



New Zealand is considered the seabird capital of the world due to the high diversity of seabirds on our waters. Most of the birds in this guide breed in New Zealand and many breed nowhere else in the world. New Zealand's seabirds include penguins, albatrosses, petrels, shags, gannets, terns and skuas.

Because most seabirds travel long distances, they face an array of threats while at sea including interactions with various fisheries, pollution and depletion of prey. This quickreference guide includes seabirds that are considered at risk of being bycaught in fisheries.

There are numerous individuals, organisations and governments working to protect seabirds. Populations for many of the seabirds in this guide are low and every individual is important. In other words, all efforts to reduce bycatch are critical. Some of New Zealand's fisheries now have mitigation measures in place to reduce seabird bycatch. Many of these mitigation measures are also being used in other parts of the world.



# List of seabirds found in this guide

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Fluttering shearwater Puffinus gavia

Flesh-footed shearwater Puffinus carneipes

Sooty shearwater (also known as tītī or muttonbird) Puffinus griseus

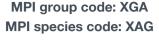
Short-tailed shearwater Puffinus tenuirostris

Wedge-tailed shearwater Puffinus pacificus pacificus

#### Species Group: Great albatrosses

# Antipodean (wandering) albatross and Gibson's albatross

Diomedea antipodensis antipodensis and D. a. gibsoni







#### Distinguishing characteristics

Head: White faces and throat with brownish crowns.

**Body:** Large albatrosses that become whiter as they mature, but some dark tail feathers. Adult males often have white bodies with some mottled brown patches. Females frequently have dark bodies.

**Wings:** Average wingspan of around three metres. Upperwings can be dark through to almost all white. White underwings with dark tips.

Bill: Pink.

**Juvenile features:** Dark brown plumage with a white face, throat and underwings.

# Feeding and range



Eats: Forages on squid and sometimes fish.

Range: South Pacific Ocean from Australia to Chile. Gibson's known to forage in the Southern Ocean. Tracking studies on Antipodean albatrosses indicate incubating birds mainly forage east of New Zealand, but some non-breeding males fly east to the waters off Chile. During early incubation, Gibson's are believed to mainly feed in the Tasman Sea and east of New Zealand.

## **Interesting Facts**



Although genetically similar, Gibson's albatrosses usually have paler plumage than Antipodean albatrosses.



Breeding sites: Antipodean albatrosses breed at Antipodes Island, with a few pairs at Campbell Island and the Chatham Islands (Chatham, Pitt). Gibson's albatrosses breed only at the Auckland Islands (Adams, Auckland, Disappointment).

**Breeding period:** Egg laying begins in December for Gibson's and January/ February for Antipodean albatrosses. Chicks usually fledge the following January through March.

**Frequency of breeding:** Every two years for successful breeders or annually for failed breeders.

Number of eggs: One.

**Type of nests:** Nest in loose colonies with nests widely spaced apart. Nest is a raised cup of soil that is built among tussock and megaherbs.

#### **Threats**



- In New Zealand, these albatrosses are reported caught in trawl and longline fisheries.
- Because Antipodean and Gibson's albatrosses forage widely across the South Pacific Ocean and Tasman Sea they are at risk from fishing outside New Zealand's Exclusive Economic Zone, and in international waters.
- Outside New Zealand waters, these albatrosses are caught in longline fisheries targeting tuna and tuna-like species, e.g. off Australia and Chile, and southern hemisphere longline fisheries operated by Japan. Further, while information is still poor in some cases, these albatrosses overlap with Asian distant-water pelagic longline fleets operating in the central Pacific.



- There are currently few land-based threats to Antipodean and Gibson's albatrosses.
- Mammalian predators may take eggs and kill unguarded chicks at some colonies. Adams, Disappointment and Campbell islands are free of introduced mammals.
- Visitor impacts on this species are currently minimal because access is restricted to Antipodes, Adams and Disappointment islands, and very few people visit the nests of birds breeding at Campbell and Auckland islands.

Species Group: Great albatrosses

# Northern royal albatross

Diomedea sanfordi





**Head:** White, sometimes with dark spots on their crown.

Body: Very large. Body and back white.

Wings: Upperwings are completely dark.

Feet: Pink.

Bill: Light pink with a thin black line on the cutting edge.

Juvenile features: Immature birds look similar to adults, but may have some dark spots on their crown and back.

MPI group code: XGA MPI species code: XNR

## Feeding and range



Eats: Mainly feed on squid, but also eat some fish

Range: Forage widely over the Tasman Sea, Pacific Ocean and South Atlantic Ocean

# **Interesting Facts**



The northern royal albatross colony at Taiaroa Head on the Otago Peninsula is the only albatross colony on New Zealand's main islands.

Since the colony established in the 1930s, more than 650 chicks have hatched at Tajaroa Head.



**Breeding sites:** Chatham Islands (Forty-Fours, Big Sister and Little Sister), South Island (Taiaroa Head) and Auckland Islands (Enderby where some have hybridised with southern royal albatrosses).

**Breeding period:** Egg laying begins in late October and chicks depart the following year from August to October.

**Frequency of breeding:** Every two years for successful breeders.

Number of eggs: One.

**Nesting:** Northern royal albatrosses have denser colonies than other great albatrosses. They build nesting mounds out of soil and vegetation.

#### **Threats**



- In New Zealand, northern royal albatrosses have been reported caught in trawl and longline fisheries.
- They have also been reported bycaught in longline fisheries around Australia, Brazil, and Uruguay.
- Where information exists, the relatively high survival rates of adults and juveniles suggest that fisheriesrelated mortality is not a major threat to this species.



- Monitoring at the colony at Taiaroa
   Head started in 1937. Land-based
   threats are actively managed at the
   colony. Managing fly strike and heat
   stress has increased egg and chick
   survival significantly. Extensive
   trapping for mammalian predators
   (cats, stoats, and ferrets) has
   reduced predation risks.
- Nesting habitat on the Chatham Islands can be vulnerable to severe storms, which remove vegetation and soil from nesting areas.
- There are no mammalian predators where these albatrosses breed on the Chatham Islands.

Species Group: Great albatrosses

# Southern royal albatross Diomedea epomophora



#### Distinguishing characteristics

**Head:** Usually white, some may have dark spots on their crown.

**Body:** Very large albatrosses with a white body. Tail all white in adults. When fully mature they are the whitest of all the albatrosses.

**Wings:** White upperwings with some black barring. As they age their upperwings become whiter.

Feet: Light pink.

Bill: Pink with a thin black line on the cutting edge.

MPI group code: XGA MPI species code: XRA

# Feeding and range



**Eats:** Mainly feed on squid, but also eat some fish

Range: During breeding season they forage over the Tasman Sea and South Pacific Ocean. Birds migrate after breeding to the South Atlantic Ocean and have a circumpolar distribution in the Southern Ocean.

# **Interesting Facts**



Southern royal albatrosses and wandering albatrosses are the largest of all albatrosses.

Like many other seabirds, southern royal albatross chicks vomit a foul-smelling stomach oil as a defence against predators.



**Breeding sites:** Mainly on Campbell Island, with a few on the Auckland Islands (Adams, Enderby, Auckland) and the South Island (Taiaroa Head – where they have hybridised with northern royal albatrosses).

**Breeding period:** Eggs are laid from late November to late December. After the egg is laid both parents take turns on the nest. The egg takes about 79 days to hatch. The chick is brooded for a month and fledges after about 240 days.

Frequency of breeding: Every two years for successful breeders.

Number of eggs: One.

**Type of nests:** A mound of soil and vegetation.

#### **Threats**



- In New Zealand, southern royal albatrosses have been reported caught in trawl and longline fisheries.
- Outside New Zealand, these albatrosses have been caught in longline fisheries around Argentina, Australia, Uruguay, and Chile, and by Japanese longliners on the high seas.
- Captures occurring in New Zealand commercial fisheries where observer coverage occurs are considered unlikely to significantly impact this species.



- Skuas are natural predators and take some eggs.
- Feral pigs may take eggs and kill unguarded chicks on Auckland Island.
- A potential threat to the breeding habitat of southern royal albatrosses is the encroachment of the scrub *Dracophyllum*, which may be caused by climate change.
- Tourist visits may have some impact on nesting albatrosses.
   Nervous birds are known to abandon nests when visited or handled. DOC has implemented a number of measures to control and limit the area where visitors can go on islands while southern royal albatrosses are breeding.

NZ Conservation Status: At Risk - Naturally Uncommon

Species Group: Smaller albatrosses (mollymawks)

# Southern and Northern Buller's (Pacific) albatross Thalassarche bulleri bulleri

and T. b. platei







Head: Grey head and neck with white crown.

Body: White body with a dark upper tail.

Wings: Upperwing is dark. Underwing is white with a black margin.

Bill: Dark with broad, bright-yellow stripes on the top and bottom.

Subspecies: Southern and northern Buller's albatross look very similar. The bill and head can help distinguish them. The sides of the bill of the Southern Buller's albatross are about 70% black. The bill of the northern Buller's albatross is about 80% black on its sides, as well as longer and deeper than its southern counterpart. The forehead of the northern Buller's albatross tends to be greyer than the southern subspecies.

MPI group code: XMA MPI species code: XPB

## Feeding and range



Eats: Mostly fish, squid, octopuses, sea squirts and crustaceans

Range: Breeding and non-breeding adults are known to forage in the Tasman Sea, the Pacific Ocean east of the South Island, and over the shelf areas south of Stewart Island, Juveniles and non-breeding adults disperse across the South Pacific Ocean, north of the Antarctic Convergence, reaching the Humboldt Current off Chile and Peru.

## **Interesting Facts**



After breeding, many adults and juveniles migrate to the waters of Peru and Chile. Here the immature birds may remain for up to five years.



**Breeding sites:** Breed only in New Zealand on the Snares Islands, Solander Islands, Chatham Islands, and Three Kings Islands.

**Breeding period:** On the Chatham Islands they breed from October to the following May. Other breeding colonies breed from December to September.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Build pedestal nests amongst shrubs on narrow terraces or in the forest.

#### **Threats**



- Buller's albatross is caught in trawl and longline fisheries in New Zealand.
- Bycatch in Australian and Chilean longline fisheries has also been recorded.
- While fisheries bycatch is ongoing, over the past 60 years, the risk to population viability resulting from fisheries has been small.



- Few threats to the species on land.
- Weka were introduced to Big Solander Island and may have some impact on breeding success there.
- Avian diseases may be a potential threat to species.

Species Group: Smaller albatrosses (mollymawks)

# Campbell albatross Thalassarche impavida

MPI group code: XMA MPI species code: XCM





#### Distinguishing characteristics

Head: White. Black eyebrows. Irises are honey-coloured.

**Body:** Medium-sized albatross with a white body.

Wings: Dark upperwings. Underwings white with black margins.

Feet: Bluish white.

Bill: Yellow with a red tip.

**Juvenile features:** Dark bill with blackish tip. Grey plumage on lower neck. Eye colour initially dark brown and therefore easily confused with juvenile black-browed albatross.

# Feeding and range



Eats: Mainly fish, squid and crustaceans.

Range: The species disperses widely around the Southern Ocean and into the temperate seas of the South Atlantic, Indian, and South Pacific oceans.

# **Interesting Facts**



Long considered a New Zealand subspecies of the black-browed albatross, the two species are now known to breed in mixed colonies on Campbell Island. While some hybrids have been found, the birds appear to prefer to mate with their own species.



Breeding sites: Breeds only on

Campbell Island.

**Breeding period:** Begins August and ends the following April.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Colonial nesters that nest on cliffs and steep slopes. Build pedestal nests made of compacted soil.

#### **Threats**

#### At sea

- Campbell albatrosses are caught in longline and trawl fisheries in New Zealand.
- Captures have also been reported in longline fisheries in Australian waters.
- Bycatch is thought to have caused population declines for this albatross from the 1970s through the 1990s.



- Few land-based threats remain for the species.
- Human visitors may have some impact, but few people visit the colonies at the northern end of Campbell Island.
- Avian diseases are a possible threat to the species.

Species Group: Smaller albatrosses (mollymawks)

# Southern black-browed albatross Thalassarche melanophris



#### Distinguishing characteristics

Head: White. Black patch around the eye and black irises.

Body: Body is white.

**Wings:** Dark upperwings and white on the underwings with black margins. Wingspan is 210-250 cm.

Feet: Yellowish-orange webbed feet.

Bill: Bright yellow with reddish tip.

Juvenile features: Immature birds have dark bills with blackish tips.

MPI group code: XMA MPI species code: XSM

## Feeding and range



**Eats:** Mostly krill and fish. Also eat some squid, salps and jellyfish.

Range: During the summer, common over shelves around New Zealand and Australia. In the winter, birds from the Indian Ocean migrate to shelves off east Africa, Australia and New Zealand.

#### **Interesting Facts**



About 70% of the global population of black-browed albatross breeds on the Falkland Islands.

Less than 150 pairs of this albatross breed in New Zealand.



**Breeding sites:** In New Zealand, black-browed albatrosses breed in low numbers on Campbell, Antipodes and Snares islands. Elsewhere the species breeds on Cape Horn, Falkland, South Georgia, Crozet, Kerguelen, Heard and Macquarie islands.

**Breeding period:** Begins in August with eggs laid in late September and ends in April.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Colonial nesters. Nest on terraces on top of coastal tussock-clad cliffs or steep slopes. Builds a pedestal nest of soil, guano and vegetation.

#### **Threats**



- Reported caught in trawl and longline fisheries in New Zealand.
- This species is also widely bycaught outside New Zealand waters, in southern hemisphere longline and trawl fisheries.



- There are few land-based threats globally that could cause population changes for this species.
- Almost 50% of the global population lives on islands free from introduced predators, including in New Zealand.
- Ticks and avian diseases.
- Numbers of visitors to some breeding colonies. This is not currently a threat in New Zealand.

Species Group: Smaller albatrosses (mollymawks)

#### Chatham Island albatross

Thalassarche eremita



#### Distinguishing characteristics

**Head:** Mature birds have a grey crown, face and throat.

**Body:** Medium-sized with a white chest and belly, and a dark-grey tail.

Wings: Dark-grey upperwings. White underwings.

Bill: Yellow bill with a dark spot at the tip of the lower bill.

Juvenile features: Juveniles have more grey in their plumage

and a blue-grey bill that has a black tip.

MPI group code: XMA MPI species code: XCI

## Feeding and range



Eats: Squid and fish.

Range: South Pacific Ocean west to Tasmania and east to South America. In winter the species migrates to the territorial waters of Chile and Peru. Juveniles appear to remain in South American waters until they reach breeding age.

# **Interesting Facts**



Chatham albatross breed on one rock stack (The Pyramid) that is only 10 ha in size. Over five years from 2014, Chatham albatross chicks were translocated from The Pyramid to main Chatham Island to try to create a new breeding colony.



**Breeding sites:** Chatham albatrosses breed only on The Pyramid, which is a large rock stack in the Chatham Islands.

**Breeding period:** August-September to the following March-April.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Colonial breeders that build pedestal nests out of guano and fish bones.

#### **Threats**



- Chatham albatross have been bycaught in New Zealand longline and trawl fisheries.
- Outside New Zealand, these albatrosses have been caught in longline fisheries operating off Australia, Chile and Peru.



- The habitat quality on The Pyramid deteriorated following a severe storm in 1985, but has since recovered.
- The Pyramid is privately owned and it is believed the illegal harvesting of Chatham albatross chicks still occasionally occurs.
- Could be affected by bird diseases including avian pox virus.

Species Group: Smaller albatrosses (mollymawks)

# Salvin's albatross Thalassarche salvini



#### Distinguishing characteristics

Head: Light grey to brown with a white cap.

**Body:** Medium-sized albatross with a mostly white body.

**Wings:** Dark upperwings with some mottled white near neck. Underwings are mainly white with a narrow outline of black.

Bill: Dusky grey or pale brown, with yellow patches at the base, tip and sides.

MPI group code: XMA MPI species code: XSA

## Feeding and range



Eats: Squid and fish.

Range: Distributed widely over the Southern Ocean. They can be found in the South Pacific and Indian oceans. They often forage over shelves and seamounts.

# **Interesting Facts**



95% of the world population of Salvin's albatross breeds on the tiny, barren islets of the Bounty Islands.



**Breeding sites:** In New Zealand, Salvin's albatrosses breed annually at the Bounty Islands, the Snares and possibly The Pyramid and the Forty-Fours at the Chatham Islands. The species also breeds at the Crozet Islands in the Indian Ocean.

**Breeding period:** Begins in October and ends the following April.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Nest on barren islands and rock stacks.

#### **Threats**

#### At sea

- Commonly seen attending fishing vessels.
- Salvin's albatross have been reported caught from longline and trawl fisheries in New Zealand.
- Almost all of these captures have been reported from the east and south of New Zealand.
- Outside New Zealand waters, Salvin's albatross are reported caught in longline fisheries off Chile.



#### On land

 There are very few land-based threats to Salvin's albatrosses. Species Group: Smaller albatrosses (mollymawks)

# New Zealand white-capped albatross Thalassarche cauta steadi

MPI group code: XMA MPI species code: XWM



#### Distinguishing characteristics

Head: White with faint grey on cheeks.

**Body:** The large albatross has a white chest, belly and rump.

Wings: Dark upperwings. Underwings are white with narrow black margins.

**Bill:** Light greyish-white with yellow tip and a faint yellow patch near the base of the top mandible.

## Feeding and range



Eats: Squid and fish.

Range: During the breeding season they feed over the Snares Island Shelf and Auckland Island Shelf

# **Interesting Facts**



Researchers monitor the white-capped albatross population with the help of counts made using photos taken from helicopters, of the birds at their breeding islands. This method disturbs nesting albatrosses significantly less than conducting counts from the ground.



**Breeding sites:** Breed only in New Zealand on Disappointment Island, Adams Island, Auckland Island, and Bollons Island. About 96% of the total population breeds on Disappointment Island.

**Breeding period:** Egg laying starts in mid-November and the chicks fledge in mid-August.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Colonial nesters that build large mound nests out of soil and vegetation.

#### **Threats**



- White-capped albatross are caught in trawl and longline fisheries in New Zealand.
- It has been estimated that more than 8,000 white-capped albatrosses are killed annually in trawl and longline fisheries around the southern hemisphere.
- Outside New Zealand waters, white-capped albatrosses have been reported caught in trawl and longline fisheries off South Africa, and in Uruguayan longline fisheries in the southwest Atlantic Ocean.
- Distinguishing white-capped and shy albatrosses is difficult. This leads to uncertainty about which albatross is being caught in some fisheries.



- There are few land-based threats to the species.
- Mammalian predators (especially feral pigs) on Auckland Island destroy nests and eat eggs and chicks.

Species Group: Smaller albatrosses (mollymawks)

# Grey-headed albatross Thalassarche chrysostoma



#### Distinguishing characteristics

**Head:** Medium-sized albatross. When mature, the body is white and upper tail is dark grey.

**Wings:** Dark grey upperwings. Underwings are white with black margins. The species has a two-metre wingspan.

**Bill:** Dark bill has a yellow stripe on the top and on the bottom. The top stripe gradually tapers at the base of the bill.

MPI group code: XMA MPI species code: XGM

# Feeding and range



**Eats:** Fish, squid and crustaceans. Lampreys appear to be important in the diet of young birds being fed by their parents.

Range: Circumpolar navigators that prefer to feed in the open oceans rather than over the continental shelves. Breeding birds are known to travel up to 2000 km away from their breeding areas to the Polar Front to forage.

## **Interesting Facts**



The grey-headed albatross has a variety of calls. These include a braying call and one that sounds like a chainsaw starting up.



**Breeding sites:** In New Zealand this albatross breeds only on Campbell Island. In other parts of the southern hemisphere it breeds on Diego Ramirez (Cape Horn), South Georgia, Prince Edward, Crozet, Kerguelen and Macquarie islands.

**Breeding period:** Season begins in August with eggs laid in late September and ends the following May.

Frequency of breeding: Every two years for successful breeders.

Number of eggs: One.

**Type of nests:** Cone nests are made of mud and lined with vegetation.

#### **Threats**



- While grey-headed albatrosses have been bycaught in New Zealand fisheries in the past, this albatross has not been reported caught in recent years.
- These albatrosses have been caught in longline fisheries off Kerguelen and Crozet islands, South Georgia, over the Patagonian Shelf, south of Africa, and around Australia.
- Grey-headed albatrosses often forage over deeper waters away from continental shelves. This reduces their exposure to some fisheries threats.



- Few land-based threats remain for the grey-headed albatross.
- The greatest land-based threat is from its natural predator, the brown skua, which takes some eggs and will kill weak chicks.
- The species is known to abandon nests if handled during incubation, but few humans visit its colonies on Campbell Island.
- Avian diseases are a possible threat.

Species Group: Smaller albatrosses (mollymawks)

# Light-mantled sooty albatross Phoebetria palpebrata



#### Distinguishing characteristics

Head: Sooty brown with a white crescent behind its eye.

**Body:** Sooties are amongst the smallest of the albatrosses. Ash-grey with a darker grey belly.

Wings: Average wingspan 200 cm. Sooty brown in colour.

Feet: Grey.

Bill: Dark with a faint blue line on its cutting edge.

MPI group code: XMA MPI species code: XLM

## Feeding and range



Eats: Fish and some squid.

Range: Prefers deep offshore waters and forages over cold Antarctic waters in summer as far south as the pack ice, but ranges north into temperate and subtropical seas in winter. While foraging, breeding birds may range thousands of kilometres from their breeding grounds.

#### **Interesting Facts**



Unlike other albatrosses, sooties have a long stiff wedge-shaped tail which is believed to aid their agility during paired courtship flights.



Breeding sites: Auckland Islands (Adams, Disappointment, Auckland, Enderby, Rose), Campbell Island group (Campbell, Dent, Jacquemart, Folly, Monowai and other inshore stacks) and Antipodes Islands (Antipodes, Bollons, Archway, Leeward). Elsewhere breeds on Macquarie, Heard, Kerguelen, Crozet, Prince Edward, Marion and South Georgia islands.

**Breeding period:** Begins in late October and chicks depart the following May and June.

Frequency of breeding: Every two years for successful breeders.

Number of eggs: One.

**Type of nests:** Less colonial than other species of albatross, sometimes even nesting singly. Build cone-shaped nests, mainly on cliff ledges.

#### **Threats**



At sea

• Light-mantled sooty albatrosses appear to follow fishing vessels

less than other albatross species.

- They appear most vulnerable to longline fisheries and have been reported caught in New Zealand, Australia, and in Japanese longline fisheries in the southern hemisphere.
- These albatrosses are better divers than most others, which means they can follow longline hooks deeper in the water.
- It is more than ten years since the last capture of a light-mantled sooty albatross was reported in New Zealand fisheries. That capture, in 2004, was reported from the southern bluefin tuna longline fishery, off the West Coast of the South Island.

- Mammalian predators may take a few eggs or kill chicks on Auckland Island although most birds nest on cliff ledges that are protected from these predators.
- The most significant predator on land is probably the brown skua.
   This natural predator takes some eggs and has been seen scaring adults off their nests.
- Human visitors to breeding areas may have some impact. The species is sensitive to disturbance during courtship. Some birds will abandon their nests if handled during early incubation. This is not a significant threat in New Zealand where few people visit breeding colonies.
- Ticks on Antipodes and Auckland islands may be potential vectors for avian diseases.



Species Group: Mid-sized petrels

# Grey-faced petrel Pterodroma gouldi



#### Distinguishing characteristics

**Head:** Dark brown head with a grey face.

**Body:** Large with dark sooty brown plumage on its entire body.

Wings: Black or brown.

Feet: Black legs and feet.

Bill: Black.

MPI group code: XPM MPI species code: XGF

#### Feeding and range



**Eats:** Mainly squid, but also fish and crustaceans

Range: At sea they forage widely over the south-west Pacific Ocean and Tasman Sea. Highly pelagic, grey-faced petrels forage beyond the continental shelf and are seldom seen in inshore waters except near their nesting areas during breeding season.

## **Interesting Facts**



Grey-faced petrels still breed on the mainland of New Zealand. Most of these remaining mainland colonies are small, with less than 500 breeding pairs.



Breeding sites: The grey-faced petrel breeds on islands, rock stacks and headlands from the Three Kings Islands down to Omata near New Plymouth. It also breeds on many islets in the Hauraki Gulf and Bay of Plenty, a number of islands and headlands west of Auckland, and at a number of locations in the Gisborne and East Cape regions.

Breeding period: Breeds June to January.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Colonial nester that nests in burrows.

#### **Threats**



- Grey-faced petrels have been caught in New Zealand's longline and trawl fisheries.
- Caught in Australia's southern bluefin tuna fishery.



- The greatest land-based threat to grey-faced petrels is introduced mammals at their breeding grounds.
   Feral rats and cats are particularly problematic.
- Human disturbance is an issue, with visitors unintentionally crushing burrows by walking over them.

Species Group: Mid-sized petrels

# Grey petrel Procellaria cinerea



#### Distinguishing characteristics

Head: Grey with a darker grey crown.

**Body:** Large, grey with darker upper body. Under body is white. Tail is grey and wedge-shaped.

Wings: Upperwings are grey. Underwings are darker grey.

Feet: Greyish pink.

**Bill:** Pale white with yellow or green tinge and dark purplish patches.

MPI group code: XPM MPI species code: XGP

#### Feeding and range



Eats: Squid, fish and crustaceans.

Range: These circumpolar foragers prefer deep ocean basins. They avoid shelves except near breeding islands and off Argentina in autumn.

## **Interesting Facts**



Grey petrels are strong swimmers and can dive to depths of 10 m in search of food.

Other names for the grey petrel include grey shearwater, brown petrel, black-tailed shearwater, and black-tailed petrel.



**Breeding sites:** In New Zealand breeds at Campbell Island and Antipodes Islands. Grey petrels also breed at Kerguelen, Amsterdam, Crozet, Prince Edward, Tristan da Cunha and Gough islands.

Breeding period: March to November.

Frequency of breeding: Annual.

Number of eggs: One.

Type of nests: Colonial nesters.

Nest in burrows.

#### **Threats**



- Grey petrels have been captured in longline and trawl fisheries in New Zealand.
- Grey petrels are capable divers and have been observed diving deeply to retrieve baits cast by longliners, especially tuna and ling fishing vessels.
- Grey petrels have been reported bycaught in many longline fisheries outside New Zealand, including around Australia, along the Patagonian shelf, and around Prince Edward Islands and Kerguelen Island.
- Fisheries bycatch of this species around Kerguelen Island has been identified as a serious threat for the population of this species in the southern Indian Ocean.



#### On land

 Feral cats and rats have exterminated grey petrel populations on Macquarie Island and Crozet Islands (Hog). They have also reduced populations on Amsterdam, Marion, Possession and Campbell islands. Species Group: Mid-sized petrels

# Black petrel Procellaria parkinsoni



#### Distinguishing characteristics

Head: Dark.

Body: Medium-sized, very dark brown or black.

Wings: Dark brown or black.

Feet: Black.

Bill: Pale yellow with a dark tip.

**Other notes:** The black petrel looks very similar to the Westland petrel, but is smaller. Its range is also further north and north-east of the North Island than the Westland petrel. Also known as Parkinson's petrel.

MPI group code: XPM MPI species code: XBP

## Feeding and range



Eats: Fish and crustaceans.

Range: The black petrel forages mainly off the eastern North Island and in the Tasman Sea. Black petrels migrate after breeding to the eastern tropical Pacific, with birds frequently seen off the coast between southern Mexico and northern Peru and westwards to the Galapagos Islands.

## **Interesting Facts**



Black petrel colonies were once found on the mountains and hills on the North Island and north-western South Island, but most colonies were lost before the 1950s.



**Breeding sites:** The only remaining colonies of the species are found on Little Barrier Island and Great Barrier Island

Breeding period: November to June.

Frequency of breeding: Annual.

Number of eggs: One.

Type of nests: Colonial nesters.

Nest in burrows.

#### **Threats**



- Black petrels are the New Zealand seabird species assessed as most likely to be bycaught in excess of sustainability limits.
- This petrel has been reported caught in longline and trawl fisheries in New Zealand.
- Beyond New Zealand waters, black petrels interact with longline fisheries off Chile and Peru.



- The species was eradicated by feral cats and other mammalian predators from many of its former breeding colonies. The removal of feral cats from Little Barrier Island has helped to slow its decline.
- On Great Barrier Island, mammalian predators may take some eggs and kill some chicks and adults. DOC conducts predator trapping to reduce these impacts.

Species Group: Mid-sized petrels

# White-chinned petrel Procellaria aequinoctialis



#### Distinguishing characteristics

**Head:** Blackish-brown with a few white feathers under the bill (which are difficult to observe at sea).

**Body:** Large blackish-brown petrel that is similar looking to the Westland petrel.

Wings: Blackish-brown.

Feet: Legs and feet are black.

**Bill:** Light yellow. One of the visible differences between the Westland petrel and the white-chinned petrel is that the white-chinned petrel does not have a dark tip at the end of its bill.

MPI group code: XPM MPI species code: XWC

## Feeding and range



Eats: Mainly krill and fish.

Range: Forage across the Southern Ocean between the tropics and Antarctica. One of the few species that is commonly seen foraging over both shelves and ocean basins.

## **Interesting Facts**



White-chinned petrels were called shoemakers by the early sealers because of the clacking and rattling sounds they make in their burrows.



Breeding sites: In New Zealand, the white-chinned petrel breeds annually in colonies at the Auckland Islands, Campbell Island group and Antipodes Islands. It also breeds at Kerguelen, Crozet, Prince Edward, Marion, South Georgia and Falkland islands.

Breeding period: November to May.

Frequency of breeding: Annual.

Number of eggs incubated: One.

Type of nests: Colonial nesters.

Nest in burrows.

#### **Threats**



- The white-chinned petrel has been caught in longline, trawl, and setnet fisheries in New Zealand.
- White-chinned petrels are adept divers. They are often bycaught in trawl and longline fisheries around the southern hemisphere (including in the Pacific, Indian and Atlantic Oceans).
- The species is known to forage for bait both during the day and night.



- Introduced mammals are a threat at some colonies.
- Human disturbance is an issue, with visitors unintentionally crushing burrows by walking over them.

Species Group: Mid-sized petrels

# Westland petrel



#### Distinguishing characteristics

Head: Black.

**Body:** Large black petrel that is similar looking to the white-chinned petrel.

Wings: Black.

Feet: Legs and feet black.

**Bill:** Mature birds have bills that are pale yellow with a large black tip.

MPI group code: XPM MPI species code: XWP

# Feeding and range



**Eats:** Mainly fish and squid. The species is also known to use offal for a significant part of its diet, especially when feeding chicks.

Range: A highly pelagic species, at sea the Westland petrel ranges from Tasmania to the territorial waters of Chile. While breeding (March-November) found in New Zealand shelf waters and Tasman Sea. From November to April migrates across the Pacific: adults travel south to Cape Horn while immature birds travel north to the Humboldt Current.

## **Interesting Facts**



The Westland petrel can often be seen from the Cook Strait ferry.



**Breeding sites:** The species breeds only in New Zealand in the coastal foothills near Punakaiki on the South Island's West Coast.

**Breeding period:** Breed each winter between May and November.

Frequency of breeding: Annual.

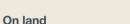
Number of eggs: One.

**Type of nests:** Colonial nesters that excavate burrows.

#### **Threats**



- Westland petrels have been recorded bycaught in longline, trawl, and setnet fisheries in New Zealand.
- Outside New Zealand, Westland petrel are reported as bycatch from longline fisheries off Chile and Australia.





- Mining and agricultural activities have destroyed some habitat adjacent to breeding colonies.
- Birds occasionally strike power lines when flying to and from the colony.



Species Group: Giant petrels

# Northern giant petrel



#### Distinguishing characteristics

**Head:** Mottled white on their head and neck. White face and chin as they mature.

**Body:** Mottled white on their breast. Older birds become a mottled dark grey on their upper body.

Wings: Wingspan is 150-200 cm.

**Bill:** Light pink with a reddish-brown tip. One way to tell northern giant petrels apart from southern giant petrels is by the pinkish-brown tip on the bill of the northern giants (compared with greenish tips on southern giants).

Juvenile features: Entirely blackish-brown with a pale bill.

MPI group code: XTP MPI species code: XNP

## Feeding and range



**Eats:** Feed on squid. Frequently seen scavenging around dead seals and whales. Also known to attack and eat smaller species of seabirds.

Range: Birds disperse widely over the Southern Ocean, mainly north of the Antarctic Convergence. The northern giant petrel is more restricted to foraging near shorelines than the southern giant petrel. Many mature northern giant petrels remain near their breeding colonies year-round, while immature birds appear to make circumpolar journeys.

## **Interesting Facts**



Giant petrels are the only petrel species that will feed on land.



Breeding sites: Auckland Islands (Enderby, Ewing, Ocean, Disappointment), Campbell Island group, Antipodes Island, and Chatham Islands (Forty-Fours, Big Sister, Little Sister). Elsewhere breeds at Macquarie, Kerguelen, Crozet, Prince Edward and South Georgia islands.

**Breeding period:** Seasons vary slightly based on colony, August/ October to February/March.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Loose colonial nesters, often breed in dispersed pairs. Build nests amongst vegetation on rugged terrain.

#### **Threats**



- Northern giant petrels have been bycaught in longline and trawl fisheries in New Zealand.
- Outside New Zealand, bycatch of this petrel has been reported from longline fisheries, off Australia, Chile, South Africa and Prince Edward Island.
- Entanglement and ingestion of plastics are other marine threats.



- Currently there are not many threats to northern giant petrels on land.
- Northern giant petrels are quite sensitive to human disturbance and will sometimes abandon eggs or young chicks if approached too closely.

Species Group: Giant petrels

# Southern giant petrel *Macronectes giganteus*



#### Distinguishing characteristics

**Head:** Two distinct colour phases. The dark phase has speckled white head and neck feathers. The white phase has a completely white head and neck except for a few dark feathers.

**Body:** Dark phase can be confused with the northern giant petrel, but southern giant petrel adults are much paler on the neck and underbody. White phase birds are white except for a few scattered dark feathers.

Wings: Wingspan 150-200 cm.

Bill: Pale peach with a greenish tip.

**Juvenile features:** Fledge black with their plumage slowly fading as they mature. Juveniles take about seven years to develop adult plumage.

MPI group code: XTP MPI species code: XSP

## Feeding and range



**Eats:** Feed on squid. They are opportunists that can be found in mixed flocks with northern giant petrels and are often seen scavenging around dead seals and whales. They are also known to attack and eat smaller species of seabirds.

Range: Breeding adults spend summers near breeding colonies. In winter, some adults remain in Antarctic waters, while others move further north and disperse across the Southern Ocean.

### **Interesting Facts**



Southern giant petrels are sometimes known as stinkers because they can spit foul-smelling oil when threatened.



**Breeding sites:** Nests in small colonies on ice-free Antarctic and subantarctic islands. Visits New Zealand waters, but does not breed in New Zealand.

**Breeding period:** September-March at northern colonies and November-May in Antarctica.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Small breeding colonies are often close to penguin colonies.

#### **Threats**



- Southern giant petrels have been reported caught in longline and trawl fisheries in New Zealand.
- Outside New Zealand waters, captures have been reported from Argentinian longline fisheries along the Patagonian Shelf.
- Bycatch of this species also occurs in trawl fisheries off the Falkland Islands.
- Entanglement and ingestion of plastics are other marine threats.



#### On land

 Highly sensitive to human disturbance. Known to abandon nests if close contact is made. Species Group: Cape petrels

## Cape pigeon/petrel Daption capense



#### Distinguishing characteristics

Head: Black head and neck.

**Body:** Medium-sized. Under body is mostly white with some black marking on chin and throat. Upper body has a distinctive black and white pattern.

**Wings:** Underwings are mostly white with black margins. Upperwings feature a distinctive black and white pattern. The two subspecies found in New Zealand's waters are easiest to tell apart by the amount of black on their upperwings. Snares Cape pigeon (*D.c. australe*) has dark upperwings with white patches. Southern Cape pigeon (*D.c. capense*) has whiter upperwings with black flecks.

Bill: Black.

MPI species code: XCP

## Feeding and range



**Eats:** Feed mainly on krill, but also eat fish and squid. They are also known to scavenge near fishing vessels and near marine mammal carcasses.

Range: Circumpolar, but during the summer feed close to their breeding colonies in Antarctica's waters especially shelf areas. Winter range extends from the ice edge to eastern tropical Pacific, especially off Argentina, south-west Africa, Australia and New Zealand. Most commonly found foraging on shelves.

## **Interesting Facts**



Cape pigeons earned their common name because of the way they peck at the water to capture prey and because of their presence around Cape of Good Hope, South Africa.



**Breeding sites:** Cape petrels breed on numerous islands surrounding Antarctica. The Snares Cape petrel breeds in many locations in the subantarctic islands and Chatham Islands.

**Breeding period:** November to March.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Colonial nesters. They build simple nests that are usually on cliffs or steep slopes with easy access to the sea.

#### **Threats**



- Cape petrels have been caught in trawl, longline and setnet fisheries in New Zealand.
- Outside New Zealand waters, this species is also bycaught, for example, in Argentinean and South African longline fisheries.



#### On land

 Skuas are natural predators and will prey on eggs and chicks. Species Group: Diving petrels

## Common diving petrel

Northern diving petrel, southern diving petrel and subantarctic diving petrel

Pelecanoides urinatrix urinatrix, P. u. chathamensis and P. u. exsul



### Distinguishing characteristics

Head: Dark.

**Body:** Small, stocky bodies with dark plumage on upper body and light grey plumage on throat and chest.

**Wings:** Dark plumage on upperwings and light grey plumage on underwings. Wingspan 33-38 cm.

Feet: Legs and feet are a light blue.

Bill: Black, short and broad.

NZ Conservation Status: Not Threatened

MPI group code: XDU MPI species code: XDP

## Feeding and range



Eats: Mainly small crustaceans.

Range: Foraging habitats not well known. However, this small seabird can travel thousands of kilometres to oceanic areas in the nonbreeding season.

## **Interesting Facts**



Common diving petrels are the most aquatic of all petrels and frequently dive and "fly" underwater to capture their prey.

This petrel has been recorded diving to depths of 11 m in New Zealand waters, and 64 m off the Kerguelen Islands.



**Breeding sites:** The subantarctic diving petrel breeds at Auckland Islands, Antipodes Islands and Campbell Island group.

The southern diving petrel breeds around Foveaux Strait, and on Stewart Island and surrounding islets and rock stacks. It also breeds at the Snares and at the Chatham Islands.

The northern diving petrel breeds on islands and small stacks around the North Island and Cook Strait, from Three Kings Islands to Brothers Island. The northern diving petrel also breeds on up to 20 islands off Australia.

**Breeding period:** August to February.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Colonial. Nest in burrows and natural cavities

#### **Threats**



 Common diving petrels have been reported bycaught in New Zealand trawl and longline fisheries.



- Introduced predators on breeding islands are the greatest threat.
   Diving petrel colonies can be destroyed within three to five years because fledglings return to natal colonies at one to two years of age and adults visit their nesting burrows eight to ten months of the year.
- Diving petrels breed in shallow burrows that are easily damaged.
- Diving petrels are attracted to bright lights. Birds have been reported crashing into brightly lit buildings near breeding colonies or onto ships at sea.

Species Group: Prions

# Fairy prion Pachyptila turtur

MPI group code: XPN MPI species code: XFP



#### Distinguishing characteristics

Head: Bluish-grey top with white around eyes and below bill.

Body: Underbody is white. Blue-grey back.

Wings: Blue-grey upperwings with a black M-shaped mark across them.

Underwings are white. Feature a broad black tip on their tail.

Feet: Dark bluish-grey.

**Bill:** Short blue bill (approximately 22 mm long and 11 mm wide).

### Feeding and range



Eats: Krill.

**Range:** Found throughout oceans and coastal areas in the southern hemisphere.

### **Interesting Facts**



Fairy prions are the smallest of all prions. They are also one of New Zealand's most abundant petrels. Research indicates that New Zealand has more than 50% of the world population.



Breeding sites: In New Zealand breeds in colonies on a number of offshore islands from the Poor Knights south, as well as the Chatham, Snares and Antipodes islands. Elsewhere breeds on 30 islands and rocks off Victoria and Tasmania (Australia), also Macquarie, Heard, Kerguelen, St. Paul, Crozet, Prince Edward, Marion, South Georgia and Falkland islands.

Breeding period: October to February.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Often form large colonies.

Burrow nesters.

#### **Threats**

#### At sea

- Fairy prions are not frequent vessel followers, but they are sometimes attracted by the lights of stationary ships at night.
- Fairy prions have been bycaught in trawl fisheries in New Zealand.



- Introduced predators are the greatest threat to fairy prion populations. All remaining colonies in New Zealand are on rodent-free islands.
- Grazing animals can affect prion populations by crushing burrows.
- Visitors to colonies can unintentionally crush burrows by walking over them.
- Fire is a risk during breeding season because many colonies are in grassy habitats.

## Buller's shearwater Puffinus bulleri



#### Distinguishing characteristics

Head: Dark grey upper half and white lower half.

**Body:** Large, white-bellied shearwater. Undersides are white.

**Wings:** Distinctive "M" pattern on its upperwings. Underwings are white with dark-grey margins.

Bill: Grey bill.

## MPI group code: XSW (shearwaters generic) MPI species code: XBS

#### Feeding and range



Eats: Fish, squid and crustaceans.

Range: During the breeding season they forage north of the Subtropical Convergence, usually staying over the continental shelf. The species is also found in the mid-Tasman Sea and off eastern Australia. Migrates to the North Pacific Ocean in winter and disperses widely from Japan and Alaska east to California. Some annually migrate to the territorial waters of Peru and Chile.

#### **Interesting Facts**



By 1936 the population on Aorangi Island had been all but wiped out (c. 100 nests left) by feral pigs. Once the pigs were removed the population rapidly increased.



**Breeding sites:** The species breeds only on islands in the Poor Knights group.

Breeding period: November to May.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** They nest in burrows or crevices on cliffs and bush-clad slopes.

#### **Threats**

#### At sea

- Recorded caught in longline and trawl fisheries in New Zealand.
- There is a risk of the species being caught in setnets.
- May be caught on hand and reel lines.
- Reported bycaught in large-scale gillnet fisheries in the central north Pacific Ocean.
- Scavenge food behind trawlers and occasionally around recreational fishing boats.



- Fire is a threat because the Poor Knights are very dry in summer and fires could cause temporary losses in the population.
- Burrows are easily collapsed by people moving about on colonies.
   Visitor access is strictly limited to protect the birds and other threatened fauna on the islands.

## Fluttering shearwater Puffinus gavia



#### Distinguishing characteristics

- Small shearwater (32-37 cm in length)
- Dark brown head
- · Greyish-brown bill and feet
- White belly and throat, with partial dark collar
- Brown upperwings
- · White underwings with brown borders
- Can be confused with the Hutton's shearwater, particularly around the Cook Strait, where the species overlap during breeding. Best separated by paler armpits and less prominent partial collar

MPI group code: XSW (shearwaters generic)

MPI species code: XFL

### Feeding and range



Eats: Small fish and crustaceans, especially krill.

Range: Breeds only in New Zealand. Forages over the continental shelf and inshore waters including sheltered bays and harbours, throughout most of New Zealand.

Fledglings and some adults migrate to eastern and southern Australia in February. Large numbers of birds remain around the New Zealand coast year round.

#### **Interesting Facts**



A new colony of fluttering shearwaters, or pakaha, has been established on Maud Island, Marlborough Sounds. Chicks translocated from Long Island to Maud Island in the 1990s have now returned to Maud as adults to breed.

\* The classification category 'Relict' has been adopted in the New Zealand Threat Classification System to encompass species that have experienced very large historic range reductions and now exist as remnant populations.



**Breeding sites:** Breeds on numerous offshore islands between the Three Kings group and the Marlborough Sounds. Colonies can be extremely dense and coexist with other species (e.g. common diving petrels and grey-faced petrels).

**Breeding period:** Between September and February with the eggs hatching in November and chicks fledging in January/February.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Colonial nester that nests in burrows or between tree roots and rock crevices.

#### **Threats**



Frequently feeds close inshore and dive deeply for food. Consequently, birds have been bycaught by fishers using hand and reel-lines in inshore waters. The birds sometimes swallow hooks or get tangled in the lines.

Flocks of shearwaters are occasionally caught in set nets.

The species may be attracted to bright lighting, especially on foggy nights. This can lead to crash landings on fishing vessels.

Most of the large breeding colonies are situated near active shipping lanes and the main New Zealand oil refinery at Marsden Point. An oil spill near the breeding islands could have a major impact on this diving species.



#### On land

All breeding colonies are on mammalfree islands or islands that only have Pacific rats present. The breeding populations are quite small on islands with Pacific rats. It is likely that these rats these rats eat eggs and chicks of fluttering shearwaters.

Fires may cause temporary losses in the populations, especially during incubation (September-November).

Nesting colonies on small rodent-free islands are usually in very friable soil. The burrows on these islands are easily collapsed by people moving about the colonies. Visitor access to these sites needs to be strictly limited, especially during the courtship and incubation periods (August to November).

## Flesh-footed shearwater Puffinus carneipes



#### Distinguishing characteristics

Head: Black or dark brown.

Body: Small shearwater. Black or dark brown.

Wings: Black or dark brown.

**Feet:** Pink legs and feet. Similar looking to the black petrel, one of the visible differences between the two species are the distinctive pink feet that flesh-footed shearwaters have. Black petrels have black feet.

Bill: Pale pink with a dark tip.

MPI group code: XSW (shearwaters generic)
MPI species code: XFS

### Feeding and range



Eats: Fish, squid and crustaceans.

Range: Forages over continental shelves north of the Subtropical Convergence during the summer and the New Zealand population migrates to the North Pacific Ocean between May and September.

## **Interesting Facts**



The calls that flesh-footed shearwaters make are a series of high-pitched moans. Their calls have been likened to the sound of cats fighting.

Although they voraciously eat whole livers, the species is effectively deterred from attending fishing vessels by spreading small quantities of shark liver oil on the sea surface.



Breeding sites: In New Zealand breeds on islands around the North Island and Cook Strait, including Hen & Chickens Islands, Mercury Islands, Ohinau, Karewa, Kauwahaia, Motumahanga, Middle Trio and Titi. Elsewhere it breeds on Lord Howe Island, in South Australia, western Australia and on some islands in the Indian Ocean.

Breeding period: December to May.

Frequency of breeding: Annual.

Number of eggs: One.

Type of nests: Colonial. Nests in burrows.

#### **Threats**

#### At sea

- Reported caught from longline, trawl and setnet fisheries in New Zealand.
- Caught off eastern Australia by tuna longliners.
- Reported caught in high-seas driftnets in the north Pacific Ocean.
- Recreational fishers catch fleshfooted shearwaters on hand and reel lines.
- Plastic ingestion may be a problem for this species.



- Mammals are a potential threat to some flesh-footed shearwater colonies. The largest colonies in New Zealand occur on islands that are free of ship rats, Norway rats and mustelids.
- Visitors can unintentionally crush burrows when walking over them.

## Sooty shearwater (also known as tītī or muttonbird)

Puffinus griseus



#### Distinguishing characteristics

Head: Chocolate brown.

**Body:** Medium-sized shearwater that is dark-chocolate brown.

**Wings:** Chocolate brown upperwings with silver-white underwings. Wingspan is 95-110 cm.

**Feet:** Legs and feet are dark on the outer side and light mauve-pink on the inner side.

**Bill:** Dark, narrow and longer than short-tailed shearwaters.

MPI group code: XSW (shearwaters generic)

MPI species code: XSH

#### Feeding and range



Eats: Fish and squid.

Range: The sooty shearwater is one of the world's most widely distributed seabirds. Birds from New Zealand forage over the South Pacific Ocean and the Tasman Sea. They migrate to the North Pacific Ocean in the austral winter and spread over the entire central and eastern Pacific Ocean, with a few birds reaching the Arctic Ocean.

### **Interesting Facts**



Sooty shearwaters are amazing divers. They are known to dive to almost 70 m.



Breeding sites: Sooty shearwaters breed on numerous islands around New Zealand from Three Kings Islands to the Campbell Island group, including Stewart Island, the Snares, Auckland Islands, Campbell Island group, Antipodes Islands and Chatham Islands. A few are also present on coastal headlands on the South Island mainland. Elsewhere the species breeds on at least 17 islands off Australia, islands off Chile, and the Falkland Islands.

Breeding period: November to May.

Frequency of breeding: Annual.

Number of eggs: One.

Type of nests: Breeds in colonies.

Nests in burrows.

#### **Threats**



- Sooty shearwaters have been reported caught in commercial trawl, longline and setnet fisheries in New Zealand.
- Recreational fishermen also catch these shearwaters, on hand or reel lines and in setnets in some locations.
- Elsewhere, sooty shearwaters are killed in longline, trawl and gillnet fisheries.



- Introduced mammals are the greatest threat to sooty shearwaters on land.
- Cattle, sheep and goats damage burrows on some islands. Rabbits may compete for burrows or disturb nesting birds on a few islands.
- Visitors can unintentionally crush burrows when walking over them.
- Sooty shearwaters are harvested in commercial operations at traditional sites around Stewart Island by descendants of Rakiura Maori.
   There are also reports of occasional small-scale illegal harvests in other locations.

## Short-tailed shearwater

Puffinus tenuirostris



#### Distinguishing characteristics

Head: Dark brown.

**Body:** Dark brown with lighter-coloured breast. Similar looking to sooty shearwaters, but short-tailed shearwaters are plumper in appearance.

**Wings:** Dark brown upperwings with paler underwings. Underwings are darker than the underwings of sooty shearwaters.

**Feet**: Legs and feet are dark on the outer parts and mauve-pink on the inside.

Bill: Dark, narrow bills are shorter than sooty shearwater bills.

MPI group code: XSW (shearwaters generic)
MPI species code: XTS

#### Feeding and range



Eats: Krill, squid and fish.

Range: Forage in summer and autumn south of Australia and to the South Indian Ocean. In winter most migrate to the North Pacific to the seas off the Aleutian Islands and Kamchatka.

## **Interesting Facts**



The short-tailed shearwater is thought to have a total population of about 23 million birds. Its numbers are stable or possibly increasing. It is one of the few Australian native birds to be commercially harvested. They are closely related to New Zealand's sooty shearwaters.



**Breeding sites:** Short-tailed shearwater colonies are present on many islands off the Australian coast. Visits New Zealand's waters, but does not breed in New Zealand.

Breeding period: November to April.

Frequency of breeding: Annual.

Number of eggs: One.

Type of nests: Breed in colonies.

Nest in burrows.

#### **Threats**



- Reported caught in New Zealand trawl fisheries
- Reported to interact with trawl warps and nets in Australian waters.
- Reported as frequent bycatch in gillnet fisheries in the north Pacific Ocean.
- Caught in longline and trawl fisheries in the Bering Sea.



- Habitat destruction is a major threat to short-tailed shearwater colonies.
- Trampling of burrows by pigs, sheep, and cows has destroyed entire colonies.
- Feral cats and uncontrolled dogs kill shearwater chicks.
- Burrows are easily collapsed by people moving about on colonies and erosion caused by recreational vehicles can destroy suitable sites for burrowing.
- Over-harvesting is another potential threat to short-tailed shearwater numbers.

# Wedge-tailed shearwater Puffinus pacificus pacificus



#### Distinguishing characteristics

Head: Dark.

Body: Large with dark plumage covering entire body and wedge tail.

Wings: Dark upperwings and underwings.

Feet: Peach.

Bill: Grey.

MPI group code: XSW (shearwaters generic)
MPI species code: No code available

### Feeding and range



Eats: Fish, squid and crustaceans.

**Range:** New Zealand birds are thought to migrate to the eastern Pacific between June and mid-October.

#### **Interesting Facts**



Birds breeding in New Zealand and Norfolk Island colonies are larger than other populations of this species.

There is a wide variety in plumage for the species. The birds in Hawaiian and Indian Ocean colonies have white underparts. Birds on the Kermadec Islands, Norfolk Island, Lord Howe Island, and other islands off the coast of Australia are all dark.



**Breeding sites:** Breeds in a number of locations, including the Kermadec Islands, islands off the Australian coast and many tropical and subtropical islands in the Indian and Pacific oceans.

**Breeding period:** Birds in southern hemisphere begin breeding each September but those at the Kermadec Islands do not lay until December.

Frequency of breeding: Annual.

Number of eggs: One.

**Type of nests:** Often form large colonies. Burrow nesters.

#### **Threats**



#### At sea

 There is some evidence that this species may be vulnerable to commercial fishing operations around the world, particularly during the non-breeding season.

- Norway rats and feral cats were two of the greatest threats to the species. Both have been eradicated from Raoul Island.
- Volcanic activity at Raoul and Curtis islands potentially threatens these breeding colonies.
- Visitors to colonies can unintentionally crush burrows by walking over them.



This and other identification guides published by DOC can be found at: www.doc.govt.nz/our-work/conservation-services-programme/ csp-resources-for-fishers/protected-species-identification-guides/

