do not cover the nostrils. If the bird vomits, loosen hold on bill so the bird does not suffocate.

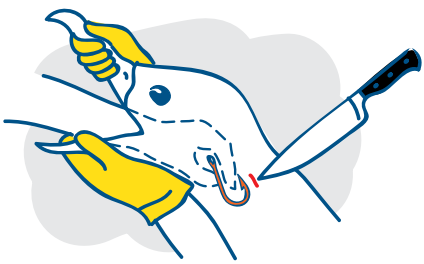


4. Removing the hook



A. If the hook is visible

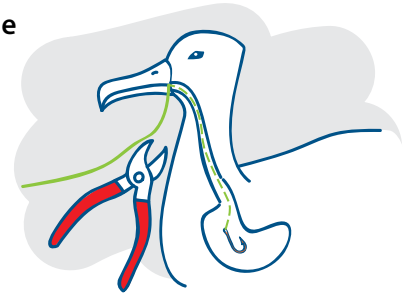
Use pliers (or bolt cutters for large hooks) to cut off the hook (or to flatten the barb). Pull the hook back out of the bird.



B. If the hook is swallowed and removal is possible

A second person can find the hook position externally by feeling along the neck or internally by following the line to the hook. Gently force the tip of the hook so that it bulges under the skin of the bird (for ***large birds***, this may be easier if you reach down the bird's throat and hold the hook). Then, use a clean knife to make a small cut (<1cm) externally down the neck to allow the hook to pass through the skin and be removed. If no knife is available, and you can get a good grip on the hook, push the tip of the hook though the skin and remove.

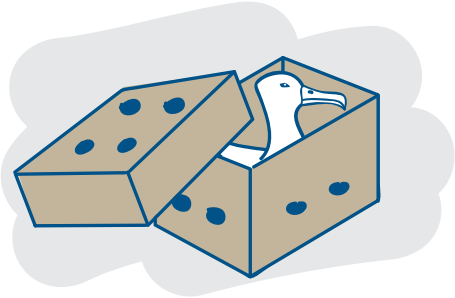
Never try to extract the hook backwards.



C. If hook removal is not possible

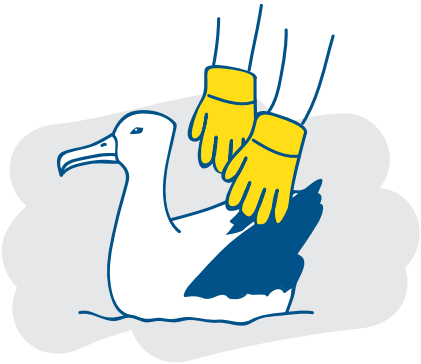
Either because removing the hook will cause further damage to the bird or the hook is too deeply ingested, cut the line as close to entry as possible and leave the hook in the bird.

5. If the bird is exhausted or waterlogged



If possible, place in a ventilated box or bin in a quiet, dry, shaded place to recover for an hour or two. Otherwise, contain bird in a quiet dry area, away from oil. The bird is ready for release when the feathers are dry, bird is alert and able to stand.

6. Release the bird



Small vessels: Slowly lower the bird onto the water. The bird may remain on the water for some time after release.

Large vessels (where birds cannot be lowered onto water): Lift and release the bird from the side of the vessel into the wind.

Record your identified species, or the selection of possible species, using the FAO code from the list below.

Albatross species list	Common name
Diomedea	Northern royal Albatross
	Southern royal Albatross
	unidentified royal albatross
	Wandering Albatross
	Antipodean Albatross (and "Gibson's Albatross")
	Amsterdam Albatross
	Tristan Albatross
	unidentified *Diomedea sp.*
Phoebetria	Sooty Albatross
	Light-mantled Albatross
	unidentified *Phoebetria sp.*
Phoebastria	Waved Albatross
	Black-footed Albatross
	Laysan Albatross
	Short-tailed Albatross
	unidentified 'Northern albatross'
Thalassarche	Atlantic yellow-nosed Albatross
	Indian yellow-nosed Albatross
	unidentified yellow-nosed albatross
	Grey-headed Albatross
	Black-browed Albatross
	Campbell Albatross
	Buller's Albatross
	Shy Albatross
	White-capped Albatross

Where ID is uncertain and no FAO code is provided, record the scientific name or common name.

FAO code	Scientific Name	Page
DIQ	*Diomedea sanfordi*	28
DIP	*Diomedea epomophora*	28
DIQ/DIP		28
DIX	*Diomedea exulans*	32
DQS/DIW	*Diomedea antipodensis*	34
DAM	*Diomedea amsterdamensis*	30
DBN	*Diomedea dabbenena*	36
-	*Diomedea sp.*	28-37
PHU	*Phoebetria fusca*	24
PHE	*Phoebetria palpebrata*	26
PHU/PHE	*Phoebetria sp.*	24-27
DPK	*Phoebastria irrorata*	22
DKN	*Phoebastria nigripes*	14
DIZ	*Phoebastria immutabilis*	18
DAQ	*Phoebastria albatrus*	20
-	*Phoebastria sp.*	16-23
DCR	*Thalassarche chlororhynchos*	40
THQ	*Thalassarche carteri*	40
DCR/THQ		
DIC	*Thalassarche chrysostoma*	42
DIM	*Thalassarche melanophris*	38
TQW	*Thalassarche impavida*	38
DIB	*Thalassarche bulleri*	44
DCU	*Thalassarche cauta*	46
TWD	*Thalassarche steadi*	46

	Chatham Albatross
	Salvin's Albatross
	unidentified Thalassarche sp.
ID uncertain	unidentified albatross

Petrel species list	**Common name**
Giant Petrels	Southern giant Petrel
	Northern giant Petrel
	unidentified giant petrel
Procellaria	Spectacled Petrel
	White-chinned Petrel
	Black Petrel
	Westland Petrel
	Grey Petrel
	unidentified 'large petrel'
Other Petrels	Great-winged Petrel
	Cape Petrel

Shearwater species list	**Common name**
	Flesh-footed Shearwater
	Sooty Shearwater
	Wedge-tailed Shearwater
	Great Shearwater
	Short-tailed Shearwater
	Pink-footed Shearwater
	unidentified shearwater
ID uncertain	If can only identify as one of several options: e.g. Black Petrel OR Westland Petrel OR White-chinned Petrel

The **ACAP Seabird Bycatch Identification Guide** is primarily intended for use at sea by fisheries observers to assist in the identification of albatrosses and some commonly caught petrels and shearwaters killed in longline operations.

Where possible, species identification is based on those characteristics that are most likely to be preserved in dead birds that may have been underwater for long periods of time. In most cases, these are primarily bill size and colour. Because dead birds may look quite different to live birds, where possible, the photos included in this guide are of dead birds.

In some cases it will not be possible to identify a bird to a single species, but it should be possible in most cases to narrow the identification down to two or three possibilities. For species with a restricted range, distribution maps have been added to eliminate them from the possible options.

This Seabird Bycatch Identification Guide was produced by the Secretariat to the Agreement on the Conservation of Albatrosses and Petrels (ACAP) in collaboration with Japan's National Research Institute of Far Seas Fisheries. The principal authors were Nadeena Beck, Yukiko Inoue and Hiroshi Minami. We gratefully acknowledge Richard Phillips, Ross Wanless, and Karen Baird for their helpful suggestions on the original draft and thank Hiroshi Hadoram, James Lloyd, Aleks Terauds, Ron LeValley, Barry Baker, Ross Wanless, Andrea Angel, Roger Kirkwood, Scott Shaffer, John Cooper, Tony Palliser, Graham Robertson, Brook Whylie, Tui de Roy, David Thompson, Drew Lee, Flavio Quintana, Marianne de Villiers, Ben Phalan, DOC New Zealand, Mike Double, and Peter Hodum for their photographs. All unattributed photographs of dead birds courtesy of National Research Institute of Far Seas Fisheries, Shizuoka, Japan.

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