

Outcome



Environment and Cultural Heritage

Measure 4

Protection of the environment

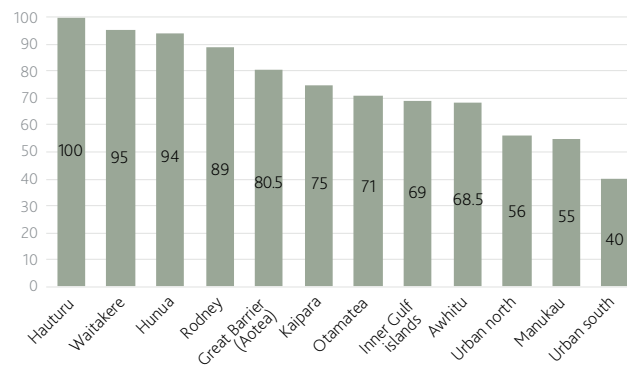
Composite measure explanation – Pest animals and plants are exotic animals and plants that cause damage and disruption to native ecosystems or agriculture. New Zealand's isolation from the rest of the world and unique biodiversity means that Auckland's indigenous ecosystems and species are especially vulnerable to the impact of introduced animals and pest plants.

This composite measure covers two main categories:

- Exotic plants
- Pests

Measure 4a.

Relative weediness of Auckland's forest ecosystems index (100 = good)



Data

Weed index score.

Source

Auckland Council *State of the Environment* monitoring and research. Site-based monitoring carried out by Auckland Council, Department of Conservation and a wide range of different community groups.

Frequency

Collected annually and reported 3 yearly.

Availability

New data expected to be released in 2019.

Notes

Pest plant (weed) plot and survey data from a representative sample of wetland, duneland, forest, riparian freshwater, urban forest and lake ecosystems.

Relevance

More than 1,100 exotic plants have naturalised in the Auckland Region and new introductions continue. Many of these introduced species have the potential to become pest plants. For example, pest plants such as pine, wattle, pampas and privet outcompete and displace adult native trees, seedlings and shrubs. Other pest plants, such as climbing asparagus, tradescantia and ginger, can suppress the regeneration of indigenous seedlings and saplings.

Baseline (2016)

The current baseline is for 2016:

Hauturu - 100

Waitakere - 95

Hunua - 94

Rodney - 89

Great Barrier (Aotea) - 80.5

Kaipara - 75

Otamatea - 71

Inner Gulf Islands - 69

Awhitu - 68.5

Urban north - 56

Manukau - 55

Urban south - 40

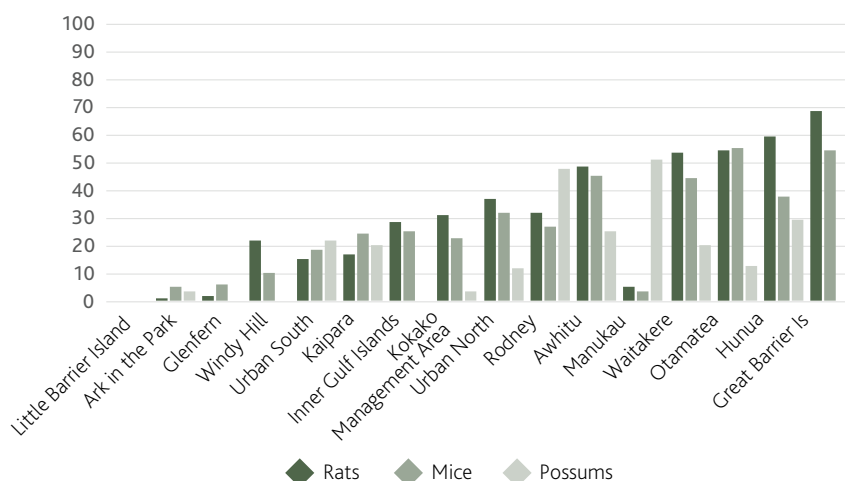
Analysis

Hauturu (Little Barrier Island) is the least weed affected part of the region, and the values recorded in its plots are the standard against which all other locations are judged. In contrast, the forest and scrub vegetation of the Auckland urban area is heavily compromised by weeds. Up to 15% of all tree stems, 34% of all saplings and 20% of all seedlings we recorded in urban forests were comprised of exotic or weedy plant species.

(•••) Trend

Insufficient data to determine a trend at the time of reporting.

Measure 4b.
Chewcards damaged by pest animals (% of cards chewed)



Data

Mean percent of chewcards damaged by pest animals in different parts of the Auckland Region. (Bars are standard errors)

Source

Auckland Council *State of the Environment* monitoring and research. Site-based monitoring carried out by Auckland Council, Department of Conservation and a wide range of different community groups.

Frequency

Collected annually and reported 3 yearly.

Availability

New data expected to be released 2019.

Notes

Presence/absence of possums, rats, and mice, and ungulate pellet counts on 8km x 8km grid plots. Possum RTC (residual trap catch) data for Hunua and Waitakere Ranges. Presence/absence of possums, rats and mice in land covered by various 'Pest Free' and other community initiatives.

Relevance

Pest animals are a major threat to New Zealand's native species. New Zealand has been geographically separated from other land masses for over 80 million years, over which our plants and animals have evolved in isolation of land mammals and thus without adaptations to succeed in their presence. For example, pests such as possums, rats and stoats compete with our native birdlife for food and habitat. They also eat bird's eggs and young and attack the adults. Animal browsers such as domestic stock, possums, deer, goats and rabbits consume native vegetation, and can significantly alter ecosystem composition and nutrient cycling.

Baseline (2016)

The current baseline is for data collected prior to 2016.

Analysis

Pest density is relatively good (i.e. low) in our highly managed areas (e.g. Ark in the Park, kokako management area (Hunuas), Glen Fern, Windy Hill). However, in some locations where pests are not controlled there is a lot more work to do to secure our native biodiversity against the negative impact of pest animals. Note the data in Figure 2 only includes data collected prior to 2016, before the Hunua Ranges 1080 poison drop dramatically reduced rat density in the Hunua ranges.

(...) **Trend**

Insufficient data to determine a trend at the time of reporting.

Additional data to be added to composite measure in the future:

Auckland Council resource consents and compliance records - The issuing of resource consents is one of the main ways in which our policies and plans are implemented – through the regulatory control of activities. The numbers and types of resource consents issued or active provide one measure of environmental pressure and compliance monitoring provides one measure of how effective consent conditions are. This information can be combined with environmental state and change information to provide a measure of how effective our policies and plans are implemented through resource consents and achieve good environmental outcomes.

This information will be available through the Unitary Plan monitoring programme currently under development.