

Outcome



Environment and Cultural Heritage

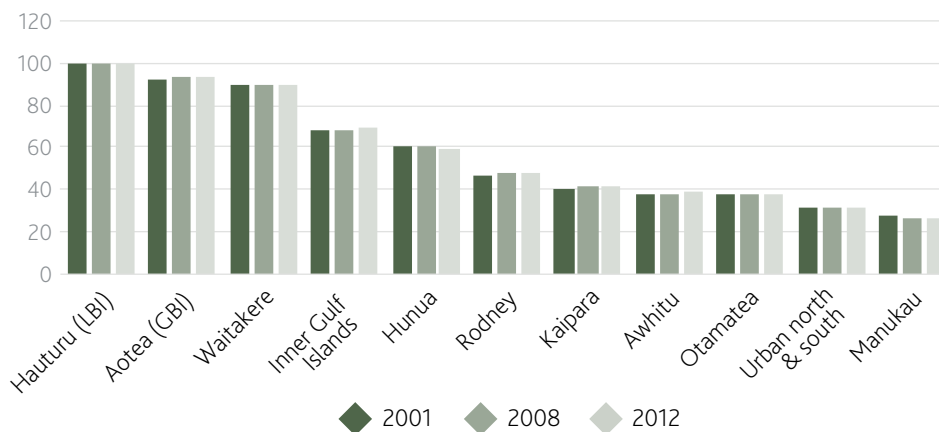
Measure 1

State and quality of locally, regionally and nationally significant environments

Composite measure explanation - New Zealand is internationally regarded as a 'biodiversity hotspot'. Our indigenous plants and animals, and the ecosystems they live in, are world treasures. When humans first discovered New Zealand it was a different world; adrift and isolated for 80 million years, and populated with many plant & animal species that seemed to belong to the age of dinosaurs. The Auckland Region, has an amazing diversity of species and ecosystems disproportionate to its size, including several species that are found nowhere else in the world. This composite measure covers:

- Native vegetation cover and habitat loss
- Native plant diversity
- Native bird species

Measure 1a. Native vegetation cover and habitat loss Landcover Index Value (%)



Data

Data landcover index value.

Source

New Zealand Landcover Database (NZLCDB), regionally acquired spatial data.

Frequency

NZLCDB – 5 to 10 years.

Availability

NZLCDB, managed and updated by Land Information New Zealand (LINZ). An update is expected in 2019.

Notes

Full regional cover is provided by LCDB, and council data, such as the Regional Ecosystem Layer, LiDAR runs or aerial photo analysis, provides higher spatial resolution for some areas and time stamps.

Relevance

This measure tracks key components of the ecological health and resilience of our native ecosystems and species including the total cover, extent and condition of native ecosystems, the loss or clearance of native ecosystems, and the quantity and variety of native species within these habitats. The combination of these programmes provides a comprehensive indication of the stability and resilience of ecological communities. This information feeds into policy changes, environmental management strategies and long-term plans.

Baseline (2012)

Due to the current unavailability of data the current baseline is drawn from 2012:

| | | |
|--------------------------|------------------|----------------|
| Hauturu (LBI) - 100 | Aotea (GBI) - 93 | Waitakere - 90 |
| Inner Gulf Islands - 69 | Hunua - 60 | Rodney - 48 |
| Kaipara - 42 | Awhitu - 39 | Otamatea - 38 |
| Urban north & south - 32 | Manukau - 27 | |

Analysis

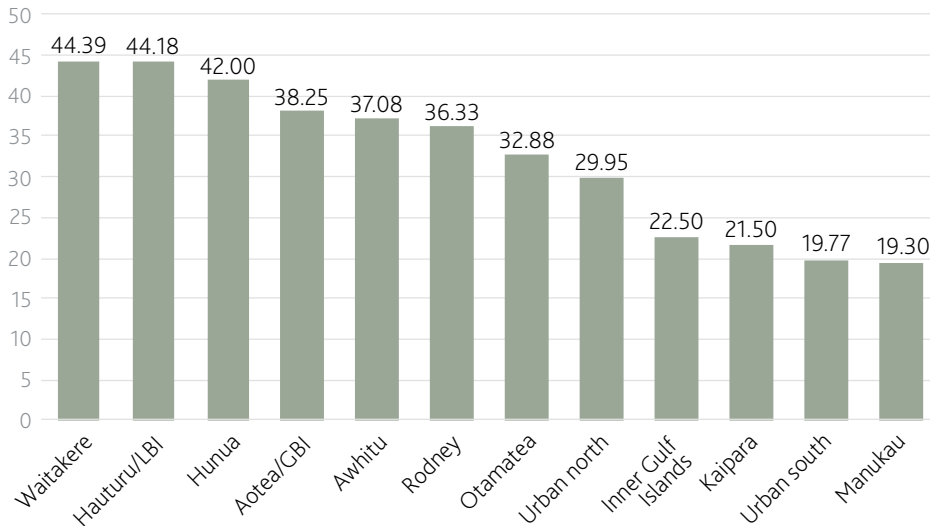
Measured at the regional scale; the per cent landcover of native ecosystems has been relatively stable over the last few decades (refer to graph); however, case-study data shows loss of small habitat fragments is occurring in the more intensively developed parts of the region.

(—) Trend

From 2001 to 2012 no significant change.

Measure 1b.

Average native plant diversity within plots for Auckland's ecological neighbourhoods



Data

Data landcover data base.

Source

New Zealand Landcover Database (NZLCDB), regionally acquired spatial data.

Availability

NZLCDB, managed and updated by Land Information New Zealand (LINZ). An update is expected in 2019.

Notes

Full regional cover is provided by LCDB, and council data, such as the Regional Ecosystem Layer, LiDAR runs or aerial photo analysis, provides higher spatial resolution for some areas and time stamps.

Relevance

This measure tracks a key component of the ecological health and resilience of our native ecosystems and through quantifying plant diversity across the region. The combination of these programmes provides a comprehensive indication of the stability and resilience of ecological communities. This information feeds into policy changes, environmental management strategies and long-term plans.

Baseline (2012)

Due to the current unavailability of data the current baseline is drawn from 2012:

| | |
|---------------------------|----------------------|
| Waitakere - 44.39 | Hauturu/ LBI - 44.18 |
| Hunua - 42 | Aotea/ GBI - 38.25 |
| Awhitu - 37.08 | Rodney - 36.33 |
| Otamatea - 32.88 | Urban north - 29.95 |
| Inner Gulf Islands - 22.5 | Kaipara - 21.5 |
| Urban south - 19.77 | Manukau - 19.3 |

Analysis

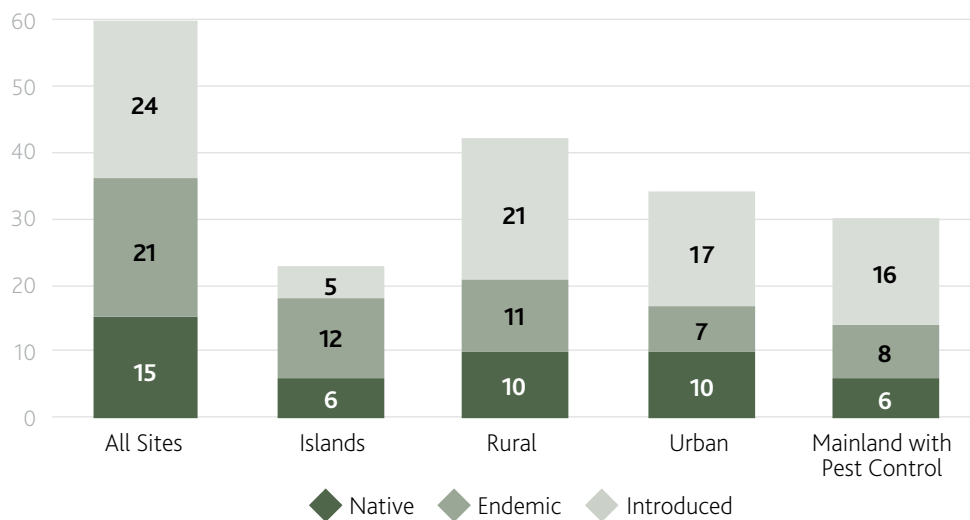
Forest ecosystems in landscapes that have been modified by high-intensity farming activity and urban growth have lower plant diversity and naturalness, as well as higher tree and sapling mortality.

(...) Trend

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

Measure 1c.

Total number of bird species found in bird counts grouped by landscape type



Data

RIMU Terrestrial Monitoring programme.

Source

Field surveys as part of regular monitoring.

Availability

3 yearly.

Relevance

The feeding relationships among all the animals in an ecosystem help prevent any one species from becoming too numerous. Birds play a vital role in keeping this balance of nature. In addition to being important parts of food webs, birds play other roles within ecosystems as pollinators and are also a valued taonga.

Baseline (2016)

Due to the current unavailability of data the current baseline is drawn from 2016:

All Sites - 60

Islands - 23

Rural - 42

Urban - 34

Mainland with Pest Control - 30

Analysis

The highest numbers of endemic birds (that's birds only found in New Zealand), such as tui, grey warbler, New Zealand fantail, and New Zealand pigeon, were found on island sites, where native species outnumbered introduced species. There were similar numbers of introduced species across the rural, urban and other mainland sites with pest management in place (e.g. parkland), yet rural sites tended to have more endemic species. Just like for plants, the most modified parts of the region had a higher presence of exotic birds.

() Trend

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