



## Table 1: White-chinned Petrel

### White-chinned petrel $\square$ Karetai kauae m $\square$

*Procellaria aequinoctialis* Linnaeus, 1758

**Order:** Procellariiformes

**Family:** Procellariidae

**New Zealand status:** Native

**Conservation status:** Not Threatened

**Other names:** shoemaker, Cape hen, whitechinned petrel, white chinned petrel

**Geographical variation:** No subspecies currently recognised.



White-chinned petrel  $\square$  Karetai kauae m $\square$  . Adult. Tutukaka Pelagic out past Poor Knights Islands, October 2021. Image  $\square$  Scott Brooks, [www.thepetrelstation.nz](http://www.thepetrelstation.nz)  $\square$  Scott Brooks

#### Species Information

#### Breeding and ecology

The white-chinned petrel is common at sea around New Zealand, but rarely sighted from land. It feeds in both small and large groups and scavenges behind fishing vessels. One of the largest *Procellaria* petrels (equal in size to Westland petrel), white-chinned petrels are large, sooty-black petrels with a varying white patch on the chin or throat, and black legs and feet. White-chinned petrels generally fly low to the water; soaring and gliding like shearwaters up to 10 m above the sea. White-chinned petrels have a circumpolar distribution, breeding on the Antipodes, Auckland, Campbell, Prince Edward and Falkland Islands, South Georgia, Iles Crozet and the Kerguelen group. In New Zealand, white-chinned petrels breed in burrows on Antipodes, Auckland and Campbell Islands. The largest colony is on Disappointment Island (Auckland Islands). Beach-wrecked juvenile white-chinned petrels are often found on the east coasts of New Zealand between November and February.

## Identification

White-chinned petrels are large, heavily-built seabirds that are uniform sooty-black with black legs and feet. They have a varying-sized and shaped white patch on the chin or throat; some birds have no white-chin. The bill is large and stout, and pale with black saddle on upper mandible between nostrils and unguis.

Voice: white-chinned petrels rarely call at sea, but are vocal on the ground during the breeding season.

Similar species: white-chinned petrels are very similar to Westland petrel and black petrel; apart from overall size (black petrel is smaller) and the absence of white on the chin, both Westland petrel and black petrel have a dark tip to the bill. Flesh-footed shearwaters are one-third smaller and slimmer, with shorter wings and have flesh-coloured legs and feet, and a slimmer pink bill with a dark tip.

## Distribution and habitat

White-chinned petrels breed on Antipodes, Auckland and Campbell Islands in the New Zealand sub-antarctic. During the breeding season, white-chinned petrels occur in waters south and east of New Zealand, feeding over continental-shelf waters up to Cook Strait. During the non-breeding season, white-chinned petrels move northwards into subtropical waters as far as North Cape. Elsewhere, white-chinned petrels breed on Prince Edward and Falkland Islands, South Georgia, Iles CroÛet, and the Kerguelen group. They are most often seen at sea, ranging widely over deep water between 30° and 65°S, and are rarely seen from land away from the breeding islands.

## Population

The largest population of white-chinned petrels in New Zealand is in the Auckland Islands, with 200,000 breeding pairs on Disappointment Island. There are large numbers on Antipodes and lesser numbers on the stacks of Campbell Island. Other populations around the world range up to 750,000 pairs (South Georgia).

## Threats and conservation

White-chinned petrels have few land-based threats on their New Zealand breeding islands, as all are legally protected island sanctuaries with restricted access. On other island colonies, white-chinned petrels are affected by feral cats and rats. White-chinned petrels have been caught by commercial fishers both in New Zealand waters and overseas and are recognised as at risk from commercial fishing operations.

Few conservation actions have specifically targeted white-chinned petrels. The Antipodes Island population was studied with population dynamics monitoring and foraging tracking (using geolocator devices) undertaken between 2007 and 2011. Mitigation to reduce seabird bycatch has been put in place on commercial fisheries vessels operating within New Zealand.

## Breeding

White-chinned petrels are colonial breeders, nesting in short to long (1-3 m) burrows. Many burrows have waterlogged entrances and tunnels, but the nest is dry on a raised pedestal. White-chinned petrels are monogamous, with shared incubation and chick care. Adults attend the colony from October to May, with a single white egg laid in late November-December. Incubation is shared and takes 57-62 days. Chicks hatch from late January-February and are left unattended during daylight when 5-8 days old. Both parents feed the chick by regurgitation every 1-6 days. Chicks fledge in April- May at 87-106 days old.

## Behaviour and ecology

White-chinned petrels are usually solitary at sea, but form large flocks around fishing vessels or in association with cetaceans. They are known to follow fishing vessels. White-chinned petrels swim and dive well. White-chinned petrels feed on squid and fish by surface-seining or shallow diving and also swim underwater using their wings. They are colonial nesters and excavate their own burrows on well-vegetated islands; burrows can have large pools (or moats) of water at the entrances. They breed as monogamous pairs, which typically remain together throughout their breeding lives. White-chinned petrels primarily visit the breeding colonies in late afternoon and circle the colony first. The occasional bird will land in broad daylight, but most arrive on or after dark. They depart before dawn, or stay in burrows during daylight. After breeding, white-chinned petrels migrate northwards to subtropical waters.

White-chinned petrels are silent at sea, although have been recorded calling when around fishing vessels competing with other birds for discards and food. They are vocal on the breeding grounds; when at the colony, they have two main calls; a wheeving and a wheezy groan used to threaten intruders during territorial disputes, and a rattle and bud quacking calls that are repeated frequently just after dark and before dawn. The Rattle call is used mainly by males to attract females to the burrow location, but also in duets between males and females in the burrow. Low, soft meaning calls have been heard when males and females are bonding in the burrow together or bonding with the chick. A high-pitched squeal also occurs on Antipodes Island usually in response to threats.

## Food

The main food items of white-chinned petrels are squid, salps, fish and crustaceans, although numbers and types of prey items alters during the breeding and non-breeding periods. Squid appears to be the main food item taken in New Zealand. Most food is taken from the surface, by shallow diving on or just above the surface of the water. White-chinned petrels readily take offal and discards from fishing vessels.

## Weblinks

BirdLife factsheet

ACAP

Wikipedia

<http://www.nzbirds.com/birds/petrelwchinned.html>

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White-chinned petrel *Puffinus tenuirostris*

**White-chinned petrel *Puffinus tenuirostris***

**Social structure**

monogamous

**Breeding season**

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

**Nest type**

burrow

**Nest description**

One to three metres deep on a raised nest inside the chamber.

**Nest height (mean)**

0 m

**Maximum number of successful broods**

1

**Clutch size (mean)**

1

**Mean egg dimensions (length)**

82 mm

**Mean egg dimensions (width)**

55 mm

**Egg colour**

White

**Egg laying dates**

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

**Interval between eggs in a clutch**

Not applicable days

**Incubation behaviour**

shared

**Incubation length (mean)**

55-62 days

**Incubation length (min)**

57 days

**Incubation length (max)**

62 days

**Nestling type**

semi-precocial

**Nestling period (mean)**

87-106 days

**Nestling period (min)**

87 days

**Nestling period (max)**

106 days

**Age at  $\square$  edging(mean)**

87-106 days

**Age at  $\square$  edging(min)**

87 days

**Age at  $\square$  edging(max)**

106 days

**Age at independence (mean)**

87-106 days

**Age at independence (min)**

87 days

**Age at independence (max)**

106 days

**Age at  $\square$  rsbreeding (typical)**

6 years

**Age at  $\square$  rsbreeding (min)**

4 years

**Maximum longevity**

Unknown

**Maximum dispersal**

5,000 km

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**Identifi $\square$  cation**

**Length: 55 cm**

**Weight: 1250 g**

Similar species: Westland petrel  $\square$   $\text{T}\bar{\text{t}}\bar{\text{t}}\bar{\text{o}}$ , Black petrel  $\square$   $\text{T}\bar{\text{t}}\bar{\text{t}}\bar{\text{o}}$ , Flesh-footed shearwater  $\square$   $\text{o}\bar{\text{a}}\text{nui}$

A large heavily-built petrel with uniform sooty-black plumage, a stout pale creamish-coloured bill with a black saddle on upper mandible between nostrils and unguis, and black legs and feet. They have a varying-sized and shaped white patch on the chin or throat; some birds have no white-chin.

**Sounds**

Birds at breeding colony (white-capped mollymawks in background)  
Birds at breeding colony (white-capped mollymawks in background)

## Images



## Book extracts



FIFTH EDITION, 2022  
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Checklist of the birds  
of NZ  
OSNZ