



TIAKINA
NGĀ MANU

Battle for our birds

Predator RESPONSE

2019



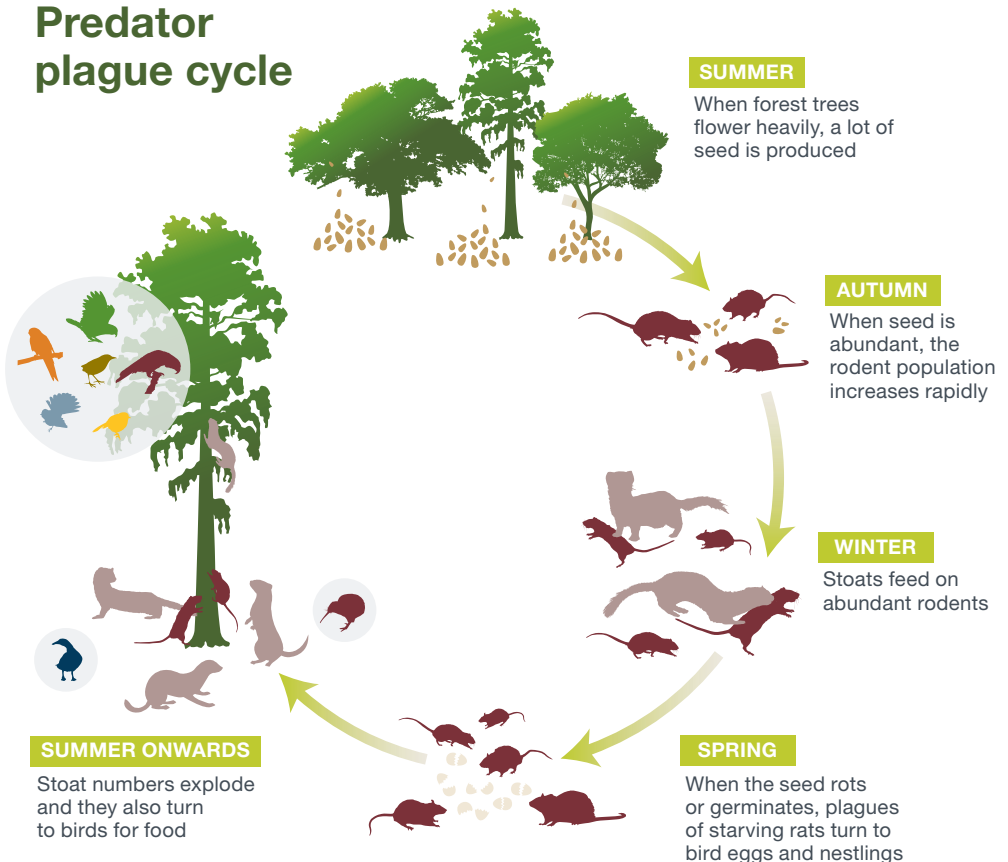
Department of
Conservation
Te Papa Atawhai

25 million native birds are killed by predators like possums, stoats and rats each year¹

Heavy seeding of trees in our native forests will drive rodent and stoat numbers higher than normal this year and those pests will prey on threatened species including birds, bats and invertebrates.

The Department of Conservation will prioritise its predator control response in key ecosystems to protect New Zealand's native wildlife.

Predator plague cycle



¹ John Innes. Landcare Research



Degrees of control

In forests in years when there is no heavy seeding or mast, many native birds can tolerate the low levels of rats and stoats present and little or no pest control is necessary.

During years when mast events occur at just a few sites, localised pest control traps and bait stations will do the trick.

When heavy seedfall is more widespread, as it is this year, rats and stoats have to be controlled over very large areas.

Who/blue duck

Status: In serious trouble (Nationally Vulnerable)

Population: More than 1000 breeding pairs

Distribution: In good numbers where conservation efforts protect populations.

Who duckling survival rates at the Tongariro Forest Security Site

Before pest control (2004)



For every 3 breeding pairs of who, 2 ducklings made it to fledging

After aerial 1080 and trapping (2011)



For every 3 breeding pairs of who, 6 ducklings made it to fledging



Photo: Alan Reith

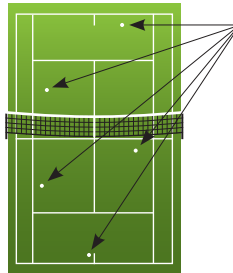
Controlling predators

The Department of Conservation uses a range of pest control tools to suit the particular need. Trapping and other ground-based predator control methods play an important part in ongoing control but cannot be easily scaled up to respond rapidly to immediate pest threats.

Biodegradable 1080 is applied by air over large areas of rugged terrain to knock down rats, stoats and possums.

Aerial 1080

1080 is biodegradable, breaks down quickly in the environment and does not leave permanent residues in water, soil, plants or animals. The active component occurs naturally in many plants found in Australia, South America and Africa as a defence against browsing animals.



4-6 baits are dropped in an area the size of a tennis court.

Approximately **12% of public conservation land** is to be treated with 1080 during this year's pest control operations.

Ground control

Conventional and re-setting traps and bait stations are used for **longer term** and **localised suppression** of pest populations.



Conventional traps



Bait stations



North Island brown kiwi

Status: In some trouble (Declining)

Population: 25,000

Distribution: Patchy throughout the northern North Island.

Without predator control:



Only **5%** of kiwi chicks hatched in the wild will make it until they are old enough to breed – their 4th birthday.

With predator control:



Up to **60%** of kiwi chicks hatched in the wild will survive to breeding age.



More than 583 kiwi have been monitored throughout 1080 operations since 1990. Over that time, not one has died as a result of 1080 poisoning.



Re-setting traps

Photo: Neil Hutton

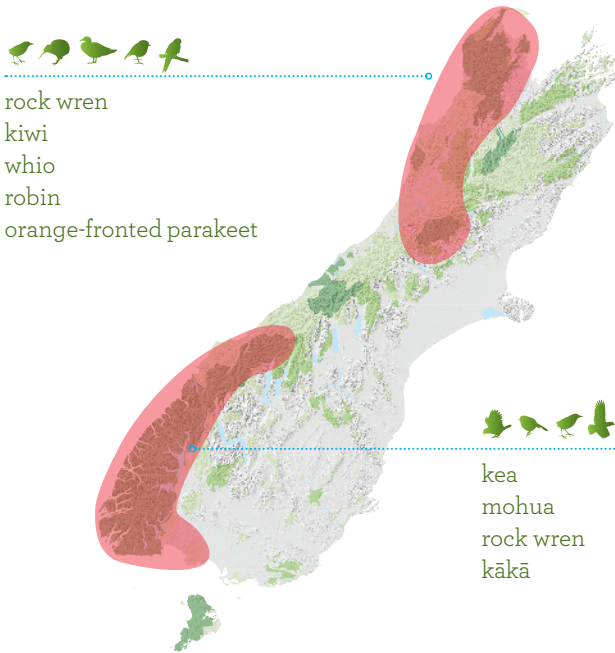


Populations under threat

Widespread forest seeding this year will lead to an increase in rats and stoats, putting our native wildlife at risk. The highlighted areas are home to some of our most vulnerable species and have been targeted as the areas most in need of predator control.

Significant seedfall 2019

- Areas of species under most threat
- National park
- Conservation park
- Other public conservation land





Great spotted kiwi



Photo: Rod Morris

Status: In serious trouble (Nationally Vulnerable)

Population: 15,000

Distribution: Confined to three discrete populations, in northwestern Nelson, Paparoa Range and Lewis Pass to Arthur's Pass.

Powelliphanta snails



Photo: Kath Walker

Status: In serious trouble

Population: Declining

Distribution: Widely but sparsely spread throughout western South Island and lower North Island.

Rock wren



Photo: Andrew Walmsley

Status: In serious trouble (Nationally Endangered)

Population: Unknown

Distribution: Widely but patchily distributed through alpine and sub-alpine areas of the South Island, most commonly in Fiordland, South Westland, Mt Aspiring and Aoraki/Mt Cook National Parks. Transferred successfully to Secretary Island in Fiordland.

Orange-fronted parakeet



Photo: Sabine Bernert

Status: In serious trouble (Nationally Critical)

Population: Fewer than 100 mature parakeets on mainland, and perhaps 200–300 on islands

Distribution: Restricted to South Island beech forest valleys: the Hawdon, Andrews and Poulter valleys in Arthur's Pass National Park and the south branch of the Hurunui valley in Lake Sumner Forest Park.

Mohua



Photo: James Reardon

Status: In some trouble (Recovering)

Population: Approx 5,000

Distribution: Strongholds where pest control is carried out. In good numbers on some offshore islands.

Whio



Photo: Herb Christophers

Status: In serious trouble (Nationally Vulnerable)

Population: Breeding population unlikely to be more than 1000 pairs

Distribution: Forested headwater catchments along the ranges of both islands.



Long-term monitoring

Doubling native bird numbers in the Landsborough valley

For 20 years our ‘bird counters’ have been going to the remote Landsborough valley in South Westland to monitor the effects of sustained predator control on bird life.

Native bird numbers have doubled since pest control began. Most of the 13 different native bird species increased.

One of the most threatened birds in the monitoring area, mohua (yellowhead), has increased in number 24-fold from 14 to 338 birds.

Monitoring outcomes is important. Standardised ‘5-minute bird counts’ have been carried out by the same

people for the past 20 years which has ensured consistency.

The results of this painstaking monitoring are impressive and highlight that where we control pests consistently over whole valleys and forests, we can turn around the fortunes of native species.

This outcome bodes well for efforts towards Predator Free 2050 as the long term goal.



Grey warbler. Photo: Janice McKenna



Rifleman/titipounamu. Photo: DOC



Tomtit/miromiro. Photo: Leon Berard

The Department of Conservation is planning to manage pests in response to a predicted predator plague this year. For more information visit www.doc.govt.nz/battleforourbirds

This publication is produced using paper sourced from well-managed, renewable and legally logged forests.

Front cover: A whio pair. Photo: Matt Binns

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