



Seabird identification

CHRIS GASKIN



Agreement on the Conservation
of Albatrosses and Petrels

This presentation



- Seabirds – a brief introduction
- North or South of the Equator?
- Identification guide – how to use it
 - Species keys
 - Guidelines on handling
 - Removing hooks from live birds
 - Taking photos
 - Recording & verification



Seabirds – a brief introduction



Seabirds of the Pacific Ocean



Seabird characteristics

What sets seabirds apart are the special adaptations they have for lives at sea.

- Feed on marine species (fish, krill, squid)
- Can drink saltwater (salt excretion ability)
- Float on seawater (waterproof plumage)
- Colonial nesting is normal
- Life history (small clutches, lengthy breeding, delayed maturity)

Status

Seabirds are the most threatened group of birds in the world.

Diversity

Seabirds of the Pacific are a diverse group.

Albatrosses, petrels, shearwaters, storm petrels, frigatebirds, boobies, terns, noddies.

Species that breed in the region, species that migrate huge distances post-breeding – south to north, north to south

Where you are in the ocean counts!

Equator

30°N



30°S

Time of the year is also important!

Northern species migrating south

Equator

30°N



30°S

Southern species migrating north across the Equator



Bycatch

Certain species are susceptible to being caught

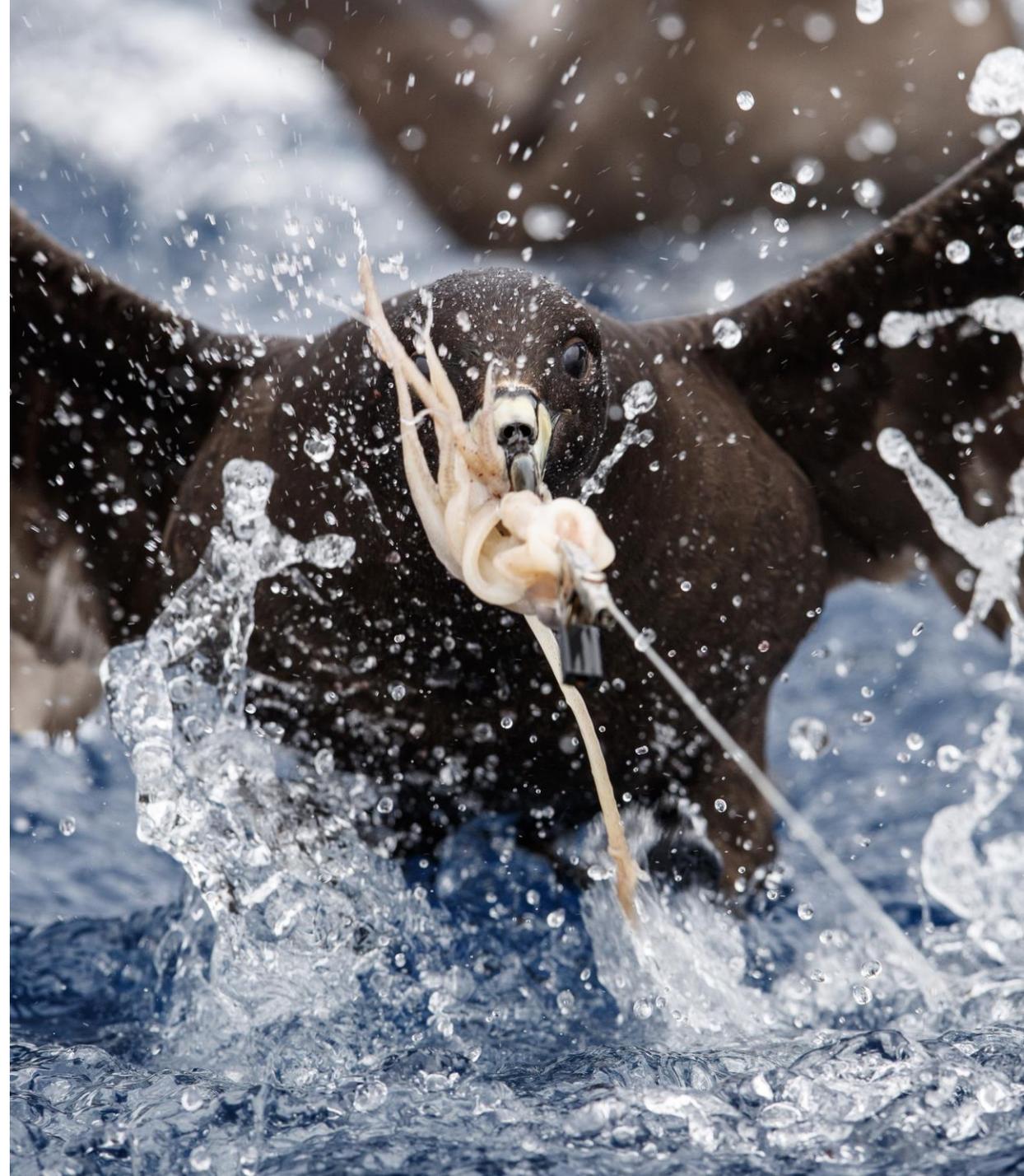
Most seabirds are natural opportunists - scavenging natural food, as well as finding live prey

Fishing vessels are attractive as a source of food

Seabirds most at risk from fisheries:

- Albatrosses
- Petrels
- Shearwaters

Other fisheries-related threats include:
Deck-strike, attraction to lights



Seabirds – identification



SPC Seabird Identification Guide

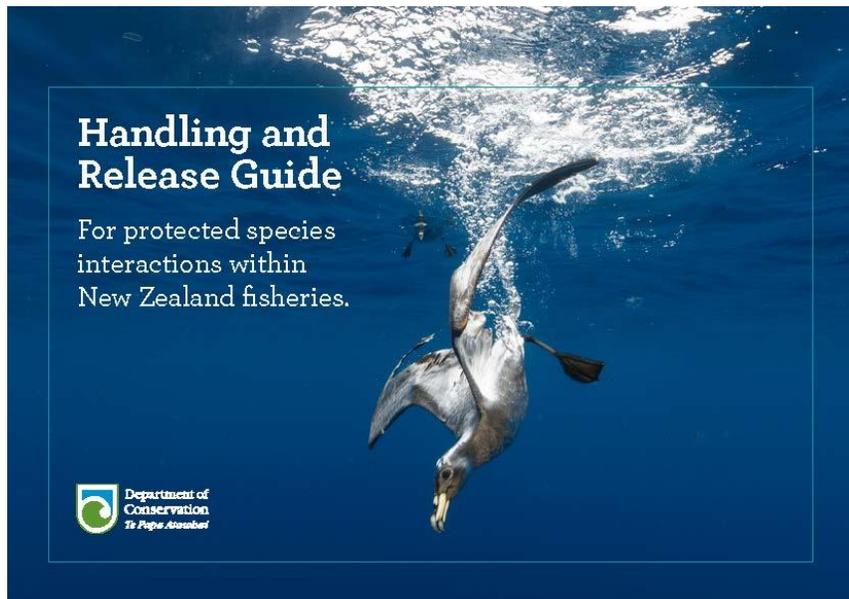


In preparation

Scheduled to be completed in 2020.

How to use the guide

ACAP ID guide provides an example for this workshop



SEABIRD BYCATCH IDENTIFICATION GUIDE

UPDATED AUGUST 2015



A bird is caught

What are the steps to making an accurate ID?

1. Look at the bird's size – very big, big, medium sized or small?
2. Look at the nostrils on the bill – albatross, petrel, shearwater or something else?
3. Check the bill shape and colour
4. Consult the relevant key – e.g. albatrosses, petrel
5. Check the description of the species.



The bird in this photograph is a very small bird

Steps to making an ID

Nostrils

Albatross, Petrel, Shearwater

Albatrosses
Separate nostrils.

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Petrels
Fused nostrils on top of short, thick based bill.

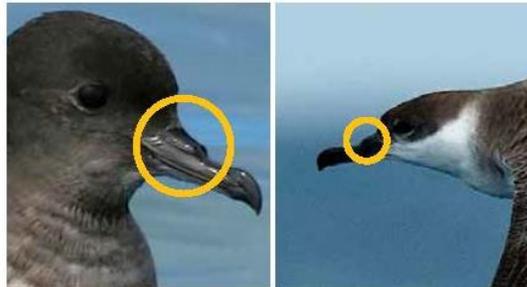
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Or Other Seabird?

Shearwaters
Fused nostrils on top of long slender bill.

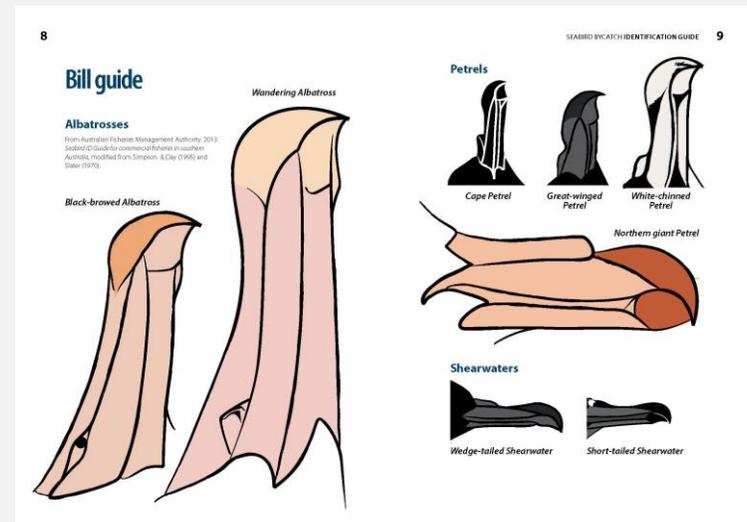
Page 66-70



Other seabirds (skuas, gulls, gannets)
No separate or fused tubes, just nasal cavities instead.



Useful additional info – bill guide



Go to albatross key

Steps to making an ID

Consult the appropriate key

In this case – the albatross key



Which one?

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

Steps to making an ID



Orange bill, red tip,
white head

Thalassarche
Black-browed Albatrosses

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More detailed information

You can see there two closely related species

38 THALASSARCHE ALBATROSSES

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



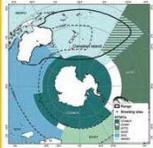
Campbell Albatross

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.



SEABIRD BYCATCH IDENTIFICATION GUIDE 39



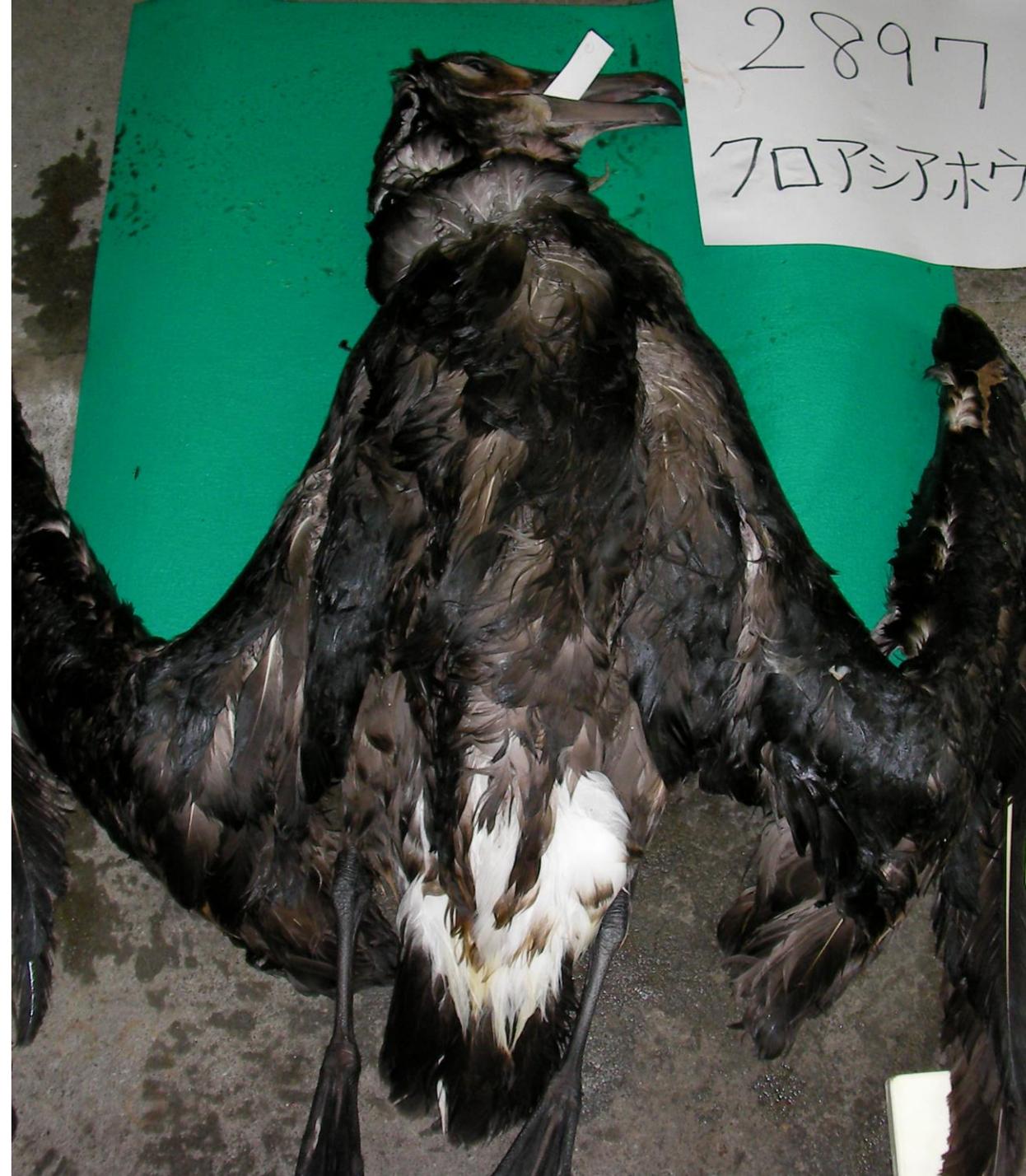
A bird is caught

What are the steps to making an accurate ID?

You are north of the Equator

The bird in the photograph is a big bird

Nostrils on the side of the bill



Steps to making an ID

Consult the appropriate key

In this case – the albatross key

Which one?

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

The only all dark albatross north of the Equator

16 NORTH PACIFIC ALBATROSSES

Black-footed Albatross

Phoebastria nigripes

FAO CODE: DKII

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.

SEABIRD BYCATCH IDENTIFICATION GUIDE 17



Two dark albatrosses south of the Equator

24 PHOEBETRIA ALBATROSSES

Sooty Albatross

Phoebastria 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.

26 PHOEBETRIA ALBATROSSES

Light-mantled Albatross

Phoebastria 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.

The sooty albatross generally not found in Pacific Ocean

The light-mantled albatross would very rarely get above 30°S.

Using the keys are very important

And mostly straightforward.

Diomedea Albatross Key

The ACAP guide has two further keys for albatrosses to further separate some species and age groups

One is to help separate the great albatrosses.

Both keys focus on the bills of the birds.

Bill >156 mm, dark cutting edge

Southern or Northern Royal Albatross

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Bill <154 mm, dark cutting edge

Amsterdam Albatross

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Bill \geq 155 mm, no dark cutting edge

Wandering Albatross

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Bill \leq 155 mm, no dark cutting edge

Pacific Ocean Antipodean Albatross

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Bill \leq 150 mm, no dark cutting edge

Atlantic or Indian Ocean Tristan Albatross

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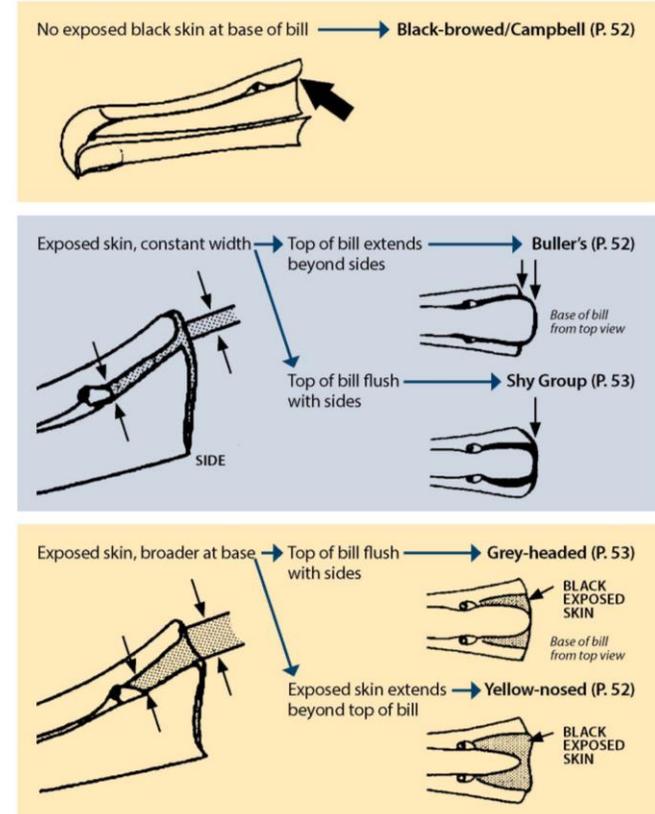


Using the keys are very important

The second one is for juvenile/immature smaller Thalassarche albatrosses of the southern hemisphere.

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



Black-browed *T. melanophrys* and *T. impavida*

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



A bird is caught

What are the steps to making an accurate ID?

This is a medium sized all dark-bird.

Nostrils are on top of the bill

Bill is pale with a darkish tip



Steps to making an ID

Consult the appropriate key

In this case – the petrel key

Which one?

There are two possibilities.

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



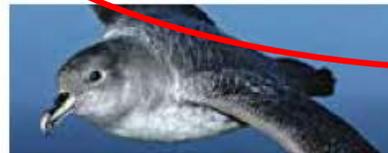
Yellow bill, pale tip, >44 mm, usually white chin, no white markings on face



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



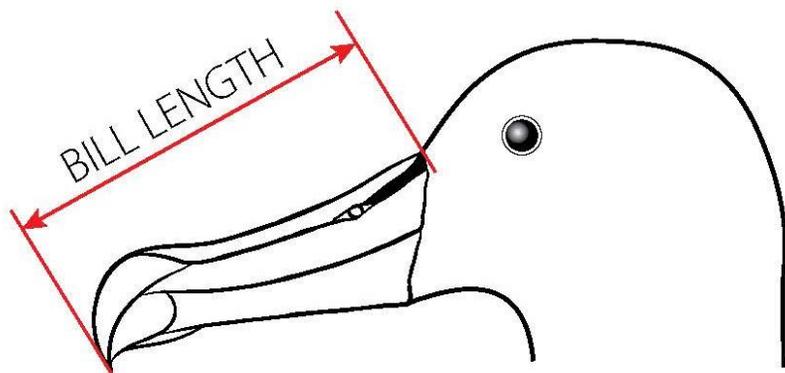
Black bill >34 mm, dark head, grey face



Black bill <34 mm, dark head, white belly

Steps to making an ID

Need to measure bill



In this case – bill is <44mm

The ID is Black Petrel

The bill of the close relative, the Westland Petrel is longer.

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)

Birds in poor condition

Sometimes the birds are so damaged

In these cases, start with the bill if the head is still attached.

The bird is large so likely an albatross.

The bill is grey with a yellow tip.



Steps to making an ID

Consult the appropriate key

In this case – the albatross key



Which one?

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

Steps to making an ID

Two choices – often indistinguishable

Look at the distribution maps

46 THALASSARCHE ALBATROSSES

White-capped Albatross

Thalassarche steadi

FAO CODE: TWD

NEAR THREATENED

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



© David Thompson

Shy Albatross

Thalassarche cauta

FAO CODE: DCU

NEAR THREATENED

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

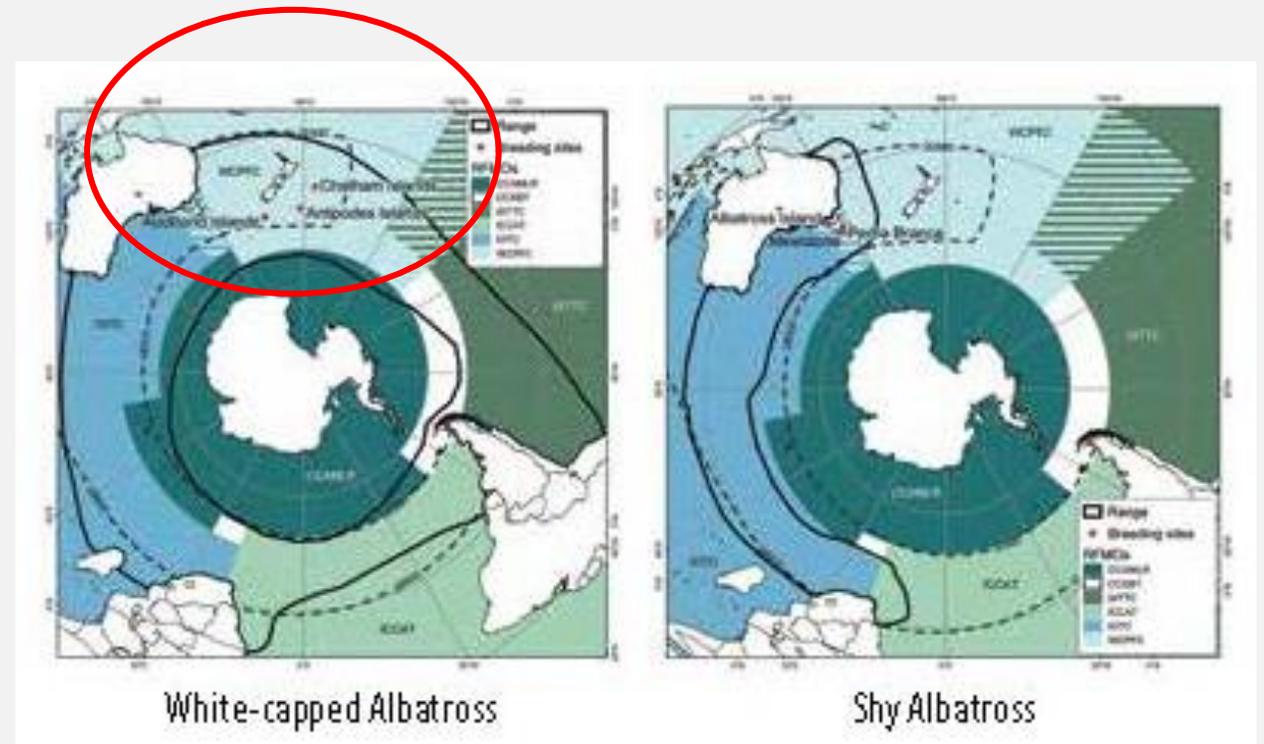


© Drew Lee



© Drew Lee

- Grey bill, yellow tip
- Often indistinguishable,



Handling a live bird



THINK FIRST: **Safety Around Seabirds**

Large birds can inflict a serious bite, it is recommended to wear gloves and eye protection if handling seabirds.

Immobilise the beak and feet with a firm hold to avoid bites and cuts.

Hold birds at waist-height, well away from your face.



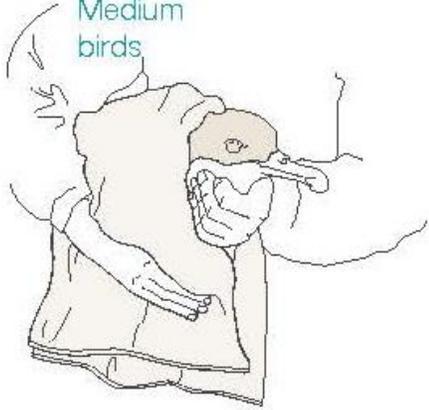
 immobilise the feet and beak

Handling different sized birds

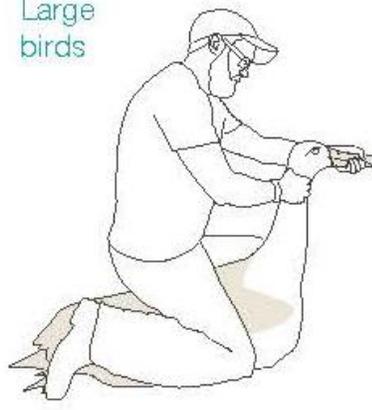
Small birds



Medium birds



Large birds



- Immobilise first then try to remove hook
- Large and medium-sized birds require two people
- Exposed hooks in bills or neck can be snipped off. Flatten the barbs with pliers or cut off barbs with snips if pulling hook back through the tissue.
- If the hook is swallowed, cut the line as close to the mouth as possible. Do not try and pull hook out from inside the bird.
- Untangle and cut away any line caught around the bird's wings, body or legs.

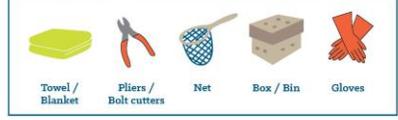
HOOK REMOVAL FROM SEABIRDS

Agreement on the Conservation of Albatrosses and Petrels

For more information visit:
www.acap.aq



Release Kit



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 small birds on board, otherwise retrieve the bird on the line as safely and quickly as possible. When within reach, grab it by the bill. **Never grab the wing.**



2 Restrain bird and hold securely

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

For large birds that you cannot manage under your arm, restrain the bird securely between your legs without squeezing. Hold the bill gently shut but **do not cover the nostrils.**

If the bird vomits, loosen hold on bill so the bird does not suffocate.



3 Remove the hook

If the hook is visible

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

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). If you can get a good grip on the hook, push the tip of the hook through the skin and remove. **Never try to extract the hook backwards.**



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 the hook as possible and leave the hook in the bird.



4 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.



5 Release the bird

If the bird is strong and mostly dry, release it onto the water (but clear of the vessel) immediately after hook removal. Having again first grabbed the bill, lift and slowly lower the bird onto the water letting go of the bill last. **Where birds cannot be lowered directly onto water**, lift and release the bird from the side of the vessel into the wind letting go of the bill at the same time. The bird may remain on the water for some time after release.

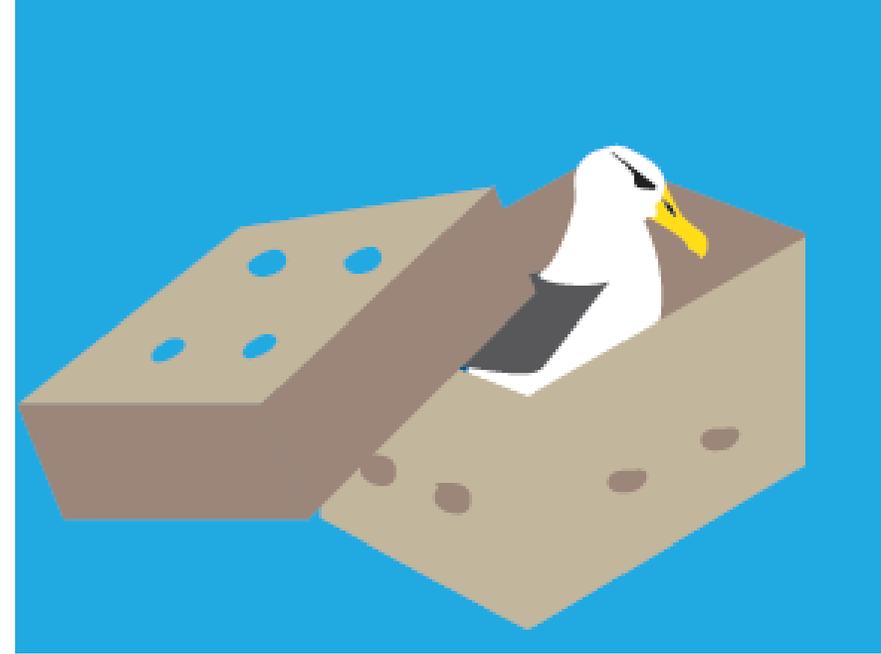
January 2019

Safe release

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.

If the bird is strong and mostly dry, release it onto the water (but clear of the vessel) immediately after hook removal. Having again first grabbed the bill, lift and slowly lower the bird onto the water letting go of the bill last.

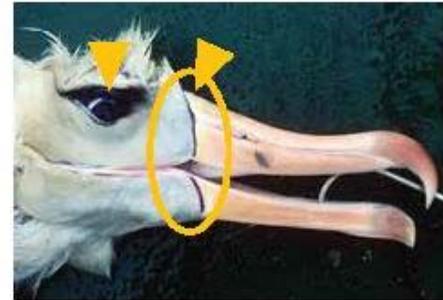
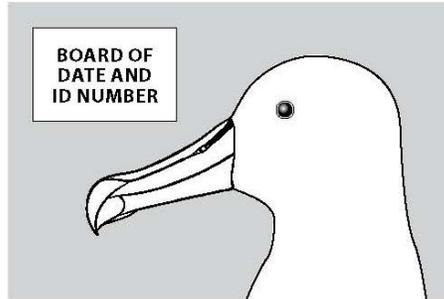
Where birds cannot be lowered directly onto water, lift and release the bird from the side of the vessel into the wind letting go of the bill at the same time. The bird may remain on the water for some time after release.



Taking photos

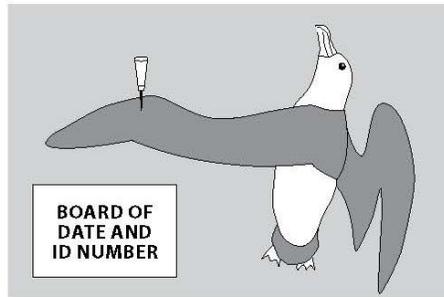
At least three pictures should be taken:

1. Head



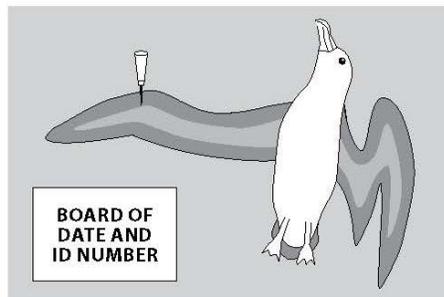
Show eye colour
and bill base shape

2. Whole body - back side



Show wing, body
and tail colour

3. Whole body - belly side



Show upper edge
and base of wing

Examples of photos

The whole body may be taken through a number of photos



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



Recording & verification

- Use species codes (FAO codes)
- Get follow-up verification of bycatch IDs through photographs

This is a **Buller's Albatross** >

Species code: **DIB**

- Where ID is uncertain and no FAO code is provided, record the scientific name and/or common name.
- Date, time, location, fishing method, nature of interaction, all steps taken to make ID, species code/common name/scientific name, other observations



Seabird species groups and key seabird species

ALBATROSSES

- WANDERING ALBATROSS
- ANTIPODEAN/GIBSON'S ALBATROSS
- CAMPBELL ALBATROSS
- BLACK-BROWED ALBATROSS
- WHITE-CAPPED ALBATROSS
- SHY ALBATROSS
- SALVIN'S ALBATROSS
- YELLOW-NOSED ALBATROSS
- BULLER'S ALBATROSS
- GREY-HEADED ALBATROSS
- CHATHAM ALBATROSS
- BLACK-FOOTED ALBATROSS
- LAYSAN ALBATROSS
- SHORT-TAILED ALBATROSS

SHEARWATERS

- WEDGE-TAILED SHEARWATER
- SOOTY SHEARWATER
- SHORT-TAILED SHEARWATER
- FLESH-FOOTED SHEARWATER
- BULLER'S SHEARWATER
- STREAKED SHEARWATER

PETRELS

- NORTHERN GIANT PETREL
- SOUTHERN GIANT PETREL
- WHITE-CHINNED PETREL
- BLACK PETREL
- WESTLAND PETREL
- GREY PETREL
- GREY-FACED PETREL
- GREAT-WINGED PETREL
- TAHITI PETREL
- BECK'S PETREL
- CAPE PETREL

OTHER SEABIRDS - FRIGATEBIRDS & BOOBIES

- GREAT FRIGATEBIRD
- LESSER FRIGATEBIRD
- BROWN BOOBY
- RED-FOOTED BOOBY
- MASKED BOOBY

OTHER SEABIRD GROUPS – STORM PETRELS

Not covered in detail but will be mentioned in the key



Ngā mihi nui, thank you