



Photos: New Zealand Conservation Trust



How you can help kiwi

- Dogs are strictly prohibited in kiwi sanctuaries. Make sure you know where your dog is at all times. Report any dogs seen in kiwi sanctuaries to DOC.
- Do not release unwanted cats or ferrets into the wild. They will kill kiwi and other birds.
- Keep your speed down. Watch out for birds on roads when travelling near a kiwi sanctuary after dark.
- Get involved. Join a local kiwi conservation project or start one yourself! Visit www.doc.govt.nz/rowi or www.savethekiwi.org.nz
- Make a donation. Online at www.savethekiwi.org.nz, or at any BNZ branch



Further information

More information is available from
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Rowi – the rarest of them all

WESTLAND *TAI POUTINI*



Department of
 Conservation
Te Papa Atawhai

Cover photos: Top – © Petr Hlavacek, centre – I Gill



With around 375 birds left in 2011, rowi are the rarest of the world's five species of kiwi. This title unfortunately earns them a place on the 'nationally critical' list.



A protected treasure

In a small area of forest near Ōkārito, rowi are fighting for survival. Through predation and habitat loss, these remarkable birds have been reduced to just one natural population, in Ōkārito Kiwi Zone, South Westland.

However, thanks to BNZ Save the Kiwi Trust and some ground-breaking technology, a dedicated Department of Conservation (DOC) team is bringing this national taonga (treasure) back from the brink of extinction.

Dedicated parents

Unlike some other kiwi species, male and female rowi both take turns incubating their eggs and show very whānau (family) orientated tendencies. Although they do not rely on their parents for food and protection



Photo: L Brown

(all kiwi chicks are self-sufficient as soon as they hatch), rowi juveniles often stay with their family group for years. Rowi are slow breeders, normally laying just one egg per year—making the death of an adult bird all the more devastating to the population.



Rowi (*Apteryx rowi*) can be distinguished from other kiwi by their soft, greyish plumage, sometimes accompanied by white or cream facial feathers.

The average weight of a male rowi is 1.6 to 2.4 kg; this increases to 2 to 2.5 kg for females. Kiwi eggs are massive in comparison to the bird's size, weighing around 400 g each – around 20% of the female's bodyweight!



Kiwi under threat

Two hundred years ago millions of kiwi lived throughout New Zealand's forests—the night air echoed with their calls. Now, introduced pests are so numerous that without extensive management they would ultimately lead to the demise of our national bird.

Photo: Tui de Roy



Stoats: Rowi enemy No.1

Currently the biggest threat to rowi survival is stoats. They are wanton killers; able to prey on species four to five times heavier than themselves.



Despite the use of 3000 traps in Ōkārito forest from 2001 to 2006, stoats continued to kill a high percentage of rowi chicks.

Dogs: Rowi enemy No.2

Dogs find the strong distinctive scent of kiwi irresistible and easy to track. With no wing muscles to protect its chest, a kiwi is crushed to death within seconds. Just one uncontrolled dog can devastate an entire kiwi population. Keep dogs and cats away from kiwi zones.

Possoms kill kiwi, destroy eggs and compete with kiwi for burrows.

Rat numbers can dramatically increase, ravaging populations of nesting songbirds. They also eat invertebrates—vital kiwi food.



Photos this column:
© Nga Manu Images

Photo: www.nzicescapes.com



... and back to Ōkārīto



The BNZ Operation Nest Egg™ story starts here

Once chicks grow large enough they are returned home to Ōkārīto Kiwi Zone. Here they will continue to be monitored and will eventually add to the number of breeding adults (usually at around four to five years old).



Eggs collected from the wild are carefully packed and carried out of Ōkārīto forest.

They are then transferred to the hatching facilities at the West Coast Wildlife Centre in Franz Josef/Waiāiu village.

The eggs are washed, weighed and 'candled' to assess the age and health of the embryos. They will hatch around 80 days after being laid.

Motuara Island, in the Marlborough Sounds, provides a safe, food-rich, crèche environment for the chicks to grow in away from predators.

Photo: www.nzicescapes.com



Motuara Island



Motuara Island



West Coast Wildlife Centre

Photo: www.nzicescapes.com



Ōkārīto Kiwi Zone



Zone

Photo: www.nzicescapes.com



BNZ Operation Nest Egg™

Trapping failed to stop the stoats. Rowi numbers were declining quickly so something had to be done . . .

With the support of BNZ Save the Kiwi Trust, the DOC established a new game-plan and BNZ Operation Nest Egg™ was put into action!

BNZ Operation Nest Egg™ involves removing eggs from the risk of predation, hatching them in captivity, and placing the chicks in a predator-free environment until they are big enough to fend for themselves (between 1 to 1.2 kg). They are then returned to the wild.



Against the odds

Unmanaged, a tiny proportion of kiwi eggs produce an adult bird.

- Roughly 80 rowi eggs are laid each season
- 40 of these eggs fail to even hatch
- Of the remaining 40, 28 are killed by stoats, and about 8 die of natural causes or at the jaws and claws of other predators
- This leaves just 4 chicks alive after the first 6 months
- Of these 4 chicks, only 2 will survive over 1 year to make it to adulthood

However . . .

Using BNZ Operation Nest Egg™ the number of birds to make it to adulthood rises from 2 to approximately 34 per season. We aim to increase the rowi population to 600 birds by 2018.

Watching over rowi

Thanks to the latest monitoring technology, the DOC team can keep a close eye on rowi. DOC has worked with private business to develop ground-breaking technology specifically for DOC's kiwi conservation work.

Chick-timer transmitters

In order to track rowi, transmitters are attached to their legs. By measuring the bird's activity, these intelligent transmitters tell the DOC team where the bird is, when an egg is laid and when a chick hatches.

Sky Ranger

A new system for data collection (nicknamed 'Sky Ranger') means that transmitter signals, that would previously have taken 45 days of groundwork to complete, can now be gathered during a two-hour flight.

Some of our people at work



Photo: www.nziescapes.com

Photo: www.nziescapes.com