



Rakiura National Park. Image: © DOC

# National parks status and trend report

## RAKIURA NATIONAL PARK

### Background

Rakiura National Park is 140,357.89 ha, located in the Central North Island region of New Zealand. It was gazetted in 2002.

### Land cover and natural character

#### *Land under indigenous vegetation*

The New Zealand Land Cover Database (LCDB) is a digital map of New Zealand showing land cover grouped into 33 mainland classes. This table summarizes the LCDB classes into 12 broad groups and describes the proportion of each group with the National Park.

Land Cover Class	Percentage
Indigenous forest	53.4
Indigenous scrub and shrubs	38.1
Tussock grassland	4.2
Other herbaceous vegetation	1.9
Natural bare or lightly-vegetated surfaces	1.7
Coverage of LCDB classes with individual cover <1% of Project Area	1.3

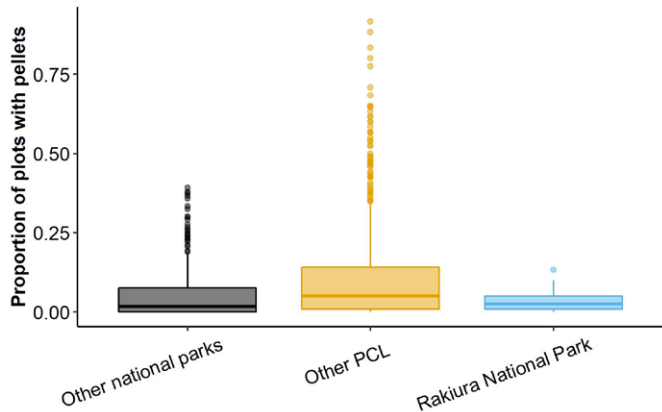




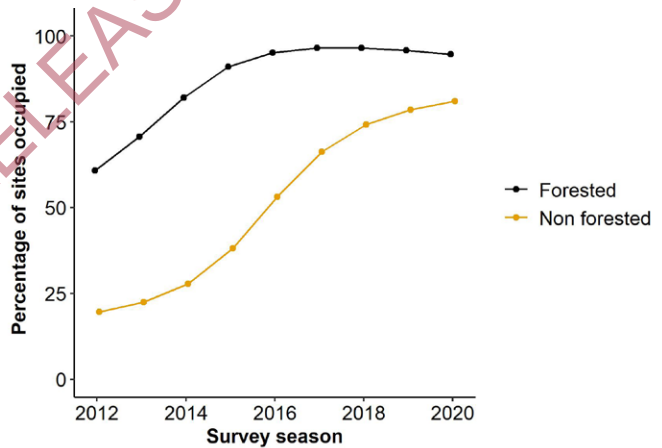
State and trend information from DOC's nationally coordinated monitoring of biodiversity within Rakiura National Park

Reducing spread and dominance of exotic species

Faecal pellet counts are used to monitor the abundance and distribution of ungulates (including goats and deer). This graph shows the scores recorded at sites in the National Park compared to other parks, and results of a model to test how this is changing over time.



Chew cards are used to monitor the abundance and distribution of possums. This graph shows a model of how possum dominance is changing over time. Possums use forested and open habitats differently, so trends are shown for both.



Preventing declines and extinctions

DOC has identified a number of threatened, at risk and conservation dependent species as having potential to be managed within the National Park.

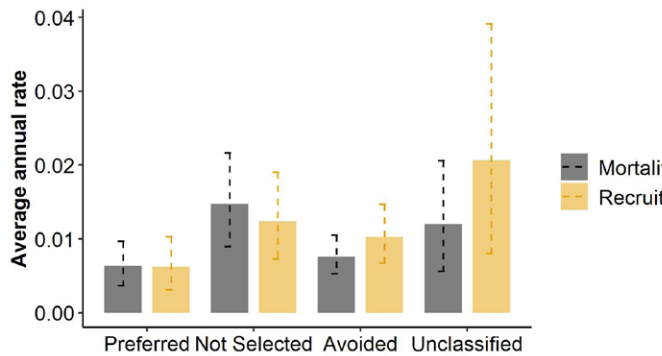
Group	Number of species in need of conservation
Birds	9
Freshwater fishes	2
Lepidoptera	1
Reptiles	2
Vascular plants	9

For other threatened species, the primary needs are more survey to identify key locations, research to identify what is causing their decline or taxonomic research to clarify relationships to other species.

Maintaining ecosystem composition

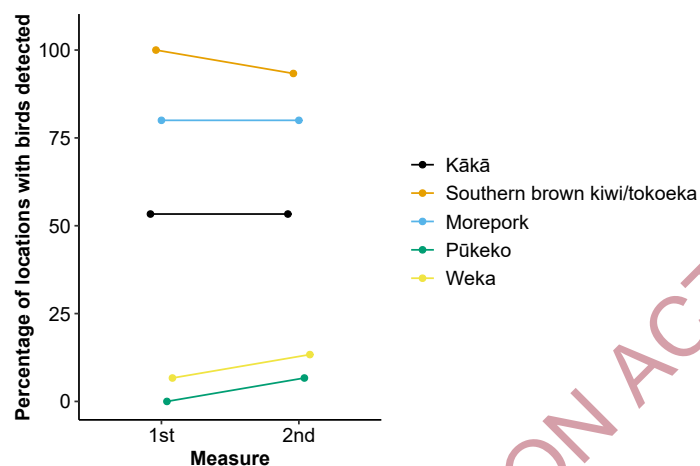
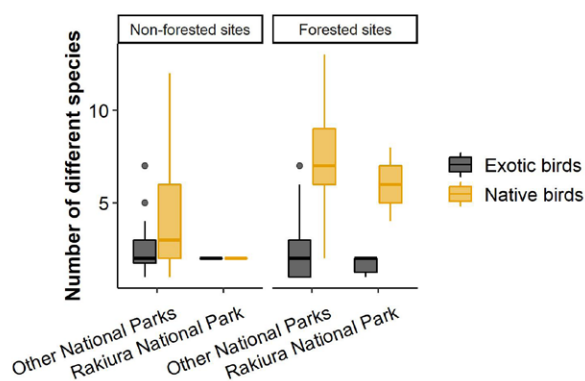
Representation of functional groups.

This graph shows rates of modelled mortality and recruitment of common tree species over nearly 20 years from 2002 to 2018 from Tier 1 sites in the Park. Stems are grouped by their palatability to ungulates. Where damage is low and forests are healthy, there should be little difference between mortality and recruitment in any group. But if mortality of preferred species is much higher than recruitment this shows negative impacts of ungulates.



## Abundance and demography of common and widespread taxa

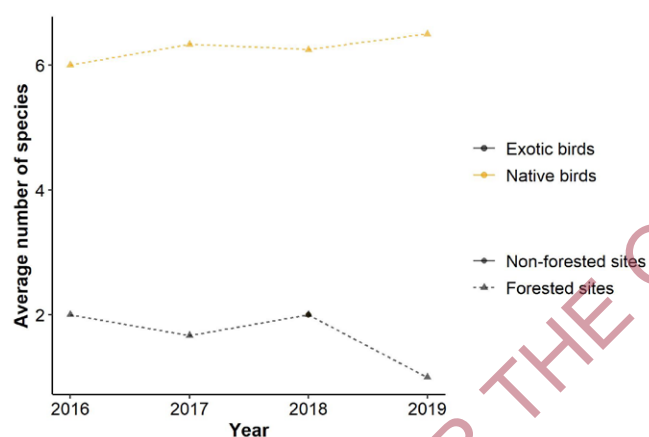
DOC uses a combination of human counts and acoustic recorders to monitor common and widespread bird species at each Tier 1 site. These graphs show the number of different bird species recorded at Tier 1 sites in the National Park compared to others; and how those numbers are changing over time. Often, different birds are found in forested or open habitats, so these are shown separately.



## Ensuring ecosystem representation

Various uncommon and reduced ecosystems occur in the National Park. This table shows the percentage protected by the National Park relative to the ecosystems' national extent.

Category	Ecosystem	Percentage
Coastal	Active sand dunes	3.12
Coastal	Coastal rock stacks	3.72
Induced by native vertebrates	Marine mammal haulouts	3.51
Induced by native vertebrates	Seabird guano deposits	0.24
Inland & alpine	Moraines	0.02
Coastal	Basic coastal cliffs	0.23
Coastal	Coastal cliffs on acidic rocks	4.99
Inland & alpine	Cliffs and scarps of acidic rocks	0.01
Inland & alpine	Tors of acidic rocks	0.16
Inland & alpine	Basic tors	0.42



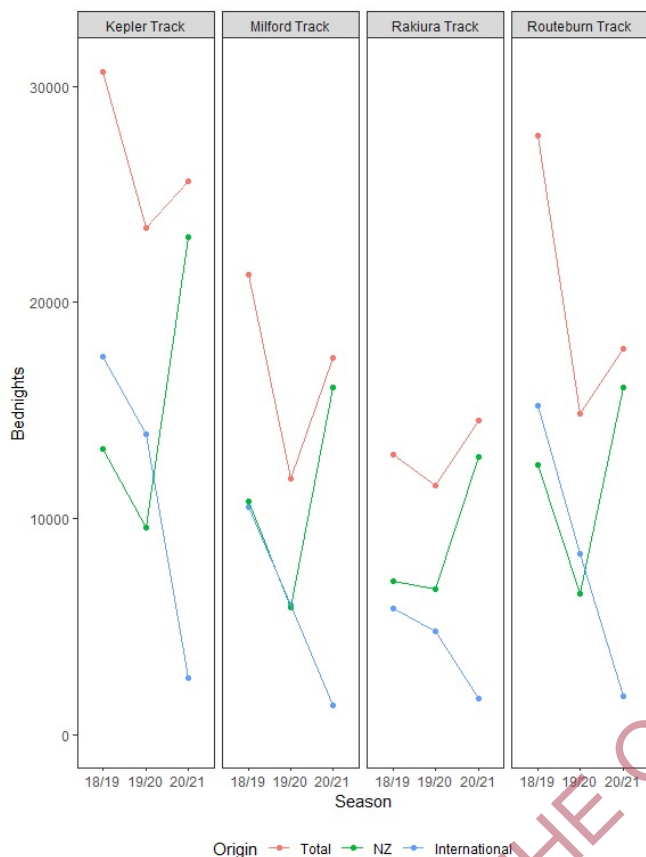
Nocturnal birds are monitored using acoustic recording devices. These graphs show how widespread different nocturnal birds are at Tier 1 sites in the park, and how this is changing over time.



# Public Use & Enjoyment in and around Rakiura National Park

## Utilisation of visitor experiences

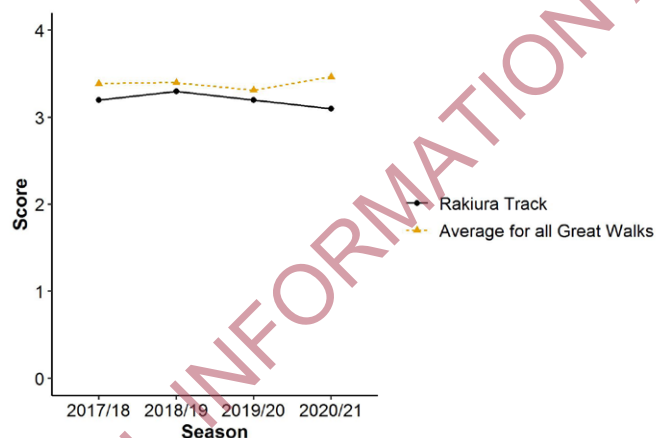
Overall annual overnight utilisation of 'Great Walks' is reported as bednights and is presented in the graphic below. Separate graphs for 'Total', 'New Zealand Resident' and 'International' users are provided. Adjacent Great Walk/s are included for comparative purposes.



## Satisfaction with visitor experiences

Users' overall satisfaction with their 'Great Walk' experience is reported as a rating (0= Not at all satisfied; 4= Totally satisfied). The results are reported in the graphic below for all users combined and are compared against the average for all Great Walks.

### Overall satisfaction

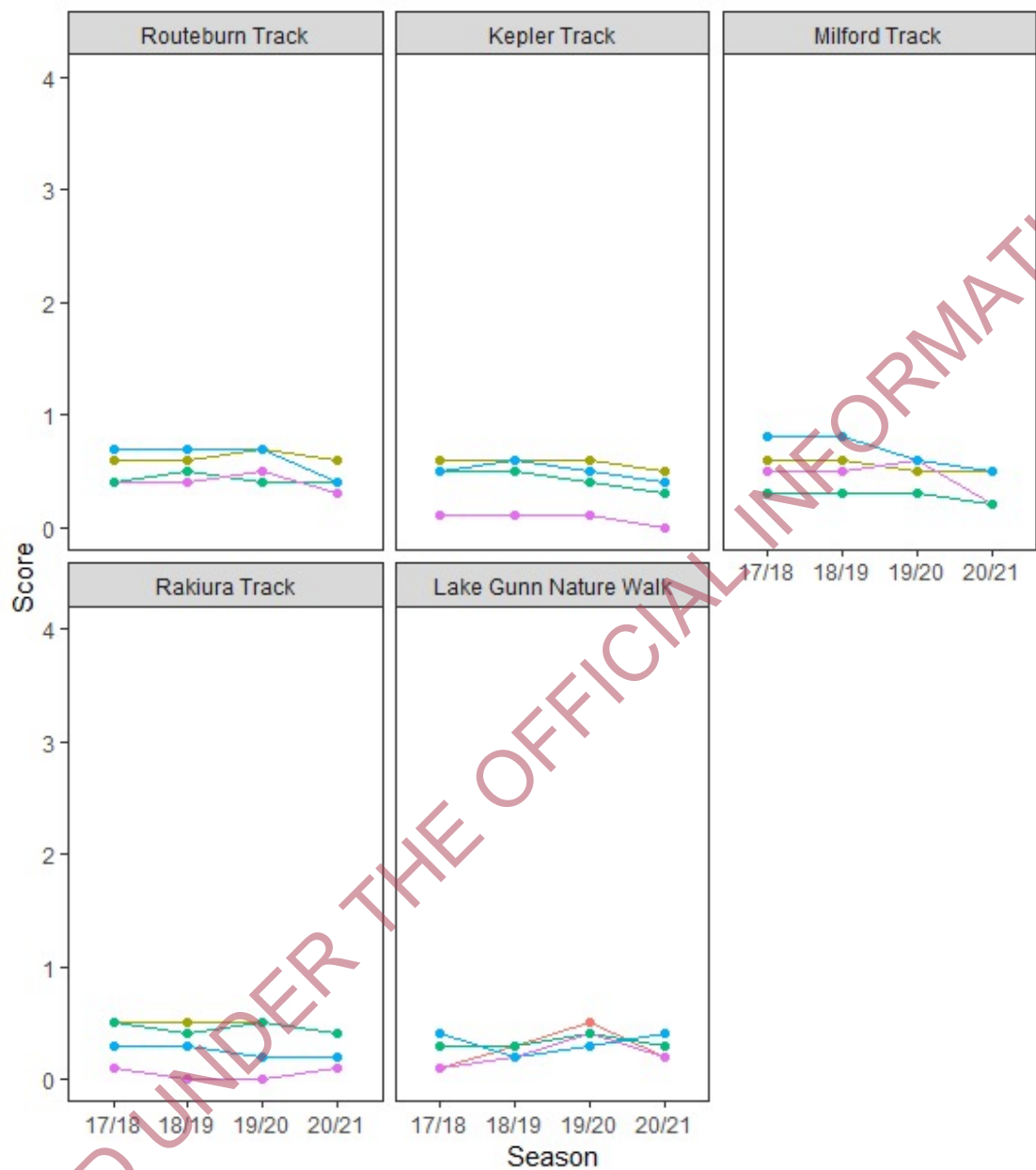


Overall annual utilisation of 'Short Walks' & 'Day Hikes' is reported as units of use. Activity counter data for relevant 'Short Walks' and 'Day Hikes' are shown in the graph below. Adjacent 'Short Walks' and/or 'Day Hikes' are included for comparative purposes.



Environmental and social impacts of visitor experiences

Users of ‘Great Walks, ‘Short walks’ and ‘Day Hikes’ are asked to rate the level of disturbance they experienced from a range of environmental and social impacts (0= Did not disturb me at all; 4= Disturbed me totally). The results for four of the most significant disturbances are reported in the graphic below for all users combined. Adjacent ‘Great Walk/s’ and ‘Short Walk/’Day Hikes’ are included for comparative purposes.

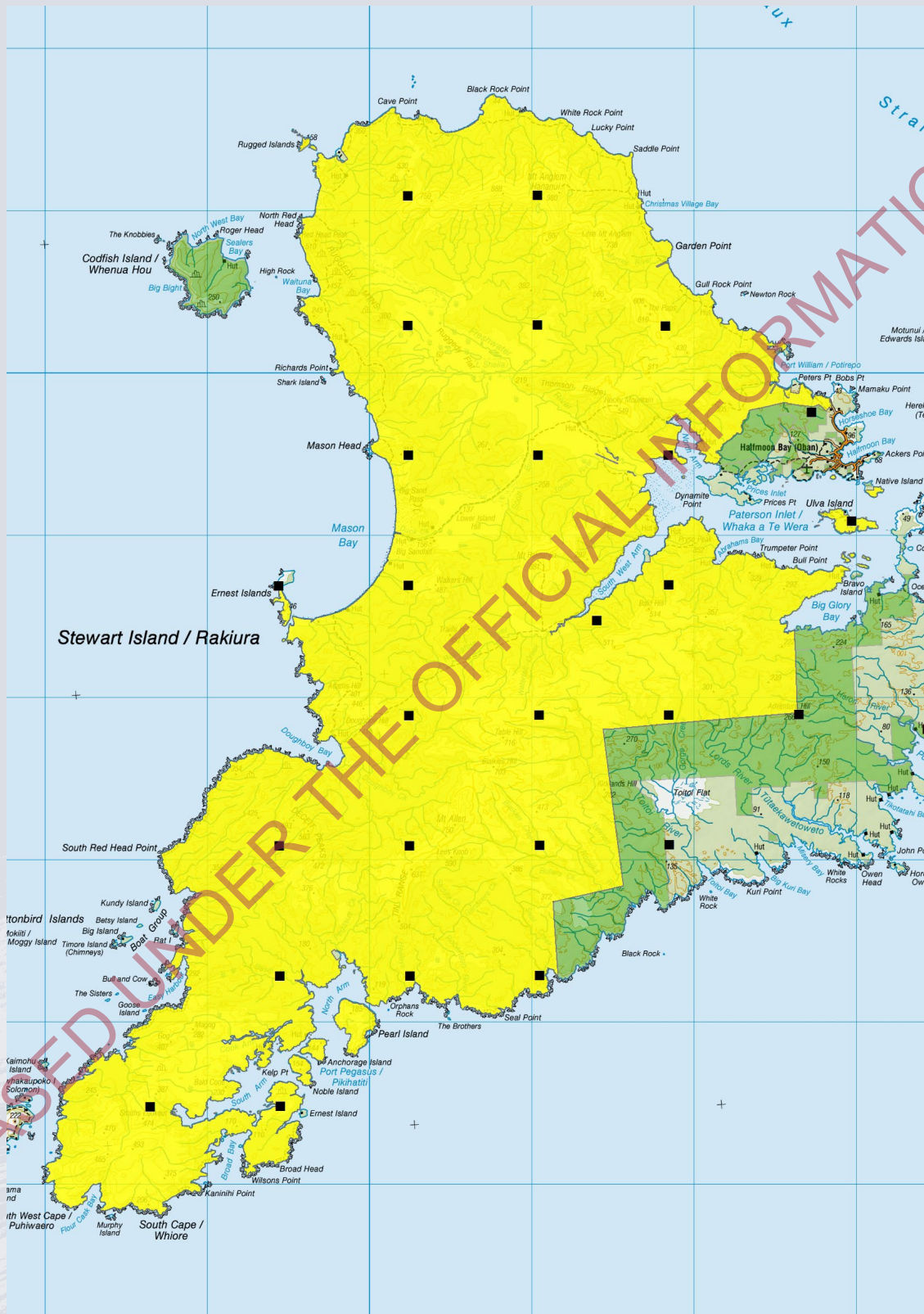


- Disturbed by
- Presence/number of other people
  - Presence of other people
  - Human impacts on the environment
  - Aircraft... motorised boats/vehicles
  - Presence of guided walkers/bikers



## Appendix 1: Information sources

## Locations of Tier 1 biodiversity monitoring sites



# Appendix 1: Information sources

## Tracks and activity counter network

