



Chatham Island taiko *Pterodroma magentae*

38 cm

CHATHAM ISLANDS ENDEMIC, NATIONALLY CRITICAL

Other names: Magenta petrel, tchaik



Adult Chatham Island taiko.
Photo: Graeme Taylor
(DOC).

Identification

Taiko are large gadfly petrels with a sooty-grey head, neck and upper breast, and white underparts. Birds have varying amounts of mottled white around the forehead and chin. Legs and feet are pink with dark outer toes and tips to the webs. They have long narrow wings and are fast, capable fliers. Identification at sea is difficult, and taiko may easily be confused with the soft-plumaged petrel (*Pterodroma mollis*). The name Magenta petrel comes from the ship, the *Magenta*, from which the first taiko to be formally described was collected in 1867.

Distribution and ecology

Taiko disappeared from scientific understanding for over a century, until its rediscovery by David Crockett and his team in the Tuku Valley in 1978. It took another ten years for the first taiko burrow to be discovered near one of the tributaries of the Tuku-a-tamatea River, in southern Chatham Island. Fossil and historic records show that taiko were once the most abundant burrowing seabird on Chatham Island. Oral records described extensive colonies of taiko at the southern



Adult Chatham Island taiko,
Taiko Camp.
Photo: Gavin Woodward.

end of Chatham Island that were regularly harvested by Moriori. Taiko do not appear to have bred on other islands in the Chatham group; now the species is one of the rarest birds in the world. The entire known taiko population is found in the southwestern forests of Chatham Island, where 160 taiko have been banded between 1978 and 2004. There are 10-15 pairs in known burrows that attempt to breed each year, and the total population is currently estimated at 100-150 birds.

Taiko nest in long burrows under forest cover. They form long-term monogamous pair bonds, and both sexes incubate the single white egg and feed the chick. The breeding season is September-May. During the breeding season, the birds forage over the open ocean, probably to the south and east of the Chatham Islands. Their distribution outside of the breeding season is unknown, although they may disperse eastwards into the temperate South Pacific Ocean. Typical of the genus *Pterodroma*, they specialize in feeding on squid.



Chatham Island taiko chick
close to fledging, Tuku
Nature Reserve, April 2000.
Photo: Graeme Taylor.

Threats and conservation

The arrival of mammalian predators, particularly cats, pigs and rodents, and the introduction of weka, are likely to have been the main causes of the decline of taiko. Loss and degradation of forest habitat as well as the harvesting of the birds for food, particularly once the population was in decline, are also likely to have contributed. The threat to taiko, during the breeding season, from feral cats, pigs, weka and rodents (especially ship rats) continues today. Pig-hunting dogs are also a threat, as are loss of forest habitat from accidental fire, trampling of burrows by feral cattle, and use of burrows as dens by possums. Since the location of the first burrow in 1987, a number of protection measures have been initiated. Gifting of land for the Tuku Nature Reserve by the Tuanui family, and the later establishment of a number of adjacent Conservation Covenants by landowners, has given legal protection to key areas of taiko habitat. Fencing of these areas to exclude stock has allowed regeneration and physical protection of the forest. Predator control, targeting feral cats, possums, weka and rats, has been implemented to protect adult taiko visiting the colony, and eggs and chicks in the burrows. The intensive predator control has significantly improved the breeding success at known taiko burrows; since predator control and monitoring of burrows began in 1988, a total of 54 chicks is known to have fledged up to 2004. Known taiko burrows are monitored closely each season to determine the success of protection measures, and to improve understanding of taiko breeding biology and population dynamics.

In order to protect taiko burrows from predators, they must first be located in the dense forest. To do this, radio-tracking operations have been run every 2-3 years. These involve catching taiko as they fly inland to the colony at night, using large spotlights that dazzle the birds and cause them to land on the ground where they can be easily captured. A transmitter is then attached to the bird and it is released back out to sea. Over the following nights it is tracked from strategically placed tracking stations and, once it is tracked going inland, a ground-team heads into the forest to track the bird to its burrow. In more recent years a trained dog has also been used with some success to locate active taiko burrows.



Chatham Island taiko chick,
Tuku Nature Reserve,
January 1996.
Photo: Graeme Taylor.

There has been a large amount of community involvement in conservation of the taiko, from its initial rediscovery, to the protection of land, to the many volunteers who continue to participate in telemetry and burrow-searches. The Chatham

Island Taiko Trust was formed recently to promote taiko conservation work. The Trust has raised funds for the construction of a predator-proof fence to create secure taiko and Chatham petrel breeding colonies. Taiko will be attracted to this safe area using taped petrel calls, and chicks of both species may be translocated to the site so that additional breeding colonies, secure from introduced predators, can be established. Details of the Chatham Island Taiko Trust can be found on their website: www.taiko.org.nz