



Chatham petrel *Pterodroma axillaris*

30 cm



Chatham petrel, Rangatira.
Photo: Colin Miskelly.

CHATHAM ISLANDS ENDEMIC, NATIONALLY ENDANGERED

Other name: ranguru

Identification

The Chatham petrel is a medium-sized grey, white and black petrel. The head, back, tail and upper-wings are slate grey, while the shoulders and upper-wing coverts are a darker grey (giving a dark M pattern across the spread upper-wings). The forehead is mottled grey and white, and the under-parts are white. The under-wing is white except for dark outer tips to the primaries, and a narrow dark trailing edge. A black diagonal band runs from the bend of the wing to the body at the base of the under-wing (this band distinguishes the Chatham Petrel from the similar black-winged petrel, with the latter bird having a narrower band not extending as far as the body).



Distribution and ecology

Chatham petrel bones have been found in subfossil deposits of recent age on Mangere, Chatham and Pitt Islands. It appears that Chatham petrels were once widespread over the Chatham group, and were

one of the more abundant burrowing seabirds. By 1900 the breeding range of the Chatham petrel was confined to forested areas on Rangatira, and this remains the sole breeding site. The population is estimated to be about 1000 birds, and 100-130 breeding pairs have been actively managed each year since 1999. Each pair lays a single white egg about December, and chicks fledge in May-June.



Chatham petrel chick,
Rangatira, February 2004.
Photo: Don Merton.

Threats and conservation

Before European arrival, Chatham petrels are thought to have declined due to predation by kiore (*Rattus exulans*) and muttonbird harvest. The arrival of additional mammalian predators, particularly European rats and cats, and the loss of forest habitat led to the confinement of Chatham petrels to Rangatira. The introduction of mammalian predators to Rangatira, damage to habitat by fire, crushing of burrows by people, and introduction of disease all pose risks to the single population of Chatham petrels. However, the greatest current threat to Chatham petrels is burrow competition from broad-billed prions. While these two species are assumed to have co-existed on Rangatira for a long time, broad-billed prions are now vastly more abundant. As they breed earlier in the year than Chatham petrels, prions also have a competitive advantage when vying for burrows. The greatest impact occurs when prions returning after their moult attack unguarded petrel chicks in their burrows.

Conservation efforts for Chatham petrel began in the late 1980s. The initial focus of this work was locating burrows, and determining the causes of breeding failure. Once it was determined that competition for burrows from broad-billed prions was causing most Chatham petrel breeding attempts to fail, attention shifted to protection of burrows and chicks from prion interference. Chatham petrel burrows are located using radio telemetry—birds that are caught on the surface are tracked to their burrows. Burrows are then protected by installing an artificial, wooden burrow to prevent collapse in the friable soil. Burrows are blocked when the Chatham petrels leave at the end of the season, to ensure that the burrows are not taken over by prions while the petrels are away at sea. During the Chatham petrel breeding season, the burrow is protected using a specially designed neoprene screen that is attached to the burrow entrance and deters prions from entering the burrow. A combination of protection techniques has resulted in a substantial improvement in Chatham petrel productivity at managed burrows. This has made it possible to begin the next stage of the recovery plan: the establishment of a second Chatham petrel population. Up to 55 chicks per year have been transferred to a predator-proof enclosure on Pitt Island, to establish a second population at a site without large numbers of resident prions. Three transfers were successfully completed in 2002-04, and the first birds are expected to return in 2004/05. Further chick transfers are planned to a predator-fenced site under construction on southern Chatham Island.



Underwings of Chatham petrel (above) and black-winged petrel (below), Rangatira. Photos: Don Merton (DOC).