

# Threatened and unique biodiversity assets of Auckland

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## **1.0 Introduction and Purpose**

The Auckland region stretches from the Awhitu Peninsula in the south, east to the Hunua Range, to the Hauraki Gulf Islands (including Waiheke, Great Barrier Island and Tiritiri Matenga) and north to the dunes of Te Arai and west to the Tōpura Peninsula and the Kaipara Harbour. The region makes up only 2 per cent of New Zealand's total land mass, yet it is an important reservoir of New Zealand's indigenous biodiversity. However, since human settlement there has been a marked decline in the region's terrestrial and freshwater biodiversity. This decline has occurred through the loss and fragmentation of native ecosystems due to human settlement and consequent land use changes, combined with the introduction of various invasive species, overharvesting and pollution. In addition, climate change, and those activities aimed at mitigating its effects, are now emerging as significant potential threats to biodiversity (Auckland Regional Council, 2010, McGlone and Walker 2011).

Auckland Council has obligations to provide for the protection of biodiversity in the Auckland region, including areas of significant indigenous vegetation and significant habitats of indigenous fauna under national legislation as well as its own statutory and non-statutory plans. This work is a matter of national importance for local government under the Resource Management Act 1991 (Section 6c). The Act also requires maintenance of indigenous biological diversity (Section 31) and for the potential of natural [biological diversity] resources to meet the reasonably foreseeable needs of future generations to be sustained (Section 5). In order to meet both statutory and non-statutory obligations the Auckland Council has identified Significant Ecological Areas (SEAs) throughout the region as part of the Unitary Plan process. The identification of SEAs also supports Council's work implementing the Auckland Plan and is in line with Council's Indigenous Biodiversity Strategy (Auckland Council 2012).

### **1.1 Auckland as a significant ecological region**

The Auckland region contains a diverse range of terrestrial biodiversity, but a considerable number of ecosystem types and species are under threat as a result of loss and fragmentation of indigenous habitats and the impacts of invasive species (particularly mammals and weeds). Only 27 per cent of indigenous land cover now remains in the Auckland region, with several ecosystem types (mainland lava forest, wetlands, coastal broadleaf forest and kauri forest), and several ecological districts (e.g., Tamaki, Awhitu, and Manukau) severely depleted. On the Auckland mainland the situation is even worse with less than 20% of the original indigenous landcover remaining.

Despite its small size, the Auckland region also contains a large number of New Zealand's threatened species, including 20 per cent of its terrestrial vertebrate fauna including pukeko and Auckland green gecko and 19 per cent of its threatened plant species (Stanley et al 2005). The region also includes several endemic species that are found only in the Auckland region. These endemic species include the black petrel and chevron skink, and plant species such as a threatened species of hebe in the Waitakere Ranges and a species of kanuka on Great Barrier Island (Auckland Regional Council, State of the Auckland Region 2010).

The Auckland region also contains a diverse range of indigenous terrestrial and freshwater ecosystems for its size and many of these ecosystems are under threat. Some indigenous ecosystem

types in Auckland are critically depleted and now cover less than 10 per cent of their original extent. These include kauri forests (9 per cent) freshwater wetlands including wetland forest (4 per cent), coastal forests (3 per cent), and mainland lava forests (0.5 per cent).

## 1.2 Significant Ecological Areas

Significant Ecological Areas have been identified by Auckland Council as a way to fulfil its obligations under Section 6 the Resource Management Act 1991 and will be subject to rules in the Unitary Plan requiring their protection. This section states that all persons exercising functions and powers under this Act shall recognise and provide for matters of national importance including the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development; the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development; and the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.

An SEA is therefore an area of significant indigenous vegetation and/or significant habitat of indigenous fauna and may include terrestrial, marine and freshwater ecosystems, habitats and species. Auckland Council has used five criteria to identify ecological areas that provide for the maintenance of biodiversity in Auckland. For full definitions of these criteria see Sawyer and Stanley 2012. The criteria are as follows:

- a. Representativeness
- b. Threat status and rarity
- c. Diversity
- d. Stepping stones, migration pathways and buffers
- e. Uniqueness or distinctiveness

The purpose of this document is to provide the information that supports two of those criteria, *Threat Status and Rarity* and *Uniqueness or Distinctiveness*.

### 1.2.1 Threat status and rarity

SEAs that meet these criteria are areas that are ecologically significant because they support genes, species, habitats and/or ecosystems that are threatened with extinction or are naturally rare. This includes nationally or regionally rare or threatened species or nationally threatened ecosystems such as wetlands and dunes.

This report lists all known indigenous species and ecosystems that are considered threatened in the Auckland region.

### 1.2.2. Uniqueness and distinctiveness

SEAs that meet these criteria may be significant because they support genes, species, communities, habitats and/or ecosystems that are unique or distinctive. This includes species or ecosystems that

are endemic (not found anywhere else) or near endemic (where the only other occurrences are within 100km of Auckland Council's boundaries). This may also include species or ecosystems that are distinctive because of their scientific importance (such as a type locality) their geographic occurrence (such as a national distributional limit) or their outstanding condition or size (such as the largest specimen or largest population of a native species in Auckland).

This report details all biodiversity assets in the Auckland region. This includes threatened and endemic species, unique or scientifically significant populations of species or unique individuals of particular species. It also includes ecosystems that are considered unique or distinctive.

## **2.0. Threatened species of Auckland**

The distribution of threatened birds, reptiles, amphibians, fish and plant species varies considerably across the Auckland region. Many threatened species in the region now survive only on some offshore islands in the Hauraki Gulf. Such islands are in relatively good condition and free of all or some introduced mammalian predators and competitors and invasive plant species. Islands which support significant numbers of threatened species include: Great Barrier Island, Little Barrier Island, Tiritiri Matangi, Motuora and Motuihe Islands.

High numbers of threatened species also occur in the Waitakere and Hunua Ranges and at South Kaipara Head. The Kaipara and Manukau Harbours contain extensive areas of mudflats and sandflats that are of international significance as feeding grounds for thousands of migratory and locally breeding shorebirds, including the nationally vulnerable New Zealand dotterel and the wrybill plover.

The large number of threatened species in the Waitakere and Hunua Ranges reflect the quality and extent of intact native forest, wetlands and dunelands (SOE 2010).

### **2.1. Fauna**

Of the native terrestrial fauna found in Auckland, 48 per cent of the birds, 71 per cent of the reptiles and both native mammals (bats) are nationally threatened. The region contains 49 (20 per cent) of New Zealand's threatened terrestrial vertebrate fauna and is a stronghold for a number of nationally threatened species such as the pateke, banded rail, New Zealand dotterel, Auckland green gecko, Hochstetter's frog and Northern New Zealand dotterel.

The species lists below follow the Department of Conservation's national threat classification system categories and have been determined using Department of Conservation threat criteria (see Townsend et al. 2008).

### 2.1.1. Birds

The Auckland region is a biodiversity hotspot for seabirds with 80 species recorded from the Hauraki Gulf and Auckland harbours. Twenty four species have been recorded breeding in the region, including confirmation in 2013 that the rediscovered New Zealand storm petrel (*Fregetta maoriana*) is breeding on Hauturu (Little Barrier Island). Although a hotspot for seabirds, the Auckland region has 54 species of birds that have a national threat status (Miskelly et al, 2008). Species such as the New Zealand fairy tern (*Sternula nereis davisae*), grey duck (*Anas superciliosa superciliosa*), stitchbird (*Notiomystis cincta*) and North Island kokako (*Callaeas wilsoni*) are critically endangered.

**Table X.X: Threatened and uncommon indigenous birds in Auckland**

COMMON NAME	SCIENTIFIC NAME	Threat status <sup>1</sup>
Australasian Bittern	<i>Botaurus poiciloptilus</i>	Nationally endangered
Australasian Pied Stilt	<i>Himantopus himantopus leucocephalus</i>	Declining
Banded Dotterel	<i>Charadrius bicinctus bicinctus</i>	Nationally vulnerable
Banded Rail	<i>Gallirallus philippensis assimilis</i>	Naturally uncommon
Black Petrel	<i>Procellaria parkinsoni</i>	Nationally vulnerable
Black Shag	<i>Phalacrocorax carbo novaehollandiae</i>	Naturally uncommon
Black-billed Gull	<i>Larus bulleri</i>	Nationally endangered
Brown Teal	<i>Anas chlorotis</i> "North Island"	Recovering
Caspian Tern	<i>Sterna caspia</i>	Nationally vulnerable
Flesh-footed Shearwater	<i>Puffinus carneipes</i>	Declining
Fluttering Shearwater	<i>Puffinus gavia</i>	Relict
Grey Duck	<i>Anas superciliosa superciliosa</i>	Nationally critical
Little Black Shag	<i>Phalacrocorax sulcirostris</i>	Naturally uncommon
Little Spotted Kiwi	<i>Apteryx owenii</i>	Recovering
Long-tailed Cuckoo	<i>Eudynamys taitensis</i>	Naturally uncommon

<sup>1</sup> Miskelly et al 2008. Conservation status of New Zealand birds, 2008. *Notornis*, 2008, Vol. 55: 117-135.

COMMON NAME	SCIENTIFIC NAME	Threat status <sup>1</sup>
Marsh Crake	<i>Porzana pusilla affinis</i>	Relict
New Zealand Dabchick	<i>Poliiocephalus rufopectus</i>	Nationally vulnerable
Northern New Zealand Dotterel	<i>Charadrius obscurus aquilonius</i>	Nationally vulnerable
New Zealand Pied oystercatcher	<i>Haematopus finschi</i>	Declining
New Zealand Pipit	<i>Anthus novaeseelandiae novaeseelandiae</i>	Declining
North Island Brown Kiwi	<i>Apteryx mantelli</i>	Nationally vulnerable
North Island Fernbird	<i>Bowdleria punctata vealeae</i>	Declining
North Island Kaka	<i>Nestor meridionalis septentrionalis</i>	Nationally vulnerable
North Island Kokako	<i>Callaeas cinerea wilsoni</i>	Nationally vulnerable
North Island Rifleman	<i>Acanthisitta chloris granti</i>	Declining
North Island Saddleback	<i>Philesturnus carunculatus rufusater</i>	Recovering
North Island Weka	<i>Gallirallus australis greyi</i>	Nationally vulnerable
Northern little blue penguin	<i>Eudyptula minor iredalei</i>	Declining
Pied Shag	<i>Phalacrocorax varius varius</i>	Nationally vulnerable
Red-billed Gull	<i>Larus novaehollandiae scopulinus</i>	Nationally vulnerable
Red-crowned Parakeet	<i>Cyanoramphus novaezelandiae novaezelandiae</i>	Relict
Reef Heron	<i>Egretta sacra sacra</i>	Nationally vulnerable
Royal Spoonbill	<i>Platalea regia</i>	Naturally uncommon
Sooty Shearwater	<i>Puffinus griseus</i>	Declining
Spotless Crake	<i>Porzana tabuensis plumbea</i>	Relict
Stitchbird	<i>Notiomystis cincta</i>	Nationally endangered

COMMON NAME	SCIENTIFIC NAME	Threat status <sup>1</sup>
Takahe	<i>Porphyrio hochstetteri</i>	Nationally critical
Variable Oystercatcher	<i>Haematopus unicolor</i>	Recovering
White Heron	<i>Egretta alba modesta</i>	Nationally critical
White-fronted Tern	<i>Sterna striata striata</i>	Declining
Wrybill	<i>Anarhynchus frontalis</i>	Nationally vulnerable
New Zealand Fairy Tern	<i>Sterna nereis davisae</i>	Nationally critical
Shore plover	<i>Thinornis novaeseelandiae</i>	Nationally critical
Kakapo	<i>Strigops habroptila</i>	Nationally critical
New Zealand storm petrel	<i>Oceanites maorianus</i>	Data deficient
Pycroft's petrel	<i>Pterodroma pycrofti</i>	Recovering
North island little shearwater	<i>Puffinus assimilis haurakiensis</i>	Recovering
New Zealand white-faced stormpetrel	<i>Pelagodroma marina maoriana</i>	Relict
Diving petrel	<i>Pelecanoides urinatrix urinatrix</i>	Relict
Cook's petrel	<i>Pterodroma cookii</i>	Relict
Northern giant petrel	<i>Macronectes halli</i>	Naturally uncommon
Little shag	<i>Phalacrocorax melanoleucos brevirostris</i>	Naturally uncommon
Grey ternlet	<i>Procelsterna cerulea albivittata</i>	Naturally uncommon
Buller's shearwater	<i>Puffinus bulleri</i>	Naturally uncommon

### 2.1.2. Reptiles and frogs

The Auckland isthmus and archipelago of islands is home to many species of reptiles. All 95 New Zealand species and subspecies of reptiles (gecko and skink) are endemic to New Zealand with 14 species occurring in the Auckland region. According to the national threat assessment (see



Hitchmough et al 2010), 11 of these 14 reptiles have a national threat status, including moko skink *Oligosoma moco*, chevron skink *Oligosoma homalonotum* and shore skink *Oligosoma smithi*. Reptiles are in decline throughout Auckland and New Zealand as a result of habitat destruction and predation. There are no tuatara populations remaining on the Auckland mainland, with only small recovering populations on offshore sanctuaries such as Tiritiri Matangi Island.

The Auckland region is home to one of New Zealand's four endemic species of frog. Despite being the most abundant of New Zealand's remaining endemic frogs, the Hochstetter's frog (*Leiopelma hochstetteri*) is in decline due to habitat destruction and modification, predation by introduced species and disease (see Newman et al 2010). Remaining populations in the Auckland region currently exist either on offshore islands or in well forested areas such as the Hunua and Waitakere ranges.

**Table X.X: Threatened and uncommon indigenous reptiles and frogs in Auckland**

COMMON NAME	SCIENTIFIC NAME	Threat status <sup>23</sup>
Hochstetter's frog	<i>Leiopelma hochstetteri</i>	Declining
Auckland green gecko	<i>Naultinus elegans elegans</i>	Declining
Duvaucel's gecko	<i>Hoplodactylus duvauceli</i>	Relict
Mokohinau gecko	<i>Hoplodactylus</i> "Mokohinaus"	Naturally uncommon
Pacific gecko	<i>Hoplodactylus pacificus</i>	Relict
Chevron skink	<i>Oligosoma homalonotum</i>	Nationally vulnerable
Egg-laying/Suter's skink	<i>Oligosoma suteri</i>	Relict
Moko skink	<i>Oligosoma moco</i>	Relict
Ornate skink	<i>Cyclodina ornata</i>	Declining

<sup>2</sup> Hitchmough, RA., Hoare, JM., Jamieson, H., Newman, D., Tocher, MD., Anderson, PJ., Lettink, M. and Whitaker, AH. 2010: Conservation status of New Zealand reptiles, 2009. New Zealand Journal of Zoology, 37: 3, 203 – 224.

<sup>3</sup> Newman Donald G., Bell Ben D., Bishop Phillip J., Burns Rhys, Haigh Amanda, Hitchmough Rodney A. and Tocher Mandy, 2010: Conservation status of New Zealand frogs, 2009. New Zealand Journal of Zoology, 37 121-130.

Striped skink	<i>Oligosoma striatum</i>	Declining
Town's skink	<i>Oligosoma townsi</i>	Recovering
Northern tuatara	<i>Sphenodon punctatus</i>	Relict

#### 2.1.4. Bats

Bats are New Zealand's only native terrestrial mammal and, prior to human colonisation of the country, they were widespread throughout the entire archipelago. New Zealand has six species and subspecies of bat, two of which occur in Auckland. O'Donnell et al (2010) have undertaken an assessment of the threat status of all New Zealand bat species. Although both species of bat in Auckland are threatened, the long-tailed bat *Chalinolobus tuberculatus* is more common than the northern lesser short-tailed bat *Mystacina tuberculata aupaourica* which is only known to be present on Little Barrier Island. *C. tuberculatus* is in rapid decline throughout Auckland as a result of habitat destruction, predation by introduced species and disease. Bats require old growth forest (or features that provide equivalent habitat) that supports large trees providing cavities for nesting and roosting. Bats also have large territories and require large expanses of forest which are becoming scarce in the Auckland region.

**Table X.X: Threatened bats in Auckland**

COMMON NAME	SCIENTIFIC NAME	Threat status <sup>4</sup>
Northern lesser short-tailed bat	<i>Mystacina tuberculata aupaourica</i>	Nationally Vulnerable
long-tailed bat	<i>Chalinolobus tuberculatus</i>	Nationally Vulnerable

#### 2.1.5. Fish and marine mammals

Freshwater ecosystems are becoming increasingly scarce in Auckland and the ones that remain are becoming increasingly polluted and degraded. This is contributing to the rapid decline in freshwater fish species throughout Auckland. 21 species are still present in Auckland including shortfin eel, longfin eel, giant kokopu, banded kokopu and redfin bully. Most of these fish species are diadromous meaning they migrate between fresh and salt water. Of these, six have a national threat status (see Allibone et al 2010, Table X.X).

Maui's dolphin is the world's smallest dolphin and is endemic to New Zealand's North Island. It is New Zealand's rarest dolphin, with an estimated population of 55. The dolphin is listed internationally as 'Critically Endangered', which means there is a high risk of it becoming extinct in the near future (see Baker et al 2010).

<sup>4</sup> O'Donnell, CFJ., Christie, JE., Hitchmough, RA., Lloyd, B. and Parsons, S. 2010: The conservation status of New Zealand bats, 2009. New Zealand Journal of Zoology, 37: 4, 297 – 311

Auckland's Hauraki Gulf Marine Park is recognised as having very special, nationally significant qualities, including an unusual diversity and abundance of marine mammals and has its own legislation (Hauraki Gulf Marine Park Act 2000). Around 20 species of whales and dolphins have been recorded in the Hauraki Gulf and most frequently encountered are common dolphins, sometimes in groups of hundreds, and pods of bottlenose dolphins and killer whales. Perhaps most remarkably, the Hauraki Gulf has its own population of large baleen whales, breeding and raising calves throughout the year. Around 50 Bryde's whales are estimated to live year-round within the Gulf, mixing with another 150 seasonal visitors; one of the few resident populations of this species in the world. The threat status of the New Zealand population of Bryde's whale is listed as a Nationally Critical.

**Table X.X: Threatened and uncommon fish and marine mammals in Auckland**

COMMON NAME	SCIENTIFIC NAME	Threat status <sup>56</sup>
Maui's dolphin (North Island)	<i>Cephalorhynchus hectori maui</i>	Nationally critical
Black mudfish	<i>Neochanna diversus</i>	Gradual decline
Dwarf inanga	<i>Galaxias gracilis</i>	Serious Decline
Giant kokopu	<i>Galaxias argenteus</i>	Gradual decline
Lamprey	<i>Geotria australis</i>	Sparse
Longfin eel	<i>Anguilla dieffenbachii</i>	Gradual decline
Shortjaw kokopu	<i>Galaxias postvectis</i>	Sparse

### 2.1.3. Invertebrates

Very few of New Zealand's and Auckland's invertebrates have been described. Invertebrates comprise 95% of known species and it is estimated that there are at least 80,000 New Zealand marine, freshwater and terrestrial invertebrate species. There are 44 Auckland invertebrate species classified as threatened with nearly all large insects, such as giant weta

<sup>5</sup> Baker CS, Chilvers BL, Constantine R, DuFresne S, Mattlin RH, van Helden A, Hitchmough R 2010. Conservation status of New Zealand marine mammals (suborders Cetacea and Pinnipedia), 2009. New Zealand Journal of Marine and Freshwater Research 44: 101 115.

<sup>6</sup> Allibone R, David B, Hitchmough R, Jellyman D, Ling N, Ravenscroft P, Waters J 2010. Conservation status of New Zealand freshwater fish, 2009. New Zealand Journal of Marine and Freshwater Research 44: 271 287.

extinct on the mainland. Owing to pollution, sedimentation and nutrient runoff from farmland, much of Auckland's freshwater catchment and coastal marine ecosystems are degraded, resulting in the rapid decline in the distribution of marine and freshwater invertebrates.

## 2.2 Flora

The Auckland region has 35 plant species that are now considered to be regionally extinct, and 169 species of plants that are nationally threatened (19 per cent of the national total). This is the fourth highest number of plants for any regional area in New Zealand, despite Auckland being one of the smallest regions. The region has 321 plant species that are regionally threatened which is 43 per cent of the total number of indigenous plant species that occur naturally in the wild in the Auckland region (Stanley et al 2005). The table below lists plants that are either nationally or regionally threatened or uncommon (de Lange et al 2009, Stanley et al 2005).

**Table X.X: Threatened and uncommon vascular plants in Auckland**

Current name	Common name	Family	Regional status <sup>7</sup>	National status <sup>8</sup>
<i>Abrodictyum strictum</i>	Erect bristle fern	Hymenophyllaceae	Range Restricted	Non Threatened
<i>Adelopetalum tuberculatum</i>	None known	Orchidaceae	Sparse	Naturally uncommon
<i>Alseuosmia banksii</i> var. <i>banksii</i>	None known	Alseuosmiaceae	Data Deficient	Not threatened
<i>Alseuosmia banksii</i> var. <i>linariifolia</i>	None known	Alseuosmiaceae	Data Deficient	Data Deficient
<i>Amphibromus fluitans</i>	Water brome	Poaceae	Regionally Critical	Nationally Endangered
<i>Anogramma leptophylla</i>	Jersey fern, annual fern	Pteridaceae	Regionally Critical	Nationally Vulnerable
<i>Anthosachne multiflora</i> subsp. <i>multiflora</i>	Blue grass, blue wheat grass	Poaceae	Gradual Decline	Not threatened
<i>Anthosachne solandri</i>	Native Wheatgrass,	Poaceae	Regionally Extinct	Not threatened

<sup>7</sup> Stanley, R., de Lange, P.J., Cameron, E. 2005. Auckland Regional Threatened and Uncommon Plant List. Auckland Botanical Society Journal 60: 152-157.

<sup>8</sup> de Lange PJ, Norton DA, Courtney SP, Heenan PB, Barkla JW, Cameron EK, Hitchmough R, Townsend AJ 2009. Threatened and uncommon plants of New Zealand (1998 revision). New Zealand Journal of Botany 47: 61-96.

Current name	Common name	Family	Regional status <sup>7</sup>	National status <sup>8</sup>
	Blue Wheatgrass			
Anzybas rotundifolius	Helmet orchid	Orchidaceae	Regionally Critical	Naturally Uncommon
Archeria racemosa	None known	Ericaceae	Range Restricted	Not threatened
Arthropodium bifurcatum	rengarenga lily	Asparagaceae	Data Deficient	Relict
Arthropodium candidum	small rengarenga lily	Asparagaceae	Regionally Critical	Not threatened
Ascarina lucida var. lucida	hutu	Chloranthaceae	Regionally Critical	Not threatened
Asplenium appendiculatum subsp. maritimum	coastal spleenwort	Pteridaceae	Regionally Critical	Not threatened
Asplenium hookerianum var. hookerianum	Hooker's spleenwort	Pteridaceae	Sparse	Not threatened
Asplenium pauperequitum	Poor Knight's spleenwort	Pteridaceae	Regionally Extinct	Nationally Endangered
Astelia fragrans	Bush flax, bush lilly, kakaha	Asteliaceae	Data Deficient	Not threatened
Astelia grandis	swamp astelia	Asteliaceae	Regionally Critical	Not threatened
Atriplex hollowayi	Holloway's crystalwort	Amaranthaceae	Regionally Extinct	Nationally Vulnerable
Australina pusilla	None known	Urticaceae	Regionally Critical	Not threatened
Austroderia toetoe	toetoe	Poaceae	Data Deficient	Not threatened
Azolla filiculoides	Pacific azolla, azolla, red azolla	Salviniaceae	Regionally Endangered	Not threatened
Blechnum blechnoides	shore hard fern	Pteridaceae	Sparse	Not threatened
Blechnum colensoi	Colenso's hard fern, peretao, petako	Pteridaceae	Regionally Critical	Not threatened
Blechnum nigrum	black hard fern	Pteridaceae	Range Restricted	Not threatened
Blechnum norfolkianum	None known	Pteridaceae	Sparse	Naturally Uncommon
Blechnum procerum	small kiokio	Pteridaceae	Range Restricted	Not threatened

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
Blechnum triangularifolium	kiokio, Green Bay kiokio	Pteridaceae	Sparse	Not threatened
Blechnum vulcanicum	korokio, mountain hard fern	Pteridaceae	Regionally Critical	Not threatened
Bolboschoenus caldwellii	Purua Grass, Caldwell's clubrush	Cyperaceae	Regionally Critical	Not threatened
Botrychium australe	parsley fern, patotara	Pteridaceae	Regionally Critical	Naturally Uncommon
Brachyglottis kirkii var. kirkii	Kohurangi, Kirk's daisy	Asteraceae	Serious Decline	Declining
Brachyglottis myrianthos	None known	Asteraceae	Regionally Extinct	Naturally Uncommon
Bromus arenarius	Sand brome	Poaceae	Sparse	Naturally Uncommon
Callitriche petriei subsp. petriei	Petrie's starwort	Plantaginaceae	Data Deficient	Not threatened
Calochilus paludosus	Bearded orchid	Orchidaceae	Regionally Critical	Naturally Uncommon
Calystegia marginata	small-flowered white bindweed	Convolvulaceae	Regionally Critical	Naturally Uncommon
Carex fascicularis	sedge	Cyperaceae	Regionally Critical	Not threatened
Carex forsteri	Forster's sedge	Cyperaceae	Sparse	Not threatened
Carex litorosa	sea sedge	Cyperaceae	Regionally Critical	Declining
Carex sinclairii	Sinclair's sedge	Cyperaceae	Data Deficient	Not threatened
Carex subdola	sedge	Cyperaceae	Regionally Endangered	Not threatened
Carmichaelia williamsii	William's Broom, Giant-flowered broom	Fabaceae	Regionally Critical	Relict
Celmisia major var. major	None known	Asteraceae	Gradual Decline	Naturally Uncommon
Centipeda aotearoana	New Zealand sneezeweed	Asteraceae	Data Deficient	Naturally Uncommon
Centipeda elatinoides	sneezeweed, snuffweed	Asteraceae	Data Deficient	Not threatened
Centipeda minima	sneezeweed, centipeda	Asteraceae	Regionally Critical	Nationally Critical

Current name	Common name	Family	Regional status <sup>7</sup>	National status <sup>8</sup>
subsp. minima				
Centrolepis strigosa	Cetrolepis	Centrolepidaceae	Data Deficient	Naturally Uncommon
Chionochloa bromoides	Coastal Tussock, Seabird Tussock	Poaceae	Range Restricted	Naturally Uncommon
Chionochloa conspicua subsp. cunninghamii	Hunangamoho , broad-leaved bush tussock	Poaceae	Regionally Critical	Not threatened
Clematis foetida	clematis	Ranunculaceae	Data Deficient	Not threatened
Clianthus maximus	kakabeak, Kowhai Ngutu-Kaka, Kaka Beak	Fabaceae	Regionally Extinct	Nationally Critical
Clianthus puniceus	kakabeak, Kowhai Ngutu-Kaka, Kaka Beak	Fabaceae	Regionally Critical	Nationally Critical
Colensoa physaloides	colensoa, koru	Campanulaceae	Regionally Critical	Relict
Collospermum microsperrum	None known	Asteliaceae	Range Restricted	Not threatened
Coprosma acerosa	sand coprosma	Rubiaceae	Serious Decline	Declining
Coprosma dodonaeifolia	None known	Rubiaceae	Range Restricted	Not threatened
Coprosma parviflora	leafy coprosma	Rubiaceae	Range Restricted	Not threatened
Coprosma propinqua var. propinqua	mingimingi	Rubiaceae	Regionally Vulnerable	Not threatened
Coprosma rigida	None known	Rubiaceae	Regionally Endangered	Not threatened
Coprosma tenuicaulis	Swamp coprosma, hukihuki	Rubiaceae	Data Deficient	Not threatened
Cordyline indivisa	Broad leaved or Mountain cabbage tree, toi	Asparagaceae	Regionally Critical	Not threatened
Corokia	Korokio, wire-	Argophyllaceae	Sparse	Not threatened

Current name	Common name	Family	Regional status <sup>7</sup>	National status <sup>8</sup>
cotoneaster	netting bush			
Corunastylis pumila	yellow gumland leek orchid	Orchidaceae	Gradual Decline	Naturally Uncommon
Crassula colligata subsp. colligata	None known	Crassulaceae	Sparse	Not threatened
Crassula ruamahanga	None known	Crassulaceae	Regionally Critical	Naturally Uncommon
Cyclosorus interruptus	None known	Pteridaceae	Regionally Critical	Declining
Cyperus ustulatus f. grandispiculosus	Coastal cutty grass, giant umbrella sedge, cyperus	Cyperaceae	Regionally Critical	Not threatened
Dactylanthus taylorii	Wood rose, pua o te reinga, flower of Hades	Balanophoraceae	Regionally Critical	Nationally Vulnerable
Danhatchia australis	Yoania, Danhatchia	Orchidaceae	Sparse	Naturally Uncommon
Daucus glochidiatus	native carrot, New Zealand carrot	Apiaceae	Regionally Critical	Nationally Critical
Dichelachne inaequiglumis	Short-hair plume grass	Poaceae	Data Deficient	Naturally Uncommon
Dichelachne micrantha	Purple plume grass	Poaceae	Data Deficient	Nationally Vulnerable
Dicksonia fibrosa	Wheki-ponga, wheki-kohoonga, golden tree fern, kuripaka	Pteridaceae	Sparse	Not threatened
Dicksonia lanata var. hispida	None known	Pteridaceae	Range Restricted	Not threatened
Discaria toumatou	Matagouri	Rhamnaceae	Regionally Extinct	Not threatened
Doodia mollis	Mokimoki, mukimuki	Pteridaceae	Sparse	Naturally Uncommon
Doodia squarrosa	None known	Pteridaceae	Sparse	Naturally Uncommon
Dracophyllum lessonianum	Gumland grass tree	Ericaceae	Data Deficient	Not threatened
Dracophyllum patens	Great Bariier inaka	Ericaceae	Range Restricted	Naturally Uncommon



<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
Dracophyllum traversii	Mountain neinei, grass tree, pineapple tree	Ericaceae	Range Restricted	Not threatened
Drosera hookeri	sundew	Droseraceae	Sparse	Coloniser
Drosera pygmaea	pygmy sundew	Droseraceae	Regionally Extinct	Nationally Vulnerable
Drosera spatulata	sundew	Droseraceae	Range Restricted	Not threatened
Earina aestivalis	bamboo orchid	Orchidaceae	Sparse	Not threatened
Einadia triandra	pigweed	Amaranthaceae	Sparse	Not threatened
Elaeocarpus hookerianus	pokaka	Elaeocarpaceae	Regionally Critical	Not threatened
Elatine gratioloides	None known	Elatinaceae	Data Deficient	Not threatened
Eleocharis neozelandica	Sand spike sedge, spikesedge	Cyperaceae	Regionally Critical	Declining
Empodisma minus	wire rush	Restoniaceae	Regionally Critical	Not threatened
Epacris sinclairii	Sinclair's tamingi	Ericaceae	Regionally Critical	Naturally Uncommon
Epilobium alsinoides	willowherb	Onagraceae	Regionally Extinct	Not threatened
Epilobium billardioreanum	willowherb	Onagraceae	Data Deficient	Not threatened
Epilobium chionanthum	marsh willowherb	Onagraceae	Data Deficient	Not threatened
Epilobium hirtigerum	hairy willowherb	Onagraceae	Regionally Critical	Nationally Critical
Epilobium insulare	willowherb	Onagraceae	Data Deficient	Declining
Epilobium komarovianum	creeping willowherb	Onagraceae	Data Deficient	Not threatened
Epilobium nerteroides	willowherb	Onagraceae	Serious Decline	Not threatened
Epilobium pedunculare	willowherb	Onagraceae	Regionally Endangered	Not threatened
Epilobium pubens	willowherb	Onagraceae	Sparse	Not threatened
Euchiton delicatus	None known	Asteraceae	Data Deficient	Not threatened
Euchiton limosus	None known	Asteraceae	Data Deficient	Not threatened

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
Euphorbia glauca	shore spurge, sea spurge, waiu-atua, sand milkweed	Euphorbiaceae	Regionally Critical	Declining
Ficinia spiralis	pingao	Cyperaceae	Serious Decline	Relict
Fimbristylis velata	Fimbristylis	Cyperaceae	Regionally Critical	Naturally Uncommon
Fuchsia procumbens	Creeping fuchsia, climbing or trailing fuchsia	Onagraceae	Range Restricted	Naturally Uncommon
Galium propinquum	None known	Rubiaceae	Data Deficient	Not threatened
Galium trilobum	native bedstraw	Rubiaceae	Regionally Critical	Not threatened
Gastrodia cunninghamii	Black orchid, Perei	Orchidaceae	Regionally Critical	Not threatened
Gastrodia minor	gastrodia	Orchidaceae	Range Restricted	Not threatened
Geranium potentilloides	None known	Geraniaceae	Sparse	Not threatened
Geranium retrorsum	Turnip-rooted geranium	Geraniaceae	Gradual Decline	Nationally Vulnerable
Geranium solanderi	Turnip-rooted geranium	Geraniaceae	Gradual Decline	Not threatened
Glossostigma elatinooides	None known	Phrymaceae	Sparse	Not threatened
Grammitis billardierei	common strap fern	Pteridaceae	Range Restricted	Not threatened
Grammitis magellanica subsp. nothofageti	None known	Pteridaceae	Range Restricted	Not threatened
Grammitis pseudociliata	None known	Pteridaceae	Range Restricted	Not threatened
Grammitis rawlingsii	Rawling's strap fern	Pteridaceae	Sparse	Naturally Uncommon
Gratiola concinna	None known	Plantaginaceae	Regionally Extinct	Naturally Vulnerable
Gratiola sexdentata	Gratiola	Plantaginaceae	Regionally Critical	Not threatened
Griselinia littoralis	Broadleaf, kapuka, papauma	Griselinaceae	Range Restricted	Not threatened
Gunnera dentata	None known	Gunneraceae	Range Restricted	Not threatened
Gunnera	None known	Gunneraceae	Data Deficient	Not threatened

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
monoica				
Gunnera prorepens	None known	Gunneraceae	Regionally Endangered	Not threatened
Halocarpus kirkii	Monoao	Podocarpaceae	Range Restricted	Naturally Uncommon
Hebe bishopiana	Waitakere rock koromiko	Plantaginaceae	Regionally Vulnerable	Nationally Vulnerable
Hebe diosmifolia	hebe	Plantaginaceae	Range Restricted	Not threatened
Hebe macrocarpa var. latisepala	hebe	Plantaginaceae	Range Restricted	Not threatened
Hebe obtusata	hebe	Plantaginaceae	Range Restricted	Naturally Uncommon
Hebe pubescens subsp. pubescens	Coromandel Koromiko, Hebe	Plantaginaceae	Regionally Critical	Not threatened
Hebe pubescens subsp. rehuarum	Great Barrier Koromiko, Great Barrier Hebe	Plantaginaceae	Range Restricted	Naturally Uncommon
Hebe pubescens subsp. sejuncta	Mokohinau Koromiko, Hebe	Plantaginaceae	Range Restricted	Naturally Uncommon
Hebe speciosa	Napuka, Titirangi	Plantaginaceae	Regionally Critical	Nationally Vulnerable
Hierochloa redolens	Holy grass, karetu	Poaceae	Regionally Extinct	Not threatened
Hydrocotyle microphylla	None known	Araliaceae	Data Deficient	Not threatened
Hydrocotyle pterocarpa	None known	Araliaceae	Data Deficient	Not threatened
Hymenophyllum armstrongii	Filmy fern	Pteridaceae	Range Restricted	Not threatened
Hymenophyllum bivalve	Filmy fern	Pteridaceae	Data Deficient	Not threatened
Hymenophyllum cupressiforme	Filmy fern	Pteridaceae	Sparse	Not threatened
Hymenophyllum lyallii	Filmy fern	Pteridaceae	Range Restricted	Not threatened
Hypericum involutum	Grassland hypericum	Hypericaceae	Data Deficient	Not threatened

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
Hypolepis dicksonioides	Giant hypolepis, ground fern (Norfolk Island only)	Pteridaceae	Sparse	Naturally Uncommon
Hypolepis lactea	None known	Pteridaceae	Sparse	Not threatened
Hypolepis rufobarbata	None known	Pteridaceae	Sparse	Not threatened
Ileostylus micranthus	green mistletoe, pirita	Loranthaceae	Regionally Critical	Not threatened
Ipomoea cairica	Pouwhiwhi, coastal morning glory, railway creeper	Convolvulaceae	Range Restricted	Not threatened
Isolepis distigmata	None known	Cyperaceae	Data Deficient	Not threatened
Isolepis fluitans var. fluitans	None known	Cyperaceae	Regionally Extinct	Nationally Vulnerable
Juncus caespiticius	grass-leaved rush	Juncaceae	Regionally Extinct	Not threatened
Juncus distegus	two storey rush	Juncaceae	Data Deficient	Not threatened
Juncus pauciflorus	Leafless rush	Juncaceae	Regionally Endangered	Declining
Korthalsella salicornioides	Mistletoe, dwarf mistletoe, leafless mistletoe	Viscaceae	Sparse	Naturally Uncommon
Kunzea ericoides var. linearis	Rawiri, Manuka-Rauriki	Myrtaceae	Regionally Endangered	Declining
Kunzea sinclairii	Great Barrier Island kanuka	Myrtaceae	Range Restricted	Naturally Uncommon
Lagenifera lanata	None known	Asteraceae	Range Restricted	Relict
Lagenifera stipitata	None known	Asteraceae	Sparse	Not threatened
Lepidium amissum	Waitakere scurvy grass	Brassicaceae	Extinct	Extinct
Lepidium flexicaule	Coastal cress	Brassicaceae	Regionally Extinct	Nationally vulnerable
Lepidium obtusatum	None	Brassicaceae	Regionally Extinct	Extinct
Lepidium	Nau, Cooks	Brassicaceae	Regionally	Nationally vulnerable

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
oleraceum	scurvy grass		Endangered	
Lepidothamnus intermedius	Yellow silver pine	Podocarpaceae	Range Restricted	Non Threatened
Leptinella dioica	Shore cotula	Asteraceae	Regionally Critical	Non Threatened
Leptinella dispersa subsp. rupestris	None	Asteraceae	Regionally Critical	Naturally uncommon
Leptinella rotundata	None	Asteraceae	Regionally Extinct	Nationally critical
Leptinella squalida subsp. squalida	None	Asteraceae	Regionally Endangered	Non Threatened
Leptinella tenella	None	Asteraceae	Sparse	Declining
Leptolepia novae-zelandiae	Lace fern	Dennistaedtiaceae	Data Deficient	Non Threatened
Leptostigma setulosa	None	Rubiaceae	Regionally Endangered	Non Threatened
Libertia micrantha	Native iris, Mikoikoi	Iridaceae	Range Restricted	Non Threatened
Libertia peregrinans	Native iris, Mikoikoi	Iridaceae	Regionally Extinct	Nationally vulnerable
Libocedrus plumosa	Kawaka, Kaikawaka, NZ cedar	Cupressaceae	Sparse	Naturally uncommon
Lindsaea viridis	None	Lindsaeaceae	Regionally Critical	Naturally uncommon
Linguella puberula	Dwarf greenhood	Orchidaceae	Regionally Extinct	Nationally critical
Linum monogynum	Rauhuia, NZ true flax, NZ linen flax	Linaceae	Sparse	Non Threatened
Lophomyrtus obcordata	Rohutu, NZ myrtle	Myrtaceae	Regionally Endangered	Non Threatened
Loxsonia cunninghamii	None	Loxsomataceae	Range Restricted	Non Threatened
Luzula banksiana var. banksiana	Coastal woodrush	Juncaceae	Regionally Critical	Non Threatened
Luzula picta var. picta	None	Juncaceae	Regionally Endangered	Non Threatened
Machaerina arthropphylla	None known	Cyperaceae	Sparse	Not threatened

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
Machaerina complanata	None known	Cyperaceae	Regionally Critical	Nationally Vulnerable
Manoao colensoi	Silver pine, Manoao	Podocarpaceae	Regionally Critical	Non Threatened
Mazus novaezeelandiae subsp. impolitus f. impolitus	Dwarf musk	Mazaceae	Regionally Critical	Nationally vulnerable
Melicytus lanceolatus	Narrow leaved mahoe, mahoe-wao	Violaceae	Range Restricted	Non Threatened
Mentha cunninghamii	New zealand mint, hihoi	Lamiaceae	Range Restricted	Non Threatened
Metrosideros albiflora	White rata	Myrtaceae	Data Deficient	Non Threatened
Metrosideros carminea	Crimson rata, Carmine rata	Myrtaceae	Sparse	Non Threatened
Metrosideros parkinsonii	Parkinsons rata	Myrtaceae	Regionally Critical	Non Threatened
Metrosideros umbellata	Southern rata	Myrtaceae	Range Restricted	Non Threatened
Microlaena carsei	None	Poaceae	Data Deficient	Naturally uncommon
Microlaena polynoda	Bamboo grass	Poaceae	Sparse	Non Threatened
Mimulus repens	Native musk, Maori musk	Phrymaceae	Regionally Endangered	Naturally uncommon
Molloybas cryptanthus	Hidden spider orchid, Icky	Orchidaceae	Data Deficient	Naturally uncommon
Myoporum laetum	Ngaio	Scrophulariaceae	Gradual Decline	Non Threatened
Myosotis forsteri	Forsters forget-me-not	Boraginaceae	Regionally Extinct	Non Threatened
Myosotis petiolata var. pansa	Forget-me-not	Boraginaceae	Regionally Endangered	Nationally endangered
Myosotis pygmaea	Pygmy forget-me-not	Boraginaceae	Regionally Extinct	Declining
Myosotis spathulata s.	None	Boraginaceae	Regionally Critical	Naturally uncommon
Myriophyllum robustum	Stout water milfoil	Haloragaceae	Regionally Critical	Declining
Myriophyllum votschii	None	Haloragaceae	Range Restricted	Naturally uncommon
Myrsine divaricata	Weeping matipo	Primulaceae	Regionally Endangered	Non Threatened
Neomyrtus pedunculata	Rohutu, Myrtle	Myrtaceae	Data Deficient	Non Threatened

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
Nertera scapanioides	None	Rubiaceae	Regionally Critical	Non Threatened
Nertera villosa	Hairy forest nertera	Rubiaceae	Regionally Critical	Non Threatened
Nestegis apetala	Coastal maire	Oleaceae	Regionally Endangered	Non Threatened
Nestegis cunninghamii	Black maire	Oleaceae	Regionally Critical	Non Threatened
Nestegis montana	Narrow-leaved maire	Oleaceae	Sparse	Non Threatened
Nothofagus solandri var. solandri	Black beech	Nothofagaceae	Regionally Critical	Non Threatened
Olearia albida	None	Asteraceae	Sparse	Non Threatened
Olearia allomii	Great Barrier tree daisy	Asteraceae	Range Restricted	Naturally uncommon
Olearia angulata	None	Asteraceae	Data Deficient	Naturally uncommon
Ophioglossum coriaceum	Adders tongue	Ophioglossaceae	Sparse	Non Threatened
Ophioglossum petiolatum	Stalked adders tongue	Ophioglossaceae	Regionally Critical	Nationally critical
Oplismenus hirtellus subsp. hirtellus	None	Poaceae	Data Deficient	Non Threatened
Paspalum orbiculare	Native paspalum, Scrobic	Poaceae	Serious Decline	Declining
Pelargonium inodorum	Kopata	Geraniaceae	Sparse	Non Threatened
Pellaea calidirupium	None	Pteridaceae	Range Restricted	Non Threatened
Pellaea falcata	Sickle fern	Pteridaceae	Regionally Critical	Relict
Pennantia corymbosa	Kaikomako	Pennantiaceae	Sparse	Non Threatened
Peraxilla tetrapetala	Red mistletoe, Pikirangi, pirta	Loranthaceae	Range Restricted	Declining
Petalochilus alatus	None	Orchidaceae	Data Deficient	Naturally uncommon
Petalochilus bartlettii	None	Orchidaceae	Data Deficient	Naturally uncommon
Phylloglossum drummondii	None	Lycopodiaceae	Regionally Extinct	Nationally critical
Picris	Native	Asteraceae	Serious Decline	Nationally

Current name	Common name	Family	Regional status <sup>7</sup>	National status <sup>8</sup>
burbidgeae	oxtongue			endangered
Pimelea longifolia	Long leaved Pimelea	Thymelaeaceae	Regionally Endangered	Data deficient
Pimelea tomentosa	None	Thymelaeaceae	Regionally Endangered	Nationally vulnerable
Pimelea villosa	Sand daphne	Thymelaeaceae	Regionally Extinct	Declining
Piper excelsum subsp. peltatum f. peltatum	Kawakawa, pepper tree	Piperaceae	Range Restricted	Naturally uncommon
Pisonia brunoniana	Parapara	Nyctaginaceae	Regionally Endangered	Relict
Pittosporum ellipticum	None	Pittosporaceae	Sparse	Naturally uncommon
Pittosporum huttonianum	Huttons Kohuhu	Pittosporaceae	Range Restricted	Non Threatened
Pittosporum kirkii	Kirks kohuhu	Pittosporaceae	Regionally Vulnerable	Declining
Pittosporum virgatum	None	Pittosporaceae	Range Restricted	Naturally uncommon
Plagianthus regius subsp. regius	Manatu, lowland ribbonwood, ribbonwood	Malvaceae	Regionally Critical	Non Threatened
Planchonella costata	Tawapou	Sapotaceae	Gradual Decline	Non Threatened
Plantago raoulii	None	Plantaginaceae	Regionally Critical	Non Threatened
Plumatichilos tasmanicum	Plumed greenhood	Orchidaceae	Regionally Critical	Nationally endangered
Poa billardierei	sand tussock, hinarepe	Poaceae	Regionally Critical	Declining
Poa imbecilla	Weak poa	Poaceae	Range Restricted	Non Threatened
Polygonum plebeium	Small knotweed	Polygonum	Regionally Extinct	Data deficient
Polystichum silvaticum	None	Dryopteridaceae	Range Restricted	Non Threatened
Pomaderris hamiltonii	Pale flowered Kumarahou	Rhamnaceae	Sparse	Naturally uncommon
Pomaderris phycifolia	Tauhinu	Rhamnaceae	Regionally Extinct	Nationally endangered
Pomaderris rugosa	Pomaderris	Rhamnaceae	Sparse	Naturally uncommon
Potamogeton ochreatus	Blunt pondweed	Potamogetonaceae	Sparse	Non Threatened
Potamogeton	Mud	Potamogetonaceae	Regionally	Non Threatened



Current name	Common name	Family	Regional status <sup>7</sup>	National status <sup>8</sup>
<i>n suboblongus</i>	pondweed	ae	Extinct	
<i>Potentilla anserinoides</i>	Silverweed	Rosaceae	Regionally Extinct	Non Threatened
<i>Prasophyllum hectorii</i>	Swamp leek orchid	Orchidaceae	Regionally Extinct	Relict
<i>Pseudopanax colensoi</i> var. <i>colensoi</i>	Mountain five finger, three finger	Araliaceae	Range Restricted	Non Threatened
<i>Pseudopanax discolor</i>	None	Araliaceae	Range Restricted	Non Threatened
<i>Pseudopanax ferox</i>	Fierce Lancewood	Araliaceae	Regionally Endangered	Naturally uncommon
<i>Pseudowintera colorata</i>	Red horopito, Mountain horopito, alpine peppertree	Winteraceae	Sparse	Non Threatened
<i>Psilotum nudum</i>	Whisk fern, Skeleton fork fern	Psilotaceae	Sparse	Non Threatened
<i>Pteris comans</i>	Coatal brake, netted brake	Pteridaceae	Sparse	Non Threatened
<i>Pterostylis cardiostigma</i>	None	Orchidaceae	Data Deficient	Non Threatened
<i>Pterostylis nutans</i>	Nodding greenhood orchid	Orchidaceae	Regionally Extinct	Vagrant
<i>Pterostylis paludosa</i>	Swamp greenhood	Orchidaceae	Data Deficient	Declining
<i>Ptisana salicina</i>	King fern, Para	Marattiaceae	Gradual Decline	Declining
<i>Puccinellia stricta</i>	Saltgrass	Poaceae	Regionally Critical	Non Threatened
<i>Ranunculus acaulis</i>	Sand buttercup, shore buttercup	Ranunculaceae	Regionally Endangered	Non Threatened
<i>Ranunculus glabrifolius</i>	Waoriki	Ranunculaceae	Data Deficient	Non Threatened
<i>Ranunculus macropus</i>	Swamp buttercup	Ranunculaceae	Regionally Critical	Data deficient
<i>Ranunculus urvilleanus</i>	None	Ranunculaceae	Serious Decline	Non Threatened
<i>Raukawa anomalus</i>	None	Araliaceae	Range Restricted	Non Threatened
<i>Raukawa edgerleyi</i>	Raukawa	Araliaceae	Regionally Vulnerable	Non Threatened
<i>Raukawa</i>	None	Araliaceae	Data Deficient	Non Threatened

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
simplex				
Rorippa divaricata	New Zealand water cress, Matangaoa	Brassicaceae	Regionally Critical	Nationally vulnerable
Rubus schmidelioides var. schmidelioides	Tataramoa, bush lawyer, white-leaved lawyer	Rosaceae	Regionally Extinct	Non Threatened
Rubus squarrosus	Leafless lawyer, Yellow-prickled lawyer	Rosaceae	Data Deficient	Non Threatened
Rumex flexuosus	Maori dock, NZ dock, runa	Polygonaceae	Regionally Extinct	Non Threatened
Ruppia megacarpa	Horses mane weed, lakeweed	Ruppiaceae	Data Deficient	Non Threatened
Ruppia polycarpa	Horses mane weed, lakeweed	Ruppiaceae	Data Deficient	Non Threatened
Rytidosperma clavatum	Bristle grass	Poaceae	Data Deficient	Non Threatened
Scandia rosifolia	Koheriki	Apiaceae	Serious Decline	Declining
Schizaea dichotoma	Fan fern	Schizaeaceae	Sparse	Naturally uncommon
Schizeilema trifoliolatum	None	Araliaceae	Regionally Critical	Non Threatened
Schoenus carsei	Carses schoenus	Cyperaceae	Regionally Critical	Nationally endangered
Schoenus concinnus	None	Cyperaceae	Regionally Critical	Non Threatened
Schoenus nitens	None	Cyperaceae	Regionally Critical	Non Threatened
Scleranthus biflorus	Canberra grass	Caryophyllaceae	Regionally Endangered	Non Threatened
Senecio biserratus	Fireweed	Asteraceae	Serious Decline	Non Threatened
Senecio marotiri	None	Asteraceae	Range Restricted	Naturally uncommon
Senecio quadridentatus	Cotton fireweed, white fireweed, pahokoraka	Asteraceae	Sparse	Non Threatened
Senecio repangae	Mokohinau groundsel	Asteraceae	Range Restricted	Naturally uncommon

Current name	Common name	Family	Regional status <sup>7</sup>	National status <sup>8</sup>
subsp. pokohinuensis				
Senecio repangae subsp. repangae	None	Asteraceae	Regionally Critical	Naturally uncommon
Senecio rufiglandulosus	None	Asteraceae	Regionally Critical	Non Threatened
Senecio scaberulus	Fireweed	Asteraceae	Regionally Critical	Nationally critical
Senecio sterquilinus	Guano groundsel	Asteraceae	Range Restricted	Relict
Solanum aviculare var. latifolium	Poroporo	Solanaceae	Range Restricted	Naturally uncommon
Sonchus kirkii	Puha, shore puha, NZ sow thistle	Asteraceae	Regionally Critical	Relict
Sophora fulvida	Kowhai	Fabaceae	Range Restricted	Naturally uncommon
Sophora microphylla	Kowhai, weeping kowhai, small leaved kowhai	Fabaceae	Sparse	Non Threatened
Sparganium subglobosum	Burr reed, maru	Sparganiaceae	Regionally Endangered	Non Threatened
Spiranthes novae-zelandiae	Lady's tresses, spiranthes	Orchidaceae	Range Restricted	Nationally vulnerable
Stegostyla atradenia	None	Orchidaceae	Sparse	Naturally uncommon
Stenostachys gracilis	None	Poaceae	Regionally Critical	Data deficient
Sticherus flabellatus var. flabellatus	None	Gleicheniaceae	Range Restricted	Non Threatened
Streblus banksii	Large leaved milk tree, turepo	Moraceae	Regionally Critical	Relict
Stuckenia pectinata	Fennel-leaved pondweed, sago pondweed	Potamogetonaceae	Data Deficient	Naturally uncommon
Syzygium maire	Swamp maire, maire tawake	Myrtaceae	Gradual Decline	Non Threatened

<b>Current name</b>	<b>Common name</b>	<b>Family</b>	<b>Regional status<sup>7</sup></b>	<b>National status<sup>8</sup></b>
Tetragonia tetragonoides	NZ spinach, kokihi, tutae-ikamoana	Aizoaceae	Regionally Critical	Naturally uncommon
Thelymitra aemula	Gumland sun orchid	Orchidaceae	Sparse	Non Threatened
Thelymitra carnea	Pink sun orchid, early sun orchid	Orchidaceae	Sparse	Non Threatened
Thelymitra cyanea	Swamp sun orchid, striped sun orchid	Orchidaceae	Data Deficient	Non Threatened
Thelymitra formosa	Sun orchid	Orchidaceae	Regionally Critical	Naturally uncommon
Thelymitra pulchella	Striped sun orchid,	Orchidaceae	Data Deficient	Non Threatened
Thelymitra tholiformis	Domed sun orchid	Orchidaceae	Sparse	Non Threatened
Thismia rodwayi	None	Thismiaceae	Data Deficient	Naturally uncommon
Tmesipteris sigmatifolia	Fossil fern, fork fern	Psilotaceae	Sparse	Non Threatened
Trilepidea adamsii	Adams mistletoe	Loranthaceae	Regionally Extinct	Extinct
Trisetum arduanum	None	Poaceae	Gradual Decline	Non Threatened
Trisetum lasiorhachis	None	Poaceae	Regionally Extinct	Non Threatened
Tupeia antarctica	Taapia, piritā, white mistletoe, tupia	Loranthaceae	Regionally Critical	Declining
Uncinia clavata	Bastard grass, fish hooks	Cyperaceae	Range Restricted	Non Threatened
Uncinia laxiflora	Lax bastard grass, hook sedge	Cyperaceae	Range Restricted	Non Threatened
Urtica incisa	Scrub nettle	Urticaceae	Data Deficient	Non Threatened
Utricularia australis	Yellow bladderwort	Lentibulariaceae	Regionally Critical	Nationally endangered
Utricularia delicatula	Bladderwort	Lentibulariaceae	Data Deficient	Relict
Utricularia dichotoma	None	Lentibulariaceae	Regionally Extinct	Non Threatened
Viola lyallii	Haaka, NZ native violet	Violaceae	Regionally Extinct	Non Threatened
Vittadinia australis	White fuzzweed	Asteraceae	Regionally Extinct	Non Threatened
Wahlenbergia littorcola	Coastal hairbell, glossy	Campanulaceae	Sparse	Non Threatened

Current name	Common name	Family	Regional status <sup>7</sup>	National status <sup>8</sup>
subsp. vernicosa	hairbell			
Zoysia minima	Prickly couch, zoysia	Poaceae	Gradual Decline	Non Threatened

### 3.0 Threatened ecosystems of Auckland

Much of the original indigenous vegetation that once covered the Auckland region has been lost or altered due to human impacts and now only 27 per cent of this indigenous landcover remains. On the mainland indigenous vegetation only 20% of the original indigenous landcover remains. Consequently, this has led to an overall decline in biodiversity, and a corresponding increase in the number of threatened ecosystems.

The table below lists the 35 terrestrial and freshwater ecosystems that occur in the Auckland region and their threat status. This threat status for ecosystems was determined by applying the World Conservation Union's (IUCN) criteria (Keith et al 2013) to each of the indigenous terrestrial and freshwater ecosystems that occur in Auckland.

**Table X.X: Threatened ecosystems of Auckland**

ECOSYSTEM NAME	CODE NAME	Threat status (based on IUCN system) <sup>9</sup>
Pohutukawa–puriri–karaka broadleaved forest	<b>WF5</b>	Critically Endangered
Totara–broadleaved forest	<b>WF6</b>	Critically Endangered
Puriri forest	<b>WF8</b>	Critically Endangered
Kahikatea–pukatea forest AND Kahikatea forest	<b>WF9 &amp; MF2</b>	Critically Endangered
Rimu–taraire–tawa forest	<b>WF10</b>	Critically Endangered
Kauri forest	<b>WF11</b>	Critically Endangered
Kauri–podocarp–broadleaved forest	<b>WF12</b>	Critically Endangered
Kauri–podocarp–broadleaved–beech forest	<b>WF13</b>	Endangered

<sup>9</sup> Osborne et al. In prep. Threatened terrestrial and freshwater ecosystems of Auckland. Auckland Council, Auckland.

<b>ECOSYSTEM NAME</b>	<b>CODE NAME</b>	<b>Threat status (based on IUCN system)<sup>9</sup></b>
Tawa–kohekohe–mangeao broadleaved–podocarp forest	<b>WF14</b>	Vulnerable
Tawa– <i>Weinmannia</i> –podocarp forest	<b>MF4</b>	Least Concern
Towai–rata–montane podocarp forest	<b>MF22</b>	Least Concern
Mangrove forest and scrub	<b>SA1</b>	Least Concern
Shore bindweed–knobby clubrush gravelfield/stonefield	<b>SA4</b>	Critically Endangered
Herbfield (coastal turf)	<b>SA5</b>	Not Evaluated
Iceplant–glasswort herbfield/loamfield	<b>SA7</b>	Critically Endangered
Manuka–mingimingi– <i>Machaerina</i> scrub/sedgeland (gumland)	<b>WL1</b>	Critically Endangered
Manuka–wirerush–restiad rushland	<b>WL2</b>	Critically Endangered
Bamboo rush, wirerush restiad rushland	<b>WL3</b>	Collapsed
Oioi restiad rushland/reedland	<b>WL10</b>	Critically Endangered
<i>Machaerina</i> sedgeland	<b>WL11</b>	Critically Endangered
<i>Manuka fen</i>	<b>WL12</b>	Not Evaluated
Herbfield (lakeshore turf)	<b>WL15</b>	Data Deficient
Flaxland	<b>WL18</b>	Critically Endangered
Raupo reedland	<b>WL19</b>	Critically Endangered
<i>Coprosma</i> – <i>Olearia</i> scrub	<b>WL20</b>	Critically Endangered
Spinifex–pingao grassland/sedgeland	<b>DN2</b>	Endangered
Oioi–knobby clubrush sedgeland	<b>DN5</b>	Not Evaluated

<b>ECOSYSTEM NAME</b>	<b>CODE NAME</b>	<b>Threat status (based on IUCN system)<sup>9</sup></b>
Pohutukawa treeland/rockland	<b>CL1</b>	Not Evaluated
Hebe–wharariki flaxland/rockland	<b>CL6</b>	Not Evaluated
Geothermal-heated water and steam	<b>GT2</b>	Least Concern
Subterranean rockland/stonefield	<b>CV1</b>	Least Concern
Kanuka scrub	<b>F11</b>	Least Concern
Manuka–kanuka scrub	<b>F12</b>	Least Concern
Broadleaved scrub/forest	<b>F14</b>	Least Concern

## 4.0 Scientific Importance

### 4.1. Distribution limits

Historical and extant populations of species at their geographical limits are important because they indicate whether a species is expanding geographically, receding or remaining static. Geographical limits have important implications for conservation and restoration and these natural limits should not be artificially enhanced or extended by planting (Cameron 2005). Under the distribution criteria, habitat that supports occurrences of a plant, animal or fungi that are at (or near) their national distributional limit will qualify as an SEA. The table below lists all species whose geographical limit sits within the Auckland region.

The records in the table below are mostly based on specimens held in the Auckland Museum Herbarium. There are a total of 27 northern (12) and southern (15) geographical limits listed for the Auckland region.

**Table X.X: Distribution limits of indigenous plants in Auckland**

<i>Scientific name</i>	Limit type (N = Northern, S = Southern)	Location	Observer	Herbarium reference	Observation date
<i>Hydrocotyle hydrophila</i>	N	37° 4' S Hunua Falls	R.O. Gardner	AK 184502	1/04/1988
<i>Schizeilema trifoliolatum</i>	N	37° 4' 32" Rutherford Property west of J.Hull Road	C D Kilgour, S Byers	AK 329737	1/11/2011
<i>Celmisia major</i> var. <i>major</i>	S	37° 3' S Paratutai Id	E.K. Cameron	AK 239077	1/05/1999
<i>Hebe bishopiana</i>	S	37° 2' S Omanawanui Trk	P.J. de Lange	AK 220776	1/09/1994
<i>Hebe macrocarpa</i> var. <i>latisepala</i>	S	37° 2' S Kohukohunu	L.B. Moore	CHR 103222	<Null>
<i>Ranunculus glabrifolius</i>	N*	37° 1' S Pararaha	E.K. Cameron	AK 279085	1/02/1991
<i>Senecio scaberulus</i>	S*	36° 56' S Hunua Ranges Papanui Point;	R.O. Gardner	AK 165332	1/04/1983
<i>Clematis forsteri</i>	N*	36° 57' S Maungaroa	A.D. Mead & K. Wood	AK 109972	1/10/1966
<i>Asplenium appendiculatum</i> subsp. <i>maritimum</i>	N	36° 56' S Whites Bay;	E.K. Cameron	AK 224585	1/12/1995
<i>Gastrodia minor</i>	N	36 54' S Waitakere Ra Spraggs Bush	J.E. Braggins,	AK 151985	1/12/1980
<i>Lindsaea viridis</i>	N*	ca. 36° 54' S Waitakere Ra	A.E. Wright	AK 223368	1/05/1970
<i>Hebe bishopiana</i>	N	36° 54' S nr Waitakere Reservoir	P.J. de Lange	AK 220459	1/08/1994
<i>Myosotis petiolata</i> var. <i>Pansa</i>	N	36° 53' S Bethells	A.E. Wright	AK 142951	1/01/1977
<i>Senecio rufiglandulosus</i>	N	36° 53' S Kawahaia Id	G.A. Taylor	AK 277972	1/09/1989
<i>Hebe obtusata</i>	N	36 50' S Muriwai	T.F. Cheeseman	AK7671	<Null>
<i>Calochilus herbaceus</i>	S	36° 43' S Albany;	R.J. Stanley,E. Asquith	AK 251366	1/11/2000
<i>Calystegia marginata</i>	S	36° 54' S Waikumete Cemetery	P.J. de Lange	AK 251356	1/10/2000
<i>Phylloglossum drummondii</i>	S*	36° 55' S Glen Eden (Waikumete)	M.H. Knight	AK 259225	1/06/1952
<i>Ipomoea cairica</i>	S	36 35' S Tiritiri Id	A. Hansen	AK 7382	1/01/1907
<i>Machaerina</i>	S*	36° 35' S Shelly Beach	P.J. De	AK	1/05/2004



Scientific name	Limit type (N = Northern, S = Southern)	Location	Observer	Herbarium reference	Observation date
<i>complanata</i>			lange, M. Goodwin,	286638	
<i>Stenostachys gracilis</i>	N*	36° 35' S Shelly Beach	P.J. de Lange & M. Goodwin,	AK 286639,	1/05/2004
<i>Hebe diosmifolia</i>	S	36° 3' S Pukitu;	B.R. Burns	AK 72447	1/02/1984
<i>Schoenoplectus pungens</i>	S	36° 27' S Waionui Inlet	E.K. Cameron & P.J. Bellingham	AK 212147	1/07/1993
<i>Clianthus puniceus</i>	S	36° 25' S Moturemu Id;	P. Hynes,	AK 31510,	1/10/1953
<i>Coprosma parviflora</i>	S*	Okahukura Peninsula	M.E. Young	AK 218630	1/12/1993
<i>Alseuosmia banksii</i> var. <i>banksii</i>	S	ca. 36° 16' S Logues Bush	C.J. West	AK 272102	1/03/1983
<i>Pimelea acra</i>	S	Hauturu (Little Barrier Island)	E.K. Cameron	Unknown	Unknown

#### 4.2 Endemic species

Under this criterion, any habitat that supports occurrences of a plant, animal or fungi or indigenous ecosystem or habitat that supports occurrences of a plant, animal or fungi that are unique (endemic) to the Auckland region (and not found anywhere else) qualify as significant ecological areas. In addition species or ecosystems that are near-endemic (where the only other occurrence(s) is within 100km of the council boundary) also qualify. The species below are those that are endemic or near-endemic to the Auckland region.

There are eleven vascular plant species, one bryophyte and seven birds considered endemic to the Auckland Region. More research is required to determine the status of other taxa such as invertebrates, lizards and fungi.

#### Birds

**Black petrel *Procellaria parkinsoni*** – Formerly bred on many forested mainland mountain ranges in North island and NW South Island. A relict population totalling about 15,000. It is confined now to Great Barrier and Little Barrier Islands with most (c. 4500 pairs) breeding on Great Barrier Island, with c.100 pairs on Little Barrier.

**Cook's petrel – *Pterodroma cookii*** – Formerly bred on many forested mainland mountain ranges in main both islands. A relict population occurs on Little Barrier Island, which probably now supports over 99% of remaining population (at least 250,000 pairs). A second small colony occurs on Codfish

Island which is now recovering following kiore eradication, but probably supports only low 100s of breeding pairs there.

**NZ storm petrel – *Pealeornis maoriana*** – May have bred on a number of northern islands and the mainland in the past but is now known to breed on Little Barrier Island.

**Brown teal - *Anas chlorotis*** – Formerly widespread and abundant throughout New Zealand. The stronghold is now on Great Barrier Island for the remaining natural population of <1000. Recent translocations to captive breeding populations and from there to other sites (such as Tiritiri Matangi Island, Coromandel, Tawharanui Regional Park and elsewhere) have occurred.

**Wrybill - *Anarhynchus frontalis*** – North and South Islands, wintering on northern harbours and breeding on central South Island riverbeds, total population c. 5000 birds. Auckland region is significant for this species because Manukau Harbour now wintering c. 50% of the population. Firth of Thames winters bulk of remainder, with smaller number in the southern Kaipara, and smaller numbers still on other northern harbours.

**Fairy tern - *Sterna nereis davisae*** – Formerly widespread in New Zealand, now only a tiny relict population of c. 35-40 birds. About 30% of 11 remaining breeding pairs nest in the Auckland region, where it breeds at Papakanui Spit and Pakiri. The only other known breeding sites are Waipu and Mangawhai Spits. Up to 35% of the global population of 35-40 birds use a post-breeding flocking site at Te Arai Stream north of Auckland.

**Stitchbird/hihi - *Notiomystis cincta*** – Formerly North Island only. The only viable remaining population (c. 3000?) confined to Little Barrier Island. This species has been translocated unsuccessfully to Hen and Cuvier islands. Small conservation-dependent (supplementary-fed) populations resulting from translocations occur at Tiritiri Matangi, Kapiti Island and Karori Sanctuary. A recent translocation was made to Maungatautari.

## **Vascular plants**

*Celmisia major* var. *major* (Titirangi or Laingholm)

*Hebe bishopiana* (Type locality: Hills above Huia - probably Mt Donald McLean), Waitakere Ranges)

*Hebe pubescens* subsp. *rehuarum* (Type locality: Lady Track, Fitzroy, Great Barrier Island)

*Hebe pubescens* subsp. *sejuncta* (Type locality: Hauturu (Little Barrier Island))

*Kunzea sinclairii* (Type locality: Mt Young, Great Barrier Island)

*Lepidium amissum* (AK 4474; Waitakere) - this is a new, endemic and now believed extinct species which was described in 2013. It is only known from two old gatherings made from somewhere between Karekare and the Manukau Heads (Type locality: "Between Karekare and Manukau Heads").

*Lobelia* aff. *angulata* (AK 212143; Woodhill) - only known from Woodhill Forest and the Waitakere Ranges

*Olearia allomii* (Type locality: Te Ahumata, Great Barrier Island)

*Parahebe jovellanooides* (Type locality: Ararimu River, Riverhead)

*Senecio repangae* subsp. *pokohinuensis* (Type locality: Pokohinu (Burgess Island), Mokohinau Islands Nature Reserve)

### **Bryophytes**

*Lindbergia maritima* (moss) (Type locality: Waitakere Ranges)

### **Near Endemic**

#### *Vascular Plants*

*Dracophyllum patens* (GBI - type locality - but also on Table Mountain, Mt Rowe and the upper Kuaeranga Valley)

*Epacris sinclairii* (GBI - Type Locality - but also on Table Mountain, Mt Rowe and the upper Kuaeranga Valley)

*Hebe obtusata* (Waitakere Ranges - Type Locality - but also known from Kawhia Harbour (from two small sites) where it may even now be extinct)

*Pomaderris hamiltonii* - close to being endemic to the Auckland region. Its souther distribution limit is south of Miranda (outside of Auckland).

### **4.3 Type locality**

Under this criterion, any habitat that supports occurrences of a plant, animal or fungi that is the type locality for that taxon is an SEA. Plant species and their type localities in Auckland are listed below. Herbarium location details are often quite general (especially for older records) or even deliberately obfuscated. Where a type locality was found within the boundary of a proposed SEA or was within 50 metres of an SEA then it was regarded as being associated with that specific site.

More research is required to determine type localities in the region for animals and fungi, therefore only those for plant species are listed here. This data has come from the national herbaria in Auckland (Auckland Museum), Wellington (Te Papa Tongarewa) and Lincoln (Landcare Research). They are the primary custodians of this information.

**Table X.X: Type localities for flora and fungi in Auckland**

Herbarium	Accession number	Scientific name	Collector	Year	Location
Auckland	295823	<i>Acrosymphyton firmum</i>	M W Hawkes 79-76, D R Bonin	1979	New Zealand, North Island, Leigh Marine Reserve, "Table Top Rock"
PDD	31874	<i>Amphilogia gyrosa</i>	R.E. Beever	1973	Waitakere Ranges, Spragg Bush
PDD	60846	<i>Anthracophyllum</i>	R.E. Beever	1973	Waitakere Ranges, Waitatarua

Herbarium	Accession number	Scientific name	Collector	Year	Location
		<i>pallidum</i>			
PDD	18975	<i>Arachnopeziza rhopalostylidis</i>	J.M. Dingley	1955	Waitakere Ranges
CHR	CHR 290559 A	<i>Asplenium lamprophyllum</i>	H Carse	1924	Lava flat, Mt Wellington, Auckland
PDD	49672	<i>Astrocystis cyatheae</i>	G.J. Samuels, P.R. Johnston	1980	Kaipara, Mt Auckland, Atuanui State Forest
PDD	32335	<i>Astrosporina aequalis</i>	J.M. Dingley	1974	Waitakere Ranges, Ferndown Track
PDD	31873	<i>Austropezia samuelsii</i>	G.J. Samuels	1973	Waitakere Ranges, Walker Bush Track
PDD	12800	<i>Bionectria kowhai</i>	J.M. Dingley	1953	Piha Valley
PDD	30637	<i>Bionectria ralfsii</i>	J.M. Dingley, G.J. Samuels, C.E. Samuels	1973	Piha
Auckland	232046	<i>Blechnum triangularifolium</i>	T C Chambers	1961	New Zealand, [North Island], Auckland, Green Bay, Manukau Harbour, tertiary mudstone, coastal cliffs, S aspect
PDD	24629	<i>Boletus leptospermi</i>	R.F.R. McNabb	1964	Titirangi, Tanekaha Road
Auckland	26031	<i>Boodlea mutabile</i>	U V Dellow	1949	[New Zealand, North Island], N Auckland, Leigh
Auckland	18957	<i>Buellia cranwelleae</i>	L M Cranwell	1933	New Zealand, North Island, Waitemata Co., Anawhata
Auckland	18961	<i>Caloplaca acheila</i>	L M Cranwell	1932	New Zealand, North Island, Waitemata Co., Anawhata
PDD	27226	<i>Camarophyllus impurus</i>	E. Horak	1981	Waitakere Ranges, Mill Bay
PDD	60261	<i>Campanella rubescens</i>	P. Warren	1978	Swanson, University Reserve
PDD	29270	<i>Campanella vinosolvida</i>	D.W. Dye	1971	Laingholm
PDD	30412	<i>Capnokyma corticola</i>	S.J. Hughes	1963	Waitakere Ranges, Rangemore Track
CHR	CHR 45532 C	<i>Carmichaelia aligera</i>	ex L.B. Moore	1938	Anawhata, Auckland
Auckland	103140	<i>Carmichaelia australis</i>	L B Moore	1948	[New Zealand, North Island], Auck., West Coast, Anawhata
PDD	20523	<i>Catenularia longispora</i>	S.J. Hughes	1963	Henderson Valley, Walker's Bush

Herbarium	Accession number	Scientific name	Collector	Year	Location
Auckland	9908	<i>Celmisia major</i> var. <i>major</i>	T F Cheeseman	1915	New Zealand, North Island, north of Manukau Heads, Karekare Cliffs
PDD	43152	<i>Cercospora eragrostidis</i>	J.M. Dingley	1975	Waitakere Ranges
PDD	21403	<i>Chaetosphaeria aotearoae</i>	S.J. Hughes	1963	Waitakere Ranges, Ruaotuwheua
PDD	21603	<i>Chaetosphaeria novae-zelandiae</i>	J.M. Dingley	1963	Waitakere Ranges, Home Track
PDD	32868	<i>Chalara agathidis</i>	W.B. Kendrick	1974	Waitakere Ranges, Ricker Track
PDD	32872	<i>Chalara gracilis</i>	W.B. Kendrick	1974	Waitakere Ranges, Fairy Falls Track
PDD	30406	<i>Chalara parvispora</i>	J.M. Dingley	1963	Waitakere Ranges, Centennial Track
PDD	32639	<i>Chalara sessilis</i>	W.B. Kendrick	1974	Northcote, Kauri Glen Park
PDD	30409	<i>Chalara unicolor</i>	S.J. Hughes	1963	Piha, Kitekite Stream
PDD	57220	<i>Chalarodes bisetis</i>	R.E. Beever	1987	Waitakere Ranges, Spragg Bush
PDD	46963	<i>Chlorovibrissea phialophora</i>	P.R. Johnston	1982	Waitakere Ranges, Nihotupu Dam
PDD	46639	<i>Clavaria cupreicolor</i>	E. Horak	1981	Mill Bay
PDD	46674	<i>Clavaria plumbeoargillacea</i>	E. Horak	1981	Mill Bay
PDD	46675	<i>Clavaria roseoviolacea</i>	P.R. Johnston	1981	Mill Bay
PDD	46677	<i>Clavaria subviolacea</i>	E. Horak, P.R. Johnston	1981	Waitakere Ranges, Kakamatua Stream
PDD	46643	<i>Clavulina urnigerobasidiata</i>	R.H. Petersen, G.J. Samuels	1982	Mill Bay
PDD	44633	<i>Coccomyces cupressini</i>	P.R. Johnston	1983	Waitakere Ranges, Sharp Bush
PDD	44643	<i>Coccomyces globosus</i>	P.R. Johnston, G.J. Samuels, E.H.C. McKenzie	1982	Waitakere Ranges, Walker Bush Track
PDD	44654	<i>Coccomyces lauraceus</i>	P.R. Johnston	1982	Waitakere Ranges, Nihotupu Dam
PDD	20965	<i>Codinaea fertilis</i>	S.J. Hughes	1963	Waitakere Ranges, Rangemore Track
PDD	25758	<i>Codinaea setosa</i>	S.J. Hughes	1963	Waitakere Ranges, Kauri Knoll Track
Te Papa	SP048801	<i>Coprosma acerosa</i>	Kirk, Thomas	<Null>	Auckland
Te Papa	SP051576	<i>Coprosma arborea</i>	Cheeseman, Thomas	1875	Near Lake Pupuke
Te Papa	SP049529	<i>Coprosma areolata</i>	Kirk, Thomas	1864	Great Omaha [Whangateau]
Auckland	8809	<i>Coprosma rhamnoides</i>	T F Cheeseman	<Null>	New Zealand, North Island, near Auckland, Chelsea
PDD	46965	<i>Cordierites acanthophora</i>	G.J. Samuels, J.M. Dingley, P.R. Johnston, R.P. Korf	1981	Waitakere Ranges, Old Coach Road Track
PDD	11717	<i>Cordyceps lateritia</i>	J.M. Dingley	1949	Waitakere Ranges
PDD	11428	<i>Corticium ampullosporum</i>	J.M. Dingley	1951	Piha, Whites Stream

Herbarium	Accession number	Scientific name	Collector	Year	Location
PDD	4702	<i>Corticium bullatum</i>	G.H. Cunningham	1946	Hunua Ranges, Hunua Falls
PDD	5568	<i>Corticium kauri</i>	J.M. Dingley	1947	Huia
PDD	4761	<i>Corticium perenne</i>	J.M. Dingley	1946	Titirangi
PDD	27255	<i>Cortinarius olorinatus</i>	E. Horak	1981	Warkworth, the Dome
PDD	27265	<i>Cortinarius phaeochlorus</i>	E. Horak	1981	Waitakere Ranges, Anawhata Rd
PDD	60751	<i>Cryptophiale pusilla</i>	E.H.C. McKenzie	1992	Waitakere Ranges, Spragg bach
PDD	25556	<i>Dacrymyces novae-zelandiae</i>	J.M. Dingley	1952	Huia
PDD	76620	<i>Dactylaria leptospermi</i>	J.A. Cooper	2001	Karekare
Auckland	108768	<i>Danhatchia australis</i>	R E Beever, J Beever	1962	[New Zealand, North Island], (Kaipara), Glorit [Mt Auckland, Atuanui Forest]
PDD	15068	<i>Dendrothele navicularis</i>	J.M. Dingley	1955	Piha, Whেকatahi Stream
PDD	27180	<i>Dermocybe alienata</i>	E. Horak	1969	Waitakere Ranges, Piha Valley
PDD	27181	<i>Dermocybe largofulgens</i>	E. Horak	1969	Waitakere Ranges, Titirangi
PDD	20966	<i>Dictyosporium hughesii</i>	S.J. Hughes	1963	Waitakere Ranges, Rangemore Track
PDD	25012	<i>Eichleriella hoheriae</i>	J.M. Dingley	1957	Waitakere Ranges, Rangemore Track
PDD	30416	<i>Endophragmiella novae-zelandiae</i>	S. Davison	1963	Waitakere Ranges, Rangemore Track
PDD	29508	<i>Entoloma canoconicum</i>	J.M. Dingley	1971	Piha, Kitekite Falls
PDD	30267	<i>Entoloma croceum</i>	B.S. Parris	1971	Titirangi, Clark Bush
PDD	30272	<i>Entoloma mcNabbianum</i>	R.F.R. McNabb	1967	Titirangi, Atkinson Park
Te Papa	SP040972/A	<i>Epilobium chionanthum</i>	Kirk, Thomas	1868	Lake Takapuna [Lake Pupuke]
PDD	14244	<i>Epithele nikau</i>	S.D. Baker	1954	Waitakere Ranges, Cascades
PDD	31006	<i>Favolaschia calocera</i> var. <i>claudopus</i>	R.E. Beever	1973	Waitakere Ranges, Waiatarua
PDD	75316	<i>Favolaschia cyatheae</i>	S. Whitton	2002	Hunua Ranges
CHR	CHR 570078	<i>Fissidens rigidulus</i> var. <i>pseudistrictus</i>	JE & RE Beever 73-96a	1992	NI, N Auckland, Waitakere Ranges, Glen Esk Stream
PDD	21599	<i>Fusichalara dingleyae</i>	S.J. Hughes	1963	Waitakere Ranges, Home Track
PDD	30179	<i>Gomphus dingleyae</i>	J.M. Dingley	1972	Waitakere Ranges, Waiatarua
PDD	44960	<i>Gomphus novae-zelandiae</i>	B.P. Segedin	1980	Titirangi, Atkinson Park
Te Papa	SP044188	<i>Gunnera dentata</i>	Cheeseman, Thomas	<Null>	Waitakere River
PDD	61990	<i>Gymnomyces fuscus</i>	R.E. Beever	1992	Waitakere Ranges, Goldie Bush, Mokoroa Falls Track
PDD	20961	<i>Hadrosporium dingleyae</i>	S.J. Hughes	1963	Waitakere Ranges, Centennial Track
PDD	20506	<i>Helminthosporium dictyoseptatum</i>	F.J. Morton	1963	Henderson Valley, Walker's Bush
PDD	19047	<i>Helotium elaeocarpi</i>	J.M. Dingley	1957	Waitakere Ranges

Herbarium	Accession number	Scientific name	Collector	Year	Location
Auckland	295874	<i>Humbrella hydra hydra</i>	J Laxton	1968	[New Zealand, North Island], east coast of Northland, Leigh, Goat Island
PDD	24713	<i>Hydnum crocidens var. badium</i>	R.F.R. McNabb	1965	Titirangi, Atkinson Park
PDD	11805	<i>Hymenochaete minuscula</i>	J.M. Dingley	1951	Piha, Whites Stream
Te Papa	P006111	<i>Hymenophyllum armstrongii</i>	Cheeseman, Thomas	<Null>	Titirangi Range
PDD	10453	<i>Hypocrea coprosma</i>	J.M. Dingley	1948	Waitakere Ranges, Waiatarua
PDD	6262	<i>Hypocrea sulfurella</i>	J.M. Dingley	1948	Waitakere Ranges, Cutty Grass Track
PDD	45034	<i>Hypoderma cordylines</i>	P.R. Johnston, S.L. Parkes	1983	Waitakere Ranges, Rangemore Track
PDD	25041	<i>Hypomyces patchii</i>	R.F.R. McNabb	1966	Waitakere Ranges, Sharp Bush
PDD	24773	<i>Hypoxyton aucklandiae</i>	J.M. Dingley	1965	Piha
PDD	23525	<i>Hypoxyton subcorticeum</i>	J.M. Dingley	1963	Waitakere Ranges, Piha Valley Track
PDD	25973	<i>Laccaria ohiensis var. paraphysata</i>	R.F.R. McNabb	1967	Titirangi, Atkinson Park
PDD	18615	<i>Lachnella nikau</i>	S.D. Brook	1956	Piha, Centennial Track
PDD	18980	<i>Lachnum pteridicola</i>	J.M. Dingley	1948	Waitakere Ranges
Te Papa	SP057078	<i>Lagenifera pumila</i>	Kirk, Thomas	1866	Great Omaha [Whangateau].
PDD	19034	<i>Lanzia allantospora</i>	J.D. Atkinson	1957	Huia
PDD	19040	<i>Lanzia berggrenii var. metrosideri</i>	S. McBeth	1958	Waitakere Ranges, Waiatarua
PDD	24774	<i>Lauterbachella dicksoniifolia</i>	J.M. Dingley	1965	Henderson Valley, Sharps Bush
Auckland	10445	<i>Leptinella rotundata</i>	T F Cheeseman	1880	New Zealand, North Island, Waitakerei [Waitakere] West, cliffs
Auckland	288243	<i>Lindbergia maritima</i>	J Lewinsky 74-431	1974	New Zealand, North Island, west of Auckland, Waitakere coast
PDD	95060	<i>Lylea rhopalostylidis</i>	E.H.C. McKenzie	2008	North Piha beach, start of White track
PDD	20956	<i>Menispora uncinata</i>	J.M. Dingley, S.J. Hughes	1963	Waitakere Ranges, Centennial Track
PDD	20518	<i>Metacapnodium fraseriae</i>	S.J. Hughes	1963	Piha
PDD	21219	<i>Metacapnodium fraseriae</i>	J.M. Dingley	1963	Piha
CHR	CHR 296099	<i>Metrosideros sub-tomentosa</i>	H Carse	22	Titirangi nr Auckland
Te Papa	A002435/A	<i>Microdictyon</i>	Dellow, Una	1949	Leigh
PDD	47874	<i>Monographella passiflorae</i>	G.I. Robertson	1980	Mt Albert Research Centre
PDD	56705	<i>Mycena oratiensis</i>	B.P. Segedin	1976	Oratia
PDD	56708	<i>Mycena vinaceipora</i>	B.P. Segedin	1976	Titirangi, Atkinson Park

Herbarium	Accession number	Scientific name	Collector	Year	Location
PDD	11491	<i>Mycobonia disciformis</i>	S.D. Baker	1952	Henderson Valley, Sharps Bush
PDD	20003	<i>Mycosphaerella enteleae</i>	J.M. Dingley	1961	Waitakere Ranges, Cascade Kauri Park
Te Papa	SP002432	<i>Myosotis petiolata</i> var. <i>pansa</i>	Petrie, Donald	1914	West Auckland, Waitakerei [Waitakere], Sea-cliffs just south of Kare Kare [Karekare]
PDD	44235	<i>Nectria chaetopsinae-penicillatae</i>	G.J. Samuels	1977	Waitakere Ranges, Marguerite Track
PDD	7490	<i>Nectria manuka</i>	D.W. McKenzie	1948	Mt Albert
PDD	7556	<i>Nectria radicola</i> var. <i>coprosmae</i>	J.M. Dingley	1948	Titirangi
PDD	17916	<i>Odontia fragilis</i>	S.D. Baker	1954	Waitakere Ranges, Cascade Kauri Park
PDD	17925	<i>Odontia lutea</i>	J.M. Dingley	1954	Henderson Valley, Mountain Road
Te Papa	SP032041	<i>Olearia furfuracea</i> var. <i>angustata</i>	Kirk, Thomas	1866	Great Omaha [Whangateau].
Auckland	304567	<i>Parahebe jovellanoides</i>	P J de Lange 7534, G R Davidson, R O Gardner, M E Young	2008	Waimauku
PDD	7348	<i>Peniophora utriculosa</i>	J.M. Dingley	1949	Waitakere Ranges, Anawhata Road
PDD	21210	<i>Phaeostalagmus novae-zelandiae</i>	S.J. Hughes	1963	Piha, Kitekite Track
PDD	30422	<i>Phragmocephala atra</i> var. <i>stenophora</i>	S.J. Hughes	1963	Titirangi, Exhibition Drive
PDD	17247	<i>Phyllachora manuka</i>	J.M. Dingley	1956	Piha
PDD	62703	<i>Pirottaea horoeka</i>	P.R. Johnston	1993	Waitakere Ranges, Rangemore Track
Te Papa	SP035941	<i>Pittosporum x intermedium</i>	Kirk, Thomas	1868	Kawau Island
PDD	25293	<i>Platygløea australis</i>	R.F.R. McNabb	1966	Henderson Valley, Sharps Bush
PDD	74984	<i>Pleurothecium leptospermi</i>	J.A. Cooper	2001	Karekare
PDD	59757	<i>Pleurotus velatus</i>	B.P. Segedin	1978	Bethells Beach
PDD	42208	<i>Podocrella harposporifera</i>	G.J. Samuels, J.W. Paden, R.E. Beever, R.P. Korf, P.R. Johnston	1981	Waitakere Ranges, Fairy Falls Track
PDD	10945	<i>Podonectria gahnia</i>	J.M. Dingley	1947	Waitakere Ranges
PDD	66261	<i>Polyporus septosporus</i>	J.E. Braggins	1986	off Bethells Road just past quarry
PDD	24696	<i>Porphyrellus brunneus</i>	R.F.R. McNabb	1965	Titirangi, Atkinson Park
PDD	82012	<i>Pseudocercospora dianellae</i>	C.F. Hill	2003	Grey Lynn, Western Springs Park
PDD	82026	<i>Pseudocercospora myopori</i>	C.F. Hill	2003	Western Springs Park
CHR	CHR 177314	<i>Pterostylis brumalis</i>	E.D. Hatch	1966	Laingholm, Auckland Province



Herbarium	Accession number	Scientific name	Collector	Year	Location
PDD	9385	<i>Puccinia maurea</i>	D. Petrie	<Null>	Mt St John
Auckland	327883	<i>Ramalodium dumosum</i>	J K Bartlett 22639a	1981	New Zealand, North Island, Auckland, Waitakere Range, [Huia]
PDD	20629	<i>Rhinocladium pulchrum</i>	S.J. Hughes	1963	Titirangi
PDD	8385	<i>Richoniella pumila</i>	M. Hodgkins	<Null>	Titirangi
PDD	23199	<i>Rosellinia dingleyae</i>	J.M. Dingley	1963	Piha
PDD	20580	<i>Rosellinia freycinetiae</i>	F.J. Morton	1963	Henderson Valley, Walker's Bush
PDD	49674	<i>Rosellinia johnstonii</i>	G.J. Samuels, P.R. Johnston	1980	Kaipara, Mt Auckland, Atuanui State Forest
PDD	49690	<i>Rosellinia samuelsii</i>	G.J. Samuels, P.R. Johnston	1980	Huia, Parau Track
PDD	26627	<i>Russula acrolamellata</i>	R.F.R. McNabb	1967	Titirangi, Atkinson Park
PDD	26545	<i>Russula albolutescens</i>	R.F.R. McNabb	1967	Titirangi, Atkinson Park
PDD	26945	<i>Russula allochroa</i>	R.F.R. McNabb	1967	Titirangi, Bishop Park Scenic Reserve
PDD	26568	<i>Russula allochroa</i>	R.F.R. McNabb	1967	Henderson Valley, Sharps Bush
PDD	26547	<i>Russula aucklandica</i>	R.F.R. McNabb	1967	Titirangi, Bishop Park Scenic Reserve
PDD	26935	<i>Russula cremeoochracea</i>	R.F.R. McNabb	1965	Waitakere Ranges, Fairy Falls Track
PDD	26615	<i>Russula griseoviridis</i>	R.F.R. McNabb, R.J. McNabb	1966	Titirangi, Bishop Park Scenic Reserve
PDD	26940	<i>Russula littoralis</i>	R.F.R. McNabb	1967	Bethells Beach
PDD	26647	<i>Russula macrocystidiata</i>	R.F.R. McNabb	1967	Henderson Valley, Sharps Bush
PDD	26936	<i>Russula multicystidiata</i>	R.F.R. McNabb	1967	Titirangi, Atkinson Park
PDD	26618	<i>Russula novae-zelandiae</i>	R.F.R. McNabb	1967	Titirangi, Bishop Park Scenic Reserve
PDD	26573	<i>Russula pudorina</i>	R.F.R. McNabb	1967	Henderson Valley, Sharps Bush
PDD	26574	<i>Russula pudorina</i>	R.F.R. McNabb	1967	Titirangi, Atkinson Park
PDD	26633	<i>Russula subvinosa</i>	R.F.R. McNabb	1967	Titirangi, Atkinson Park
PDD	26620	<i>Russula vinaceocuticulata</i>	R.F.R. McNabb	1967	Titirangi, Bishop Park Scenic Reserve
PDD	46958	<i>Sclerocrana atra</i>	G.J. Samuels, P.R. Johnston	1980	Waitakere Ranges, Cascades
PDD	25610	<i>Sebacina pruinosa</i>	R.F.R. McNabb, R.J. McNabb	1966	Titirangi, Bishop Park Scenic Reserve
CHR	CHR 8206	<i>Sophora microphylla</i> var. <i>fulvida</i>	<Null>	<Null>	Anawhata
PDD	21602	<i>Sporoschismopsis dingleyae</i>	J.M. Dingley	1963	Waitakere Ranges, Home Track
PDD	41858	<i>Stictis collospermi</i>	P.R. Johnston, G.J. Samuels, R. Korf, J.M. Dingley	1981	Waitakere Ranges, Fairy Falls Track
PDD	41873	<i>Stictis dealbata</i>	P.R. Johnston, G.J. Samuels	1980	Huia, Parau Dam

Herbarium	Accession number	Scientific name	Collector	Year	Location
PDD	41848	<i>Stictis inconstans</i>	P.R. Johnston, G.J. Samuels	1980	Huia, Parau Dam
PDD	41877	<i>Stictis laciniata</i>	P.R. Johnston	1982	Anawhata Road, Chateau-Mosquito Track
PDD	41849	<i>Stictis lata</i>	P.R. Johnston	1980	Waitakere Ranges, Kakamatua Stream
PDD	41868	<i>Stictis paucula</i>	P.R. Johnston, G.J. Samuels, M.E. Lanigan	1980	Piha, Kitekite Track
PDD	41004	<i>Stictis ramuligera var. minor</i>	P.R. Johnston, G.J. Samuels, R. Korf, J. Paden	1981	Waitakere Ranges, Fairy Falls Track
PDD	41899	<i>Stictis subiculata</i>	P.R. Johnston, G.J. Samuels	1981	Waitakere Ranges, Cascade Track
PDD	39480	<i>Stilbohypoxyton novae-zelandiae</i>	G.J. Samuels, W.S. Versluys, P.R. Johnston, Y. Joe	1979	Titirangi, Clark Bush
Te Papa	SP017904	<i>Streblus banksii</i>	Kirk, Thomas	1864	Great Omaha [Whangateau].
PDD	26297	<i>Synchytrium hypochaeridis</i>	J.S. Karling	1965	Henderson Valley, Sharps Bush
PDD	27066	<i>Thaxterogaster aurantiacus</i>	E. Horak, R.F.R. McNabb	1967	Titirangi, Atkinson Park
PDD	41946	<i>Trichosphaerella tuberculata</i>	G.J. Samuels, P.R. Johnston	1980	Huia, Parau Track
PDD	34193	<i>Ulocoryphus mastigophorus</i>	W.B. Kendrick	1974	Waitakere Ranges, Scenic Drive
PDD	11859	<i>Vararia protrusa</i>	J.D. Atkinson	1952	Cornwallis
PDD	28170	<i>Veronaea filicina</i>	J.M. Dingley	1969	Waitakere Ranges, Sharp Bush
Te Papa	SP084005	<i>Veronica bishopiana</i>	Bishop, J with Carse, Harry & Jenkins, C	1923	Waitemata [Harbour], Huia,
PDD	17246	<i>Vestergrenia leucopogonis</i>	J.M. Dingley	1956	Piha
PDD	20620	<i>Xenosporium boivinii</i>	S.J. Hughes, J.M. Dingley	1963	Titirangi
PDD	25165	<i>Xerocomus griseoolivaceus</i>	R.F.R. McNabb	1966	Henderson Valley, Sharps Bush
PDD	29449	<i>Xylohypha novae-zelandiae</i>	S.J. Hughes	1963	Waitakere Ranges, McKenzie Track
PDD	21519	<i>Xylohypha palmicola</i>	S.J. Hughes	1963	Swanson, Kauri Park

### Largest individual or ecosystem

To meet this criterion a site must contain the largest example of an indigenous ecosystem, or habitat of indigenous fauna in Auckland or its ecological district. This also includes habitat that supports occurrences of a plant, animal or fungi that is the largest specimen or largest population of the species in Auckland or New Zealand. Examples of sites in Auckland that support the largest populations in the region or New Zealand are withheld as they are for species subject to illegal collection.

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