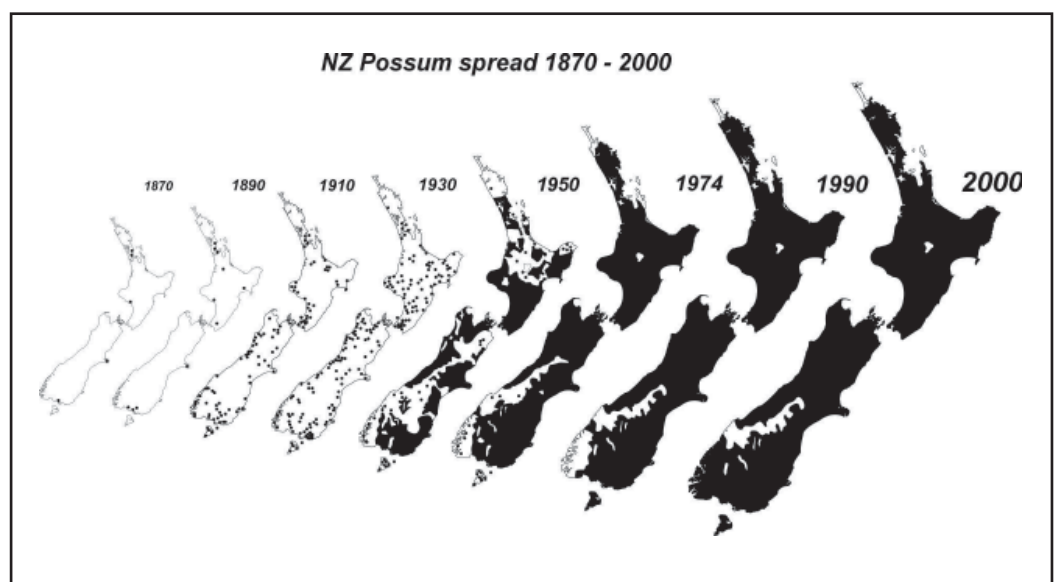


Possums—their introduction & spread

Brush-tail possums were among the earliest animals introduced into New Zealand by European settlers. They were first brought from Australia in 1837 to establish a fur industry. By 1922, 36 batches of possums had been imported, mostly from Tasmania where possums were larger and most had the black fur preferred by furriers. These possums and their descendants were liberated at more than 450 places around New Zealand by 1930.

At the time, these introductions and liberations were considered largely beneficial. Although reports of possum damage to crops, orchards, and forests in the early 1900s prompted the Government to commission investigations by two of the country's leading botanists, Professor HB Kirk and Dr L Cockayne, they both concluded that damage to New Zealand's forests was negligible. Kirk went so far as to state: "opossums may, in my opinion, with advantage be liberated in all forest districts except where the forest is fringed by orchards or has plantations of imported tree species in the neighbourhood."

However, from 1921, further liberation of possums was prohibited (by the Department of Internal Affairs). Possum hunting and the selling of skins were regulated, but these regulations merely provoked a flurry of illegal liberations. During the 1940s, evidence of damage by possums to New Zealand's forests increased, and in 1947 all restrictions on possum hunting were removed and penalties for releasing them were increased. The need for action against possums on a national scale was recognised, and from 1951 a bounty of 2/6d (25c) per head was paid for animals whose skins were not sold. During the following 11 years, more than 8 million bounties were paid, but this did little to control the increasing and expanding populations of possums.



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In the late 1940s the first formal survey of their distribution showed that possums were occupying about half of New Zealand. By 1961–63 they had spread to 84% of the country. Within the last 15 years Northland and the Coromandel Peninsula have been colonised, leaving few areas other than Fiordland yet to be occupied, and even there the possum-free area has continued to shrink.

The number of possums in New Zealand was estimated some years ago at 70 million, significantly more than the number of sheep. This is almost certainly an overestimate, as possums are now controlled annually over about 8 million hectares by the Animal Health Board, the Department of Conservation and regional councils. Because possums have no predators or competitors here in New Zealand, and suitable habitats are readily available, they occupy most habitats: all types of native and exotic forest, montane scrublands and tussock grasslands; swamps, farmland, orchard and cropping areas; and areas in and around towns and cities. Possums tolerate habitats with a wide range of climates, from arid plains to areas with high rainfall, and from temperate coastlands to harsh alpine slopes at more than 1800 m altitude in the North Island and South Island ranges.

Today possums are considered the major animal pest in New Zealand. In farming areas they spread bovine tuberculosis to beef and dairy cattle and to farmed deer, damage crops and orchards, kill poplars and willows planted to control hill-country erosion and stabilise riverbanks, and eat pasture. In exotic forest plantations they kill young trees and stunt the growth of older trees by ringbarking them or breaking the uppermost branches.

In conservation areas, possums cause severe damage by altering habitats important to native animals. Native plant species that are palatable to possums (e.g. rata, kamahi, mistletoe) become much reduced or locally extinct, and are replaced by plants that are less palatable such as tree ferns and pepperwood. As well as altering the composition of native forests and competing with native fauna for food, possums are also significant predators of native birds and insects.

Landcare Research Contacts:

Dr Phil Cowan
Email:
cowanp@landcareresearch.co.nz

Landcare Research
Private Bag 11052
Palmerston North 4442
New Zealand
Tel: +64 6 353 4800
Fax: +64 6 353 4801

www.landcareresearch.co.nz

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