

Southern Tokoeka



The tokoeka (*Apteryx australis*) gets its name from Ngai Tahu—weka with a “toko” or walking stick. Genetic analyses showed that tokoeka were a new species, quite distinct from brown kiwi of the North Island and at Okarito. Southern tokoeka at Fiordland and Stewart Island are regarded as a subspecies of this group, that also includes the rarer Haast tokoeka

Range limited by predators

Tokoeka are among the largest and most aggressive of kiwi and have been known to attack humans. On Stewart Island adults are capable of defending themselves and their offspring against feral cats and possums and, in the absence of mustelids (ferrets, stoats and weasels), have maintained a healthy stable population sometimes reaching densities of up to 60 birds per square kilometre. The population on Stewart Island is estimated to be between 16000 and 26000 birds.



Known distribution of Southern tokoeka



Stoats kill the very vulnerable chicks

However, in Fiordland, like the rest of the mainland populations of kiwi, tokoeka are sparsely distributed and are probably continuing to decline. The population in Fiordland is estimated at 3000-5000 individuals. The main culprits in their demise are stoats which kill the very vulnerable chicks and juveniles. Studies elsewhere in New Zealand show that over 95% of young kiwi are killed before the age of six months.

A small introduced population of southern tokoeka (about 50 birds) lives on Kapiti Island off the coast of the lower North Island.

Variety of habitats

Southern tokoeka live in a wide range of habitats. Their footprints are regularly seen on sandy beaches and nearby dunes where they feed on large sand scarab beetle larvae.

Tokoeka also live in tussock grasslands where they are difficult to see because they blend in so well with their cryptic brown- and black-streaked body plumage, possibly a defence against (now extinct) giant eagles and goshawks.

They are equally at home in thick scrub, the podocarp forests of Stewart Island and the mixed beech forests of Fiordland.

In Fiordland they can even live year-round in the high subalpine tussock grasslands, an extreme environment which may offer some protection for the chicks because stoat densities are often less there than in lowland forests.

Signs of kiwi present



Kiwi foot-prints in the snow.



Kiwi dropping: note white uric acid crystals, a feature of bird faeces.



Kiwi feeding sign in sand.

Rogan Colbourne & Hugh Robertson

Science & Research Unit,
Department of Conservation,
PO Box 10420, Wellington.

A different kiwi

Recent studies of Southern tokoeka (started in 1985) are continuing to reveal behaviours very different from our previous understanding of what constitutes ‘typical’ kiwi behaviour.

Unlike the strictly monogamous, male-only incubation strategy of the North Island brown kiwi (*Apteryx mantelli*), southern tokoeka usually live in family groups of three or more birds which defend their territory from other groups; and all members of the family may take turns in incubating the single egg.

On Stewart Island, females usually relieve incubating males in the second hour of darkness and remain on the egg until their mate or other group members return, often just before dawn. Females that incubate all night regularly forage by day, as do some males once their egg hatches. This explains why visitors to Stewart Island sometimes see kiwi feeding during daylight hours.



Southern tokoeka from Fiordland attacking human visitor

How you can help

The Department of Conservation is interested in finding out more about tokoeka distribution, particularly in the northern section of Stewart Island and throughout Fiordland. To help us do this, please fill in Kiwi Reporting Cards which are available at local DOC visitor centres and offices and record your notes in the hut visitor book.

- The call of the male kiwi is a repetitive (8-25 notes) high-pitched whistle.
- The call of the female is a repetitive (10-20 notes) coarse rasping note.
- The best time to hear tokoeka is about 30 minutes after sunset and for the following two hours.
- Kiwi are a taonga or treasure and are a protected species. They must not be chased or caught.
- Do not take dogs to Stewart Island or Fiordland National Park.
- Report the presence of weka—another species of flightless bird on the decline.

Your information will help us target management to those areas where most kiwi live.



Department of Conservation
Te Papa Atawhai

Science Poster no 41 (edition 1 May 2001) prepared by Chris Edkins
Other titles available from Science Publications, Dept. of Conservation,
Box 10420, Wellington.



for further information visit
www.kiwirecovery.org.nz