



# Regional Conservation Status of Indigenous Vascular Plants in Otago

Scott Jarvie, John Barkla, Brian Rance, Geoff Rogers, Richard Ewans, Mike Thorsen

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Otago Threat Classification Series 3

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Otago  
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*Otago Threat Classification Series* is a scientific monograph series presenting publications related to regional threats assessments of groups of taxa in the Otago region. Most will be lists providing regional threat assessments of members of a plant or animal group (e.g., reptiles, bats, birds, indigenous vascular plants), and leverages off national assessments for the New Zealand Threat Classification System within the regional context.

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*Helichrysum simpsonii* subsp. *tumidum*, Threatened – Regionally Vulnerable. Photograph by John Barkla

*Craspedia argentea*, Threatened – Regionally Critical. Photograph by John Barkla

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## **Executive Summary**

This report provides the first assessment of the regional conservation status of all indigenous vascular plant taxa known in Otago. Standardised methodology was followed to assess the regional threat status of 1242 indigenous vascular plant taxa in the Otago region. Two hundred and twenty-seven indigenous plant taxa were assessed as Regionally Threatened (Regionally Critical = 93; Regionally Endangered = 68; Regionally Vulnerable = 66), 275 as Regionally At Risk (Regionally Declining = 50; Regionally Naturally Uncommon = 225), 614 as Regionally Not Threatened, one as Regional Non-resident Native (Regional Coloniser = 1), and 115 as Regionally Data Deficient. The percentage of indigenous vascular plant taxa in Otago that are Regionally Threatened is 18.2%, Regionally At Risk is 22.3%, and for Regionally Data Deficient is 9.5%. An additional 10 taxa were identified that have become extinct or may have formerly occurred in the region.

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## Introduction

Threat classifications play an important role in monitoring biodiversity and informing conservation actions. The New Zealand Threat Classification System (NZTCS) is a tool used to assign a threat status to candidate taxa (species, subspecies, varieties, and forma) in Aotearoa New Zealand (Townsend et al. 2008). The classification system was developed to apply equally to terrestrial, freshwater, and marine biota (flora and fauna). The NZTCS scores taxa at the national scale against criteria based on an understanding of population state, size, and trend, while considering population status, impact of threats, recovery potential, and taxonomic certainty. The Department of Conservation | Te Papa Atawhai (DOC) administers the NZTCS in Aotearoa New Zealand, with national assessments used to inform conservation action, target resources, and monitor biodiversity trends and conservation effectiveness.

While DOC is tasked with managing indigenous taxa nationally, regional and district councils have statutory obligations to maintain indigenous biodiversity under the Resource Management Act 1991 (RMA), including to manage the habitats of threatened taxa. The regional threat status of taxa is particularly important in the context of the RMA and in conservation planning. A key requirement of managing the habitats occupied by taxa is to understand regional population sizes and distributions, and to monitor trends and management effectiveness.

This report is the first regional conservation status assessment for indigenous vascular plants in the Otago region. Regional threat assessments have been completed following a standardised methodology by Otago Regional Council for three taxonomic groups (bats, Jarvie et al. 2023a; reptiles, Jarvie et al. 2023b, amphibians, Jarvie 2024), Greater Wellington Regional Council for five taxonomic groups (birds, Crisp et al. 2024; indigenous freshwater fish, Crisp et al. 2022; indigenous vascular plants, Crisp 2020a; reptiles, Crisp et al. 2023b; bats, Crisp et al. 2023b) and Auckland Council for five taxonomic groups (amphibians, Melzer et al. 2022a; reptiles, Melzer et al. 2022b; indigenous vascular plants, Simpkins et al. 2023; bats, Woolly et al. 2023; freshwater fish, Bloxham et al. 2023) as of March 2024. Regional threat assessments also provide a stronger foundation for assessing the threat status of taxa nationally. The methodology for the regional threat assessments leverages off national threat assessments as determined using the NZTCS (Townsend et al. 2008, Rolfe et al. 2021, Michel 2021), with thresholds for area of occupancy or species numbers adjusted for the land area in the region (Appendix 1). National strongholds and additional regional qualifiers are also considered (Appendix 2).

## Methods

The regional threat status of indigenous vascular plants was assessed by a panel of experts (John Barkla, Richard Ewans, Brian Rance, Geoff Rogers, and Mike Thorsen) and an Otago Regional Council (ORC) ecologist (Scott Jarvie) between June 2023 and January 2024. This assessment covers all indigenous vascular plant taxa in the region, following standardised methodology for regional threat assessments as shown in Appendix 1, the list of regional qualifiers in Appendix 2, and the list of national qualifiers in Appendix 3. The national threat assessments and national qualifiers were from de Lange et al. (2018). All the taxa in this regional assessment were classified following de Lange et al. (2018) as: 'taxonomically determinate', i.e., legitimately and effectively published and generally accepted by relevant experts as distinct; and 'taxonomically indeterminate', i.e., used loosely to include both undescribed entities which still require formal taxonomic research to confirm their validity and provide them with a formal name and, occasionally, described species whose taxonomic validity is in question. 'Taxonomically indistinct' are also noted in a separate table.

Following the standardised methodology, indigenous vascular plant taxa recognised in the NZTCS list (de Lange et al. 2018) but not known to occur naturally in Otago were first removed from consideration. The next step was to identify Nationally Threatened and At-Risk taxa that are present in the region. If more than 20% of the national population is breeding or resident for more than half their life cycle in the region, taxa were assigned National Stronghold status and the NZTCS criteria applied. In this exercise, the regional conservation status must not be of a lower threat status than the national status. For example, a Nationally Endangered taxon cannot be assessed as Regionally Vulnerable or lower but could be assessed as Regionally Critical. Due to the timing of this assessment being prior to the national assessment, some applications of the criteria anticipated potential changes to the national status but may not always align to the national status, such as for some of the myrtle species.

Regional thresholds were set at more than 2000 mature individuals present or occupancy of more than 1000 ha. If taxa did not meet the threshold, they were assigned a regional threat status by applying the NZTCS criteria. If taxa meet the threshold and the population trend was  $\pm 10\%$  stable or increasing, they were assigned the status Regionally Not Threatened. For Nationally Not Threatened and Non-Resident taxa, the regional population threshold was applied. If the population was not stable to increasing or decreasing by more than 10%, the NZTCS criteria were used to determine the regional threat status. Population trend criteria are applied based on current knowledge, representing trends over the next 10 years or 3 generations, whichever is longer.

Indigenous vascular plant taxa not included in the NZTCS but considered by the expert panel as 'taxonomically determinate' or 'taxonomically indeterminate' are included in a separate table. Indigenous Aotearoa New Zealand taxa that have been introduced to the Otago region but for which Otago is not part of their natural distribution, are also included in a separate table.

To inform decisions on distributions and area of occupancy for assessment of the regional threat status of indigenous vascular plant taxa, occurrence records from online databases were used (e.g., Auckland Museum Herbarium – Tāmaki Paena Hira, CHR Allan Herbarium – Te Kohinga Tipu o Aotearoa, iNaturalist, National Vegetation Survey). These records were then taxonomically harmonised with the list of indigenous vascular plant taxa in the NZTCS where possible (de Lange et al. 2018). In addition to occurrence records, the panel used plant check lists compiled by themselves or others, e.g., Druce list number 292 for Mountains of Inland Otago and Northern Southland (Druce 2006), Protected National Area Programme (PNAP) reports for Otago, New Zealand Plant Conservation Network, the Flora of New Zealand series, and local, regional, and national personal communications. The PNAP reports for Otago that were checked for species occurrence records were those for the following Ecological Districts: Dansey (Comrie 1992), Dunstan (Ward et al. 1994), Hawkdun (Grove 1994), Lindis (Ward et al. 1994), Macraes (Bibby 1997), Maniototo (Grove 1994), Manorburn (Fagan and Pillai 1992), Nokomai (Dickinson 1989), Old Man (Brumley et al. 1986), Pisa (Ward et al. 1994), Umbrella (Dickinson 1988), and Waipori (Carter 1994). The panel critically assessed the available data and drew on their own expert knowledge to consider current and likely future threats to determine the status and qualifiers for each taxon.

Type localities (TLs) are included as a qualifier and details of the type locality is specified in the notes column of the tables to highlight their scientific significance in the region. There are several different categories of types recognised under the International Code of Nomenclature (ICN; Turland et al. 2017), and are shown in this report where known: 'holotype', i.e., the single specimen designated as the type of a species by the original authors at the time the species name and description was published; 'isotype', i.e., a duplicate specimen of the holotype; 'syntype', i.e., any of two or more specimens listed in the original description of a taxon when a holotype was not designated; isosyntype, i.e., duplicates of a syntype; 'lectotype', i.e., a specimen chosen from among the specimens available to the original author of a name when the holotype was either lost or destroyed, or when no holotype was designated; 'isolectotype', i.e., duplicate of a lectotype; 'neotype', i.e., a specimen chosen by a later researcher to serve in place of a holotype when all specimens available to the original author of a name have been lost or destroyed; and 'isoneotype', i.e., duplicate of a neotype.

The following categories have no standing under the ICN, and are therefore not shown in this report: ‘paratype’, i.e., a specimen not formally designated as a type but cited along with the type collection in the original description of a taxon; ‘topotype’, i.e., a specimen of a plant collected from the same locality as the holotype, not necessarily at the same time; ‘cotype’, i.e., an old term used by some authors for additional (different) specimens that supported their taxonomic concept; and lectotype, i.e., a name sometimes used for the unselected remainder when a lectotype is selected from a number of syntypes.

If no specific site for a type locality is known, but could include Otago, this is recorded as ‘TL?’. This was for the taxa where records stated: “likely to occur”, “throughout South Island”, “throughout eastern South Island”, “on and west of Main Divide, even if an Otago locality was not mentioned”, and where “distributions mention “scattered South Island but no Otago locality listed”. Further investigation would especially be needed in such cases. The type locality information was compiled from information curated in the Global Biodiversity Information Facility (GBIF, 2023), the Atlas of Living Australia (ALA, Belbin et al. 2021), the Flora and eFlora Series (Breitweiser et al. 2023; specifically Flora Vol. 1, Vol. 2 and Vol. 3; Allan, 1961; Moore and Edgar, 1976, and Edgar and Connor, 2010, respectively), and also mostly from the following herbaria: Otago Regional Herbarium – Te māra Otaota o Otago (OTA), Allan Herbarium – Te Kohinga Tipu o Aotearoa (CHR), Museum of New Zealand – Te Papa Tongarewa Herbarium (WELT), and Auckland Museum Herbarium – Tāmaki Paena Hira (AK). Other herbarium type localities were noted when reviewing information from eFlora, GBIF and ALA. These include Kew Gardens Herbarium, London (K), the former Wellington Dominion Museum (W), the former DSIR Botany Division (BD), and the former Otago Museum (OM); sometimes registration numbers were not readily available, but the herbarium is still noted. Type locality information was also extracted from recent publications describing new species from the Otago region, including Breitweiser and Ford (2022), Burrows (2008), Burrows (2009), Burrows (2011), de Lange et al. (2013), de Lange and Blanchon (2023), Edgar and Connor (2010), Heads (1998), Heads (1990), Heenan (2017), MacMillan (1991), Meudt and Prebble (2018), Meudt (2008), Meudt et al. (2020), Moore and Edgar (1976), Prebble et al. (2022), Saldivia (2023), and Thorsen and de Lange (2016). The curation of type locality information is often part of an ongoing process at herbaria, with updates, new images and records being added regularly. In some cases, such records are yet to be confirmed by herbarium staff, and consequently there could be mistakes or omissions in the information presented. Hyperlinks are provided to institutions with registration numbers to facilitate checking of the source material for type locality information, where known.

For taxa with the qualifiers regional endemic (RE), one location (OL), and designated (De), explanatory information is also provided in the notes column of the tables. For

taxa that have had their taxonomic names changed since de Lange et al. (2018), their previous name and authority are provided in the notes column.

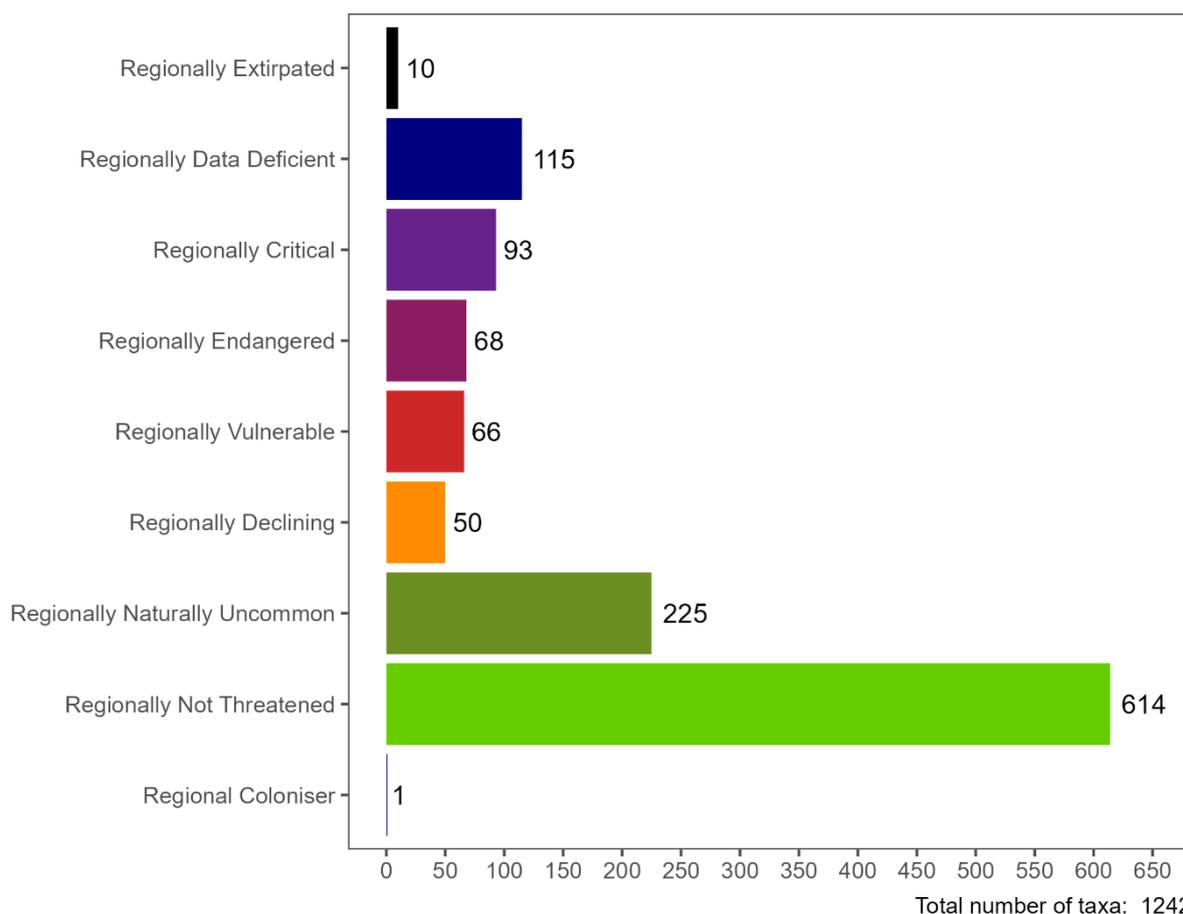
Regional conservation assessments for indigenous vascular plant taxa were completed in a locally operated dashboard using R v. 4.2.2 (R Core Team 2022) via the RStudio platform (Posit Team 2023). The main packages used for the dashboard were 'shiny' (Chang et al. 2021) and 'flexdashboard' (Iannone et al. 2020). Other packages used in the dashboard and for other data wrangling include the 'tidyverse' (Wickham et al. 2019), 'readxl' (Wickham and Bryan 2022), sf (Pebesma 2018), lubridate (Grolemund and Wickham 2011), leaflet (Cheng et al. 2022), leaflet.extras (Karambelkar and Schloerke 2018), plotly (Sievert 2020), janitor (Firke 2020), ggplot2 (Wickham 2016), and terra (Hijmans 2022). The map layers used to view records in the dashboard were OpenStreetMap (OpenStreetMap Contributors 2017) and Esri World Imagery (Esri 2023).

## Results

A total of 1242 indigenous vascular plant taxa were identified as present in the Otago region that were listed in the NZTCS (excluding introduced and naturalised species; Figure 1, Tables 1–4). Of these taxa, 227 are Regionally Threatened, 275 are Regionally At Risk, one is Regionally Non-resident, 614 are Regionally Not Threatened, and 115 are Regionally Data Deficient. Ten taxa were also identified as Regionally Extirpated (likely now extinct in the Otago region). Additionally, 14 taxa were assessed but are not in the NZTCS; four of these were Regionally Data Deficient, five were Threatened, three were At Risk, and two were Not Threatened.

Of the Regionally Threatened taxa in the Otago region in the NZTCS, 93 are Regionally Critical, 68 are Regionally Endangered, 66 are Regionally Vulnerable. Of the 275 Regionally At Risk taxa in the NZTCS, 50 are Regionally Declining and 275 are Regionally Recovering. The number of Regionally Not Threatened was 614. For Regionally Non-resident Native species, only one was identified as a Regional Coloniser. In Otago 10 indigenous vascular plant taxa were identified as likely now extinct in the region, with one being nationally extinct.

The region was identified as a National Stronghold (i.e., containing > 20% of the national population) for around 41% of the Regionally Threatened and Regionally At Risk indigenous vascular plants. Of those taxa with National Strongholds in Otago, at least 36 are Regional Endemics, meaning they are not found elsewhere. The panel noted for Regionally Threatened and Regionally At Risk taxa around 17.4% of taxa were at natural northern and southern limits within the region, excluding the Regional Endemics taxa. Taxa with identified type localities in the Otago region was around 17.2%.



**Figure 1: Regional conservation status of indigenous vascular plants in the Otago region.** The total of 1242 indigenous vascular plants does not include 14 taxa not included in the national assessment (de Lange et al. 2018). Appendix 4 has figure for these 14 taxa assessed regionally.

## Regionally Extirpated (10)

Taxa for which there is no reasonable doubt that the species is no longer present in the wild in Otago.

Table 1: Regionally Extirpated indigenous vascular plant taxa in Otago

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY EXTIRPATED (10)</b>					
NATIONALLY EXTINCT (1)					
TAXONOMICALLY DETERMINATE (1)					
<i>Stellaria multiflora</i> subsp. <i>multiflora</i> Hook.	chickweed	Extinct	TL		TL = voucher specimens: Eweburn School, near Naseby / Gorge Creek, Clutha/Mata-au River / Spear Grass Flat, Alexandra.  Previous Name and Authority: <i>Stellaria elatinooides</i> Hook.f.  Notes: this taxon was last collected in Aotearoa New Zealand in 1921 (Heenan 2019).
REGIONALLY EXTIRPATED (9)					
TAXONOMICALLY DETERMINATE (8)					
<i>Carmichaelia juncea</i> Hook.f.	tangle broom	Nationally Vulnerable	HR, TL	CD, DP, EF	TL = L, ISL: Otago. Accession numbers: L <a href="#">CHR 45814 C</a> ; ISL <a href="#">CHR 45814 A</a> , <a href="#">CHR 45814 B</a>
<i>Chenopodium detestans</i> Kirk	New Zealand fish-guts plant	Nationally Critical	HR	DP, EF, TO	
<i>Pachycladon exile</i> (Heenan) Heenan & A.D.Mitch.	cross	Nationally Critical		CD, OL	
<i>Parapolytichum microsorum</i> (Endl.) Labiak, Sundue & R.C.Moran		Not Threatened			Previous Name and Authority: <i>Parapolytichum microsorum</i> subsp. <i>pentangulare</i> (Colenso) Labiak, Sundue & R.C.Moran
<i>Poa billardierei</i> (Spreng.) St.-Yves	sand tussock	Declining		PD, RR, SO	
<i>Rytidosperma exiguum</i> (Kirk) H.P.Linder		Declining	HR	DP	
<i>Senecio scaberulus</i> (Hook.f.) D.G.Drury	fireweed	Nationally Critical	HR	EF	
<i>Sophora prostrata</i> Buchanan		Not Threatened			
TAXONOMICALLY INDETERMINATE (1)					
<i>Pimelea</i> aff. <i>villosa</i> (AK 216133; southern New Zealand)		Nationally Endangered	HR	DP, RR, RF	

Regional and national qualifiers: CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural State; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Overseas?; S?O = Secure?Overseas; TO = Threatened Overseas' TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

Type localities: H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isonotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Regionally Data Deficient (115)

Taxa that are suspected to be threatened or, in some instances, possibly extinct in Otago but are not definitely known to belong to any particular category due to a lack of current information about their distribution and abundance (for a fuller definition see Townsend et al. 2008).

**Table 2: Regionally Data Deficient indigenous vascular plant taxa in Otago**

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY DATA DEFICIENT (115)</b>					
<i>TAXONOMICALLY DETERMINATE (103)</i>					
<i>Abrotanella rostrata</i> Swenson		Naturally Uncommon		DP, RR, Sp	
<i>Acianthus sinclairii</i> Hook.f.	heart-leaved orchid	Not Threatened			
<i>Aciphylla congesta</i> Cheeseman		Not Threatened		RR	
<i>Aciphylla multisecta</i> Cheeseman		Declining		DP, RR, Sp	
<i>Adiantum diaphanum</i> Blume	small maidenhair fern	Not Threatened			
<i>Agrostis imbecilla</i> Zotov		Data Deficient	TL	Sp	TL = H, I: Macraes, Waihemo County, Otago. Accession numbers: H <a href="#">WELT SP069601</a> ; I <a href="#">AK 1434</a>
<i>Agrostis magellanica</i> Lam.		Not Threatened		SO	
<i>Agrostis petriei</i> Hack.		Naturally Uncommon	TL	DP, Sp	TL = H, I: Nevis Valley, Tapuae-o-Uenuku   Hector Mountains, Central Otago / Cromwell, Central Otago. Accession numbers: H W SP036494; I <a href="#">WELT SP068876</a> , <a href="#">CHR 25061</a> / H: W SP07926, I <a href="#">AK 1425</a> (1), (2), <a href="#">WELT SP068873</a>
<i>Archeria traversii</i> Hook.f. var. <i>traversii</i>		Not Threatened			
<i>Astelia linearis</i> Hook.f. var. <i>linearis</i>		Not Threatened			
<i>Botrychium australe</i> R.Br.	parsley fern	Naturally Uncommon		DP, EF, SO, Sp	
<i>Caltha novae-zelandiae</i> Hook.f.	New Zealand marsh marigold	Not Threatened			
<i>Calystegia sepium</i> subsp. <i>roseata</i> Brummitt	pink bindweed	Not Threatened			
<i>Cardamine eminentia</i> Heenan	crass	Naturally Uncommon		DP, Sp	
<i>Cardamine grandiscapa</i>	crass	Naturally Uncommon	TL	DP	TL = H: Remarkables, Wye Creek. Accession number: H <a href="#">CHR 617195</a>
<i>Cardamine sinuatifolia</i> Heenan	crass	Naturally Uncommon		DP, RR, Sp	
<i>Carex allanii</i> Hamlin	Allan's sedge	Taxonomically Indistinct	TL		TL = H, I: Old Man Range, Clutha Valley. Accession numbers: H <a href="#">WELT SP005135/A</a> ; I <a href="#">WELT SP005135/B</a> , <a href="#">WELT SP005135/C</a> , <a href="#">WELT SP005135/D</a>
<i>Carex stricta</i> K.A.Ford	hook sedge	Not Threatened			
<i>Carex aucklandica</i> (Hamlin) K.A.Ford	subantarctic hook grass	Naturally Uncommon		DP, RR	
<i>Carex cheesemariana</i> (Boeckeler) K.A.Ford	hook sedge	Not Threatened		SO	
<i>Carex cockayneana</i> Kük.	Cockayne's sedge	Not Threatened			
<i>Carex enysii</i> Petrie	Enys's sedge	Naturally Uncommon		DP, Sp	
<i>Carex erythrovaginata</i> K.A.Ford	lax hook sedge	Not Threatened			

Continued on next page

## Regional conservation status of indigenous vascular plants in Otago

Regionally Data Deficient continued

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Carex goyenii</i> Petrie	Goyen's sedge	Not Threatened	TL		TL = L?: forest land at head of Lake Whakatipu. Accession number: L? <a href="#">AK 2616</a>
<i>Carex hamlinii</i> K.A.Ford	Aston's hook sedge	Not Threatened			
<i>Carex healyi</i> K.A.Ford	harsh-leaved hook sedge	Not Threatened			
<i>Carex kirkii</i> var. <i>kirkii</i> Petrie	Kirk's sedge	Naturally Uncommon	TL		TL = L: Mount Pisa, head waters of Luggate Creek. Accession number: L <a href="#">AK 2480</a> . Previous Name and Authority: <i>Carex kirkii</i> Petrie
<i>Carex lambertiana</i> Boott	forest sedge	Not Threatened			
<i>Carex longifructus</i> (Kük.) K.A.Ford	hook sedge	Naturally Uncommon	TL	DP, Sp	TL = L, ISL: Routeburn. Accession numbers: L <a href="#">WELT SP001778</a> , ISL <a href="#">AK2328</a>
<i>Carex obtusifolia</i> (Heenan) K.A.Ford	fine-leaved hook sedge	Naturally Uncommon		Sp	
<i>Carex silvestris</i> (Hamlin) K.A.Ford	forest hook sedge	Not Threatened			
<i>Carex subviridis</i> K.A.Ford	hook sedge	Not Threatened			
<i>Carmichaelia uniflora</i> Kirk	dwarf broom	Declining		DP	
<i>Celmisia spedenii</i> G.Simpson	Speden's mountain daisy	Naturally Uncommon		RR	
<i>Colobanthus monticola</i> Petrie	colobanthus	Not Threatened	TL		TL = S; Bald Hill Flat, near Clutha/Mata-au River at "Gorge Creek", near Alexandra. Accession number: S <a href="#">WELT SP050960</a>
<i>Convolvulus fractosaxosa</i> Petrie	shingle convolvulus	Naturally Uncommon		DP, Sp	
<i>Coriaria angustissima</i> Hook.f.	small-leaved tutu	Not Threatened	TL		TL = H, S: Otago Lake District / Mount Alta, Wānaka Ecological District. Accession numbers: H K?; S <a href="#">AK 5090</a>
<i>Corybas acuminatus</i> M.A.Clem. & Hatch	spider Orchid	Not Threatened			
<i>Craspedia lanata</i> var. <i>elongata</i> Allan		Not Threatened			
<i>Craspedia minor</i> (Hook.f.) Allan		Not Threatened			
<i>Craspedia robusta</i> (Hook.f.) Cockayne var. <i>robusta</i>		Not Threatened			
<i>Craspedia uniflora</i> G.Forst. var. <i>uniflora</i>		Not Threatened			
<i>Deschampsia chapmanii</i> Petrie		Not Threatened	TL		TL = L, ISL: Tapuae-o-Uenuku   Hector Mountains, ca. 5000 ft. Accession numbers: L <a href="#">WELT SP069475/A</a> ; ISL <a href="#">CHR 2808</a> , <a href="#">WELT SP069475/B</a>
<i>Deschampsia pusilla</i> Petrie		Naturally Uncommon	TL	Sp	TL = L, ISL, ISL (putative), ISL?: Tapuae-o-Uenuku   Hector Mountains. Accession numbers: L <a href="#">WELT SP069433</a> ; ISL <a href="#">CHR 333257</a> ; ISL (putative) <a href="#">WELT SP068263</a> , <a href="#">WELT SP069431</a> , <a href="#">WELT SP076980</a> ; ISL? <a href="#">AK 223532</a> , <a href="#">AK 1534</a>
<i>Dracophyllum oliveri</i> Du Rietz		Not Threatened			
<i>Dracophyllum traversii</i> Hook.f.	mountain neinei	Not Threatened			
<i>Drymoanthus adversus</i> (Hook.f.) Dockrill		Not Threatened			
<i>Epilobium cockayneanum</i> Petrie		Data Deficient			
<i>Epilobium gracilipes</i> Kirk		Naturally Uncommon			
<i>Epilobium tenuipes</i> Hook.f.		Not Threatened			
<i>Euchiton involucratus</i> (G.Forst.) Holub.		Not Threatened		SO	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Data Deficient continued

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Euchiton japonicus</i> (Thunb.) Holub		Not Threatened		SO	
<i>Festuca matthewsii</i> (Hack.) Cheeseman subsp. <i>matthewsii</i>		Not Threatened	TL		TL = ISL: Mount Bonpland, Humboldt Mountains, West of Lake Whakatipu. Accession numbers: ISL <a href="#">AK 1990</a> , <a href="#">AK 212981</a> , <a href="#">CHR 1537</a> , <a href="#">CHR 2870</a> .
<i>Gastrodia minor</i> Petrie		Not Threatened	TL		TL = S: Town Belt, Ōtepoti Dunedin, in shady manuka bush, Dunedin Ecological District / near northern cemetery, Ōtepoti Dunedin. Accession numbers: S <a href="#">AK 3688</a> , <a href="#">WELT SP019064</a>
<i>Geranium cruentum</i> Heenan & G.M.Rogers	Von geranium	Nationally Critical	CD, De, EW, RE	CD, EW	Previous Name and Authority: <i>Geranium</i> (c) (CHR 546319; Von)
<i>Geranium potentilloides</i> L'Her. ex DC.		Not Threatened	TL	SO	TL = S: Flagstaff Hill, Ōtepoti Dunedin. Accession numbers S <a href="#">AK 22911</a> , <a href="#">AK 22912</a>
<i>Gleichenia dicarpa</i> R.Br.		Not Threatened			
<i>Gleichenia microphylla</i> R.Br.	carrier tangle fern	Not Threatened		SO	
<i>Glossostigma cleistanthum</i> W.R.Barker		Not Threatened			
<i>Gonocarpus incanus</i> (A.Cunn.) Orchard		Not Threatened			
<i>Hierochloa cuprea</i> Zotov		Not Threatened			
<i>Hierochloa equisetata</i> Zotov		Not Threatened	TL		TL = H: Bold Peak, Humboldt Mountains. Accession number: H <a href="#">CHR 9679</a>
<i>Hierochloa fusca</i> Zotov		Not Threatened			
<i>Hymenophyllum atrovirens</i> Willd.	filmy fern	Naturally Uncommon	TL	DP, RR, SO, Sp	TL = I: near Lake Whakatipu. Accession number: I <a href="#">CHR 293758</a>  Previous Name and Authority: <i>Hymenophyllum australe</i> Willd.
<i>Hypericum involutum</i> (Labill.) Choisy		Declining		DP, SO	
<i>Hypolepis dicksonioides</i> (Endl.) Hook.	giant hypolepis	Naturally Uncommon		EF, SO, Sp	
<i>Hypolepis lactea</i> Brownsey & Chinnock		Not Threatened			
<i>Isoetes kirkii</i> A.Braun	quillwort	Declining		RR	
<i>Isolepis inundata</i> R.Br.	sedge	Not Threatened		SO	
<i>Isolepis subtilissima</i> Boeckeler		Not Threatened			
<i>Juncus australis</i> Hook.f.		Not Threatened		SO	
<i>Lachnagrostis glabra</i> (Petrie) Edgar		Data Deficient			
<i>Lachnagrostis littoralis</i> subsp. <i>salaria</i> Edgar		Not Threatened			
<i>Lagenophora schmidiae</i> de Lange et Jian Wang	papataniwha	Nationally Critical			
<i>Lindsaea linearis</i> Sw.		Not Threatened		SO	
<i>Luzula picta</i> A.Rich. var. <i>picta</i>	wood-rush	Not Threatened			
<i>Luzula picta</i> var. <i>limosa</i> Edgar	wood-rush	Not Threatened			
<i>Metrosideros perforata</i> (J.R.Forst. & G.Forst.) A.Rich.	akatea	Nationally Vulnerable		DP, De	
<i>Montia calycina</i> (Colenso) Pax & K.Hoffm.		Not Threatened			
<i>Myosotis suavis</i> Petrie		Data Deficient			
<i>Notogrammitis givenii</i> (Parris) Parris		Not Threatened			
<i>Notogrammitis gunnii</i> (Parris) Parris	strap fern	Data Deficient		SO	
<i>Oxalis rubens</i> Haw.		Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Data Deficient continued

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Pachycladon fastigiatum</i> (Hook.f.) Heenan & A.D.Mitch.	hairless cress	Not Threatened	TL	DP	TL = H, L: mountains near Lake Wānaka and Lake Ohau / head of Lake Ohau / Three Kings Mountain, Otago. Accession numbers: H <a href="#">WELT SP083897</a> ; L <a href="#">WELT SP083898</a> , <a href="#">WELT SP083899</a>
<i>Parsonsia capsularis</i> var. <i>rosea</i> (Raoul) Cockayne	New Zealand jasmine	Data Deficient			
<i>Parsonsia capsularis</i> var. <i>tenuis</i> G.Simpson & J.S.Thomson	New Zealand jasmine	Data Deficient			
<i>Pentapogon quadriseta</i> (Labill.) P.M.Peterson, Romasch. & Soreng		Declining		DP, EF, SO	Previous Name and Authority: <i>Deyeuxia quadriseta</i> (Labill.) Benth.
<i>Picris angustifolia</i> subsp. <i>merxmulleri</i> Lack & S.Holzappel		Naturally Uncommon		DP, SO	
<i>Pimelea prostrata</i> (J.R.Forst. & G.Forst.) Willd. subsp. <i>prostrata</i>		Not Threatened	TL		TL = S: Mount Earnslaw Creek, Otago Lake District, Dart Ecological District. Accession number: S <a href="#">AK 5410</a>
<i>Pimelea prostrata</i> subsp. <i>ventosa</i> C.J.Burrows		Declining		Sp	
<i>Poa intrusa</i> Edgar		Data Deficient			
<i>Poa senex</i> Edgar		Naturally Uncommon	TL	DP, RR	TL = H, I: Kopuwai   Old Man Range, Otago. Accession numbers: H <a href="#">CHR 133878</a> ; I <a href="#">CHR 133877</a> , <a href="#">CHR 133879</a> , <a href="#">CHR 133880</a> , <a href="#">CHR 133881</a>
<i>Polygonum plebeium</i> R.Br.	small knotweed	Declining		DP, SO	
<i>Pterostylis auriculata</i> Colenso		Naturally Uncommon		DP, Sp	
<i>Pterostylis foliata</i> Hook.f.		Naturally Uncommon		SO, Sp	
<i>Schoenus nitens</i> (R.Br.) Roem. & Schult.		Not Threatened			
<i>Solanum americanum</i> Mill.	small-flowered nightshade	Not Threatened		SO	
<i>Stenostachys gracilis</i> (Hook.f.) Connor	poaceae	Not Threatened		DP	
<i>Thelymitra colensoi</i> Hook.f.	Colenso's sun orchid	Data Deficient			
<i>Thelymitra formosa</i> Colenso	sun orchid	Naturally Uncommon		EF, Sp	
<i>Veronica hookeri</i> (Buchanan) Garn.-Jones		Not Threatened	TL		TL = I, I?, T?: Mount Alta. Accession numbers: T? <a href="#">WELT SP084569</a> ; I <a href="#">WELT SP013044</a> ; I? <a href="#">WELT SP013043</a>
<i>Veronica macrocalyx</i> var. <i>humilis</i> (G.Simpson) Garn.-Jones		Not Threatened	TL		TL = H, L: slopes of Mount French / collected from slopes of Mount French. Accession numbers: H <a href="#">CHR 550051</a> ; L <a href="#">CHR 76135</a>
<i>Veronica quadrifaria</i> Kirk		Not Threatened	TL		TL = H: Mount Alta. Accession number: OM?
<i>Zoysia minima</i> (Colenso) Zotov	prickly couch	Declining		DP	
<b>TAXONOMICALLY INDETERMINATE (11)</b>					
<i>Cardamine</i> (m) (OTA 36555; "Eweburn")	cress	Data Deficient			
<i>Cardamine</i> (q) (CHR 591775; west Otago)	cress	Data Deficient			
<i>Carex</i> (a) (AK 30599; <i>Carex potens</i> sensu Ford, 2015) (C.B.Clarke) Hamlin	hook sedge	Not Threatened	NStr		
<i>Craspedia</i> (ll) (CHR 629757; Otago)		Not Threatened	NStr, RE		
<i>Craspedia</i> (nn) (CHR 567299; "Rex")		Nationally Vulnerable			
<i>Craspedia</i> (pp) (CHR 673757; Skippers)		Data Deficient	NStr		
<i>Earina aestivalis</i> Cheeseman		Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

*Regionally Data Deficient continued*

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Meliccytus</i> aff. <i>alpinus</i> (c) (CHR 541568; Otago)		Data Deficient			
<i>Meliccytus</i> aff. <i>alpinus</i> (d) (CHR 541567; "dark")		Data Deficient			
<i>Meliccytus</i> aff. <i>alpinus</i> (f) (CHR 530143; "Brockie")		Data Deficient	OL	OL	

*Regional and national qualifiers:* CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural State; NStr = National Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure?Overseas; TO = Threatened Overseas' TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

*Type localities:* H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isonotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Regionally Threatened (227)

Taxa that meet the criteria specified by Townsend et al. (2008) and Michel (2021) for the categories Regionally Critical, Regionally Endangered, Regionally Vulnerable or Regionally Increasing.

## Regionally Critical (93)

*Criteria for Regionally Critical:*

*A – very small population (natural or unnatural)*

A(1) < 250 mature individuals

A(2) ≤ 2 subpopulations, ≤ 200 mature individuals in the larger subpopulation

A(3) Total area of occupancy ≤ 1 ha (0.01 km<sup>2</sup>)

*B – small population (natural or unnatural) with a moderate ongoing or predicted decline of 50–70%*

B(1) 250–1000 mature individuals

B(2) ≤ 5 subpopulations, ≤ 300 mature individuals in the largest subpopulation

B(3) Total area of occupancy ≤ 10 ha (0.1 km<sup>2</sup>)

*C – population (irrespective of size or number of subpopulations) with a very high ongoing or predicted decline of > 70%*

**Table 3.3.1: Regionally Critical indigenous vascular plant taxa in Otago**

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY CRITICAL (93)</b>													
<i>TAXONOMICALLY DETERMINATE (87)</i>													
<i>Amphibromus fluitans</i> Kirk	water brome	Nationally Vulnerable	A (3)				≤ 1 ha		Low	Medium	DPR, DPS, DPT, EF, NR, RR	DP, TO	
<i>Anemanthele lessoniiana</i> (Steud.) Veldkamp	gossamer grass	Relict	A (1)			≤ 250 mature individuals			Low	Low	DPS, DPT, Sp	DP, Sp	
<i>Anogramma leptophylla</i> (L.) Link	Jersey fern	Nationally Vulnerable	A (3)				≤ 1 ha		Low	Low	DPR, DPS, DPT, NR, PF, Sp	DP, RR, SO, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Asplenium oblongifolium</i> Colenso	shining spleenwort	Not Threatened	A (1)			< 250 mature individuals			Low	Medium	DPR, DPS, DPT, NR, Sp		
<i>Astelia subulata</i> (Hook.f.) Cheeseman		Naturally Uncommon	A (3)				≤ 1 ha		Medium	Medium	DPS, DPT, NS, OL, St	RR, Sp	
<i>Botrychium bifforme</i> Colenso	fine-leaved parsley fern	Not Threatened	A (1)			< 250 mature individuals			Low	Low	DPR, DPS, DPT, Sp		
<i>Brachyscome linearis</i> (Petrie) Druce	daisy	Nationally Critical	A (1)			≤ 250 mature individuals			Medium	High	DPT, NR, OL, RR	CD, DP, RR, Sp	
<i>Cardamine dilatata</i> Heenan	cress	Nationally Critical	A (1)	Yes	Yes	≤ 250 mature individuals			Medium	High	DPS, DPT, NStr, OL, RR, Sp	DP	Distributional notes: While currently only known from the Macraes area, it was until recently present in south Canterbury. It was therefore not assigned the Regional Endemic qualifier as could still be found outside Otago
<i>Cardamine mutabilis</i> Heenan	Turf cress	Nationally Critical	A (3)	Yes			≤ 1 ha		Medium	Medium	DPS, DPT, EF, NR, NStr, RR, TL	CD, DP, EF, RR, Sp	TL = H: Lake Onslow, Fortification Stream. Accession number: H <a href="#">CHR 420058</a>
<i>Cardamine sciaphila</i> Heenan	cress	Nationally Critical	A (1)	Yes	Yes	≤ 250 mature individuals			Low	Low	DPR, DPS, DPT, NS, NStr, RE, RR, TL	DP, RR	RE = Central Otago endemic known from the Dunstan Mountains and Pisa Range.  TL = H: Dunstan Mountains. Accession number: H <a href="#">CHR 514168</a>
<i>Carex albula</i> Allan	white sedge	Nationally Vulnerable	A (1)	Yes		≤ 250 mature individuals			High	High	DPR, NR, NStr, PF, RF	Sp	
<i>Carex carsei</i> Petrie	Carse's sedge	Declining	A (3)				≤ 1 ha		Low	Medium	DPS, DPT, PF, RR	DP	
<i>Carex cirrhosa</i> Berggr.	curly sedge	Nationally Endangered	A (3)				≤ 1 ha		Low	Low	DPS, DPT, RR	RR	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Carex cyanea</i> K.A.Ford		Declining	A (3)				≤ 1 ha		High	High	DPR, NR, NS, OL	DP, Sp	
<i>Carex dallii</i> Kirk	Dall's sedge	Naturally Uncommon	A (3)	Yes			≤ 1 ha		Low	Low	DPR, DPS, DPT, NR, NStr, RR, Sp	DP	
<i>Carex inopinata</i> V.J.Cook	grassy mat sedge	Nationally Vulnerable	A (3)	Yes			≤ 1 ha		Medium	Medium	DPR, DPS, DPT, NR, NStr, PF, Sp	DP, Sp	
<i>Carex strictissima</i> (Kük.) K.A.Ford	hook sedge	Nationally Endangered	A (1)	Yes		≤ 250 mature individuals			Medium	Low	DPR, DPS, DPT, NStr, PF, RF, Sp, TL	DP	TL = H, I: Waitahuna, Tuapeka County, Otago. Accession numbers: H <a href="#">WELT SP001494</a> ; I <a href="#">CHR 294890</a>
<i>Carex uncifolia</i> Cheeseman	sedge	Nationally Vulnerable	A (3)	Yes			≤ 1 ha		Medium	Medium	DPT, NStr, PF, RR, TL	RR, St, Sp	TL = H: Mount Cardrona. Accession number: H <a href="#">WELT 01891/A</a>
<i>Carmichaelia corrugata</i> Colenso	common dwarf broom	Nationally Vulnerable	A (3)				≤ 1 ha		Low	Medium	DPS, DPT, PF, Sp	RF, Sp	
<i>Carmichaelia curta</i> Petrie	Waitaki broom	Nationally Critical	A (1)			≤ 250 mature individuals			Medium	High	DPS, DPT, NR, PF	DP, RF	
<i>Carmichaelia nana</i> (Hook.f.) Hook.f.	Dwarf carmichaelia	Nationally Vulnerable	A (3)				≤ 1 ha		Low	Medium	DPS, DPT, PF, RR, TL	DP	
<i>Centipeda aotearoana</i> N.G.Walsh	New Zealand sneezewort	Not Threatened	A (3)				≤ 1 ha		Low	High	DPR, DPT, NR, OL		
<i>Ceratocephala pungens</i> Garn.-Jones	Ranunculaceae	Nationally Critical	B (3)	Yes			≤ 10 ha		Medium	Low	DPS, DPT, EF, NR, NStr, TL	DP, EF, PD	TL = I: Bald Hill Flats, Clutha/Mata-au River. Accession number: I <a href="#">WELT SP061962</a>
<i>Chaerophyllum colensoi</i> var. <i>delicatulum</i> (Allan) K. F. Chung		Nationally Endangered	A (3)				≤ 1 ha		Low	Medium	DPR, DPS, DPT, NS, RR	DP, EF, RR	Previous Name and Authority: <i>Chaerophyllum colensoi</i> var. <i>delicatulum</i> (CHR 73872; Hauhungaroa Range) (Allan) K. F. Chung

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Clematis quadribacteolata</i> Colenso	clematis	Naturally Uncommon	A (1)			≤ 250 mature individuals			Low	Low	DPR, DPS, DPT, PF, Sp	DP, Sp	
<i>Convolvulus verecundus</i> f. <i>verecundus</i> Allan	trailing bindweed	Nationally Vulnerable	A (3)	Yes			≤ 1 ha		High	High	DPT, NStr, PD, PF, RR	DP	Previous Name and Authority: <i>Convolvulus verecundus</i> Allan
<i>Coprosma obconica</i> Kirk	coprosma	Nationally Vulnerable	A (1)	Yes		≤ 250 mature individuals			Low	Medium	DPT, NStr, PF, RF, RR	Sp	
<i>Coprosma pedicellata</i> Molloy, de Lange & B.D.Clarkson	coprosma	Declining	A (1)			≤ 250 mature individuals			Medium	High	DPT, PF, RR	CD, DP, RR	
<i>Craspedia argentea</i> Breitw. & K.A.Ford, sp. nov.		Nationally Critical	A (1)	Yes	Yes	≤ 250 mature individuals			High	High	CD, NStr, OL, RE, TL	DP, OL	RE = only known from one location in Central Otago.  Previous Name and Authority: <i>Craspedia</i> (a) (CHR 511522; Clutha River)  TL = H: Pisa Flats. Accession number: H <a href="#">CHR 588519</a>
<i>Crassula multicaulis</i> (Petrie) A.P.Druce & Given		Nationally Endangered	A (3)	Yes			≤ 1 ha		Low	Medium	DPR, DPS, DPT, NR, NStr, PF, RR, TL	EF, PD, RR, Sp	TL = H, I, S, T?: Maniototo Plain, near Naseby / Lake Waihola / Tokomairiro Ecological District. Accession numbers: H <a href="#">WELT SP050121/A</a> ; I <a href="#">WELT SP050121/B</a> ; S <a href="#">AK 4553</a> ; T? <a href="#">WELT SP050119</a>
<i>Crassula peduncularis</i> (Sm.) F.Meigen	shore stonecrop	Nationally Critical	A (3)	Yes			≤ 1 ha		Low	Low	DPS, DPT, NStr, RR	EF, RR, SO	
<i>Crassula ruamahanga</i> A.P.Druce emend de Lange & Heenan		Naturally Uncommon	A (3)				≤ 1 ha		Low	Low	DPR, DPS, DPT, PF, Sp	DP, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Cyathea medullaris</i> (G.Forst.) Sw.		Not Threatened	A (1)			< 250 mature individuals			Medium	Medium	Sp		
<i>Daucus glochidiatus</i> (Labill.) Fisch., C.A.Mey. & Avé-Lall.	New Zealand carrot	Declining	A (3)				≤ 1 ha		High	High	OL	EF, SO	
<i>Epilobium pictum</i> Petrie	grassland willowherb	Nationally Critical	A (1)	Yes		≤ 250 mature individuals			Low	Low	DPR, DPS, DPT, NStr, OL, PF, TL	DP, Sp	TL = L, ISL, NT: Lowburn Creek, near Cromwell / Mountain valleys of Central Otago / Pisa Ecological District. Accession numbers: L <a href="#">WELT SP041030</a> ; ISL <a href="#">AK 5678</a>
<i>Eryngium vesiculosum</i> Labill.	sea holly	Nationally Vulnerable	A (3)				≤ 1 ha		High	High	CI, NR, OL	DP, RR, SO, Sp	
<i>Euchiton paludosus</i> (Petrie) Holub		Data Deficient	A (3)				≤ 1 ha		Low	Low	DPR, DPS, DPT, PF, RR, Sp	Sp	
<i>Euphorbia glauca</i> G.Forst.	shore spurge	Declining	A (3)				≤ 1 ha		High	High	CI, PF, RF, RR	CD	
<i>Ficinia spiralis</i> (A.Rich.) Muasya & de Lange	pīngao	Declining	B (1)			250–1000 mature individuals			High	High	CI, PF, RF, RR	PD, RR	
<i>Gastrodia cooperae</i> Lehnebach & J.R.Rolfe		Nationally Critical	A (3)				≤ 1 ha		Low	Low	DPR, DPS, DPT, NR, OL	DP	
<i>Geranium retrorsum</i> L'Hér. ex DC.		Nationally Vulnerable	A (3)				≤ 1 ha		Low	Medium	DPR, DPS, DPT, NR, Sp	DP, SO	
<i>Geranium sessiliflorum</i> var. <i>arenarium</i> G.Simpson & J.S.Thomson		Declining	A (3)				≤ 1 ha		High	High	CI, PF, RR	CD, DP, RR	
<i>Hypericum rubicundulum</i> Heenan		Nationally Endangered	A (3)	Yes			≤ 1 ha		Medium	Medium	DPR, DPS, DPT, NR, NStr, PF, RR, Sp	DP, RR	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Hypolepis amaurorachis</i> (Kunze) Hook.		Naturally Uncommon	A (1)			≤ 250 mature individuals			Low	Low	DPR, DPS, DPT, Rel, Sp	DP, EF, SO, Sp	
<i>Juncus pauciflorus</i> R.Br.		Nationally Vulnerable	A (1)			≤ 250 mature individuals			Low	Low	DPR, DPS, DPT, Sp	DP, SO, Sp	
<i>Lachnagrostis ammobia</i> Edgar		Declining	A (3)				≤ 1 ha		Low	Low	CI, DPR, DPS, DPT, NR, PF, RR	DP, Sp	
<i>Lachnagrostis billardierei</i> (R.Br.) Trin. subsp. <i>billardierei</i>		Not Threatened	A (1)			< 250 mature individuals			Low	Medium	CI, DPR, DPS, DPT, RR, Sp	SO	
<i>Lastreopsis velutina</i> (A.Rich.) Tindale		Not Threatened	A (1)			< 250 mature individuals			Low	High	DPS, DPT, NR, OL		
<i>Lepidium juvenum</i> Heenan & de Lange	scurvy grass	Nationally Critical	A (3)	Yes			≤ 1 ha		Medium	High	DPR, NR, NStr, PF, RR, TL	CD, DP, RR	TL = H, I: Long Beach, Purakanui. Accession numbers: H <a href="#">CHR 609785 B</a> ; I <a href="#">CHR 609785 A</a>
<i>Lepidium kirkii</i> Petrie	salt-pan cress	Nationally Critical	A (3)	Yes	Yes		≤ 1 ha		High	High	CD, NStr, PF, RE, RF, RR, TL	CD, EF	RE = found only in Central Otago.  TL = H, S, L?: Gimmerburn district, Maniototo Plains / Maniototo plain below Gimmerburn farms. Accession numbers: H W; S <a href="#">AK 4477</a> , <a href="#">WELT SP030096</a> , <a href="#">WELT SP030099</a> ; L? <a href="#">WELT SP030098</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Lepidium sisymbrioides</i> Hook.f.	peppercress	Nationally Critical	A (1)	Yes		≤ 250 mature individuals			High	High	NR, NStr, PF, RF, RR, TL	DP	TL = H, S, ISN (putative): Kawarau River, near Gibbston / 2 miles west of Victoria Bridge over Kawarau River / Kawarau River, near Nevis Bluff / Kawarau River, west of Cromwell. Accession numbers: H W; S <a href="#">WELT SP028588</a> , <a href="#">WELT SP028587</a> , <a href="#">WELT SP028592/A</a> , <a href="#">WELT SP028592/B</a> , <a href="#">WELT SP028593</a> ; ISN (putative) <a href="#">WELT SP028596</a> , <a href="#">WELT SP028602</a>
<i>Lepidium solandri</i> Kirk	Maniototo peppercress	Nationally Critical	A (1)	Yes		≤ 250 mature individuals			Medium	High	DPT, NR, NStr, PF, RF, RR, TL	RF, Sp	TL = H, S, L: Maniototo Plain / Alexandra South. Accession numbers: H Uni. Zurich; L <a href="#">WELT SP028621</a> ; S <a href="#">AK 4488</a> , <a href="#">AK 209545</a>
<i>Leptinella conjuncta</i> Heenan		Nationally Critical	A (3)	Yes			≤ 1 ha		Medium	High	DPR, NR, NStr, PF, RF, RR, TL	Sp	TL = H: Pisa Flat, Clutha/Mata-au River. Accession number: H <a href="#">CHR 592259</a>
<i>Libertia peregrinans</i> Cockayne & Allan		Nationally Vulnerable	A (3)				≤ 1 ha		Low	High	DPT, PF, RR	DP, PD	
<i>Lobelia arenaria</i> (Hook.f.) Heenan & de Lange		Naturally Uncommon	A (3)				≤ 1 ha		Medium	Low	CI, DPS, DPT, PF, RR, Sp	DP	
<i>Luzula decipiens</i> Edgar	wood-rush	Not Threatened	A (1)			< 250 mature individuals			Low	Low	CI, DPR, DPS, DPT, NR, OL		

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Mazus arenarius</i> Heenan, P.N.Johnson & C.J.Webb		Declining	A (3)				≤ 1 ha		High	High	CI, DPT, NR, PF, RR, TL	DP, RR, Sp	TL = H, I: False Islet, southeast Otago / Tahakopa Ecological District. Accession numbers: H <a href="#">CHR 494723</a> <a href="#">CHR 494723 B</a> ; I <a href="#">AK 229880</a> , MO 102097055, AD 99646366, OTA 061154, <a href="#">CHR 532707</a> , <a href="#">WELT SP080009</a> , K
<i>Mazus novaezeelandiae</i> subsp. <i>impolitus</i> Heenan f. <i>impolitus</i>		Nationally Endangered	A (3)	Yes			≤ 1 ha		High	High	NR, NStr, OL, PF	DP, RR	
<i>Muehlenbeckia ephedroides</i> Hook.f.		Nationally Vulnerable	A (1)			≤ 250 mature individuals			High	Medium	DPR, PF, RF, RR	DP, Sp	
<i>Myosotis albosericca</i> Hook.f.		Nationally Critical	A (3)	Yes	Yes		≤ 1 ha		High	High	NS, NStr, OL, RE, St, TL	OL	RE = one known location from Central Otago, southern Dunstan Range.  TL = H: Dunstan Gorge on the Clutha/Mata-au River. Accession number: H K?
<i>Myosotis cheesemanii</i> Petrie	Forget-me-not	Nationally Critical	A (3)	Yes			≤ 1 ha		High	Medium	DPR, DPS, DPT, NS, NStr, RR, St, TL	DP, RR, Sp	TL = H, L, ISL, TF: Mount Pisa Range, north of Cromwell. Accession numbers: L <a href="#">WELT SP002696/A</a> ; ISL <a href="#">AK 7447</a> , <a href="#">SP002696/B</a> ; TF <a href="#">CHR 97407</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Myosotis glabrescens</i> L.B.Moore	Forget-me-not	Data Deficient	A (3)	Yes	Yes		≤ 1 ha		Low	Medium	DPR, DPS, DPT, NS, NStr, RE, RR, Sp, St, TL		RE = known only from one site and a few gatherings made in the Hector Range, east of Lake Whakatipu.  TL = H: Tapuae-o-Uenuku   Hector Mountains, east of Lake Whakatipu. Accession number: H <a href="#">WELT SP004736</a>
<i>Myosotis hikuwai</i> Meudt, Prebble & G.M.Rogers		Nationally Critical	A (3)	Yes	Yes		≤ 1 ha		High	Medium	DPT, EF, NStr, OL, RE, TL	DP, OL	RE = one known location from the Clutha/Mata-au River, near Wānaka.  TL = H: Clutha/Mata-au River. Accession number: H <a href="#">WELT SP0108906</a>  Previous Name and Authority: <i>Myosotis</i> aff. <i>glauca</i> (a) (WELT SP104520; "Mata-Au")
<i>Myosotis oreophila</i> Petrie		Nationally Critical	A (3)	Yes	Yes		≤ 1 ha		High	Medium	DPR, DPS, DPT, NS, NStr, RE, RR, St, TL	EF, St, Sp	RE = known only from Central Otago. Although localised to one or a few known populations, recent research suggests it could now be known from one site only (Stanley, pers. comm, cited in NZPCN website, 2023).  TL = H, I: Mount Ida, near Naseby. Accession numbers: H <a href="#">WELT SP002393/A</a> ; I <a href="#">WELT SP002393/B</a>
<i>Myosotis spathulata</i> G.Forst.		Naturally Uncommon	A (1)			≤ 250 mature individuals			Low	Low	DPS, DPT, OL	DP, EF, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Myosotis tenericaulis</i> Petrie		Naturally Uncommon	A (3)	Yes			≤ 1 ha		Low	Medium	DPR, DPT, NStr, PF, RR, Sp, TL	DP, Sp	TL = L, ISL: edge of Inch Clutha, near Romahapa, Clutha County / Inch Clutha, about a mile (~1.6 km) from the Romahapa Station on the Catlins River railway line, where the railway crosses the Puerua Stream and enters the alluvial plan of the Inch-Clutha / Tokomairiro Ecological District. Accession numbers: L <a href="#">WELT SP002689/A</a> , <a href="#">WELT SP002689/B</a> ; ISL <a href="#">CHR 295327</a>
<i>Myosotis umbrosa</i> Meudt, Prebble & Thorsen		Nationally Critical	A (1)	Yes	Yes	≤ 250 mature individuals			Low	Low	DPR, DPS, DPT, NStr, PF, RE, Sp, TL	DP, RR, Sp	RE = known only from the Rock and Pillar and Lammerlaw Ranges.  TL = H: Rock and Pillar Range. Accession number: H <a href="#">WELT SP089905</a>
<i>Olearia hectorii</i> Hook.f.	Hector's tree daisy	Nationally Endangered	C	Yes					High	High	CD, NStr, RF, TL	CD, De, RF	TL = H: Otago Lakes District. Accession number: H K?
<i>Ourisia modesta</i> Diels		Nationally Critical	A (3)	Yes			≤ 1 ha		Low	Medium	DPT, NStr, OL	DP, PD, Sp	
<i>Pentapogon youngii</i> (Hook.f.) de Lange & L.M.H.Schmid		Naturally Uncommon	A (1)			≤ 250 mature individuals			Low	Low	DPR, DPS, DPT, NR, PF, Sp, TL	DP, Sp	Previous Name and Authority: <i>Deyeuxia youngii</i> (Hook.f.) Buchanan  TL = H, I: Swampy Hill, near Ōtepoti Dunedin / Otago Coast Ecological Region. Accession numbers: H W 29192; I <a href="#">AK 1508</a> , <a href="#">WELT SP069693</a> , <a href="#">WELT SP069694</a> , <a href="#">WELT SP069696</a> .

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Pimelea lyallii</i> Hook.f.		Declining	A (1)			≤ 250 mature individuals			High	High	CI, DPT, PF, RF, RR	CD, DP, RR, Sp	
<i>Pittosporum obcordatum</i> Raoul	heart-leaved kohuhu	Nationally Vulnerable	A (1)			≤ 250 mature individuals			High	High	NR, PF, RF, RR	PD, RF	
<i>Pittosporum patulum</i> Hook.f.	pitpat	Nationally Vulnerable	A (1)			≤ 250 mature individuals			High	High	NR, Sp	CD, PD, RF, Sp	
<i>Puccinellia rariflorens</i> Edgar	saltgrass	Nationally Critical	A (3)	Yes			≤ 1 ha		Medium	High	CD, NR, NStr, PF, RR, TL	CD, DP, RR	TL = H: Alexandra, Conroys Road. Accession number: H <a href="#">CHR 402693</a>
<i>Puccinellia walkeri</i> (Kirk) Allan		Naturally Uncommon	A (3)				≤ 1 ha		Low	Low	CI, DPR, DPS, DPT, PF, RR, Sp	DP, Sp	
<i>Ranunculus brevis</i> Garn.-Jones	aquatic buttercup	Nationally Endangered	A (3)				≤ 1 ha		Low	Low	DPS, NR, NS, RR, St	DP, RR, Sp	
<i>Ranunculus macropus</i> Hook.f.		Data Deficient	A (3)				≤ 1 ha		Low	Medium	CR, DPR, DPS, DPT, PF, RF		
<i>Ranunculus recens</i> Kirk		Nationally Vulnerable	A (3)	Yes			≤ 1 ha		High	High	NStr, PF, RR, Sp, TL	CD, RR, Sp, St	TL = H, S, L: coastal sands near Ōtepoti Dunedin to Fortrose, Otago. Accession numbers: H W: S <a href="#">WELT SP000361/B</a> ; L <a href="#">WELT SP000361/A</a>
<i>Raoulia monroi</i> Hook.f.	fan-leaved mat daisy	Nationally Vulnerable	A (3)				≤ 1 ha		High	Medium	CD, DPS, DPT, NR, PF, RR	DP, PD, RR, Sp	
<i>Rytidosperma horrens</i> Connor & Molloy		Nationally Critical	A (3)				≤ 1 ha				DPS, DPT, DPR, NR	RR, St	
<i>Rytidosperma telmaticum</i> Connor & Molloy		Declining	A (3)				≤ 1 ha		Low	Low	DPR, DPS, DPT, NR, RR	DP, RR	
<i>Scleranthus biflorus</i> (J.R.Forst. & G.Forst.) Hook.f.		Not Threatened	A (3)				≤ 1 ha		Medium	High	CI, DPR, NR, OL, PF	SO	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Simplicia felix</i> de Lange, J.R.Rolfe, Smissen & Ogle		Nationally Critical	A (3)				≤ 1 ha		Medium	Medium	DPR, DPS, DPT, NR, OL, PE	DP, RR	
<i>Simplicia laxa</i> Kirk		Nationally Critical	A (1)	Yes		≤ 250 mature individuals			Low	Low	DPS, DPT, NR, NStr, PF, RF, Sp, TL	CD, RR, Sp	TL = L, ISL, ISN: Waikouaiti, Otago / northeast from Waikouaiti, Otago east coast / Waikouaiti, Deep Stream / Rock and Pillar Road [Old Dunstan Road], near Deep Stream Hotel, not far from roadside. Accession numbers: L <a href="#">WELT SP043017</a> , <a href="#">WELT SP043021</a> ; ISL <a href="#">AK 1370</a> , <a href="#">AK 1371</a> , <a href="#">AK 1372</a> ; ISN <a href="#">WELT SP043019</a>
<i>Solenogyne christensenii</i> (Petrie) de Lange, Jian Wang ter & Barkla, comb. nov.		Nationally Critical	A (3)	Yes	Yes		≤ 1 ha		High	High	NS, NStr, OL, RE	DP, EF	RE = The one location where this taxon was previously found outside Otago is believed to have gone extinct. The remaining known habitat is in the upper Clutha Valley, Otago.  Previous Name and Authority: <i>Abrotanella christensenii</i> Petrie
<i>Triglochin palustris</i> L.	marsh arrow-grass	Nationally Critical	A (3)	Yes			≤ 1 ha		Medium	Low	DPS, DPT, NR, NStr, RR	DP, RR, SO, Sp	
<i>Trithuria brevistyla</i> (K.A.Ford) de Lange & Mosyakin	hydatella	Nationally Vulnerable	A (3)	Yes			≤ 1 ha		Low	Low	DPR, DPS, DPT, NR, NS, NStr, RR	DP, PD	Previous Name and Authority: <i>Trithuria</i> aff. <i>inconspicua</i> (CHR 502359; South Island)
<i>Veronica lilliputiana</i> Stearn		Declining	A (3)				≤ 1 ha		Low	High	DPT, RR, Sp	DP	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Critical continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>TAXONOMICALLY INDETERMINATE (5)</i>													
<i>Acaena</i> aff. <i>rorida</i> (OTA 59561; Pool Burn)	bidibidi	Nationally Critical	A (3)	Yes	Yes		≤ 10 ha	Decline: 10–30%	Medium	Medium	De, DPR, DPS, DPT, NStr, PF, RE, RR, Sp	DP, OL	RE = known Ida Valley and Macraes
<i>Craspedia</i> (gg) (CHR 472168; Mararoa)		Nationally Critical	A (1)	Yes		≤ 250 mature individuals			Medium	Medium	DPS, DPT, DPR, OL, Sp	DP, OL	
<i>Craspedia</i> (y) (CHR 516260; Cape Saunders)		Nationally Critical	A (3)	Yes	Yes		≤ 1 ha		Low	Medium	DPS, DPT, NStr, OL, RE		Recent surveys in 2024 have found ca. 250 mature individuals
<i>Leptinella</i> aff. <i>pectinata</i> (a) (CHR 580894; Nevis)		Nationally Critical	A (3)	Yes	Yes		≤ 1 ha		Low	High	DPT, NStr, OL, RE	DP, OL	OL = Found in an outcrop of fragmenting finely eroding schist
<i>Meliccytus</i> (a) (CHR 355077; Matiri Range)		Nationally Endangered	A (1)			≤ 250 mature individuals			Low	Medium	DPR, DPS, DPT, NR, OL	CD, DP, RF, Sp	OL = Only one plant known in Otago, from the Upper Long Burn, Eyre Mountains. This record from >20 years ago

*Regional and national qualifiers:* CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural State; NStr = National Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure?Overseas; TO = Threatened Overseas; TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation; PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

*Type localities:* H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isonotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Regionally Endangered (68)

### Criteria for Regionally Endangered:

A – small population (natural or unnatural) that has a low to high ongoing or predicted decline

A(1) 250–1000 mature individuals, predicted decline 10–50%

A(2) ≤ 5 subpopulations, ≤ 300 mature individuals in the largest subpopulation, predicted decline 10–50%

A(3) Total area of occupancy ≤ 10 ha (0.1 km<sup>2</sup>), predicted decline 10–50%

B – small stable population (unnatural)

B(1) 250–1000 mature individuals, stable population

B(2) ≤ 5 subpopulations, ≤ 300 mature individuals in the largest subpopulation, stable population

B(3) Total area of occupancy ≤ 10 ha (0.1 km<sup>2</sup>), stable population

C – moderate population and high ongoing or predicted decline

C(1) 1000–5000 mature individuals, predicted decline 50–70%

C(2) ≤ 15 subpopulations, ≤ 500 mature individuals in the largest subpopulation, predicted decline 50–70%

C(3) Total area of occupancy ≤ 100 ha (1 km<sup>2</sup>), predicted decline 50–70%

**Table 3.3.2: Regionally Endangered indigenous vascular plant taxa in Otago**

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY ENDANGERED (68)</b>													
<i>TAXONOMICALLY DETERMINATE (66)</i>													
<i>Acaena microphylla</i> var. <i>pauciglochidiata</i> Bitter	bidibidi	Declining	A (3)	Yes			≤ 10 ha	Decline: 10-30%	Low	Low	CI, DPS, DPT, NR, NStr, PF, RR, Sp	DP, RR, Sp	
<i>Acaena pallida</i> (Kirk) Allan	sand bidibid	Declining	B (3)	Yes			≤ 10 ha	Stable: ±10%	Medium	Medium	CI, NStr, PF, RR, St	DP, RR, SO	
<i>Achnatherum petriei</i> (Buchanan) S.W.L.Jacobs & J.Everett		Declining	A (1)	Yes		250–1000 mature individuals		Decline: 10–30%	Low	Low	DPR, DPS, DPT, NR, NStr, RR	DP, EF, Sp	
<i>Anisotome lyallii</i> Hook.f.	Lyall's carrot	Relict	B (3)				≤ 10 ha	Stable: ±10%	Medium	Medium	CI, PF, RR, St	RR	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Endangered continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Atriplex buchananii</i> (Kirk) Cheeseman		Nationally Vulnerable	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NS, PF, RR	DP, RR, Sp	
<i>Bolboschoenus caldwellii</i> (V.J.Cook) Soják	Caldwell's clubrush	Not Threatened	B (3)				≤ 10 ha	Stable: ±10%	Low	Medium	CI, DPS, DPT, NR, RR	SO	
<i>Brachyglottis sciadophila</i> (Raoul) B.Nord.	climbing groundsel	Declining	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Medium	DPT, NR, NStr, PF, Sp	DP	
<i>Cardamine thalassica</i> Heenan	cress	Nationally Endangered	B (1)	Yes		250–1000 mature individuals		Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, RR, Sp, TL	DP	TL = H: Hawkdun Range, Rambling Stream. Accession number: H <a href="#">CHR 619275</a>
<i>Carex applanata</i> Thorsen & de Lange		Naturally Uncommon	B (3)	Yes	Yes		≤ 10 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RE, RR, Sp, St	DP, RR	RE = only known from the Old Woman, Old Man, Umbrella, Garvie, Pisa and The Remarkables Range.  TL = H: Central Otago Ecological Region, Old Man Ecological District, Old Woman Range. Accession number: H <a href="#">AK 302066</a>
<i>Carex capillacea</i> Boott	sedge	Nationally Vulnerable	A (3)				≤ 10 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, PF, RR	DP, SO, Sp	
<i>Carex decurtata</i> Cheeseman	sedge	Data Deficient	A (3)	Yes			≤ 10 ha	Decline: 10–30%	High	Medium	DPT, NR, NStr, PF, RR, Sp	Sp	
<i>Carex edgariae</i> Hamlin	Edgar's sedge	Naturally Uncommon	B (3)	Yes			≤ 10 ha	Stable: ±10%	Low	Medium	De, DPR, DPS, DPT, NR, NS, NStr, Sp, St, TL	DP, Sp	TL = H: Nevis Valley, east of Tapuae-o-Uenuku   Hector Mountains. Accession numbers: H <a href="#">WELT SP002007/A</a> and <a href="#">WELT SP002007/B</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Endangered continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Carex kaloides</i> Petrie	sedge	Declining	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Low	Medium	DPT, NR, NStr, PD, Sp, TL	DP, Sp	TL = H, L, T: Carrick Range. Accession numbers: H <a href="#">WELT SP002007/B</a> ; L <a href="#">WELT SP021726/A</a> ; T <a href="#">WELT SP021726/B</a>
<i>Carex litorosa</i> L.H.Bailey	sea sedge	Declining	B (3)	Yes			≤ 10 ha	Stable: ±10%	Medium	Medium	CI, DPS, DPT, NStr, RR	DP, RR	
<i>Carex rubicunda</i> Petrie		Nationally Vulnerable	B (3)	Yes			≤ 10 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RR	DP, EF, RR	
<i>Carex subtilis</i> K.A.Ford	handsome hook sedge	Naturally Uncommon	B (3)	Yes			≤ 10 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, NStr, PF, Sp, TL	DP, SO, Sp	TL = I: Blacks, Ophir, Manuherikia Valley. Accession number: I <a href="#">WELT SP001761</a>
<i>Carex tenuiculmis</i> (Petrie) Heenan & de Lange	red-leaved swamp sedge	Declining	B (3)	Yes			≤ 10 ha	Stable: ±10%	Medium	Medium	DPT, NStr, RR, Sp, TL	DP, Sp	TL = S (possible): Lammerlaw Range. Accession numbers: S (possible) <a href="#">WELT SP021591</a> , <a href="#">WELT SP021592</a>
<i>Carmichaelia kirkii</i> Hook.f.	climbing broom	Nationally Vulnerable	A (1)	Yes		250–1000 mature individuals		Decline: 10–30%	Medium	Medium	DPS, DPT, NR, NStr, PF, RF, Sp, TL	DP, RF	TL = H, S, L, ISL: Cardrona Valley / Otepopo. Accession numbers: H K; L <a href="#">CHR 45771 A</a> ; S <a href="#">WELT SP026733</a> ; ISL <a href="#">WELT SP026731</a> , <a href="#">WELT SP026732</a> , <a href="#">WELT SP026737</a> , <a href="#">CHR 45771 C</a> , <a href="#">CHR 213042 A</a> , <a href="#">CHR 213042 B</a> , <a href="#">WELT SP079537</a>
<i>Connorochloa tenuis</i> (Buchanan) Barkworth, S.W.L.Jacobs & H.Q.Zhang	Prostrate bluegrass	Data Deficient	A (1)	Yes		250–1000 mature individuals		Decline: 10–30%	Low	Low	DPR, DPS, DPT, NS, PF, Sp		

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Endangered continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Coprosma acerosa</i> A.Cunn.	sand coprosma	Declining	A (3)				≤ 10 ha	Decline: 10–30%	Medium	Medium	DPT, PF, RF, RR	PD	
<i>Coprosma wallii</i> Petrie in Cheeseman	Wall's coprosma	Declining	A (1)			250–1000 mature individuals		Decline: 10–30%	Medium	High	PF, RF, Sp	CD, RF	
<i>Crassula mataikona</i> A.P.Druce		Naturally Uncommon	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Low	DPR, DPS, DPT, EF, NR, NStr, PF, RR, Sp	DP, Sp	
<i>Deschampsia cespitosa</i> (L.) P.Beauv.	Tufted hair grass	Declining	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Medium	NStr, RR, Sp	DP, PD, SO	
<i>Drosera binata</i> Labill.		Not Threatened	B (3)				≤ 10 ha	Stable: ±10%	Low	Medium	DPS, DPT, RR, Sp	SO	
<i>Epilobium angustum</i> (Cheeseman) P.H.Raven & Engelhorn		Naturally Uncommon	A (3)				≤ 10 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NR, PF, RR, Sp	DP, RR	
<i>Euchiton ensifer</i> (D.G.Drury) Holub		Nationally Endangered	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, NStr, PD, PF, RR, Sp	DP, PD, RR, Sp	
<i>Gentianella lineata</i> (Kirk) T.N.Ho & S.W.Liu		Relict	B (3)	Yes			≤ 10 ha	Stable: ±10%	High	Medium	NStr, RR, Sp, St	PD, RR, Sp	
<i>Gentianella saxosa</i> (G.Forst.) Holub		Naturally Uncommon	B (3)				≤ 10 ha	Stable: ±10%	Medium	Medium	DPS, DPT, PF, RR, Sp, St	DP, RR	
<i>Gingidia enysii</i> (Kirk) J.W.Dawson var. <i>enysii</i>		Nationally Endangered	A (3)				≤ 10 ha	Decline: 10–30%	Medium	Medium	DPT, Sp, NR	DP, RR	
<i>Gratiola concinna</i> Colenso		Nationally Endangered	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Medium	DPS, NStr, PF, RR	CD, DP, PD, RR	
<i>Isolepis basilaris</i> Hook.f.	Pygmy clubrush	Declining	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Medium	DPR, NStr, PF, RR	EF, RR, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Endangered continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Juncus kraussii</i> subsp. <i>australiensis</i> (Buchenau) Snogerup	sea rush	Not Threatened	B (3)				≤ 10 ha	Stable: ±10%	High	Medium	OL, RR, NR	SO	
<i>Korthalsella clavata</i> (Kirk) Cheeseman		Declining	B (3)				≤ 10 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, PF, Sp	DP	
<i>Lagenophora barkeri</i> Kirk		Naturally Uncommon	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NStr, PF, RR, Sp	DP, Sp	
<i>Lepidium crassum</i> Heenan & de Lange	thick-leaved scurvy grass	Nationally Endangered	B (3)	Yes	Yes		≤ 10 ha	Stable: ±10%	High	High	CD, DPR, NStr, PF, RE, RR, TL	CD, DP, EF, RR	RE = Once found in the Waitaki Valley, now only found in Otago, most common on Otago Peninsula, but occurs in small populations from near Kakanui to The Nuggets.  TL = H, I: Otago Peninsula, Aramoana, Mole. Accession number: H <a href="#">CHR 609777 A</a>
<i>Lepidothamnus intermedius</i> (Kirk) Quinn		Not Threatened	B (3)				≤ 10 ha	Stable: ±10%	Medium	Low	DPR, DPS, DPT, OL, Sp		
<i>Leptinella maniototo</i> (Petrie) D.G.Lloyd & C.J.Webb		Relict	A (3)				≤ 10 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, PF, RR, TL		TL = H: Maniototo Plains. Accession number: H <a href="#">WELT SP057515</a>
<i>Leptinella pusilla</i> Hook.f.		Declining	A (3)				≤ 10 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, PF, Sp		
<i>Lobelia ionantha</i> Heenan		Declining	A (3)				≤ 10 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, PF, RR, Sp	DP	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Endangered continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Luzula celata</i> Edgar	dwarf wood-rush	Declining	A (3)				≤ 10 ha	Decline: 10–30%	Medium	Medium	CD, DPS, DPT, PF, RR, Sp	DP, RR	
<i>Luzula rufa</i> var. <i>albicomans</i> Edgar	wood-rush	Not Threatened	C (3)	Yes			≤ 100 ha	Decline: 50–70%	High	High	NStr, RR		
<i>Luzula traversii</i> var. <i>tenuis</i> Edgar	wood-rush	Naturally Uncommon	A (1)	Yes	Yes	250–1000 mature individuals		Decline: 10–30%	Low	Low	DPR, DPS, DPT, NStr, RE, RF, Sp, TL	DP, RR	RE = Central Otago endemic found on rock, from 200–450 m asl.  TL = H: Cromwell Gorge. Accession number: H <a href="#">CHR 113666</a>
<i>Melicytus flexuosus</i> Molloy & A.P.Druce		Nationally Vulnerable	B (1)	Yes		250–1000 mature individuals		Stable: ±10%	Medium	Medium	DPR, NStr, PF, RF, RR	CD, RF	
<i>Montia angustifolia</i> Heenan		Naturally Uncommon	B (3)	Yes			≤ 10 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, PF, RR	DP, RR, Sp	
<i>Montigena novae-zelandiae</i> (Hook.f.) Heenan	scree pea	Declining	A (1)			250–1000 mature individuals		Decline: 10–30%	Medium	Medium	DPS, DPT, NR, PF, RR, TL	RF, Sp	TL = L, ISL: Mount Ida, north of Naseby. Accession numbers: L <a href="#">CHR 48114</a> ; ISL <a href="#">CHR 48139</a>
<i>Myosotis antarctica</i> subsp. <i>traillii</i> Kirk		Declining	A (1)	Yes		250–1000 mature individuals		Decline: 10–30%	High	Medium	CI, DPS, NStr, PF, RR, TL	Sp	TL = H: 3 miles S of Luggate, Central Otago. Accession number: H <a href="#">CHR 75720</a>  Previous Name and Authority: <i>Myosotis pygmaea</i> Colenso
<i>Myosotis brevis</i> de Lange & Barkla		Nationally Vulnerable	A (3)	Yes			≤ 10 ha	Decline: 10–30%	High	Medium	EF, NStr, PF, RR, Sp	EF, Sp	
<i>Myosotis glauca</i> (G.Simpson & J.S.Thomson) de Lange & Barkla	Kaimanawa forget-me-not	Nationally Vulnerable	A (3)	Yes			≤ 10 ha	Decline: 10–30%	High	Medium	NR, NStr, PF, Sp, TL	DP, Sp	TL = H, T?: base of Mount Ida. Accession numbers: H: <a href="#">CHR 75722</a> ; T? <a href="#">CHR 550036</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Endangered continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Myosotis rakiura</i> L.B.Moore		Naturally Uncommon	A (3)				≤ 10 ha	Decline: 10–30%	Low	High	DPT, NR, PF, RR	RR, Sp	
<i>Myosotis uniflora</i> Hook.f.		Naturally Uncommon	A (3)				≤ 10 ha	Decline: 10–30%	Medium	High	CD, DPT, OL	DP, Sp	
<i>Myosurus minimus</i> subsp. <i>novae-zelandiae</i> (W.R.B.Oliv.) Garn.-Jones	New Zealand mousetail	Nationally Vulnerable	A (3)	Yes			≤ 10 ha	Decline: 10–30%	High	High	EF, NR, NStr, PF, RR	DP, EF, RR, Sp	
<i>Oxybasis ambigua</i> (R.Br.) de Lange & Mosyakin	amarantha ceae	Declining	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Medium	CI, DPS, DPT, NStr, PF, RR	DP, PD, SO	Previous Name and Authority: <i>Oxybasis glauca</i> subsp. <i>ambigua</i> (R.Br.) Mosyakin
<i>Pachycladon cheesemanii</i> Heenan & A.D.Mitch.	dryland cress	Nationally Endangered	C (1)	Yes		1000–5000 mature individuals		Decline: 50–70%	Medium	Low	DPS, NStr, PF, RF	DP, RR, Sp	
<i>Pimelea poppelwellii</i> Petrie		Naturally Uncommon	B (1)	Yes		250–1000 mature individuals		Stable: ±10%	Low	Low	DPS, DPT, NR, NStr, RR, Sp, TL	DP, RR, Sp, TL	TL = S: Symmetry Peaks, Eyre Mountains, near Lake Whakatipu. Accession number: S <a href="#">WELT SP044228</a>
<i>Pimelea pseudolyallii</i> Allan		Naturally Uncommon	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NR, NStr, RR	DP, Sp	
<i>Pimelea sericeovillosa</i> subsp. <i>pulvinaris</i> (C.J.Burrows) C.J.Burrows		Nationally Vulnerable	A (3)	Yes			≤ 10 ha	Decline: 30–50%	High	High	NR, NStr, PF, RF, RR, CD	DP	
<i>Ranunculus ternatifolius</i> Kirk		Nationally Vulnerable	B (3)	Yes			≤ 10 ha	Stable: ±10%	Medium	Medium	NStr, PF, RR, TL	DP, Sp	TL = H?, S: Catlins River. Accession numbers: H W?; S <a href="#">WELT SP000335</a> , <a href="#">WELT SP000341</a> , <a href="#">WELT SP000343</a> , <a href="#">WELT SP026422</a>
<i>Ruppia megacarpa</i> R.Mason		Naturally Uncommon	B (3)				≤ 10 ha	Stable: ±10%	Low	Low	CI, DPR, DPS, DPT, PF, RR, Sp, EF	RR, SO	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Endangered continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Rytidosperma thomsonii</i> (Buchanan) Connor & Edgar		Declining	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NR, NStr, PF, Sp, TL	DP	TL = H, I (possible): Mount St. Bathans. Accession numbers: H <a href="#">WELT SP059624</a> ; I (possible) <a href="#">WELT SP068111/A</a> , <a href="#">WELT SP068111/B</a>
<i>Senecio dunedinensis</i> Belcher		Nationally Endangered	A (1)	Yes		250–1000 mature individuals		Decline: 10–30%	Low	Low	DPS, DPT, NR, NStr, PF, RF, Sp, TL	DP, EF, Sp	TL = H?, T?: hills near Ōtepoti Dunedin. Accession numbers: H? W; T? <a href="#">WELT SP031853</a> , <a href="#">WELT SP031627</a>
<i>Sonchus kirkii</i> Hamlin	pūhā	Declining	A (1)			250–1000 mature individuals		Decline: 10–30%	Medium	Low	CI, DPS, DPT, PF, RR, Sp		
<i>Tetrachondra hamiltonii</i> Petrie ex Oliv.		Nationally Vulnerable	B (3)	Yes			≤ 10 ha	Stable: ±10%	Low	Medium	DPT, NStr, PD, RR	DP, Sp	
<i>Teucrium parvifolium</i> (Hook.f.) Kattari & Salmaki	native verbena	Declining	A (1)			250–1000 mature individuals		Decline: 10–30%	Medium	Medium	DPS, DPT, NR, PF, RF, Sp	Sp	Previous Name and Authority: <i>Teucrium parvifolium</i> Hook.f.
<i>Urtica perconfusa</i> Grosse-Veldmann & Weigend	swamp nettle	Declining	B (3)				≤ 10 ha	Stable: ±10%	Medium	Medium	DPS, DPT, PF, RR, Sp, St	Sp	
<i>Veronica cupressoides</i> Hook.f.	whipcord hebe	Nationally Endangered	C (1)	Yes		1000–5000 mature individuals		Decline: 50–70%	Medium	Medium	NR, NStr, PF, RF	DP, RF	
<i>Wurmbea novae-zelandiae</i> (Hook.f. ex Kirk) Lekhak, Survesw. & S.R.Yadav		Nationally Endangered	A (3)	Yes			≤ 10 ha	Decline: 10–30%	Medium	Low	DPS, NStr, PF, Sp	DP, RR	
<b>TAXONOMICALLY INDETERMINATE (2)</b>													
<i>Coprosma brunnea</i> (Kirk) Cockayne ex Cheeseman	coprosma	Declining	A (1)	Yes		250–1000 mature individuals		Decline: 10–30%	Medium	Medium	DPT, NStr, PF, RF, RR, Sp	DP, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Endangered continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Myosotis saxatilis</i> Petrie		Naturally Uncommon	B (3)	Yes			≤ 10 ha	Stable: ±10%	Low	Low	De, DPS, DPT, NR, NStr, Sp	DP, Sp	Previous Name and Authority: <i>Myosotis aff. australis</i> (d) (WELT SP02612; "saxatilis Petrie")

*Regional and national qualifiers:* CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural State; NStr = National Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure?Overseas; TO = Threatened Overseas' TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

*Type localities:* H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isonotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## **Regionally Vulnerable (66)**

### *Criteria for Regionally Vulnerable:*

#### *A – small, increasing population (unnatural)*

A(1) 250–1000 mature individuals, predicted increase > 10%

A(2) ≤ 5 subpopulations, ≤ 300 mature individuals in the largest subpopulation, predicted increase > 10%

A(3) Total area of occupancy ≤ 10 ha (0.1 km<sup>2</sup>), predicted increase > 10%

#### *B – moderate, stable population (unnatural)*

B(1) 1000–5000 mature individuals, stable population

B(2) ≤ 15 subpopulations, ≤ 500 mature individuals in the largest subpopulation, stable population

B(3) Total area of occupancy ≤ 100 ha (1 km<sup>2</sup>), stable population

#### *C – moderate population, with population trend that is declining*

C(1) 1000–5000 mature individuals, predicted decline 10–50%

C(2) ≤ 15 subpopulations, ≤ 500 mature individuals in the largest subpopulation, predicted decline 10–50%

C(3) Total area of occupancy ≤ 100 ha (1 km<sup>2</sup>), predicted decline 10–50%

#### *D – moderate to large population and moderate to high ongoing or predicted decline*

D(1) 5000–20,000 mature individuals, predicted decline 30–70%

D(2) ≤ 15 subpopulations, ≤ 1000 mature individuals in the largest subpopulation, predicted decline 30–70%

D(3) Total area of occupancy ≤ 1000 ha (10 km<sup>2</sup>), predicted decline 30–70%

#### *E – large population and high ongoing or predicted decline*

E(1) 20,000–100,000 mature individuals, predicted decline 50–70%

E(2) Total area of occupancy ≤ 10,000 ha (100 km<sup>2</sup>), predicted decline 50–70%

**Table 3.3.3: Regionally Vulnerable indigenous vascular plant taxa in Otago**

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY VULNERABLE (66)</b>													
<b>TAXONOMICALLY DETERMINATE (63)</b>													
<i>Acaena buchananii</i> Hook.f.	bidibidi	Declining	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	Low	DPS, DPT, NR, NStr, PF, Sp, TL	DP	TL = H, S, S?: Otago Lake District / Tarras and Luggate, Upper Clutha / Mount Ida Valley / Cardrona Mountains. Lake Hāwea, Tarras and Luggate. Accession numbers: H K?, <a href="#">CHR 9358</a> (as <i>Acaena buchananii</i> Hook.f. f. <i>erubescens</i> Bitter); S <a href="#">CHR 330983</a> , <a href="#">CHR 330984</a> , <a href="#">WELT SP028922</a> , <a href="#">WELT SP028945</a> ; S? <a href="#">WELT SP028925</a> , <a href="#">WELT SP028935</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Aciphylla subflabellata</i> W.R.B.Oliv.	speargrass	Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Medium	Low	DPS, DPT, NStr, PF, Sp	DP, Sp	
<i>Actinotus novae-zelandiae</i> Petrie	New Zealand flannel flower	Not Threatened	B (3)				≤ 100 ha	Stable: ±10%	High	Medium	DPS, NR, NS, RR	DP	
<i>Alepis flavida</i> (Hook.f.) Tiegh.	yellow mistletoe	Declining	C (1)			1000–5000 mature individuals		Decline: 10–30%	Medium	Low	CD, DPS, PF, Sp	CD	
<i>Athenia bilocularis</i> (Kirk) Cockayne		Nationally Vulnerable	B (3)	Yes			≤ 100 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NStr, TL	EF, RR, SO, Sp	TL = S, T?: Lake Waihola, eastern Otago. Accession numbers: S <a href="#">AK 1255</a> , <a href="#">WELT SP063601</a> , <a href="#">WELT SP063602</a> , <a href="#">WELT SP063603</a> ; T? <a href="#">WELT SP060350</a> , <a href="#">WELT SP060351</a> , <a href="#">WELT SP060352</a> , <a href="#">WELT SP060353</a> , <a href="#">WELT SP060354</a>  Previous Name and Authority: <i>Lepilaena bilocularis</i> Kirk
<i>Anisotome capillifolia</i> (Cheeseman) Cockayne		Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Low	Low	DPS, DPT, NR, NStr, RR, Sp	DP, PD, RF	
<i>Anisotome caucicola</i> J.W.Dawson		Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Low	Low	DPS, DPT, NR, NStr, PF, RR, Sp, TL	DP, RR, Sp	TL = H: Nevis Valley. Accession numbers: <a href="#">WELT SP00515/A</a> , <a href="#">WELT SP00515/B</a>
<i>Anisotome pilifera</i> (Hook.f.) Cockayne & Laing		Declining	D (3)				≤ 1000 ha	Decline: 30–50%	Low	Low	DPS, DPT, Sp	DP, PD	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Anthosachne aprica</i> (A.Löve & Connor) C.Yen & J.L.Yang	blue wheat grass	Naturally Uncommon	C (3)	Yes	Yes		≤ 100 ha	Decline: 10–30%	Low	Medium	DPR, DPS, DPT, NStr, PF, RE, Sp, TL	DP, Sp	RE = known only from Central Otago.  TL = H: Hillside to west of Roxburgh. Accession numbers: H <a href="#">CHR 370822</a>
<i>Asplenium subglandulosum</i> (Hook. & Grev.) Salvo, Prada & T.E.Diaz		Naturally Uncommon	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	Low	DPS, DPT, NR, NStr, PF, RR, Sp	DP, SO, Sp	
<i>Astelia petriei</i> Cockayne		Not Threatened	C (1)			1000–5000 mature individuals		Decline: 10–30%	Low	Low	DPS, DPT, Sp		
<i>Australina pusilla</i> (Poir.) Gaudich. subsp. <i>pusilla</i>		Not Threatened	B (3)				≤ 100 ha	Stable: ±10%	Medium	Medium	DPS, DPT, Sp	SO	
<i>Azorella nitens</i> Petrie		Not Threatened	C (3)				≤ 100 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, RR		
<i>Carex appressa</i> R.Br.	southern cutty grass	Not Threatened	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NStr, RR	SO	
<i>Carex buchananii</i> Berggr.	Buchanan's sedge	Declining	B (3)	Yes			≤ 100 ha	Stable: ±10%	Low	Medium	DPS, DPT, NStr, Sp	DP	
<i>Carex maorica</i> Hamlin	Māori sedge	Not Threatened	C (3)				≤ 100 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, RR, Sp		

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Carex talbotii</i> Kottaim	Berggren's sedge, Talbot's sedge	Declining	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Low	Medium	DPS, DPT, NStr, RR, TL	PD, Sp	TL = L, ISL, ISL (possible), T?: Mount Pisa / summit of Mount Pisa / Top of Mount Pisa Range, north from Cromwell. Accession numbers: L <a href="#">WELT SP011974</a> ; ISL <a href="#">WELT SP011952</a> , ISL (possible): <a href="#">WELT SP011978/A</a> , <a href="#">WELT SP011949</a> ; ISL? <a href="#">AK199699</a> , <a href="#">AK 2693</a> ; T? <a href="#">WELT SP011978/B</a>  Previous Name and Authority: <i>Carex berggrenii</i> Petrie
<i>Carmichaelia crassicaulis</i> subsp. <i>racemosa</i> (Kirk) Heenan	slender coral broom	Nationally Vulnerable	C (1)	Yes		1000–5000 mature individuals		Decline: 30–50%	High	Medium	DPR, DPS, NR, NStr, PF, RF, Sp, TL	DP, RF	TL = H: near the Lindis Pass / Lindis Pass. Accession numbers: <a href="#">WELT SP084571</a> ; ISL <a href="#">AK 4815</a>
<i>Chaerophyllum novae-zelandiae</i> K.F.Chung	apiaceae	Not Threatened	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, NR, NStr, Sp		
<i>Chiloglottis valida</i> D.L.Jones	bird orchid	Vagrant	A (3)				≤ 10 ha	Increasing : >10%	Low	Medium	DPT, OL	SO	
<i>Chionochoa ovata</i> (Buchanan) Zotov	Fiordland snow tussock	Declining	C (1)			1000–5000 mature individuals		Decline: 30–50%	Low	Low	DPR, DPS, DPT, NR, Sp	CD, DP, RR, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Clematis afoliata</i> Buchanan	leafless clematis	Not Threatened	C (3)				≤ 100 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NR, Sp	DP	
<i>Colobanthus brevisepalus</i> Kirk	pin cushion	Declining	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	Low	CD, DPS, NR, NStr, PF, RR, TL	DP, Sp	TL = H, S: Bald Hill flat near Alexandra, Clutha/Mata-au River, Gorge Creek / Old Man Ecological District. Accession numbers: H W?: S <a href="#">AK 4075</a> , <a href="#">WELT</a> <a href="#">SP050959</a>
<i>Coprosma intertexta</i> G.Simpson	coprosma	Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Medium	Low	DPS, DPT, NR, NStr, PF, RF, Sp, TL	DP, Sp	TL = S, T?: Swinburne Valley, near Kyeburn / Central Otago Ecological Region. Accession numbers: S <a href="#">AK 22885</a> , <a href="#">AK 211649</a> ; T? = <a href="#">CHR 63000 A</a> , <a href="#">CHR 63000 B</a> , <a href="#">CHR 550909</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Coprosma virescens</i> Petrie	coprosma	Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Medium	Medium	DPT, NR, NStr, PF, Sp, TL	DP, RF	TL = H, S, S?: near Ōtepoti Dunedin / Dunedin Ecological District. Accession numbers: H W?; S <a href="#">SP048838/A</a> , <a href="#">SP048838/B</a> ; S? <a href="#">AK 8933</a> , <a href="#">AK 8934</a> , <a href="#">AK 8935</a> , <a href="#">AK 8936</a> , <a href="#">AK 8937</a> , <a href="#">AK 211964</a>
<i>Drymoanthus flavus</i> St George & Molloy		Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Low	Low	DPS, DPT, NStr, Sp, TL	DP, Sp	TL = H, I: Tahakopa Bay Scenic Reserve. Accession numbers: H <a href="#">CHR 482355</a> ; I <a href="#">WELT SP080019</a> , K 000891455
<i>Eleocharis sphacelata</i> R.Br.	tall spike sedge	Not Threatened	B (3)				≤ 100 ha	Stable: ±10%	Low	Low	DPS, DPT, OL	SO	
<i>Epilobium chionanthum</i> Hausskn.	marsh willowherb	Not Threatened	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	Low	DPR, DPS, DPT, NStr, RR, Sp	DP	
<i>Epilobium insulare</i> Hausskn.		Declining	C (3)				≤ 100 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NR, RR, Sp, TL	DP, RR, Sp	TL = L: Town Belt, Ōtepoti Dunedin. Accession numbers: <a href="#">WELT SP042073</a>
<i>Epilobium rostratum</i> Cheeseman		Not Threatened	C (3)				≤ 100 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, NR, RR, Sp		
<i>Euchiton delicatus</i> (D.G.Drury) Holub		Not Threatened	B (3)				≤ 100 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, RR, Sp	SO	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Euchiton polylepis</i> (D.G.Drury) Breitw. & J.M.Ward		Naturally Uncommon	C (3)				≤ 100 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, PF, Sp	DP, PD, Sp	
<i>Helichrysum simpsonii</i> subsp. <i>tumidum</i> (Cheeseman) de Lange & Blanchon		Nationally Vulnerable	B (3)	Yes	Yes		≤ 10 ha	Stable: ±10%	High	High	NStr, RE, RR, TL	DP, RR	RE = known from near Cape Saunders.  TL = L, ISL: near Cape Saunders. Accession numbers: L <a href="#">WELT SP058412</a> ; ISL WELT SP058411, WELT SP058413  Previous Name and Authority: <i>Helichrysum</i> aff. <i>intermedium</i> (c) ( <i>Helichrysum selago</i> var. <i>tumidum</i> Cheeseman; WELT SP058412)
<i>Juncus pusillus</i> Buchenau	dwarf rush	Naturally Uncommon	C (3)				≤ 100 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, PF, RR, Sp	DP, SO, Sp	
<i>Lachnagrostis filiformis</i> (G.Forst.) Trin.		Not Threatened	B (1)			1000–5000 mature individuals		Stable: ±10%	Low	Low	DPR, DPS, DPT, EF	SO	
<i>Lachnagrostis striata</i> (Colenso) Zotov		Not Threatened	C (3)				≤ 100 ha	Decline: 10–30%	Medium	Low	DPR, DPS, DPT, RR		

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Lachnagrostis tenuis</i> (Cheeseman) Edgar		Nationally Vulnerable	B (3)	Yes			≤ 100 ha	Stable: ±10%	Medium	Medium	CI, DPR, DPS, DPT, NStr, RR, St, TL	RR	TL = H, I: Catlins River. Accession numbers: H <a href="#">WELT SP077014/A</a> ; I <a href="#">WELT SP077014/B</a>
<i>Lepidium tenuicaule</i> Kirk	shore cress	Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 30–50%	High	High	CI, NR, NStr, PF, RR, TL	DP, RR	TL = H, S?, S (possible); L, T?: Cape Wanbrow, near Ōamaru / Ōamaru Ecological District. Accession numbers: H W?; S? <a href="#">AK 4482</a> , <a href="#">AK 4483</a> ; S (possible) <a href="#">WELT SP030071</a> ; L <a href="#">WELT SP030070</a> ; T? <a href="#">WELT SP030069</a>
<i>Linum monogynum</i> G.Forst. var. <i>monogynum</i>		Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Medium	Medium	CI, DPS, DPT, NStr, PF, RR	DP	
<i>Lobelia perpusilla</i> Hook.f.		Not Threatened	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	High	DPS, DPT, NStr, RR	Sp	
<i>Luzula ulophylla</i> (Buchenau) Cockayne & Laing	wood-rush	Declining	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Low	Medium	DPS, DPT, NR, NStr, PF, Sp	DP	
<i>Microlaena polymoda</i> (Hook.f.) Hook.f.		Not Threatened	B (3)				≤ 100 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, Sp		

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Olearia fimbriata</i> Heads		Nationally Vulnerable	B (1)	Yes		1000–5000 mature individuals		Stable: ±10%	Medium	Medium	NR, NStr, PD, PF, TL	PD, RF	TL = H, I: Devil's Gorge, Pomahaka River, Umbrella Ecological District. Accession numbers: H <a href="#">OTA 043292</a> ; I <a href="#">OTA 043293</a> , <a href="#">OTA 043295</a> , <a href="#">OTA 043296</a>
<i>Olearia laxiflora</i> Kirk		Not Threatened	B (3)	Yes			≤ 100 ha	Stable: ±10%	Medium	High	DPT, NStr, RF, RR		
<i>Peraxilla tetrapetala</i> (L.f.) Tiegh.	red mistletoe	Declining	C (1)			1000–5000 mature individuals		Decline: 10–30%	Medium	Medium	CD, DPS, DPT, PD, Sp	CD	
<i>Pimelea aridula</i> Cheeseman subsp. <i>aridula</i>		Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 30–50%	Medium	Low	DPS, NR, NStr, PF, RF, Sp, TL	RR, Sp	TL = I, L: Clyde Hospital Grounds / Old Man Ecological District. Accession numbers: I <a href="#">CHR 6344</a> ; L <a href="#">AK 101181</a>
<i>Pseudopanax ferox</i> Kirk		Naturally Uncommon	B (1)	Yes		1000–5000 mature individuals		Stable: ±10%	Medium	High	NR, NStr, PF, Sp, TL	PD, Sp	TL = H: "valley of the Poulter, near the junction of the Matukituki"? Accession numbers: H W?
<i>Pterostylis tanypoda</i> D.L.Jones, Molloy & M.A.Clem.		Declining	C (3)				≤ 100 ha	Decline: 10–30%	Medium	Low	DPS, DPT, NR, PF, Sp	DP, EF, Sp	
<i>Pterostylis tristis</i> Colenso		Declining	C (3)				≤ 100 ha	Decline: 10–30%	Medium	Low	DPS, DPT, PF, Sp	DP, EF, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Ranunculus acraeus</i> Heenan & P.J.Lockh.		Nationally Endangered	C (1)			1000–5000 mature individuals		Decline: 10–30%	Medium	Low	De, DPS, DPT, NR, RF, RR, Sp	DP, RF	
<i>Ranunculus buchananii</i> Hook.f.		Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Medium	Medium	DPS, DPT, NR, NStr, RR, Sp, TL	DP, RR	TL = H, I: Bold Peak, Humboldt Mountains / Otago Lakes District. Accession numbers: H <a href="#">CHR 5338 A</a> ; I <a href="#">CHR 5338 B</a>
<i>Ranunculus royi</i> G.Simpson		Data Deficient	B (3)	Yes			≤ 100 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NStr, RR, Sp, TL		TL = H: Mount Roy, near Lake Wānaka. Accession number: H <a href="#">CHR 75712</a>
<i>Raoulia beauverdii</i> Cockayne		Declining	D (3)	Yes			≤ 1000 ha	Decline: 30–50%	Medium	Medium	DPS, DPT, NR, NStr, PF, RR, Sp	DP, Sp	
<i>Raoulia parkii</i> Buchanan	celadon mat daisy	Declining	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	Low	DPS, DPT, NR, NStr, RR, Sp, TL		TL = H: Mount Alta range. Accession number: H OM?
<i>Rytidosperma maculatum</i> (Zotov) Connor & Edgar		Data Deficient	D (3)	Yes			≤ 1000 ha	Decline: 30–50%	Low	Low	CD, DPR, DPS, DPT, NR, NStr, PD, PF, RR, Sp, TL		TL = H: Gallaway, Central Otago. Accession number: H <a href="#">CHR 3660</a>
<i>Rytidosperma merum</i> Connor & Edgar		Declining	C (3)	Yes			≤ 100 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, NR, NStr, PF, RR	DP, Sp	
<i>Schizacme novae-zelandiae</i> (Hook.f.) K.L.Gibbons		Not Threatened	B (3)				≤ 100 ha	Stable: ±10%	Medium	Low	OL, RR, NS, DPS		

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Senecio carnosulus</i> (Kirk) C.J.Webb		Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 10–30%	Medium	Medium	CI, DPR, DPS, DPT, EF, NStr, PF, RR, Sp, TL	DP, EF, Sp	TL = ISN: Cultivated ex Ōtepoti Dunedin, Black Head. Accession number: ISN <a href="#">AK 264208</a>
<i>Stenostachys laevis</i> (Petrie) Connor	grassland wheatgrasses	Naturally Uncommon	B (3)	Yes			≤ 100 ha	Stable: ±10%	Low	Low	CI, DPR, DPS, DPT, NStr, RR, Sp, TL	DP, Sp	TL = L, S: Matukituki Valley, west of Lake Wānaka / Wānaka Ecological District. Accession numbers: L <a href="#">WELT SP068353</a> ; ISL <a href="#">AK 2038</a> , <a href="#">AK 223528</a> , <a href="#">AK 223527</a>
<i>Stuckenia pectinata</i> (L.) Börner	fennel-leaved pondweed	Naturally Uncommon	C (3)				≤ 100 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NR, OL, RR	SO, Sp	
<i>Tupeia antarctica</i> (G.Forst.) Cham. & Schldl.	white mistletoe	Declining	C (1)	Yes		1000–5000 mature individuals		Decline: 30–50%	Medium	Medium	DPS, DPT, NR, NStr, PF, Sp	PD	
<i>Veronica annulata</i> (Petrie) Cockayne ex Cheeseman		Naturally Uncommon	B (2)	Yes		subpopulations ≤ 15, ≤ 500 mature individuals in largest subpopulation		Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, NStr, PF, Sp, St	RR, St, Sp	
<i>Veronica dilatata</i> (G.Simpson & J.S.Thomson) Garn.-Jones		Naturally Uncommon	C (2)	Yes		subpopulations ≤ 15, ≤ 500 mature individuals in largest subpopulation		Decline: 10–30%	Low	Low	DPR, DPS, DPT, NR, NStr, PF, Sp	Sp	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Vulnerable continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>TAXONOMICALLY INDETERMINATE (3)</i>													
<i>Dracophyllum uniflorum</i> var. <i>frondosum</i> G.Simpson	sprawling inaka	Naturally Uncommon	B (1)	Yes		1000–5000 mature individuals		Stable: ±10%	Low	Low	DPS, DPT, NR, NS, NStr, Sp, St, TL	DP, Sp	TL = H, I: Deep Stream, Otago / Deep Stream, Lammermoor Range to Taieri/Taieri River; Deep Stream, Ōtepoti Dunedin - Middlemarch Road, near bridge. Accession numbers: H <a href="#">CHR 47407 A</a> , <a href="#">CHR 47407 B</a> ; I <a href="#">WELT SP033375</a>
<i>Pimelea carnosa</i> C.J.Burrows		Not Threatened	C (3)				≤ 100 ha	Decline: 10–30%	Medium	Medium	CI, DPR, DPS, DPT, NR, RR, Sp		
<i>Sonchus</i> aff. <i>novae-zelandiae</i> (a) (CHR 517718; "grassland")		Nationally Vulnerable	B (3)	Yes			≤ 100 ha	Stable: ±10%	Low	Low	DPS, DPT, NStr, Sp	DP, Sp	Previous Name and Authority: <i>Sonchus novae-zelandiae</i> (Hook.f.) Garn.-Jones

*Regional and national qualifiers:* CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural State; NStr = National Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure?Overseas; TO = Threatened Overseas' TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

*Type localities:* H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isoneotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Regionally At Risk (275)

Taxa that meet the criteria specified by Townsend et al. (2008) and Michel (2021) for the statuses Regionally Declining, Regionally Recovering, Regionally Relict or Regionally Naturally Uncommon.

### Regionally Declining (50)

*Criteria for Regionally Declining:*

*A – moderate to large population and low ongoing or forecast decline of 10–30%*

A(1) 5000–20,000 mature individuals

A(2) Total area of occupancy ≤ 1000 ha (10 km<sup>2</sup>)

*B – large population and low to moderate ongoing or forecast decline of 10–50%*

B(1) 20,000–100,000 mature individuals

B(2) Total area of occupancy ≤ 10,000 ha (100 km<sup>2</sup>)

*C – very large population and low to high ongoing or forecast decline of 10–70%*

C(1) > 100 000 mature individuals

C(2) Total area of occupancy > 10,000 ha (100 km<sup>2</sup>)

**Table 3.4.1: Regionally Declining indigenous vascular plant taxa in Otago**

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY DECLINING (50)</b>													
<i>TAXONOMICALLY DETERMINATE (49)</i>													
<i>Acaena caesiiglauca</i> (Bitter) Bergmans	glaucus bidibid	Not Threatened	C (2)	Yes			> 10000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NStr		
<i>Acaena inermis</i> Hook.f.	blue mountain bidibid	Not Threatened	C (2)	Yes			> 10000 ha	Decline: 10–30%	Medium	Low	DPS, DPT, NStr, RR		

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Aciphylia lecomtei</i> J.W.Dawson		Declining	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Medium	DPS, DPT, NR, NStr, Sp, TL	DP, RR, Sp	TL = H, I: Tapuae-o-Uenuku   Hector Mountains. Accession numbers: H <a href="#">WELT SP065502</a> ; I <a href="#">WELT SP065503</a>
<i>Agrostis muscosa</i> Kirk	pincushion grass	Not Threatened	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Medium	Medium	CI, DPS, DPT, NStr, PF, Sp, TL		TL = L, ISL: Lake Wānaka. Accession numbers: L <a href="#">WELT SP069300</a> ; ISL <a href="#">WELT SP06925</a>
<i>Anisotome brevistylis</i> (Hook.f.) Poppelw.	native carrot	Not Threatened	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NR, NStr, RR, Sp, TL		TL = H: Otago Lakes District. Accession number: H K?
<i>Anthosachne falcis</i> (Connor) Barkworth & S.W.L.Jacobs	grass	Declining	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, NR, NStr, Sp	DP, Sp	
<i>Carex colensoi</i> Boott	Colenso's sedge	Not Threatened	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NStr, Sp		
<i>Carex dipsacea</i> Berggr.	teasel sedge	Not Threatened	A (2)				≤ 1000 ha	Decline: 10–30%	Low	Low	DPS, DPT, RR, Sp		
<i>Carex fretalis</i> Hamlin	curly sedge	Declining	A (2)				≤ 1000 ha	Decline: 10–30%	Medium	High	DPR, NR	DP, Sp	
<i>Carex muelleri</i> Petrie	Mueller's sedge	Not Threatened	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	High	Medium	DPS, NR, NStr, Sp, TL		TL = L, ISL, T?: Nevis Valley, east of Tapuae-o-Uenuku   Hector Mountains. Accession numbers: L <a href="#">WELT SP021679/A</a> ; ISL <a href="#">WELT SP021679/B</a> ; T? <a href="#">WELT SP021679/C</a>

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Regional conservation status of indigenous vascular plants in Otago

Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Carex resectans</i> Cheeseman	desert sedge	Not Threatened	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, NR, N NStr Str, Sp		
<i>Carmichaelia compacta</i> Petrie	Cromwell broom	Naturally Uncommon	A (2)	Yes	Yes		≤ 1000 ha	Decline: 10–30%	High	High	NStr, PD, PF, RE, RF, RR, TL	RR	RE = known only from Central Otago, centred on the Kawarau and Cromwell Gorges and immediate surrounding area, also near Alexandra, Omakau, and Cromwell.  TL = H, L, ISL: Dunstan Gorge / Clyde / Rock and sandstone faces, near Alexandra / Old Man Ecological District. Accession numbers: H W?; L <a href="#">CHR 45904 B</a> , <a href="#">WELT SP053661</a> ; ISL <a href="#">AK 4929</a> , <a href="#">AK 211346</a> , <a href="#">WELT SP026306</a> .
<i>Carmichaelia crassicaulis</i> Hook.f. subsp. <i>crassicaulis</i>	coral broom	Declining	B (1)	Yes		20000–100000 mature individuals		Decline: 30–50%	Medium	Medium	NR, NStr, PF, RF, TL	RF	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Carmichaelia petriei</i> Kirk	desert broom	Declining	B (1)	Yes		20000–100000 mature individuals		Decline: 10–30%	Medium	Medium	NStr, RF, TL	DP, RF	TL = H, L, ISL: Dunstan Gorge / between Dansy's Pass and Livingstone / Cromwell Gorge / flats at the Matukituki River, Wānaka, near the forks to East and West / Central Otago Ecological Region. Accession numbers: H W?; L <a href="#">CHR 45748 A</a> , <a href="#">CHR 45809 C</a> , <a href="#">CHR 213070</a> ; ISL <a href="#">AK 4873</a> , <a href="#">AK 209787</a> , <a href="#">CHR 45809 B</a>
<i>Carmichaelia vexillata</i> Heenan	dwarf broom	Declining	B (1)	Yes		20000–100000 mature individuals		Decline: 10–30%	High	Medium	NR, NStr, RF, Sp	DP, RF	
<i>Chenopodium allanii</i> Aellen		Naturally Uncommon	A (1)	Yes		5000–20000 mature individuals		Decline: 10–30%	Medium	Low	DPS, DPT, NR, NStr, PF, Sp, TL	DP, Sp	TL = L: Lammermoor Mountains. Accession number: L <a href="#">CHR 1064</a>
<i>Chionochloa rigida</i> (Raoul) Zotov subsp. <i>rigida</i>	narrow-leaved snow tussock	Not Threatened	C (2)	Yes			> 10000 ha	Decline: 10–30%	Medium	Medium	NStr, TL		TL = L: Otago Lakes District. Accession number: L W?
<i>Colobanthus strictus</i> Cheeseman	colobanthus	Not Threatened	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Low	Medium	DPR, DPS, DPT, NStr, Sp		
<i>Dolichoglottis scorzoneroides</i> (Hook.f.) B.Nord.		Not Threatened	C (2)	Yes			> 10000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NStr, Sp	DP	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Epilobium elegans</i> Petrie		Data Deficient	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NStr, Sp		
<i>Epilobium hectorii</i> Hausskn.		Not Threatened	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NR, NStr, RR, Sp, TL		TL = H: Lindis Pass, Otago. Accession number: H <a href="#">CHR 76098</a>
<i>Festuca matthewsii</i> subsp. <i>latifundii</i> Connor		Not Threatened	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Low	Medium	DPR, DPS, DPT, NR, NStr, TL		TL = H: Mount Longslip, Lindis Pass. Accession number: H <a href="#">CHR 98244</a>
<i>Gingidia amphistoma</i> Heenan		Not Threatened	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Medium	Low	DPS, DPT, NR		Previous Name and Authority: <i>Gingidia</i> aff. <i>montana</i> (c) (CHR 505502; Mt Cook)
<i>Gingidia baxterae</i> (J.W.Dawson) C.J.Webb		Naturally Uncommon	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Low	DPS, DPT, NR, NStr, PF, Sp, TL	DP, Sp	TL = H: Rock and Pillar Range. Accession number: H <a href="#">OTA 004685</a>
<i>Gingidia grisea</i> Heenan		Naturally Uncommon	B (2)	Yes	Yes		≤ 10000 ha	Decline: 10–30%	Medium	Low	DPS, DPT, NStr, PF, RE, RR, TL	DP, RR	TL = H, I: Trotters Gorge Scenic Reserve / Waianakarua Ecological District. Accession numbers: H <a href="#">CHR 565624</a> ; I <a href="#">AK 288114</a>
<i>Gingidia montana</i> (J.R.Forst. & G.Forst.) J.W.Dawson		Not Threatened	C (2)	Yes			> 10000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NStr, Sp	DP	
<i>Juncus distegus</i> Edgar		Naturally Uncommon	A (1)	Yes		5000–20000 mature individuals		Decline: 10–30%	Low	Medium	DPR, DPS, DPT, NR, NStr, PF, RR, Sp	DP, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Leptinella serrulata</i> (D.G.Lloyd) D.G.Lloyd & C.J.Webb	dryland button daisy	Declining	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	High	Medium	DPR, DPS, NStr, PF, Sp	DP, Sp	
<i>Mentha cunninghamii</i> Benth.		Declining	A (2)				≤ 1000 ha	Decline: 10–30%	Low	Low	DPS, DPT, PD, PF, Sp	PD	
<i>Microlaena stipoides</i> (Labill.) R.Br.		Not Threatened	A (2)				≤ 1000 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, Sp	SO	
<i>Myosotis macrantha</i> (Hook.f.) Benth. & Hook.f.		Not Threatened	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	High	Medium	DPS, NStr, Sp, TL		TL = H, T?: Mount Pollux, head of Wilkin River, Lake Wānaka, Arawata Ecological District. Accession numbers: H <a href="#">CHR 75723</a> ; T? <a href="#">CHR 549662</a>
<i>Gratiola sexdentata</i> R.Cunn. ex A.Cunn.		Not Threatened	A (2)				≤ 1000 ha	Decline: 10–30%	Medium	Medium	DPR, DPS, DPT, RR, Sp		

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Olearia fragrantissima</i> Petrie		Declining	A (1)	Yes		5000–20000 mature individuals		Decline: 10–30%	Medium	High	DPT, NR, NStr, PD, PF, Sp, TL	PD	TL = S?, S (possible): near Ōtepoti Dunedin / Tomahawk, near Ōtepoti Dunedin / Vauxhall, near Ōtepoti Dunedin, Catlins River / Otago Coast Ecological Region. Accession number: S? <a href="#">AK 9627</a> ; S (possible) <a href="#">WELT SP032533</a> , <a href="#">WELT SP032529</a> , <a href="#">WELT SP032535</a> , <a href="#">WELT SP032528</a> , <a href="#">WELT SP032534</a> , <a href="#">WELT SP032516/A</a> , <a href="#">WELT SP032516/B</a> , <a href="#">WELT SP032516/C</a>
<i>Olearia lineata</i> (Kirk) Cockayne		Declining	A (1)	Yes		5000–20000 mature individuals		Decline: 10–30%	Medium	High	NStr, PD, PF, RF, Sp	RF	
<i>Pachycladon wallii</i> (Carse) Heenan & A.D.Mitch.		Declining	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NR, NStr, RR, Sp, TL	DP, RR, Sp	TL = H, I: Bold Peak and Mount Bonpland / Cecil Peaks, Lake Wakitipu. Accession numbers: H <a href="#">CHR 331403</a> , <a href="#">CHR 329555</a> ; I <a href="#">CHR 329556</a>
<i>Peraxilla colensoi</i> (Hook.f.) Tiegh.	scarlet mistletoe	Declining	A (1)			5000–20000 mature individuals		Decline: 10–30%	Medium	Medium	CD, DPS, DPT, NR, PD, SP	CD	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Plantago spathulata</i> Hook.f.		Not Threatened	A (2)				≤ 1000 ha	Decline: 10–30%	Medium	Low	DPR, DPS, DPT, NR, Sp	DP	
<i>Poa lindsayi</i> Hook.f.		Not Threatened	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	High	Medium	DPR, DPS, NStr, Sp, TL		TL = L: northern slopes of Saddle Hill, near Ōtepoti Dunedin. Accession number: L K?
<i>Poa maniototo</i> Petrie		Not Threatened	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NR, NStr, Sp, TL		TL = L, ISL (possible), S: Maniototo Plain, Upper Clutha, Otago / Mount Cardrona / Maniototo Plains / Maniototo Ecological District. Accession numbers: L <a href="#">AK 1940</a> ; S <a href="#">WELT SP066146</a> ; ISL (possible) <a href="#">WELT SP066145</a> , <a href="#">WELT SP07607</a>
<i>Puccinellia stricta</i> (Hook.f.) C.H.Blom		Not Threatened	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Medium	CI, DPR, DPS, DPT, NStr, PF, RR, TL	SO	TL = I, TF: Ōamuru / Ōamaru Ecological District. Accession numbers: I <a href="#">SP068569</a> ; TF <a href="#">CHR 42730</a>
<i>Ranunculus lyallii</i> Hook.f.		Not Threatened	C (2)	Yes			> 10000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NStr		
<i>Ranunculus pilifera</i> (F.J.F.Fisher) Heenan & P.J.Lockh.		Declining	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Medium	DPS, DPT, NR, NStr, RF, RR, TL	DP, RR, RF	TL = L: head of Hut Creek, branch of Lochy River, Eyre Mountains, Rough Peaks Range. Accession numbers: L <a href="#">CHR 158126 C</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Rumex neglectus</i> Kirk		Not Threatened	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Medium	CI, DPS, DPT, NStr, PF, RR, Sp		
<i>Rytidosperma buchananii</i> (Hook.f.) Connor & Edgar		Declining	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Low	DPR, DPS, DPT, NStr, PF, Sp, TL	DP	TL = H: Otago. Accession number: H K?
<i>Rytidosperma pumilum</i> (Kirk) Connor & Edgar		Not Threatened	C (2)	Yes			> 10000 ha	Decline: 10–30%	Low	Medium	DPR, DPS, DPT, NR, NStr, Sp, TL	SO	TL = L, ISL, TF: Macraes, Otago / Macraes, Waihemo County, northeast Otago. Accession numbers: L <a href="#">WELT SP039891</a> ; ISL <a href="#">CHR 4152</a> , <a href="#">WELT SP039871</a> , <a href="#">WELT SP039907</a> ; TF <a href="#">CHR 236573</a>
<i>Senecio matatini</i> subsp. <i>basinudus</i> Ornduff		Naturally Uncommon	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Medium	Medium	CI, DPS, DPT, NStr, PF, RR, Sp	DP, RR	Previous name: <i>Senecio glaucophyllus</i> subsp. <i>basinudus</i> Ornduff
<i>Urtica aspera</i> Petrie	nettle	Naturally Uncommon	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Low	DPS, DPT, NR, NStr, PF, Sp, TL	Sp	TL = H, S, S?: Firewood Creek, Dunstan Range near Cromwell / Maniototo Ecological District / Central Otago Ecological Region. Accession numbers: H W?; S <a href="#">WELT SP017831</a> , <a href="#">WELT SP017838</a> ; S? <a href="#">AK 210752</a> , <a href="#">AK 210751</a> , <a href="#">AK 3784</a> , <a href="#">AK 3785</a>

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Declining continued

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Veronica pimeleoides</i> Hook.f. subsp. <i>pimeleoides</i>		Not Threatened	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Low	Low	DPS, DPT, NR, NStr, RR, Sp		
<i>Veronica pimeleoides</i> subsp. <i>faucicola</i> (Kellow & Bayly) Garn.-Jones		Naturally Uncommon	A (2)	Yes			≤ 1000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NR, NStr, PF, RR, Sp, TL	RR, Sp	Distributional notes: Mostly found in central Otago in the Manuherikia, Kawarau and Clutha River valleys. Not considered a RE as may be more widespread.  TL = H: lookout point ca. 300 m northeast of dam wall, near Clyde Accession number: H <a href="#">WELT SP082445</a>
TAXONOMICALLY INDETERMINATE (1)													
<i>Raoulia australis</i> Hook.f. ex Raoul		Declining	B (2)	Yes			≤ 10000 ha	Decline: 10–30%	Medium	Medium	DPS, DPT, NR, NStr	DP	

*Regional and national qualifiers:* CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural state; NStr = Natural Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure?Overseas; TO = Threatened Overseas' TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

*Type localities:* H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isonotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Regionally Naturally Uncommon (225)

Criteria for Regionally Naturally Uncommon:

Taxa whose distribution is confined to a specific geographical area or which occur within naturally small and widely scattered populations, where this distribution is not the result of human disturbance.

**Table 3.4.2: Regionally Naturally Uncommon indigenous vascular plant taxa in Otago**

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY NATURALLY UNCOMMON (225)</b>												
<i>TAXONOMICALLY DETERMINATE (218)</i>												
<i>Abrotanella linearis</i> Berggr.		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, Sp		
<i>Abrotanella patea</i> Heads		Naturally Uncommon	Yes	Yes	250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, RE, Sp, St, TL	DP, Sp	RE = known only from Eastern and Central Otago: Rock and Pillar Range, Lammerlaw Top, Umbrella Mountains, Garvie Mountain  TL = H: Rock and Pillar Range. Accession number: H <a href="#">OTA 023132</a>
<i>Acaena dumicola</i> B.H.Macmill.	bidibidi	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, Sp		
<i>Acaena glabra</i> Buchanan	bidibidi	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, NS, Sp		
<i>Acaena tesca</i> B.H.Macmill.	bidibidi	Not Threatened	Yes	Yes		< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, RE, Sp, TL		TL = H, I: Kopuwai   Old Man Range. Accession numbers: H <a href="#">CHR 391420</a> ; I <a href="#">OTA 046286</a> , <a href="#">WELT SP078896</a>
<i>Aciphylla divisa</i> (Cheeseman) Cheeseman		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, NS, NStr, Sp	DP	
<i>Aciphylla dobsonii</i> Hook.f.		Not Threatened			250–20000 mature individuals		Stable: ±10%	Medium	Low	DPS, DPT, NR, NS, RR	DP	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Aciphylla hectorii</i> Buchanan		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp, TL	DP	TL = S? or IS?: Hector Col, Mount Aspiring Range / St. Mary Ecological District / Nokomai Ecological District / Garvie Mountains. Accession numbers: S? or IS <a href="#">AK 6525</a>
<i>Aciphylla horrida</i> W.R.B.Oliv.	speargrass	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, Sp		
<i>Aciphylla kirkii</i> Buchanan		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp, TL	DP	TL = H, S, type (possible), T?: Mount Alta / Wānaka Ecological District. Accession numbers: H OM?; S <a href="#">AK 6541</a> ; type (possible) <a href="#">WELT SP011641</a> , <a href="#">WELT SP013819</a> ; T? <a href="#">WELT SP011640</a>
<i>Aciphylla lyallii</i> Hook.f.		Not Threatened			250–20000 mature individuals		Stable: ±10%	High	Low	DPS, NR, NS, Sp	DP	
<i>Aciphylla montana</i> Armstr. var. <i>montana</i>		Not Threatened	Yes		250–20000 mature individuals		Stable: ±10%	Medium	Low	DPR, DPS, DPT, NR, NS, NStr, Sp	DP	
<i>Aciphylla montana</i> var. <i>gracilis</i> (W.R.B.Oliv.) J.W.Dawson		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, Sp, St, RR	DP, RR	
<i>Aciphylla pinnatifida</i> Petrie		Not Threatened	Yes			< 100000 ha	Stable: ±10%	High	Medium	NR, NS, NStr, RR	DP	
<i>Aciphylla scott-thomsonii</i> Cockayne & Allan	giant speargrass	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, Sp, TL		TL = H, T?: Mount Maungatua, near Ōtepoti Dunedin. Accession numbers: H <a href="#">CHR 11226</a> , <a href="#">CHR 11227</a> ; T? <a href="#">CHR 521532</a>
<i>Aciphylla simplex</i> Petrie		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	DP, RR, Sp	TL = H, S, L: Mount Cardrona, Lake County / Lakes Ecological District. Accession numbers: H W?; S <a href="#">AK 6543</a> ; L <a href="#">WELT SP002123/A</a> , <a href="#">WELT SP002123/B</a>
<i>Aciphylla spedenii</i> Cheeseman		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	RR	TL = S: Cecil Peak, near Lake Whakatipu / Eyres Ecological District. Accession numbers: S <a href="#">AK 6538</a> , <a href="#">AK 6536</a> , <a href="#">AK 6537</a>

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Agrostis dyeri</i> Petrie		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, Sp		
<i>Agrostis pallescens</i> Cheeseman		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, NStr, RR, St		
<i>Anaphalioides hookeri</i> (Allan) Anderb.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, RR, Sp		
<i>Anemonastrum tenuicaule</i> (Cheeseman) de Lange et Mosyakin	New Zealand anemone	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, Sp	DP, Sp	Previous Name and Authority: <i>Anemone tenuicaulis</i> (Cheeseman) Parkin & Sledge
<i>Anisotome lanuginosa</i> (Kirk) J.W.Dawson		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr NS, NS, RR, Sp, St, TL	DP, Sp	TL = H or L, S or ISN, L: Tapuae-o-Uenuku   Hector Mountains or Kopuwai   Old Man Range & Tapuae-o-Uenuku   Hector Mountains. Accession numbers: H or L <a href="#">WELT SP001166</a> ; S or ISN <a href="#">AK 6676</a>
<i>Argyrotegium mackayi</i> (Buchanan) J.M.Ward & Breitw.	matt daisy	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPR, DPS, DPT, NStr, RR		
<i>Asplenium bulbiferum</i> G.Forst.	hen and chicken fern	Not Threatened			250–20000 mature individuals		Stable: ±10%	Low	Low	DPR, DPS, DPT, Sp		
<i>Asplenium obtusatum</i> G.Forst.	shore spleenwort	Not Threatened	Yes			< 100000 ha	Stable: ±10%	High	High	NStr, RR, Sp	SO	
<i>Asplenium polyodon</i> G.Forst.	sickle spleenwort	Not Threatened			250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPS, DPT, Sp	SO	
<i>Astelia linearis</i> var. <i>novae-zelandiae</i> Skottsbo.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NS, RR		
<i>Austroblechnum durum</i> (T.Moore) Gasper et V.A.O.Dittrich		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, RR		Previous Name and Authority: <i>Blechnum durum</i> (T.Moore) C.Chr.

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Austroblechnum membranaceum</i> (Colenso ex Hook.) Gasper et W.A.O.Dittrich		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, Sp, NR		
<i>Azorella cockaynei</i> Diels		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, NStr, RR, Sp		
<i>Azorella exigua</i> (Hook.f.) Drude		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	RR	TL = H: Otago Lake District. Accession numbers: H K?
<i>Azorella haastii</i> subsp. <i>haastii</i> (Hook.f.) Drude		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Low	DPR, DPS, DPT, NS, Sp		
<i>Azorella hydrocotyloides</i> (Hook.f.) Kirk		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp		
<i>Brachyglottis cassinioides</i> (Hook.f.) B.Nord.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, Sp		
<i>Brachyglottis southlandica</i> (Cockayne) B.Nord.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NStr, Sp, TL		TL = H: Whisky Gully, near Tapanui. Accession number: H <a href="#">CHR 24175</a>
<i>Brachyscome humilis</i> G.Simpson & J.S.Thomson	daisy	Naturally Uncommon	Yes	Yes		< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NS, NStr, RE, RR, Sp, St, TL	DP, Sp	TL = N, ISN: Rock and Pillar Range. Accession numbers: N <a href="#">CHR 199636</a> ; ISN <a href="#">WELT SP041374</a>
<i>Brachyscome longiscapa</i> G.Simpson & J.S.Thomson	daisy	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	DP, Sp	TL = N: Dunback - Kyeburn road, near Kyeburn. Accession number: N <a href="#">CHR 112471</a>
<i>Brachyscome montana</i> G.Simpson	daisy	Data Deficient	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NR, NStr, NS, RR, Sp, St		

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Bulbinella gibbsii</i> var. <i>balanifera</i> L.B.Moore	Gibbs's onion	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, Sp		
<i>Cardamine dimidia</i> Heenan	cress	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, NStr, Sp, TL		TL = H: Lauder Creek, Dunstan Mountains. Accession number: H <a href="#">CHR 586035</a>
<i>Cardamine dolichostyla</i> Heenan	New Zealand bitter cress	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, Sp		
<i>Cardamine exigua</i> Heenan	cress	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Medium	DPR, DPS, DPT, NR, NS, NStr, Sp, St, TL	DP	TL = H: Rock and Pillar Range. Accession number: H <a href="#">CHR 199634</a>
<i>Cardamine intonsa</i> Heenan	cress	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, Sp		
<i>Cardamine reptans</i> Heenan	cress	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NS, NStr, RR, Sp, St, TL	DP	TL = H: Dunstan Mountains, Fairfax Spur, near Leaning Rock. Accession number: H <a href="#">CHR 514169</a>
<i>Carex hectorii</i> Petrie	Hector's sedge	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, NS, NStr, Sp, St, TL	Sp	TL = I, ISL, L: Kopuwai   Old Man Range / Kopuwai, summit of Mount Pisa / Old Man Ecological District. Accession numbers: L <a href="#">WELT SP011957</a> ; I = <a href="#">CHR 288717</a> ; ISL <a href="#">AK 223516</a> , <a href="#">AK 2695</a> , <a href="#">WELT SP014641</a>
<i>Carex lachenalii</i> subsp. <i>parkeri</i> (Petrie) Toivonen	sedge	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RR, Sp, St, TL	Sp	TL = N: head of Lake Whakatipu / Richardson Ecological District. Accession numbers: N <a href="#">AK 2564</a> , <a href="#">AK 223517</a> , <a href="#">AK 223518</a>
<i>Carex lessoniana</i> Steud.	cutty grass	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, Sp		
<i>Carex parvispica</i> K.A.Ford	Sinclair's hook sedge	Declining	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, RR	DP, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Carex pterocarpa</i> Petrie	sedge	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	RR, Sp	TL = H or L, ISL, L (possible): Mount Pisa, north from Cromwell, west side of Clutha/Mata-au River. Accession numbers: H or L <a href="#">WELT SP021489</a> ; ISL <a href="#">CHR 73159</a> ; L (possible) <a href="#">WELT SP021488</a>
<i>Carex purpurata</i> (Petrie) K.A.Ford	tussock hook sedge	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NStr, Sp, St, TL	Sp	TL = I, CT, ISL?, T?: Signal Hill, Ōtepoti Dunedin / Dunedin Ecological District. Accession numbers: I <a href="#">CHR 294811</a> ; ISL? <a href="#">AK 2353</a> ; T? <a href="#">WELT SP001693/A</a> , <a href="#">WELT SP001693/B</a> , <a href="#">WELT SP001693/C</a> ; CT <a href="#">WELT SP001695</a>
<i>Carex raoulii</i> Boott	coastal forest sedge	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, Sp		
<i>Carex trifida</i> Cav.	mutton-bird sedge	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	CI, DPS, DPT, NStr, RR, Sp	SO	
<i>Celmisia argentea</i> Kirk	silver cushion mountain daisy	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, Sp, TL		TL = H or T (possible), I, S: swampy ground summit of Maungatua / Maungatua Hill, Taieri/Taieri County / Otago. Accession numbers: H or T (possible) <a href="#">WELT SP045695</a> ; I <a href="#">WELT SP001693/B</a> ; S <a href="#">AK 9970</a>
<i>Celmisia bellidioides</i> Hook.f.	green cushion mountain daisy	Not Threatened				< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, RR, Sp		
<i>Celmisia bonplandii</i> (Buchanan) Allan	mountain daisy	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, Sp, TL		TL = N: Bold Peak, Humboldt Mountains (original type locality Mount Bonpand). Accession number: N <a href="#">CHR 6301</a>
<i>Celmisia brevifolia</i> Cockayne	common shrub mountain daisy	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, Sp, TL		TL = S, S (possible): Mount Ernest and summit of Kopuwai   Old Man Range / Huxley Ecological District. Accession numbers: S <a href="#">AK 34925</a> ; S (possible) <a href="#">WELT SP045774</a>

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Celmisia coriacea</i> (G.Forst.) Hook.f.	Fiordland mountain daisy	Not Threatened			250–20000 mature individuals		Stable: ±10%	Medium	Low	DPS, DPT, NR, NStr, RR, Sp		
<i>Celmisia haastii</i> var. <i>tomentosa</i> G.Simpson & J.S.Thomson	daisy	Naturally Uncommon	Yes	Yes		< 100000 ha	Stable: ±10%	Medium	Medium	NS, NStr, RE, RR, St, TL	RR	TL = H, S, T?: Rock and Pillar Range. Accession numbers: H <a href="#">CHR 50011</a> ; S <a href="#">AK 106430</a> ; T? <a href="#">CHR 549665</a>
<i>Celmisia hookeri</i> Cockayne	Hooker's mountain daisy	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	NR, NStr, RR	Sp	TL = NT: north-east Otago
<i>Celmisia lindsayi</i> Hook.f.	Lindsay's Daisy	Naturally Uncommon	Yes	Yes		< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, RE, RR, St, TL	RR, Sp	TL = H: Trap Cliffs at Shaw's Bay, the Nuggets. Accession number: H K340033
<i>Celmisia philocremna</i> Given	Eyre Mountains daisy	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	DP, RR, Sp	TL = H: Windley branch of Eyre Creek, Eyre Mountain. Accession number: H <a href="#">CHR 166411 A</a>
<i>Celmisia prorepens</i> Petrie	daisy	Not Threatened	Yes		250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, Sp, TL		TL = H or L, S, I (possible): Kopuwai   Old Man Range, Otago / ex Kopuwai   Old Man Range, Otago. Accession numbers: H or L: <a href="#">WELT SP002151</a> ; S <a href="#">AK 9762</a> ; I (possible) <a href="#">WELT SP084084</a>
<i>Celmisia ramulosa</i> var. <i>tuberculata</i> G.Simpson & J.S.Thomson	mountain daisy	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, Sp, TL		TL = H, S, T?: Rough Peaks, Lake Whakatipu / Eyre Ecological District. Accession numbers: H <a href="#">CHR 50003</a> ; S <a href="#">AK 170505</a> ; T? <a href="#">CHR 550039</a>
<i>Celmisia semicordata</i> subsp. <i>aurigans</i> Given	large mountain daisy	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT NS NR, NStr, Sp		
<i>Celmisia thomsonii</i> Cheeseman	Thomson's mountain daisy	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	DP, RR, Sp	TL = S: Eyre Mountains. Accession number: S <a href="#">AK 9976</a>
<i>Centrolepis pallida</i> (Hook.f.) Cheeseman	centrolepis	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RR		

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i> Kunze	rock fern	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, Sp	SO	Previous Name and Authority: <i>Cheilanthes sieberi</i> Kunze
<i>Chionochoa vireta</i> Connor	snow tussock	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RR, St	DP, RR, Sp	
<i>Colobanthus apetalus</i> (Labill.) Druce	colobanthus	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, RR, Sp	SO	
<i>Colobanthus muelleri</i> Kirk	colobanthus	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, RR, TL	DP	TL = S?: Otago? Accession number: S? <a href="#">AK 4071</a>
<i>Coprosma elatirioides</i> de Lange & A.S.Markey	coprosma	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, RR, Sp		
<i>Cordyline indivisa</i> (G.Forst.) Steud.	mountain cabbage tree	Not Threatened			250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPS, DPT, NS, Sp		
<i>Corybas cryptanthus</i> Hatch		Naturally Uncommon				> 1000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, Sp	DP, Sp	
<i>Cranfillia nigra</i> (Colenso) Gasper et V.A.O.Dittrich	black hard fern	Not Threatened			250–20000 mature individuals		Stable: ±10%	Medium	Low	DPS, DPT, NS, RR		
<i>Crassula colligata</i> Toelken subsp. <i>colligata</i>		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, Sp	EF, SO	
<i>Crassula moschata</i> G.Forst.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	CI, DPS, DPT, NS, NStr, RR	SO	
<i>Cystopteris tasmanica</i> Hook.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, Sp	SO	
<i>Dracophyllum menziesii</i> Hook.f.		Not Threatened	Yes		250–20000 mature individuals		Stable: ±10%	High	Medium	DPS, NS, NStr	DP	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Dracophyllum politum</i> (Cheeseman) Cockayne		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, RR, TL		TL = H, L, I or ISL: Maungatua, / Mount Maungatua, near Ōtepoti Dunedin / Maungatua Hill, Taiari/Taiari County / Dunedin Ecological District. Accession numbers: H A?; L <a href="#">AK 7033</a> ; I or ISL <a href="#">WELT SP033366</a>
<i>Dracophyllum prostratum</i> Kirk		Not Threatened	Yes		250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, RR, Sp, TL		TL = H, L, ISL: mountains above Lake Harris, Otago-Southland boundary / near falls above Lake Harris. Accession numbers: H W?; L <a href="#">WELT SP032884</a> ; ISL <a href="#">CHR 332686</a> , <a href="#">WELT SP032883</a> , <a href="#">WELT SP032882</a>
<i>Epilobium komarovianum</i> H.Lév.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	CI, DPS, DPT, NStr, RR		
<i>Epilobium matthewsii</i> Petrie		Naturally Uncommon				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, Sp	DP, RR, Sp	
<i>Epilobium microphyllum</i> A.Rich.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, RR, Sp		
<i>Epilobium pallidiflorum</i> A.Cunn.	swamp willowherb	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, RR	SO	
<i>Epilobium porphyrium</i> G.Simpson		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NStr, Sp, TL		TL = H, I: Hector Col / Arawata Ecological District. Accession numbers: H <a href="#">CHR 90790</a> ; I <a href="#">AK 22888</a>
<i>Epilobium purpuratum</i> Hook.f.		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, RR, Sp, St, TL	RR, Sp	TL = NT: Alps of Otago. Accession number: NT K?
<i>Euchiton traversii</i> (Hook.f.) Holub		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, Sp	SO	
<i>Euphrasia dyeri</i> Wettst.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RR, TL		TL = H, I, I (possible): Mount Kyeburn / Kyeburn Hill, Maniototo County. Accession numbers: H K?; I <a href="#">WELT SP004855</a> ; I (possible) <a href="#">WELT SP104461</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Euphrasia integrifolia</i> Petrie		Naturally Uncommon				< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NR, NS, RR, Sp, St	DP, RR, Sp	
<i>Euphrasia petriei</i> Ashwin		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RR, Sp		
<i>Exocarpos bidwillii</i> Hook.f.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, Sp		
<i>Festuca madida</i> Connor		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NStr, Sp		
<i>Festuca matthewsii</i> subsp. <i>pisamontis</i> Connor		Naturally Uncommon	Yes	Yes		< 100000 ha	Stable: ±10%	Low	Medium	DPR, DPS, DPT, NStr, RE, RR, St, TL	RR	RE = known only from Central Otago: Dunstan, Pisa, and Kopuwai   Old Man Range  TL = H: Mount Pisa, Pisa Range. Accession number: H <a href="#">CHR 74046</a>
<i>Forstera purpurata</i> Glenny		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, Sp		
<i>Gahnia procera</i> J.R.Forst. & G.Forst.	giant sedge	Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, Sp		
<i>Gaultheria nubicola</i> D.J.Middleton		Not Threatened	Yes			< 100000 ha	Stable: ±10%	High	High	NS, NStr, RR		
<i>Gaultheria rupestris</i> (L.f.) D.Don		Not Threatened			250–20000 mature individuals		Stable: ±10%	Low	Medium	DPR, DPS, DPT, NS, Sp		
<i>Gentianella amabilis</i> (Petrie) Glenny		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, RR		
<i>Gentianella lilliputiana</i> (C.J.Webb) Glenny		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NS, Sp, St	DP, Sp	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Gentianella serotina</i> (Cockayne) T.N.Ho & S.W.Liu		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, Sp		
<i>Geum pusillum</i> Petrie		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	DP, RR, Sp	TL = H, L, ISL: Kopuwai   Old Man Range, Clutha Basin. Accession numbers: H W?; L WELT <a href="#">SP030388/A</a> ; ISL <a href="#">WELT SP030388/B</a>
<i>Gunnera dentata</i> Kirk		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, RR, TL		TL = S or ISN: Lake Wānaka, Lake Hāwea. Accession numbers: S or ISN <a href="#">AK 6025</a> , <a href="#">AK 6026</a>
<i>Haastia sinclairii</i> Hook.f. var. <i>sinclairii</i>		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, Sp		
<i>Hiya distans</i> (Hook.) Brownsey & Perrie		Not Threatened			subpopulations ≤ 15, ≤ 1000 mature individuals in largest subpopulation		Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, Sp	TO	Previous Name and Authority: <i>Hypolepis distans</i> Hook.
<i>Hydrocotyle dissecta</i> Hook.f.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, Sp		
<i>Hydrocotyle robusta</i> Kirk		Not Threatened				< 100000 ha	Stable: ±10%	Low	Medium	DPR, DPS, DPT, NR, Sp	DP	
<i>Hymenophyllum minimum</i> A.Rich.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, Sp		
<i>Isolepis praetextata</i> (Edgar) Soják		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	CI, DPR, DPS, DPT, NS, RR, Sp		
<i>Isolepis reticularis</i> Colenso		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, Sp		

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Kelleria childii</i> Heads		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, TL		TL = H: Rock and Pillar Range. Accession number: H <a href="#">OTA 37813</a>
<i>Kelleria croizatii</i> Heads		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, Sp		
<i>Kelleria paludosa</i> Heads		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RR, TL		TL = H: Teviot Swamp, Lammerlaw Range. Accession number: H <a href="#">OTA 34004</a>
<i>Kelleria villosa</i> var. <i>barbata</i> Heads		Naturally Uncommon	Yes	Yes		< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NS, NStr, RE, RR, Sp, St, TL	RR, Sp	TL = H: Rock and Pillar Range. Accession number: H <a href="#">OTA 009887</a>
<i>Korthalsella salicornioides</i> (A.Cunn.) Tiegh.	dwarf mistletoe	Nationally Critical	Yes			< 100000 ha	Stable: ±10%	Medium	Low	De, DPS, DPT, NStr, PF, Sp	DP, Sp	
<i>Lachnagrostis uda</i> Edgar		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPR, DPS, DPT, NS, NStr, RR, Sp, St	DP, RR, Sp	
<i>Lagenophora pinnatifida</i> Hook.f.		Not Threatened			250–20000 mature individuals		Stable: ±10%	Low	Low	DPS, DPT, Sp, St		
<i>Leptinella albida</i> (D.G.Lloyd) D.G.Lloyd & C.J.Webb		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NS, NStr, RR, Sp, St, TL	DP, RR, Sp	Distributional notes: near regional endemic, only because range could extend into Garvie Mountains, Southland.  TL = lost, L, ISL, ISL?: Mount Cardrona, north of Arrowtown, Lake Whakatipu. Accession numbers: L <a href="#">CHR 68186</a> ; ISL <a href="#">AK 212127</a> , <a href="#">AK 10388</a> ; ISL ? <a href="#">WELT SP057714</a> , <a href="#">WELT SP057712</a>

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Leptinella goyenii</i> (Petrie) D.G.Lloyd & C.J.Webb		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, NStr, TL		TL = H, I, L (possible), ISL, ISL (possible), ISL?: Mount Pisa, north of Cromwell / Pisa Ecological District. Accession numbers: H W?; I <a href="#">CHR 68173</a> ; L (possible) <a href="#">WELT SP057612</a> ; ISL (possible) <a href="#">WELT SP057709</a> ; ISL? <a href="#">AK 10391</a>
<i>Leptinella pectinata</i> (Hook.f.) D.G.Lloyd & C.J.Webb subsp. <i>pectinata</i>		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, NStr, Sp, TL		
<i>Lilaeopsis ruthiana</i> Affolter		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, RR, Sp	SO	
<i>Lobelia glaberrima</i> Heenan		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp, TL		TL = H: Long Burn, Eyre Mountains. Accession number: H <a href="#">CHR 468987</a>
<i>Lobelia linnaeoides</i> (Hook.f.) Petrie		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp		
<i>Lobelia roughii</i> Hook.f.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, Sp		
<i>Lophomyrtus obcordata</i> (Raoul) Burret	rohutu	Nationally Critical			250–20000 mature individuals	NA	Stable: ±10%	Medium	Medium	De, DPS, PF, Sp	DP	
<i>Luzula banksiana</i> var. <i>acra</i> Edgar	wood-rush	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, RR, Sp		
<i>Luzula banksiana</i> var. <i>rhadina</i> (Buchenau) Edgar	wood-rush	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NStr, Sp		
<i>Luzula colensoi</i> Hook.f.	wood-rush	Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, Sp		

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Luzula crenulata</i> Buchenau	wood-rush	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NR, NS, NStr, RR, Sp, TL	RR	TL = H: Kopuwai   Old Man Range, Central Otago. Accession number: H <a href="#">WELT SP012358</a>
<i>Luzula leptophylla</i> Buchenau & Petrie	wood-rush	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, NS, RR, Sp, St, TL	DP, RR, Sp	TL = H, I, T?: Mount Kyeburn, Central Otago / Maniototo County / St. Mary Ecological District. Accession numbers: H <a href="#">WELT SP012654</a> ; I <a href="#">AK 223509</a> , <a href="#">AK 3068</a> ; T? <a href="#">CHR 491870</a>
<i>Luzula subclavata</i> Colenso	wood-rush	Not Threatened				< 100000 ha	Stable: ±10%	Medium	Low	DPR, DPS, DPT, NR, Sp		
<i>Lycopodiella diffusa</i> (R.Br.) B.Øllg.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, RR, Sp	SO	
<i>Machaerina rubiginosa</i> (Spreng.) T.Koyama	baumea	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, RR, Sp	SO	
<i>Machaerina tenax</i> (Hook.f.) T.Koyama		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NS, RR, Sp		
<i>Meliccytus micranthus</i> (Hook.f.) Hook.f.		Not Threatened			250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPS, DPT, NR, Sp		
<i>Myosotis antarctica</i> subsp. <i>antarctica</i> Hook.f.		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, Sp	DP, Sp, TO	Previous Name and Authority: <i>Myosotis antarctica</i> Hook.f.
<i>Myosotis bryonoma</i> Meudt, Prebble & Thorsen	forget-me-not	Naturally Uncommon	Yes	Yes		< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RE, RR, Sp, TL	DP, RR, Sp	RE = known from high-elevation bogs and wet places in mountain ranges of Otago  TL = H: Otago, Garvie Mountains, east of Lake Laura, Old Man Ecological District. Accession number: H <a href="#">WELT SP104478</a>
<i>Myosotis drucei</i> (L.B.Moore) de Lange & Barkla	Druce's forget-me-not	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, Sp		

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Myosotis lyallii</i> subsp. <i>elderi</i> (L.B.Moore) Meudt & Prebble		Nationally Vulnerable				< 100000 ha	Stable: ±10%	Medium	Medium	De, DPR, NS, Sp, St, TL	DP, Sp	TL = H: Mountains near Arrowtown, Lake County. Accession number: H <a href="#">WELT SP002648</a>  Previous Name and Authority: <i>Myosotis elderi</i> L.B.Moore
<i>Myosotis lyallii</i> Hook.f. subsp. <i>lyallii</i>		Naturally Uncommon				< 100000 ha	Stable: ±10%	Medium	Medium	De, DPR, NS, Sp, St	DP, Sp	
<i>Myosotis pulvinaris</i> Hook.f.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, Sp, TL		TL = H, I: Middle Island, alps of Otago / Otago Lake District, alpine. Accession numbers: H K000787905, K000787903; I <a href="#">CHR 97409</a>
<i>Myosotis retrorsa</i> Meudt, Prebble & Hindmarsh-Walls		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, NR, NS, NStr, RR, St	DP, Sp	
<i>Myosotis traversii</i> var. <i>cantabrica</i> L.B.Moore		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPT, NR, NS, Sp	DP	
<i>Myriophyllum pedunculatum</i> subsp. <i>novae-zelandiae</i> Orchard		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, RR		
<i>Myriophyllum votschii</i> Schindl.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, RR, Sp	Sp	
<i>Nertera balfouriana</i> Cockayne		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RR, Sp		
<i>Nertera scapanioides</i> Lange		Not Threatened			subpopulations ≤ 15, ≤ 1000 mature individuals in largest subpopulation		Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, RR, Sp		

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Notogrammitis ciliata</i> (Colenso) Parris		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, OL, Sp		
<i>Notothlaspi rosulatum</i> Hook.f.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, OL, Sp	DP	
<i>Olearia bullata</i> H.D.Wilson & Garn.-Jones		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, TL		TL = L, ISL, ISL?: Flagstaff Hill, Ōtepoti Dunedin / Dunedin Ecological District. Accession numbers: L <a href="#">CHR 75715</a> ; ISL <a href="#">AK 210589</a> ; ISL? <a href="#">AK 22899</a>
<i>Olearia cymbifolia</i> (Hook.f.) Cheeseman		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, Sp		
<i>Olearia lacunosa</i> Hook.f.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, Sp		
<i>Ourisia confertifolia</i> Arroyo		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, NStr, RR, Sp, St	RR, Sp	
<i>Pachycladon enysii</i> (Cheeseman) Heenan & A.D.Mitch.	high alpine cress	Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, Sp		
<i>Pachycladon novae-zelandiae</i> (Hook.f.) Hook.f.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp, TL		TL = H: Mount Alta, Otago. Accession number: H K?
<i>Parietaria debilis</i> G.Forst.		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NR, Sp	DP	
<i>Pellaea calidirupium</i> Brownsey & Lovis		Not Threatened	Yes		250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, Sp	DP	
<i>Phyllachne rubra</i> (Hook.f.) Cheeseman		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, Sp, TL	DP	TL = H: Lake District. Accession number: H K?

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Pilularia novae-hollandiae</i> A.Braun	pillwort	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, NS, RR, Sp		
<i>Pimelea notia</i> C.J.Burrows & Thorsen		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, Sp, TL	DP	TL = H: Remarkables Range, Rastus Burn Recreational Area. Accession number: H <a href="#">OTA 60767</a>
<i>Pimelea sericeovillosa</i> subsp. <i>alta</i> C.J.Burrows		Naturally Uncommon	Yes	Yes		< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, RE, RR, Sp, St, TL	DP	RE = known from Pisa Range. TL = H: Pisa Range, Central Otago. Accession number: H <a href="#">CHR 669170</a>
<i>Pimelea traversii</i> Hook.f. subsp. <i>traversii</i>		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, Sp	DP	
<i>Pittosporum divaricatum</i> Cockayne		Not Threatened			250–20000 mature individuals		Stable: ±10%	Low	Low	DPR, DPS, DPT, PF, Sp	DP, RR	
<i>Plantago obconica</i> Sykes		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, RR, St	DP	
<i>Poa astonii</i> Petrie		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	CI, DPS, DPT, NR, NStr, RR, TL		TL = L: Brighton, near Ōtepoti Dunedin. Accession number: L <a href="#">WELT SP066186</a>
<i>Poa incrassata</i> Petrie		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	DP, RR, Sp	TL = H: Otago, Lake district, alpine. Accession number: H K?
<i>Poa pusilla</i> Berggr.		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, Sp	RR	

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## Regional conservation status of indigenous vascular plants in Otago

Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Poa pygmaea</i> Buchanan		Naturally Uncommon	Yes	Yes		< 100000 ha	Stable: ±10%	High	High	CI, NS, NStr, RE, RR, St, TL		RE = known from Pisa Range and Mount St Bathans.  TL = H, I: Mount Pisa, near Cromwell / Pisa Ecological District. Accession numbers: H <a href="#">WELT SP059606</a> ; I <a href="#">AK 223876</a> , <a href="#">AK 1902</a> , <a href="#">AK 223877</a> , <a href="#">WELT SP015854</a> , <a href="#">WELT SP066744</a> , <a href="#">WELT SP066745</a> , <a href="#">WELT SP066746</a> , <a href="#">WELT SP066747</a> , <a href="#">WELT SP066748</a>
<i>Poa schistacea</i> Edgar & Connor		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, RR, Sp, TL		TL = H, I: "Two mile" Valley, Tāpuae-O-Uenuku   Hector Mountains  Accession numbers: H <a href="#">CHR 395536 A</a> ; I <a href="#">CHR 395536 B</a> , <a href="#">CHR 395537</a> , <a href="#">CHR 395538</a>
<i>Poa sudicola</i> Edgar		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Medium	DPR, DPS, DPT, NS, NStr, RR, St		
<i>Poa tonsa</i> Edgar		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr, Sp, TL	DP, Sp	TL = H, I: Ōmārama Saddle, Central Otago. Accession numbers: H <a href="#">CHR 175630</a> ; I <a href="#">OTA 018377</a>
<i>Potamogeton suboblongus</i> Hagstr.	mud pondweed	Not Threatened				≤ 1000 ha	Stable: ±10%	Medium	Low	RR, DPR, DPT, DPS, Sp	DP, Sp	
<i>Prumnopitys taxifolia</i> (Sol. ex D. Don) de Laub.	matai	Not Threatened			250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPS, Rel, Sp		
<i>Ranunculus enysii</i> Kirk		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, Sp, TL		TL = I, ISL, T?: summit of Rock and Pillar Range / Carrick Range, near Cromwell / Old Man Ecological District. Accession numbers:; I <a href="#">CHR 334225</a> ; ISL <a href="#">AK 4242</a> , <a href="#">AK 4243</a> , <a href="#">AK 4245</a> ; T? <a href="#">WELT SP00347/A</a> , <a href="#">WELT SP000347/B</a> , <a href="#">WELT SP000354</a> , <a href="#">WELT SP000355/A</a> , <a href="#">WELT SP000355/B</a> , <a href="#">WELT SP000356</a>

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### Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Ranunculus limosella</i> F.Muell. ex Kirk	mud buttercup	Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, RR, Sp	SO	
<i>Ranunculus maculatus</i> Cockayne & Allan		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, RR, Sp, St, TL	SO	TL = H, I, N: Mount Cardrona / Rock and Pillar Range. Accession numbers: H <a href="#">WELT SP000340</a> ; N <a href="#">CHR 199637</a> ; I <a href="#">AK 4313</a>
<i>Ranunculus membranifolius</i> (Kirk) Garn.-Jones		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	TL		TL = T?: Valley of the Dart [Dart Valley]. Accession number: <a href="#">WELT SP000357</a>
<i>Ranunculus pachyrrhizus</i> Hook.f.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, NStr, Sp, TL		TL = H: Otago Lake District. Accession number: H K?
<i>Ranunculus scirithalis</i> Garn.-Jones		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	RR	TL = H: Hummock Peak; Eyre Mountains. Accession number: H <a href="#">OTA 027279</a>
<i>Raoulia apicinigra</i> Kirk		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Low	Medium	DPR, DPS, DPT, NStr, PD, Sp		
<i>Raoulia eximia</i> Hook.f.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, Sp		
<i>Raoulia haastii</i> Hook.f.		Not Threatened				≤ 1000 ha	Stable: ±10%	Medium	Low	RR, Sp, DPS		
<i>Raoulia hectorii</i> var. <i>mollis</i> Buchanan		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL		TL = H: Mount St Bathans. Accession number: H W?
<i>Raoulia petriensis</i> Kirk		Naturally Uncommon				< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NS, RR, St, TL		TL = H, S, S?, T?.; Mount St Bathans / St Bathans Ecological District. Accession numbers: H W?; S <a href="#">AK 10127</a> ; S? <a href="#">AK 30643</a> ; T? <a href="#">WELT SP048520</a>
<i>Raoulia subulata</i> Hook.f.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, RR, Sp		

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Regionally Naturally Uncommon continued

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<i>Raoulia youngii</i> (Hook.f.) Beauverd		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp, TL		TL = H: mountains above Lake Hāwea. Accession number: H K?
<i>Rostkovia magellanica</i> (Lam.) Hook.f.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, RR	DP, Sp	
<i>Rumex flexuosus</i> Spreng.		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, Sp	DP, Sp	
<i>Scandia geniculata</i> (G.Forst.) J.W.Dawson		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, Sp		
<i>Schoenus maschalinus</i> Roem. & Schult.		Not Threatened				< 100000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, Sp		
<i>Scleranthus brockiei</i> P.A.Will.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, Sp		
<i>Selliera microphylla</i> Colenso		Not Threatened				≤ 1000 ha	Stable: ±10%	Low	Low	DPT, DPS, Sp		
<i>Senecio biserratus</i> Belcher		Declining	Yes		250–20000 mature individuals	NA	Stable: ±10%	Low	Low	DPS, DPT, NStr, PF, Sp	DP	
<i>Senecio matatini</i> subsp. <i>discoideus</i> (Cheeseman) Courtney, de Lange & Pelsler		Not Threatened				≤ 1000 ha	Stable: ±10%	Low	Low	DPT, DPS, Sp		Previous Name and Authority: <i>Senecio glaucophyllus</i> subsp. <i>discoideus</i> (Cheeseman) Ornduff
<i>Stackhousia minima</i> Hook.f.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, Sp	DP	
<i>Stylidium subulatum</i> Hook.f.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp	Sp	
<i>Thyridia repens</i> (R.Br.) W.R.Barker & Beardsley		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	CI, DPS, DPT, NStr, PF, RR, Sp	Sp	
<i>Trichomanes colensoi</i> Hook.f.		Not Threatened				≤ 1000 ha	Stable: ±10%	Low	Low	DPT, DPS, DPR, Sp		

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<i>Trichomanes endlicherianum</i> C.Presl		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, OL, Sp	DP, Sp	
<i>Trisetum youngii</i> Hook.f.		Not Threatened				< 100000 ha	Stable: ±10%	Medium	Low	DPR, DPS, DPT, NS, Sp	RR, Sp	
<i>Veronica biggarii</i> Cockayne		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NR, NStr, RR, Sp, TL	Sp	TL = L, S: originally from Eyre Mountains / Eyre Mountains, Lake Whakatipu, subalpine belt. Accession numbers: L <a href="#">CHR 332289</a> ; S <a href="#">AK 107833</a>
<i>Veronica birleyi</i> N.E.Br.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, RR, Sp, TL		TL = H, !: Mount Bonpland, near Lake Whakatipu / Dart Ecological District. Accession numbers: H K?; I <a href="#">AK 8415</a>
<i>Veronica chionohebe</i> Garn.-Jones	plantaginaceae	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPR, DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	SO	TL = L, L?. Mount Pisa / Mount Pisa, west of Clutha/Mata-au River and north of Cromwell / Pisa Ecological District. Accession numbers: L <a href="#">AK 8335</a> , L? <a href="#">WELT SP014128</a>
<i>Veronica ciliolata</i> (Hook.f.) Cheeseman subsp. <i>ciliolata</i>	plantaginaceae	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NStr, NStr, Sp		
<i>Veronica ciliolata</i> subsp. <i>fiordensis</i> (Ashwin) Meudt	plantaginaceae	Naturally Uncommon				< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, Sp		
<i>Veronica cockayneana</i> Cheeseman		Not Threatened				≤ 1000 ha	Stable: ±10%	Medium	Low	DPS, DPR, Sp, NS, TL		TL = H, ISL, T?: Humboldt Mountains, Lake Whakatipu / Serpentine Mountains, Routeburn valley, near Lake Harris / Earnslaw Creek, below the Glacier / Dart Ecological District. Accession numbers: H A?; ISL <a href="#">CHR 331810</a> , <a href="#">CHR 331811</a> , <a href="#">WELT SP047652</a> ; T? <a href="#">WELT SP012435</a>

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Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Veronica colostylis</i> Garn.-Jones		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NS, NStr, Sp		
<i>Veronica hectorii</i> subsp. <i>demissa</i> (G.Simpson) Garn.-Jones		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, Sp, TL		TL = H, I, L, ISL?, T?: ex Rock and Pillar Range / Rock and Pillar Ecological District / Kopuwai   Old Man Range, Central Otago. Accession numbers: H <a href="#">CHR 48080 A</a> ; I <a href="#">CHR 48080 B</a> ; ISL? <a href="#">AK 22921</a> ; T? <a href="#">CHR 195571</a>
<i>Veronica petriei</i> (Buchanan) Kirk		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Low	Medium	DPS, DPT, NR, NS, NStr, RR, Sp, St, TL	RR	TL = H, ISL, ISL?, T?: Mount Bonpland, Humboldt Mountains / Dart Ecological District. Accession numbers: H OM? ISL <a href="#">WELT SP005119</a> ; ISL? <a href="#">AK 8283</a> ; T? <a href="#">WELT SP084567</a>
<i>Veronica pinguifolia</i> Hook.f.		Not Threatened				≤ 1000 ha	Stable: ±10%	Low	Medium	DPT, Sp, NR	Sp	
<i>Veronica planopetiolata</i> G.Simpson & J.S.Thomson		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NR, NS, NStr, Sp, St, TL	RR, Sp	TL = H, I: Hector Col, Matukituki Valley, Mount Aspiring / Arawata Ecological District. Accession numbers: H OM? I <a href="#">WELT SP041436</a>
<i>Veronica poppelwellii</i> Cockayne		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NR, NS, NStr, Sp	DP, RR, Sp	
<i>Veronica propinqua</i> Cheeseman		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, NStr, Sp, TL		TL = L: Mount Maungatua / Waipori Ecological District. Accession number: I <a href="#">AK 8258</a>
<i>Veronica rakaiensis</i> J.B.Armstr.		Not Threatened	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, Sp, TL		TL = H, T?: Deep Stream, North Otago. Accession numbers: H <a href="#">CHR 18230</a> ; T? <a href="#">CHR 549649</a>
<i>Veronica treadwellii</i> (Cockayne & Allan) Garn.-Jones		Not Threatened				≤ 1000 ha	Stable: ±10%	Low	Medium	DPT, Sp, NR		
<i>Veronica trifida</i> Petrie		Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPS, DPT, NR, NS, NStr, RR, Sp, St	DP, RR, Sp	

Continued on next page

## Regional conservation status of indigenous vascular plants in Otago

### Regionally Naturally Uncommon continued

Name and Authority	Common Name	National Conservation Status	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Viola lyallii</i> Hook.f.	New Zealand violet	Not Threatened				≤ 1000 ha	Stable: ±10%	Low	Low	DPT, DPS, DPR, Sp		
<i>Vittadinia australis</i> A.Rich.	white fuzziweed	Not Threatened	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NR, NStr, Sp	SO	
<i>Zostera muelleri</i> subsp. <i>novazelandica</i> (Setch.) S.W.L.Jacobs	eelgrass	Declining				< 100000 ha	Stable: ±10%	Low	Low	CI, DPS, DPT, EF, PF, RR	DP, RR, Sp	
<b>TAXONOMICALLY INDETERMINATE (7)</b>												
<i>Aciphylla</i> aff. <i>horrida</i> (a) (CHR 511521; Lomond)	speargrass	Naturally Uncommon	Yes			< 100000 ha	Stable: ±10%	Medium	Medium	DPR, DPS, DPT, NS, NStr	DP	
<i>Anisotome</i> (b) (CHR 511716; "Otago bog")		Naturally Uncommon	Yes	Yes		> 1000 ha	Stable: ±10%	Medium	Medium	DPR, NS, RE, RR, Sp	DP	
<i>Asplenium</i> aff. <i>trichomanes</i> (WELT P031321; "hexaploid")	spleenwort	Not Threatened	Yes		250–20000 mature individuals		Stable: ±10%	Medium	Medium	DPS, DPT, NR, NStr, Sp		Previous Name and Authority: <i>Asplenium</i> aff. <i>trichomanes</i> (AK 168112; "hexaploid") L.
<i>Chaerophyllum</i> aff. <i>colensoi</i> (CHR 215836; "bog")		Data Deficient	Yes			< 100000 ha	Stable: ±10%	Medium	Low	DPR, DPS, DPT, NS, NStr, RR, Sp, St		
<i>Corybas</i> aff. <i>trilobus</i> (b) (CHR 534742; Trotters Gorge)		Naturally Uncommon				> 1000 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, Sp	DP, Sp	
<i>Ranunculus</i> (c) (CHR 472008; Garvie Range)		Data Deficient	Yes	Yes	250–20000 mature individuals		Stable: ±10%	Medium	Low	DPS, DPT, NS, NStr, RE, RR, Sp, St		
<i>Ranunculus</i> aff. <i>reflexus</i> (CHR 394270; Mt Peel)		Data Deficient	Yes			< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NS, NStr, Sp		

**Regional and national qualifiers:** CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural state; NStr = Natural Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure?Overseas; TO = Threatened Overseas; TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

**Type localities:** H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isonotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan

## Regional conservation status of indigenous vascular plants in Otago

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Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Regionally Non-Resident Native (1)

Taxa whose natural presence in Otago is either discontinuous (Migrant) or sporadic or temporary (Vagrant) or which have succeeded in recently (since 1950) establishing a resident breeding population (Coloniser).

## Regional Coloniser (1)

*Criteria for Regional Coloniser:*

Taxa that otherwise trigger 'Threatened' categories because of small population size, but have arrived without direct or indirect help from humans and have been successfully reproducing in the wild since 1950.

**Table 3.5: Regional Coloniser indigenous vascular plant taxa in Otago**

Name and Authority	Common Name	National Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONAL COLONISER (1)</b>													
<i>TAXONOMICALLY DETERMINATE (1)</i>													
<i>Disphyma clavellatum</i> (Haw.) Chinnock		Coloniser										SO	

*Regional and national qualifiers:* CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural state; NStr = Natural Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure? Overseas; TO = Threatened Overseas' TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

*Type localities:* H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isonotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Regionally Not Threatened (614)

Resident native taxa that have large, stable populations.

**Table 3.6: Regionally Not Threatened indigenous vascular plant taxa in Otago**

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY NOT THREATENED (613)</b>					
<i>TAXONOMICALLY DETERMINATE (611)</i>					
<i>Abrotanella caespitosa</i> Petrie ex Kirk		Not Threatened	TL		TL = H, L, S?: Mount Kyeburn / St. Mary Ecological District. Accession numbers: H W?; L <a href="#">AK 10466</a> ; <a href="#">WELT SP057804</a>
<i>Abrotanella inconspicua</i> Hook.f.		Not Threatened	TL		TL = H, ISL, TF: Mount Alta. Accession numbers: H K? ISL <a href="#">WELT SP057814</a> ; TF <a href="#">CHR 402986</a>
<i>Acaena anserinifolia</i> (J.R.Forst. & G.Forst.) J.B.Armstr.	bidibidi	Not Threatened			
<i>Acaena fissistipula</i> Bitter	bidibidi	Not Threatened	TL		TL = H: Tapuae-o-Uenuku   Hector Mountains. Accession number: H TURIC?
<i>Acaena juvenca</i> B.H.Macmill.	bidibidi	Not Threatened	TL		TL = H, I: above Karoro Creek, south of Willsher Bay Reserve / Tahakopa Ecological District. Accession numbers: H <a href="#">CHR 316173 A</a> , <a href="#">CHR 316173 B</a> ; I <a href="#">CHR 554414</a> ; <a href="#">WELT SP078439/A</a> , <a href="#">WELT SP078439/B</a> , <a href="#">AK 176854</a>
<i>Acaena novae-zelandiae</i> Kirk	red bidibid	Not Threatened		SO	
<i>Acaena profundeincisa</i> (Bitter) B.H.Macmill.	bidibidi	Not Threatened			
<i>Acaena saccaticupula</i> Bitter	bidibidi	Not Threatened			
<i>Aciphylla aurea</i> W.R.B.Oliv.	golden speargrass	Not Threatened	TL		TL = H, I (possible): Swampy Hill, Ōtepoti Dunedin. Accession numbers: H <a href="#">WELT SP005373/A</a> , <a href="#">WELT SP005373/B</a> ; I (possible) <a href="#">WELT SP013760</a>
<i>Aciphylla crenulata</i> J.B.Armstr.		Not Threatened		DP	
<i>Aciphylla glaucescens</i> W.R.B.Oliv.	speargrass	Not Threatened	TL	DP	TL = H, I: Swampy Hill, Ōtepoti Dunedin. Accession numbers: H <a href="#">WELT SP005401/A</a> , I <a href="#">WELT SP005401/B</a> , <a href="#">WELT SP005401/C</a> , <a href="#">WELT SP005401/D</a>
<i>Acrothamnus colensoi</i> (Hook.f.) Quinn		Not Threatened			
<i>Adenochilus gracilis</i> Hook.f.	orchid	Not Threatened			
<i>Adiantum cunninghamii</i> Hook.	maidenhair fern	Not Threatened			
<i>Agrostis muelleriana</i> Vicky		Not Threatened		SO	
<i>Agrostis personata</i> Edgar		Not Threatened			
<i>Anaphalioides bellidioides</i> (G.Forst.) Glenn	Hell's bells	Not Threatened			
<i>Androstoma empetrifolium</i> Hook.f.	bog mingimingi	Not Threatened			
<i>Anisotome aromatica</i> Hook.f.	aromatic aniseed	Not Threatened	TL		TL = H, H?: Flagstaff Hill, Ōtepoti Dunedin / upper basin of Wilkin River / Tapuae-o-Uenuku   Hector Mountains. Accession numbers: H <a href="#">CHR 75688</a> , W?; H? <a href="#">CHR 76104</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Anisotome flexuosa</i> J.W.Dawson		Not Threatened	TL		TL = H: From upper basins of the Wilkin River above the forks. Accession numbers: H <a href="#">CHR 76104</a>
<i>Anisotome haastii</i> (F.Muell.) Cockayne & Laing	Haast's carrot	Not Threatened			
<i>Anisotome imbricata</i> (Hook.f.) Cockayne var. <i>imbricata</i>		Not Threatened	TL		TL = H: Otago, dry debris on the alps of the lake district. Accession number: H G-G-263084/1
<i>Anisotome imbricata</i> var. <i>prostrata</i> J.W.Dawson		Not Threatened			
<i>Anthosachne solandri</i> (Steud.) Barkworth & S.W.L.Jacobs	native wheatgrass	Not Threatened	TL	DP	
<i>Apium prostratum</i> subsp. <i>prostratum</i> var. <i>filiforme</i> (A.Rich.) Kirk	New Zealand celery	Not Threatened		SO	
<i>Apodasmia similis</i> (Edgar) B.G.Briggs & L.A.S.Johnson	jointed wire rush	Not Threatened			
<i>Aporostylis bifolia</i> (Hook.f.) Rupp & Hatch	odd-leaved orchid	Not Threatened	TL		TL = H: Otago. Accession number: H K?
<i>Aristotelia fruticosa</i> Hook.f.	mountain wineberry	Not Threatened	TL		TL = H, S: Flagstaff Hill, near Ōtepoti Dunedin / Dunedin Ecological District. Accession numbers: H <a href="#">CHR 75704</a> ; S <a href="#">AK 22919</a> , <a href="#">AK 22917</a> , <a href="#">AK 22914</a> , <a href="#">AK 22916</a> , <a href="#">AK 22915</a> , <a href="#">AK 22920</a> , <a href="#">AK 22918</a>
<i>Aristotelia serrata</i> (J.R.Forst. & G.Forst.) W.R.B.Oliv.	wineberry	Not Threatened			
<i>Arthropodium candidum</i> Raoul	small renga lily	Not Threatened			
<i>Asplenium appendiculatum</i> (Labill.) C.Presl subsp. <i>appendiculatum</i>	ground spleenwort	Not Threatened		SO	
<i>Asplenium flabellifolium</i> Cav.	butterfly fern	Not Threatened		SO	
<i>Asplenium flaccidum</i> G.Forst.	drooping spleenwort	Not Threatened		SO	
<i>Asplenium gracillimum</i> Colenso	hen & chicken fern	Not Threatened		SO	
<i>Asplenium hookerianum</i> Colenso	Hooker's spleenwort	Not Threatened			
<i>Asplenium lyallii</i> (Hook.f.) T.Moore	Lyall's spleenwort	Not Threatened			
<i>Asplenium richardii</i> (Hook.f.) Hook.f.	Richard's spleenwort	Not Threatened			
<i>Astelia fragrans</i> Colenso	bush lily	Not Threatened			
<i>Astelia nervosa</i> Hook.f.	mountain astelia	Not Threatened			
<i>Astelia nivicola</i> Cockayne ex Cheeseman var. <i>nivicola</i>		Not Threatened			
<i>Austroblechnum banksii</i> (Hook.f.) Gasper et V.A.O.Dittrich	shore hard fern	Not Threatened			Previous Name and Authority: <i>Blechnum blechnoides</i> (Bory) Keyserl.
<i>Austroblechnum colensoi</i> (Hook.f.) Gasper et V.A.O.Dittrich	Colenso's hard fern	Not Threatened			Previous Name and Authority: <i>Blechnum colensoi</i> (Hook.f.) N.A.Wakef.
<i>Austroblechnum lanceolatum</i> (R.Br.) Gasper et V.A.O.Dittrich	lance fern	Not Threatened		SO	Previous Name and Authority: <i>Blechnum chambersii</i> Tindale
<i>Austroblechnum penna-marina</i> subsp. <i>alpina</i> (R.Br.) A.R.Field	little hard fern	Not Threatened		SO	Previous Name and Authority: <i>Blechnum penna-marina</i> subsp. <i>alpina</i> T.C.Chambers & P.A.Farrant
<i>Austroderia richardii</i> (Endl.) N.P.Barker & H.P.Linder	toetoe	Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Austrolycopodium fastigiatum</i> (R.Br.) Holub		Not Threatened	TL	SO	TL = T?: Otago. Accession number: LD 1406084  Previous Name and Authority: <i>Lycopodium fastigiatum</i> R.Br.
<i>Azolla rubra</i> R.Br.	Pacific azolla	Not Threatened		SO	
<i>Azorella haastii</i> subsp. <i>cyanopetala</i> (Domin) G.M.Plunkett & A.N.Nicolas		Not Threatened			
<i>Azorella hookeri</i> Drude		Not Threatened			
<i>Brachyglottis bellidioides</i> (Hook.f.) B.Nord. var. <i>bellidioides</i>		Not Threatened			
<i>Brachyglottis bellidioides</i> var. <i>orbiculata</i> (G.Simpson & J.S.Thomson) B.Nord.		Not Threatened	TL		TL = H: Garvie Mountains. Accession number: H CHR?
<i>Brachyglottis buchananii</i> (J.B.Armstr.) B.Nord.		Not Threatened	TL		TL = H, S: Mount Cargill, near Ōtepoti Dunedin, upper forest margins / Dunedin Ecological District. Accession numbers: H <a href="#">CHR 29513</a> ; S <a href="#">AK 35247</a>
<i>Brachyglottis haastii</i> (Hook.f.) B.Nord.		Not Threatened			
<i>Brachyglottis revoluta</i> (Kirk) B.Nord.		Not Threatened			
<i>Brachyscome radicata</i> Hook.f.	button daisy	Not Threatened	TL		TL = H: Cape Wanbrow, Ōamaru, Ōamaru Ecological District. Accession number: H <a href="#">AK 9389</a>
<i>Brachyscome sinclairii</i> Hook.f.	daisy	Not Threatened			
<i>Bulbinella angustifolia</i> (Cockayne & Laing) L.B.Moore	onion	Not Threatened			
<i>Caladenia chlorostyla</i> D.L.Jones, Molloy & M.A.Clem.	finger orchid	Not Threatened			
<i>Caladenia lyallii</i> Hook.f.	cap orchid	Not Threatened	TL	SO?	TL = H: Otago. Accession number: H K?
<i>Callitriche petriei</i> R.Mason subsp. <i>petriei</i>	Petrie's starwort	Not Threatened			
<i>Caltha obtusa</i> Cheeseman	white caltha	Not Threatened	TL		TL = S, S?: St. Bathans and Dunstan Mountains. Accession numbers: S <a href="#">WELT SP025743</a> , S? <a href="#">AK 4363</a> , <a href="#">WELT SP025745</a>
<i>Calystegia soldanella</i> (L.) R.Br.	shore bindweed	Not Threatened		SO	
<i>Calystegia tuguriorum</i> (G.Forst.) R.Br. ex Hook.f.	climbing convolvulus	Not Threatened		SO	
<i>Cardamine corymbosa</i> Hook.f.	cress	Not Threatened			
<i>Cardamine forsteri</i> Govaerts	cress	Not Threatened			
<i>Cardamine heleniae</i> Heenan	cress	Data Deficient	TL		TL = H: Centre Road, Otago Peninsula. Accession number: H <a href="#">CHR 616824</a>
<i>Carex acicularis</i> Boott	sedge	Not Threatened	TL		
<i>Carex banksiana</i> K.A.Ford	fine-leaved bastard grass	Not Threatened			
<i>Carex breviculmis</i> R.Br.	grassland sedge	Not Threatened		SO	
<i>Carex comans</i> Berggr.	sedge	Not Threatened			
<i>Carex coriacea</i> Hamlin	cutty grass	Not Threatened			
<i>Carex corynoidea</i> K.A.Ford		Not Threatened			
<i>Carex crispa</i> K.A.Ford	hook sedge	Not Threatened			
<i>Carex diandra</i> Schrank	sedge	Not Threatened		SO	
<i>Carex dissita</i> Sol. ex Boott	forest sedge	Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Carex drucei</i> (Hamlin) K.A.Ford	Druce's hook sedge	Not Threatened			
<i>Carex echinata</i> Murray	star sedge	Not Threatened		SO	
<i>Carex edura</i> K.A.Ford	hook sedge	Not Threatened	TL		TL = ISL, T?: Eweburn Creek, Naseby / Maniototo Ecological District. Accession numbers: ISL <a href="#">AK 2339</a> ; T? <a href="#">WELT SP001388</a>
<i>Carex egmontiana</i> (Hamlin) K.A.Ford	hook sedge	Not Threatened			
<i>Carex flagellifera</i> Colenso	Glen Murray tussock	Not Threatened			
<i>Carex flaviformis</i> Nelmess	yellow sedge	Not Threatened			
<i>Carex forsteri</i> Wahlenb.	Forster's sedge	Not Threatened			
<i>Carex gaudichaudiana</i> Kunth	Gaudichaud's sedge	Not Threatened		SO	
<i>Carex geminata</i> Schkuhr	cutty grass	Not Threatened			
<i>Carex horizontalis</i> (Colenso) K.A.Ford	hook sedge	Not Threatened	TL		TL = S: Otago. Accession number: S <a href="#">CHR 294827</a>
<i>Carex imbecilla</i> K.A.Ford	delicate hook sedge	Not Threatened			
<i>Carex inversa</i> R.Br.	creeping lawn sedge	Not Threatened		SO	
<i>Carex lectissima</i> K.A.Ford	fine-leaved hook sedge	Not Threatened			
<i>Carex megalepis</i> K.A.Ford	Caver's beard	Not Threatened			
<i>Carex minor</i> (Kük.) K.A.Ford	hook sedge	Not Threatened	TL		TL = T?: Rongahere, Tuapeka County. Accession numbers: H? <a href="#">WELT SP003134/A</a> , <a href="#">WELT SP003134/B</a>
<i>Carex penalpina</i> K.A.Ford	hook sedge	Not Threatened	TL		TL = T?: Maungatua. Accession number: T? <a href="#">WELT SP001696</a>
<i>Carex petriei</i> Cheeseman	Petrie's sedge	Not Threatened			
<i>Carex pumila</i> Thunb.	sand sedge	Not Threatened		SO	
<i>Carex punicea</i> K.A.Ford	frost flat hook sedge	Not Threatened			
<i>Carex pyrenaica</i> var. <i>cephalotes</i> (F.Muell.) Kük.	mountain sedge	Not Threatened			
<i>Carex secta</i> Boott	pūrei	Not Threatened			
<i>Carex sinclairii</i> Boott	Sinclair's sedge	Not Threatened			
<i>Carex solandri</i> Boott	forest sedge	Not Threatened			
<i>Carex testacea</i> Sol. ex Boott	speckled sedge	Not Threatened			
<i>Carex uncinata</i> L.f.	hook sedge	Not Threatened		SO	
<i>Carex virgata</i> Sol. ex Boott	swamp sedge	Not Threatened			
<i>Carex wakatipu</i> Petrie	sedge	Not Threatened	TL		TL = S, S?: Ben Lomond, Lake Whakatipu / Shotover Ecological District. Accession numbers: S <a href="#">AK 2659</a> , <a href="#">WELT SP011894</a> ; S? <a href="#">WELT SP011895</a>
<i>Carex zotovii</i> (Hamlin) K.A.Ford	Zotov's hook sedge	Not Threatened			
<i>Carmichaelia arborea</i> (G.Forst.) Druce		Not Threatened			
<i>Carpha alpina</i> R.Br.	sedge	Not Threatened			
<i>Carpodetus serratus</i> J.R.Forst. & G.Forst.	putaputaweta	Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Celmisia alpina</i> (Kirk) Cheeseman	mountain daisy	Not Threatened			
<i>Celmisia angustifolia</i> Cockayne	strap-leaved daisy	Not Threatened			
<i>Celmisia armstrongii</i> Petrie	Armstrong's mountain daisy	Not Threatened			
<i>Celmisia densiflora</i> Hook.f.	mountain daisy	Not Threatened			
<i>Celmisia durietzii</i> Cockayne & Allan	du Rietz's mountain daisy	Not Threatened			
<i>Celmisia glandulosa</i> Hook.f. var. <i>glandulosa</i>	bog mountain daisy	Not Threatened			
<i>Celmisia glandulosa</i> var. <i>longiscapa</i> Cockayne	bog mountain daisy	Not Threatened			
<i>Celmisia gracilentia</i> Hook.f.	common mountain daisy	Not Threatened			
<i>Celmisia haastii</i> Hook.f. var. <i>haastii</i>	Haast's mountain daisy	Not Threatened	TL		TL = L: Otago Lake District, alpine. Accession numbers: L K882081
<i>Celmisia hectorii</i> Hook.f.	Hector's daisy	Not Threatened	TL		TL = H: Mount Brewster, Otago-Westland boundary / north-east Otago. Accession number: H K882078
<i>Celmisia laricifolia</i> Hook.f.	needle-leaved mountain daisy	Not Threatened			
<i>Celmisia lyallii</i> Hook.f.	false spaniard	Not Threatened	TL		TL = H: Mount Alta. Accession number: H K?
<i>Celmisia petriei</i> Cheeseman	Petrie's mountain daisy	Not Threatened			
<i>Celmisia ramulosa</i> Hook.f. var. <i>ramulosa</i>	mountain daisy	Not Threatened			
<i>Celmisia semicordata</i> Petrie subsp. <i>semicordata</i>	large mountain daisy	Not Threatened			
<i>Celmisia semicordata</i> subsp. <i>stricta</i> (Cockayne) Given	large mountain daisy	Not Threatened			
<i>Celmisia sessiliflora</i> Hook.f.	white cushion mountain daisy	Not Threatened			
<i>Celmisia verbascifolia</i> Hook.f. subsp. <i>verbascifolia</i>	daisy	Not Threatened			
<i>Celmisia vespertina</i> Given	daisy	Not Threatened		DP	
<i>Celmisia viscosa</i> Hook.f.	sticky mountain daisy	Not Threatened			
<i>Celmisia walkeri</i> Kirk	Walker's mountain daisy	Not Threatened	TL		TL = H, I, ISL (possible): mountains above Lake Harris, Otago-Southland boundary / Dividing range above Lake Harris. Accession numbers: H <a href="#">WELT SP003287</a> ; I <a href="#">CHR 288140</a> ; ISL (possible) <a href="#">WELT SP004548</a> , <a href="#">WELT SP045260</a>
<i>Centella uniflora</i> (Colenso) Nannf.	centella	Not Threatened		SO	
<i>Centrolepis ciliata</i> (Hook.f.) Druce	centrolepis	Not Threatened			
<i>Chaerophyllum colensoi</i> (Hook.f.) K.F.Chung var. <i>colensoi</i>	mountain myrrh	Not Threatened			
<i>Chaerophyllum ramosum</i> (Hook.f.) K.F.Chung	apiaceae	Not Threatened	TL		TL = H, S or ISN: Otago, river flats in the Lakes District / Lake Wānaka District. Accession numbers: H K?; S or ISN <a href="#">AK 6371</a>
<i>Chiloglottis cornuta</i> Hook.f.	bird orchid	Not Threatened		SO	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Chionochloa conspicua</i> (G.Forst.) Zotov subsp. <i>conspicua</i>	broad-leaved tussock	Not Threatened			
<i>Chionochloa crassiuscula</i> subsp. <i>torta</i> Connor	curly snow tussock	Not Threatened	TL		TL = H: Lake Harris, Routeburn, left Branch. Accession numbers: H <a href="#">CHR 9613</a>
<i>Chionochloa macra</i> Zotov	slim snow tussock	Not Threatened			
<i>Chionochloa oreophila</i> (Petrie) Zotov	mountain snow tussock	Not Threatened			
<i>Chionochloa pallens</i> subsp. <i>cadens</i> Connor	mid-ribbed snow tussock	Not Threatened			
<i>Chionochloa rigida</i> subsp. <i>amara</i> Connor	narrow-leaved snow tussock	Not Threatened			
<i>Chionochloa rubra</i> subsp. <i>cuprea</i> Connor	copper tussock	Not Threatened	TL		TL = H: Pigroot, 16 miles from Ranfurly. Accession number: H <a href="#">CHR 132481</a>
<i>Clematis foetida</i> Raoul	clematis	Not Threatened			
<i>Clematis marata</i> J.B.Armstr.	clematis	Not Threatened			
<i>Clematis paniculata</i> J.F.Gmel.	white clematis	Not Threatened			
<i>Colobanthus acicularis</i> Hook.f.		Not Threatened			
<i>Colobanthus affinis</i> (Hook.) Hook.f.	colobanthus	Not Threatened		SO	
<i>Colobanthus buchananii</i> Kirk	pin cushion	Not Threatened	TL		TL = H, L, S: Manuherikia Valley / interior of Otago. Accession numbers: H W?; L <a href="#">WELT SP050895</a> ; S <a href="#">AK 4090</a>
<i>Colobanthus canaliculatus</i> Kirk	colobanthus	Not Threatened	TL		TL = H, T?: Central Otago / interior of Otago. Accession numbers: H W? T? <a href="#">WELT SP050876</a>
<i>Convolvulus waitaha</i> (Sykes) Heenan, Molloy & de Lange	grass convolvulus	Not Threatened			
<i>Coprosma areolata</i> Cheeseman	thin-leaved coprosma	Not Threatened	TL		TL = S: vicinity of Ōtepoti Dunedin / Dunedin Ecological District. Accession numbers: S <a href="#">AK 211646</a> , <a href="#">AK 211647</a> , <a href="#">AK 8785</a>
<i>Coprosma atropurpurea</i> (Cockayne & Allan) L.B.Moore	coprosma	Not Threatened			
<i>Coprosma cheesemanii</i> W.R.B.Oliv.	coprosma	Not Threatened			
<i>Coprosma ciliata</i> Hook.f.	coprosma	Not Threatened			
<i>Coprosma colensoi</i> Hook.f.		Not Threatened			
<i>Coprosma crassifolia</i> Colenso	thick leaved coprosma	Not Threatened	TL		TL = T?: Otago. Accession number: T? <a href="#">WELT SP048862</a>
<i>Coprosma crenulata</i> W.R.B.Oliv.	coprosma	Not Threatened			
<i>Coprosma cuneata</i> Hook.f.	coprosma	Not Threatened	TL		TL = H, L, S?, T?: Whisky Gully, near Tapanui. Accession numbers: H W? L <a href="#">WELT SP048878/A</a> , <a href="#">WELT SP048878/B</a> , <a href="#">WELT SP048878/C</a> ; T? <a href="#">WELT SP048873/A</a> , <a href="#">WELT SP048873/B</a> ; S? <a href="#">WELT SP048879</a>
<i>Coprosma decurva</i> Heads	coprosma	Not Threatened	TL		TL = H, I: Mount Cargill, Ōtepoti Dunedin, by Bethune's Gully Track / Dunedin Ecological District. Accession numbers: H <a href="#">AK 231764</a> ; I <a href="#">CHR 489340</a> , NSW 413944; <a href="#">OTA 048469</a> , <a href="#">WELT SP080001</a>
<i>Coprosma depressa</i> Colenso ex Hook.f.	coprosma	Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Coprosma dumosa</i> (Cheeseman) G.T.Jane	coprosma	Not Threatened			
<i>Coprosma foetidissima</i> J.R.Forst. & G.Forst.	stinkwood	Not Threatened			
<i>Coprosma fowerakeri</i> D.A.Norton & de Lange	Foweraker's coprosma	Not Threatened			
<i>Coprosma linariifolia</i> Hook.f.	yellow wood	Not Threatened			
<i>Coprosma lucida</i> J.R.Forst. & G.Forst.	shining karamu	Not Threatened			
<i>Coprosma niphophila</i> Orchard	creeping coprosma	Not Threatened		SO	
<i>Coprosma perpusilla</i> Colenso subsp. <i>perpusilla</i>	coprosma	Not Threatened		SO	
<i>Coprosma petriei</i> Cheeseman	turfy coprosma	Not Threatened	TL		TL = S: Cromwell / Maniototo Plains / Mount St. Bathans / Maniototo Ecological District / Central Otago Ecological Region / St. Bathans Ecological District. Accession numbers: S <a href="#">AK 9124</a> , <a href="#">AK 9128</a>
<i>Coprosma propinqua</i> var. <i>propinqua</i> A.Cunn.	mingimingi	Not Threatened			
<i>Coprosma pseudociliata</i> G.T.Jane	coprosma	Not Threatened			
<i>Coprosma pseudocuneata</i> W.R.B.Oliv. ex Garn.-Jones & Elder		Not Threatened			
<i>Coprosma rhamnoides</i> A.Cunn.	coprosma	Not Threatened			
<i>Coprosma rigida</i> Cheeseman		Not Threatened			
<i>Coprosma rotundifolia</i> A.Cunn.	round leaved coprosma	Not Threatened			
<i>Coprosma rubra</i> Petrie	coprosma	Not Threatened	TL		TL = H, L, S?, T?: Leith Valley, Ōtepoti Dunedin / vicinity of Ōtepoti Dunedin / Dunedin Ecological District. Accession numbers: H W?; L <a href="#">WELT SP048848/A</a> , <a href="#">WELT SP048848/B</a> , <a href="#">WELT SP048848/C</a> , <a href="#">WELT SP048848/D</a> , <a href="#">WELT SP048848/E</a> , S? <a href="#">AK 8928</a> , <a href="#">AK 8929</a> , <a href="#">AK 8930</a> , <a href="#">AK 8922</a> , <a href="#">AK 211963</a> , <a href="#">AK 8924</a> , <a href="#">AK 8923</a> , <a href="#">AK 8926</a> , <a href="#">AK 8925</a> , <a href="#">AK 8921</a> , <a href="#">AK 8927</a>
<i>Coprosma rugosa</i> Cheeseman	coprosma	Not Threatened	TL		TL = S: Otago. Accession numbers: S <a href="#">AK 8968</a> , <a href="#">AK 8969</a> , <a href="#">AK 8970</a> , <a href="#">AK 8971</a>
<i>Coprosma serrulata</i> Hook.f. ex Buchanan	coprosma	Not Threatened			
<i>Cordyline australis</i> (G.Forst.) Endl.	cabbage tree	Not Threatened			
<i>Coriaria arborea</i> R.Linds. var. <i>arborea</i>	tutu	Not Threatened			
<i>Coriaria plumosa</i> W.R.B.Oliv.	feathery tutu	Not Threatened	TL		
<i>Coriaria sarmentosa</i> G.Forst.		Not Threatened			
<i>Corokia cotoneaster</i> Raoul	korokio	Not Threatened			
<i>Corybas hatchii</i> Lehnebach	spider orchid	Not Threatened			
<i>Corybas iridescens</i> Irwin & Molloy		Not Threatened			
<i>Corybas macranthus</i> (Hook.f.) Rchb.f.	spider orchid	Not Threatened			
<i>Corybas oblongus</i> (Hook.f.) Rchb.f.		Not Threatened			
<i>Corybas orbiculatus</i> (Colenso) L.B.Moore		Not Threatened			
<i>Corybas trilobus</i> (Hook.f.) Rchb.f.		Not Threatened			
<i>Cotula australis</i> (Spreng.) Hook.f.		Not Threatened		SO	
<i>Cotula coronopifolia</i> L.		Not Threatened		SO	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Cranfillia deltooides</i> (Colenso) de Lange et Parris	mountain hard fern	Not Threatened		SO	
<i>Cranfillia fluviatilis</i> (R.Br.) Gasper et V.A.O.Dittrich	creek fern	Not Threatened		SO	Previous Name and Authority: <i>Blechnum fluviatile</i> (R.Br.) Lowe ex Salomon
<i>Craspedia lanata</i> (Hook.f.) Allan var. lanata		Not Threatened			
<i>Crassula sieberiana</i> (Schult. & Schult.f.) Druce		Not Threatened		SO	
<i>Crassula sinclairii</i> (Hook.f.) A.P.Druce & Given		Not Threatened	TL		TL = S, T?: Otago, Waipahī and Lake Waiholā / Gore Ecological Region and District. Accession numbers: S <a href="#">AK 4552</a> ; T? <a href="#">WELT SP050141</a> , <a href="#">WELT SP050143</a> , <a href="#">WELT SP050165</a> , <a href="#">WELT SP050175/A</a> , <a href="#">WELT SP050175/B</a> , <a href="#">WELT SP050176</a>
<i>Cyathea colensoi</i> (Hook.f.) Domin	mountain tree fern	Not Threatened			
<i>Cyathea dealbata</i> (G.Forst.) Sw.		Not Threatened			
<i>Cyathea smithii</i> Hook.f.		Not Threatened			
<i>Dacrycarpus dacrydioides</i> (A.Rich.) de Laub.	kahikatea	Not Threatened			
<i>Dacrydium cupressinum</i> Lamb.	rimu	Not Threatened			
<i>Dendrobium cunninghamii</i> Lindl.		Not Threatened			
<i>Deschampsia tenella</i> Petrie		Not Threatened	TL		TL = L; uncertain type material: Catlins River, Clutha County, on coast. Accession numbers: L <a href="#">WELT SP069304/A</a> ; uncertain type material <a href="#">WELT SP069304/B</a>
<i>Dianella nigra</i> Colenso		Not Threatened			
<i>Dichondra brevifolia</i> Buchanan		Not Threatened	TL		TL = H, T (possible), T?: "Popotunoa, Otago, pastures in swampy places mixed with <i>D. repens</i> ". Accession numbers: H OM?! T (possible) <a href="#">WELT SP032646</a> , T? <a href="#">WELT SP070293</a>
<i>Dichondra repens</i> J.R.Forst. & G.Forst.	Mercury bay weed	Not Threatened		SO	
<i>Dicksonia fibrosa</i> Colenso		Not Threatened			
<i>Dicksonia squarrosa</i> (G.Forst.) Swartz		Not Threatened			
<i>Diphysium scariosum</i> (G.Forst.) Rothm.		Not Threatened		SO	Previous Name and Authority: <i>Lycopodium scariosum</i> G.Forst.
<i>Discaria toumatou</i> Raoul	matagouri	Declining			
<i>Disphyma australe</i> (W.T.Aiton) N.E.Br. subsp. australe	horokaka	Not Threatened			
<i>Dolichoglottis lyallii</i> (Hook.f.) B.Nord.		Not Threatened		DP	
<i>Donatia novae-zelandiae</i> Hook.f.		Not Threatened		SO	
<i>Dracophyllum kirkii</i> Berggr.		Not Threatened			
<i>Dracophyllum longifolium</i> (J.R.Forst. & G.Forst.) R.Br. var. <i>longifolium</i>	inanga	Not Threatened			
<i>Dracophyllum muscoides</i> Hook.f.		Not Threatened	TL		TL = H, S or IS: Mount Alta / Wānaka Ecological District. Accession numbers: H K?; I or ISN <a href="#">AK 7046</a>
<i>Dracophyllum prunum</i> W.R.B.Oliv.		Not Threatened			
<i>Dracophyllum rosarinifolium</i> (G.Forst.) R.Br.		Not Threatened			
<i>Drosera arcturi</i> Hook.		Not Threatened		SO	

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Drosera spatulata</i> Labill.		Not Threatened		SO	
<i>Drosera stenopetala</i> Hook.f.		Not Threatened			
<i>Earina autumnalis</i> (G.Forst.) Hook.f.		Not Threatened			
<i>Earina mucronata</i> Lindl.		Not Threatened			
<i>Echinopogon ovatus</i> (G.Forst.) P.Beauv.		Not Threatened		SO	
<i>Elaeocarpus hookerianus</i> Raoul	pokaka	Not Threatened			
<i>Elatine gratioides</i> A.Cunn.		Not Threatened		SO	
<i>Eleocharis acuta</i> R.Br.		Not Threatened		SO	
<i>Eleocharis gracilis</i> R.Br.		Not Threatened		SO	
<i>Eleocharis pusilla</i> R.Br.		Not Threatened		SO	
<i>Empodisma minus</i> (Hook.f.) L.A.S.Johnson & D.F.Cutler	wire rush	Not Threatened		SO	
<i>Epilobium alsinoides</i> A.Cunn.		Not Threatened			
<i>Epilobium atriplicifolium</i> A.Cunn.		Not Threatened			
<i>Epilobium billardioreanum</i> DC.		Not Threatened		SO	
<i>Epilobium brunnescens</i> (Cockayne) P.H.Raven & Engelhorn subsp. <i>brunnescens</i>		Not Threatened			
<i>Epilobium brunnescens</i> subsp. <i>minutiflorum</i> (Cockayne) P.H.Raven & Engelhorn		Not Threatened			
<i>Epilobium chlorifolium</i> Hausskn.		Not Threatened			
<i>Epilobium cinereum</i> A.Rich.		Not Threatened		SO	
<i>Epilobium crassum</i> Hook.f.		Not Threatened		DP	
<i>Epilobium glabellum</i> G.Forst.		Not Threatened			
<i>Epilobium macropus</i> Hook.		Not Threatened			
<i>Epilobium melanocaulon</i> Hook.		Not Threatened			
<i>Epilobium nerteroides</i> A.Cunn.		Not Threatened			
<i>Epilobium nummulariifolium</i> A.Cunn.		Not Threatened			
<i>Epilobium pedunculare</i> A.Cunn.		Not Threatened			
<i>Epilobium pernitens</i> Cockayne & Allan		Not Threatened			
<i>Epilobium pubens</i> A.Rich.		Not Threatened			
<i>Epilobium pycnostachyum</i> Hausskn.		Not Threatened			
<i>Epilobium rotundifolium</i> G.Forst.		Not Threatened			
<i>Epilobium tasmanicum</i> Hausskn.		Not Threatened		SO	
<i>Euchiton audax</i> (D.G.Drury) Holub	creeping cudweed	Not Threatened			
<i>Euchiton lateralis</i> (C.J.Webb) Breitw. & J.M.Ward		Not Threatened			
<i>Euchiton limosus</i> (D.G.Drury) Holub		Not Threatened			
<i>Euchiton ruahenicus</i> (D.G.Drury) Breitw. & J.M.Ward		Not Threatened			
<i>Euchiton sphaericus</i> (Willd.) Holub		Not Threatened		SO	
<i>Euphrasia australis</i> Petrie		Not Threatened			
<i>Euphrasia revoluta</i> Hook.f.		Not Threatened			
<i>Euphrasia zelandica</i> Wettst.		Not Threatened			
<i>Festuca novae-zelandiae</i> (Hack.) Cockayne		Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Ficinia nodosa</i> (Rottb.) Goetgh., Muasya & D.A.Simpson	wiwi	Not Threatened	TL	SO	
<i>Forstera sedifolia</i> G.Forst.		Not Threatened			
<i>Forstera tenella</i> Hook.f.		Not Threatened			
<i>Fuchsia excorticata</i> (J.R.Forst. & G.Forst.) L.f.	tree fuchsia	Not Threatened			
<i>Fuchsia perscandens</i> Cockayne & Allan		Not Threatened			
<i>Fuscospora cliffortioides</i> (Hook.f.) Heenan & Smissen	mountain beech	Not Threatened			
<i>Fuscospora fusca</i> (Hook.f.) Heenan & Smissen	red beech	Not Threatened			
<i>Gaimardia setacea</i> Hook.f.		Not Threatened		SO	
<i>Galium perpusillum</i> (Hook.f.) Allan		Not Threatened			
<i>Galium propinquum</i> A.Cunn.		Not Threatened		SO	
<i>Galium trilobum</i> Colenso	native bedstraw	Not Threatened			
<i>Gastrodia cunninghamii</i> Hook.f.		Not Threatened			
<i>Gastrodia molloyi</i> Lehnebach & J.R.Rolfe		Not Threatened			
<i>Gaultheria antipoda</i> G.Forst.		Not Threatened			
<i>Gaultheria crassa</i> Allan		Not Threatened	TL		TL = H: Flagstaff Hill, west of Ōtepoti Dunedin. Accession number: H <a href="#">CHR 93594</a>
<i>Gaultheria depressa</i> Hook.f. var. <i>depressa</i>		Data Deficient		SO	
<i>Gaultheria depressa</i> var. <i>novae-zelandiae</i> D.A.Franklin		Not Threatened			
<i>Gaultheria macrostigma</i> (Colenso) D.J.Middleton		Not Threatened			
<i>Gaultheria parvula</i> D.J.Middleton		Not Threatened			
<i>Gentianella bellidifolia</i> (Hook.f.) Holub		Not Threatened			
<i>Gentianella corymbifera</i> (Kirk) Holub subsp. <i>corymbifera</i>		Not Threatened			
<i>Gentianella corymbifera</i> subsp. <i>gracilis</i> Glennly		Not Threatened			
<i>Gentianella grisebachii</i> (Hook.f.) T.N.Ho		Not Threatened	TL		TL = L, ISL: Lake Harris, Routeburn, Lake Whakatipu. Accession numbers: L <a href="#">WELT SP004710</a> ; ISL <a href="#">WELT SP079965</a>
<i>Gentianella montana</i> (G.Forst.) Holub subsp. <i>montana</i> var. <i>montana</i>		Not Threatened	TL		TL = L, ISL: Lake Harris, Routeburn, west of Lake Whakatipu. Accession numbers: L <a href="#">WELT SP004723/A</a> ; ISL <a href="#">WELT SP004723/B</a>
<i>Geranium brevicaule</i> Hook.f.		Not Threatened		SO	
<i>Geum cockaynei</i> (F.Bolle) Molloy & C.J.Webb		Not Threatened			
<i>Geum leiospermum</i> Petrie		Not Threatened	TL		TL = H, L, ISL: Mount Cardrona / upper Waipori, northeast from Lawrence. Accession numbers: H W?; L <a href="#">WELT SP030386/A</a> ; ISL <a href="#">WELT SP030386/B</a>
<i>Geum uniflorum</i> Buchanan		Not Threatened			
<i>Gingidia decipiens</i> (Hook.f.) J.W.Dawson		Not Threatened			
<i>Gleichenia alpina</i> R.Br.	alpine tangle fern	Not Threatened		SO	
<i>Glossostigma diandrum</i> (L.) Kuntze		Not Threatened	TL		TL = H, PT, T?: Lake Waiholā, below high tide level, east of Otago. Accession numbers: H W?; T? <a href="#">CHR 293989</a> ; PT <a href="#">CHR 119292</a>

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Glossostigma elatinooides</i> Benth. ex Hook.f.		Not Threatened		SO	
<i>Gonocarpus aggregatus</i> (Buchanan) Orchard		Not Threatened	TL		TL = L, ISL: Lower part of Hunter River, Lake Hāwea / Lakes Ecological Region. Accession numbers: L <a href="#">WELT SP0407084/A</a> , <a href="#">WELT SP040784/B</a> ; ISL <a href="#">AK 5939</a> , ISL <a href="#">AK 209568</a> , <a href="#">WELT SP006882</a> , <a href="#">WELT SP040817</a> , <a href="#">WELT SP040822</a>
<i>Gonocarpus micranthus</i> subsp. <i>micranthus</i> Thunb.		Not Threatened		SO	
<i>Gonocarpus montanus</i> (Hook.f.) Orchard		Not Threatened			
<i>Goodenia radicans</i> (Cav.) Pers.	remuremu	Not Threatened			Previous Name and Authority: <i>Selliera radicans</i> Cav.
<i>Griselinia littoralis</i> Raoul	kāpuka	Not Threatened			
<i>Gunnera monoica</i> Raoul		Not Threatened	TL		TL = T?: Otago. Accession number: T? <a href="#">WELT SP025332</a>
<i>Gunnera prorepens</i> Hook.f.		Not Threatened			
<i>Haastia sinclairii</i> var. <i>fulvida</i> Allan		Not Threatened			
<i>Halocarpus bidwillii</i> (Kirk) Quinn		Not Threatened		DP	
<i>Halocarpus biformis</i> (Hook.) Quinn	pink pine	Not Threatened		DP	
<i>Haloragis erecta</i> (Banks ex Murray) Oken subsp. <i>erecta</i>		Not Threatened			
<i>Hectorella caespitosa</i> Hook.f.		Not Threatened	TL		TL = H: Otago Lake District, 4000–6000 ft. Accession numbers: H K?
<i>Helichrysum filicaule</i> Hook.f.		Not Threatened			
<i>Helichrysum lanceolatum</i> (Buchanan) Kirk		Not Threatened			
<i>Helichrysum simpsonii</i> Kottaim. subsp. <i>simpsonii</i>		Not Threatened	TL		TL = H, lost?. I, S? T?: Bold Peak, at 1400 m, Lake Whakatipu / Berwick, Taeri plain. Accession numbers: H <a href="#">CHR 76018</a> ; <a href="#">CHR 154063</a>  Previous Name and Authority: <i>Helichrysum intermedium</i> G.Simpson
<i>Herpilirion novae-zelandiae</i> Hook.f.		Not Threatened		SO	
<i>Hierochloa novae-zelandiae</i> Gand.		Not Threatened	TL		TL = H: Ōtepoti Dunedin. Accession number: H LY?
<i>Hierochloa recurvata</i> (Hack.) Zotov		Not Threatened			
<i>Hierochloa redolens</i> (Vahl) Roem. & Schult.		Not Threatened		SO	
<i>Histiopteris incisa</i> (Thunb.) J.Sm.		Not Threatened		SO	
<i>Hoheria angustifolia</i> Raoul		Not Threatened			
<i>Hoheria glabrata</i> Sprague & Summerh.		Not Threatened			
<i>Hoheria lyallii</i> Hook.f.		Not Threatened			
<i>Huperzia australiana</i> (Herter) Holub		Not Threatened		SO	
<i>Hydrocotyle elongata</i> A.Cunn.		Not Threatened			
<i>Hydrocotyle heteromeria</i> A.Rich.		Not Threatened			
<i>Hydrocotyle hydrophila</i> Petrie		Not Threatened	TL		TL = H, L, ISL?: Wickliffe Bay, between the Pyramids, Otago Peninsula / Dunedin Ecological District. Accession numbers: H W?; L <a href="#">WELT SP068306</a> ; ISL? <a href="#">AK 6239</a>
<i>Hydrocotyle microphylla</i> A.Cunn.		Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Hydrocotyle moschata</i> G.Forst. var. <i>moschata</i>		Not Threatened			
<i>Hydrocotyle novae-zeelandiae</i> DC. var. <i>novae-zeelandiae</i>		Not Threatened			
<i>Hydrocotyle novae-zeelandiae</i> var. <i>montana</i> Kirk		Not Threatened			
<i>Hydrocotyle sulcata</i> C.J.Webb & P.N.Johnson		Not Threatened			
<i>Hymenophyllum</i> aff. <i>rarum</i> (AK 330262; New Zealand)		Not Threatened			
<i>Hymenophyllum bivalve</i> (G.Forst.) Sw.	two-valved filmy fern	Not Threatened		SO	
<i>Hymenophyllum demissum</i> (G.Forst.) Sw.	filmy fern	Not Threatened			
<i>Hymenophyllum dilatatum</i> (G.Forst.) Sw.		Not Threatened			
<i>Hymenophyllum flabellatum</i> Labill.		Not Threatened		SO	
<i>Hymenophyllum flexuosum</i> A.Cunn.		Not Threatened			
<i>Hymenophyllum frankliniae</i> Colenso		Not Threatened			
<i>Hymenophyllum malingii</i> (Hook.) Mett.		Not Threatened			
<i>Hymenophyllum multifidum</i> (G.Forst.) Sw.	sharp-toothed filmy fern	Not Threatened		SO	
<i>Hymenophyllum peltatum</i> (Poir.) Desv.		Not Threatened		SO	
<i>Hymenophyllum pulcherrimum</i> Colenso		Not Threatened			
<i>Hymenophyllum revolutum</i> Colenso		Not Threatened			
<i>Hymenophyllum sanguinolentum</i> (G.Forst.) Sw.		Not Threatened		TO	
<i>Hymenophyllum scabrum</i> A.Rich.		Not Threatened			
<i>Hymenophyllum villosum</i> Colenso		Not Threatened			
<i>Hypericum pusillum</i> Choisy		Not Threatened		SO	
<i>Hypolepis ambigua</i> (A.Rich.) Brownsey & Chinnock		Not Threatened			
<i>Hypolepis millefolium</i> Hook.		Not Threatened			
<i>Hypolepis rufobarbata</i> (Colenso) N.A.Wakef.		Not Threatened		EF	
<i>Ileostylus micranthus</i> (Hook.f.) Tiegh.		Not Threatened		TO	
<i>Isoetes alpina</i> Kirk		Not Threatened			
<i>Isolepis aucklandica</i> Hook.f.		Not Threatened		SO	
<i>Isolepis caligenis</i> (V.J.Cook) Soják		Not Threatened		DP	
<i>Isolepis cernua</i> (Vahl) Roem. & Schult. var. <i>cernua</i>		Not Threatened		SO	
<i>Isolepis habra</i> (Edgar) Soják		Not Threatened		SO	
<i>Juncus antarcticus</i> Hook.f.		Not Threatened		SO	
<i>Juncus edgariae</i> L.A.S.Johnson & K.L.Wilson		Not Threatened			
<i>Juncus novae-zeelandiae</i> Hook.f.		Not Threatened			
<i>Juncus pallidus</i> R.Br.		Not Threatened		SO	
<i>Juncus planifolius</i> R.Br.		Not Threatened		SO	
<i>Juncus sarophorus</i> L.A.S.Johnson		Not Threatened		SO	
<i>Kelleria dieffenbachii</i> (Hook.) Endl.		Not Threatened			
<i>Kelleria laxa</i> (Cheeseman) Heads		Not Threatened			
<i>Kelleria villosa</i> var. <i>villosa</i> Berggr.		Not Threatened			
<i>Koeleria cheesemanii</i> (Hack.) Petrie		Not Threatened			
<i>Koeleria novozelandica</i> Domin		Not Threatened			

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Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Korthalsella lindsayi</i> (Oliv.) Engl.		Not Threatened	TL		TL = H: East Taieri/Taieri Bush. Accession number: H K?
<i>Kunzea robusta</i> de Lange & Toelken	rawirinui	Nationally Vulnerable	De	DP, De	De = <a href="#">impacts of myrtle risk is unknown</a>
<i>Kunzea serotina</i> de Lange & Toelken	mākahikātoa	Nationally Vulnerable	De	DP, De	De = <a href="#">impacts of myrtle risk is unknown</a>
<i>Lachnagrostis lyallii</i> (Hook.f.) Zotov		Not Threatened			
<i>Lachnagrostis pilosa</i> (Buchanan) Edgar subsp. <i>pilosa</i>		Not Threatened			
<i>Lagenophora cuneata</i> Petrie		Not Threatened	TL		TL = H, L, I, ISL: Flagstaff Hill, near Ōtepoti Dunedin. Accession numbers: H W?; L <a href="#">WELT SP044165</a> ; I <a href="#">CHR 333540</a> ; ISL <a href="#">AK 9346</a>
<i>Lagenophora petiolata</i> Hook.f.		Not Threatened	TL		TL = I, S, S?: Catlins River / Tahakopa Ecological District. Accession numbers: I <a href="#">WELT SP044167</a> ; S <a href="#">AK 9350</a> ; S? <a href="#">AK 30646</a>
<i>Lagenophora pumila</i> (G.Forst.) Cheeseman		Not Threatened			
<i>Lagenophora strangulata</i> Colenso		Not Threatened			
<i>Lastreopsis hispida</i> (Sw.) Tindale		Not Threatened		SO	
<i>Lecanopteris pustulata</i> (G.Forst.) Perrie & Brownsey subsp. <i>pustulata</i>		Not Threatened		SO	Previous Name and Authority: <i>Microsorium pustulatum</i> (G.Forst.) Copel. subsp. <i>pustulatum</i>
<i>Lemna minor</i> L.	duckweed	Not Threatened		SO	
<i>Lepidium desvauxii</i> Thell.	bushy peppergrass	Not Threatened		SO	
<i>Lepidosperma australe</i> (A.Rich.) Hook.f.		Not Threatened			
<i>Lepidothamnus laxifolius</i> (Hook.f.) Quinn	pygmy pine	Not Threatened			
<i>Leptecophylla juniperina</i> (J.R.Forst. & G.Forst.) C.M.Weiller subsp. <i>juniperina</i>		Not Threatened		SO	
<i>Leptinella dioica</i> Hook.f.		Not Threatened			
<i>Leptinella pectinata</i> subsp. <i>villosa</i> (G.Simpson) D.G.Lloyd & C.J.Webb		Not Threatened	TL		TL = L: Mount Roy, Lake Wānaka. Accession numbers: L <a href="#">CHR 76029</a>
<i>Leptinella pectinata</i> subsp. <i>willcoxii</i> (Cheeseman) D.G.Lloyd & C.J.Webb		Not Threatened	TL		TL = H, I, L, ISL: near Mount Earnslaw / Upper Route Burn Valley / Dart Ecological District. Accession numbers: H A?, <a href="#">CHR 75701</a> ; I <a href="#">CHR 155497</a> ; L <a href="#">AK 24966</a> ; ISL <a href="#">AK 209500</a>
<i>Leptinella squalida</i> subsp. <i>mediana</i> (D.G.Lloyd) D.G.Lloyd & C.J.Webb		Not Threatened			
<i>Leptolepia novae-zelandiae</i> (Colenso) Mett. ex Diels		Not Threatened			
<i>Leptopteris hymenophylloides</i> (A.Rich.) C.Presl		Not Threatened			
<i>Leptopteris superba</i> (Colenso) C.Presl		Not Threatened			
<i>Leptospermum scoparium</i> J.R.Forst. & G.Forst. var. <i>scoparium</i>	mānuka	Declining	De	DP, De	De = <a href="#">impacts of myrtle risk is unknown</a>
<i>Leptostigma setulosum</i> (Hook.f.) Fosberg		Not Threatened			
<i>Leucogenes grandiceps</i> (Hook.f.) Beauverd		Not Threatened			
<i>Leucopogon fraseri</i> A.Cunn.		Not Threatened		SO	
<i>Libertia ixioides</i> (G.Forst.) Spreng.		Not Threatened			
<i>Libocedrus bidwillii</i> Hook.f.		Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Lilaeopsis novae-zelandiae</i> (Gand.) A.W.Hill		Not Threatened	TL	SO	TL = H: Tomahawk Lagoon, Ōtepoti Dunedin Accession number: H Gandoger?
<i>Limosella australis</i> R.Br.		Not Threatened		SO	Previous Name and Authority: <i>Limosella lineata</i> Gluck
<i>Lobelia angulata</i> G.Forst.		Not Threatened			
<i>Lomaria discolor</i> (G.Forst.) Willd.	crown fern	Not Threatened			Previous Name and Authority: <i>Blechnum discolor</i> (G.Forst.) Keyserl.
<i>Lophozonia menziesii</i> (Hook.f.) Heenan & Smissen	silver beech	Not Threatened			
<i>Luzula banksiana</i> var. <i>migrata</i> (Buchenau) Edgar	wood-rush	Not Threatened			
<i>Luzula crinita</i> var. <i>petrieana</i> (Buchenau) Edgar	wood-rush	Not Threatened			
<i>Luzula pumila</i> Hook.f.	wood-rush	Not Threatened	TL		TL = H, I, L, ISL, T?, uncertain: Otago Lake District, alpine / Mount Cardrona / Rock and Pillar Range / Wanaka Ecological District. Accession numbers: H <a href="#">AK 105078</a> ; I <a href="#">CHR 491678</a> ; L <a href="#">WELT SP012356</a> ; T? <a href="#">CHR 491679</a> ; ISL <a href="#">WELT SP012355</a> ; uncertain <a href="#">WELT SP012354</a>
<i>Luzula rufa</i> Edgar var. <i>rufa</i>	wood-rush	Not Threatened			
<i>Luzula traversii</i> (Buchenau) Cheeseman var. <i>traversii</i>	wood-rush	Not Threatened			
<i>Luzuriaga parviflora</i> (Hook.f.) Kunth		Not Threatened		SO	
<i>Marsippospermum gracile</i> (Hook.f.) Buchenau		Not Threatened			
<i>Mazus radicans</i> (Hook.f.) Cheeseman		Not Threatened			
<i>Melicope simplex</i> A.Cunn.	poataniwha	Not Threatened			
<i>Melicytus alpinus</i> (Kirk) Garn.-Jones		Not Threatened			
<i>Melicytus lanceolatus</i> Hook.f.		Not Threatened	TL		TL = H, S: Flagstaff Hill, Ōtepoti Dunedin / Dunedin Ecological District. Accession numbers: H <a href="#">CHR 75719</a> (var. <i>latior</i> G.Simpson & J.S.Thomson); S <a href="#">AK 100240</a>
<i>Melicytus ramiflorus</i> J.R.Forst. & G.Forst. subsp. <i>ramiflorus</i>	mahoe	Not Threatened			
<i>Metrosideros diffusa</i> (G.Forst.) Sm.	white rata	Nationally Vulnerable	De	DP, De	De = <a href="#">impacts of myrtle risk is unknown</a>
<i>Metrosideros umbellata</i> Cav.	southern rata	Nationally Vulnerable	De	DP, De	De = <a href="#">impacts of myrtle risk is unknown</a>
<i>Microlaena avenacea</i> (Raoul) Hook.f.	bush rice grass	Not Threatened		SO	
<i>Microseris scapigera</i> (Sol. ex A.Cunn.) Sch.Bip.	catsear	Not Threatened		DP	
<i>Microtis oligantha</i> L.B.Moore		Not Threatened			
<i>Microtis unifolia</i> (G.Forst.) Rchb.f.		Not Threatened		S?O	
<i>Montia fontana</i> L. subsp. <i>fontana</i>		Not Threatened		SO	
<i>Montia sessiliflora</i> (G.Simpson) Heenan		Not Threatened	TL		TL = L: Cardrona River. Accession number: L <a href="#">CHR 60027</a>
<i>Montitega dealbata</i> (R.Br.) C.M.Weiller		Not Threatened		SO	
<i>Muehlenbeckia australis</i> (G.Forst.) Meisn.	muehlenbeckia vine	Not Threatened		SO	
<i>Muehlenbeckia axillaris</i> (Hook.f.) Endl.		Not Threatened		SO	
<i>Muehlenbeckia complexa</i> (A.Cunn.) Meisn. var. <i>complexa</i>		Not Threatened		SO	
<i>Myoporum laetum</i> G.Forst.	ngaio	Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Myosotis australis</i> R.Br. subsp. <i>australis</i>		Not Threatened		SO	Previous name and authority: <i>Myosotis australis</i> R.Br.
<i>Myosotis forsteri</i> Lehm.		Not Threatened			
<i>Myriophyllum propinquum</i> A.Cunn.		Not Threatened		SO	
<i>Myriophyllum triphyllum</i> Orchard		Not Threatened			
<i>Myrsine australis</i> (A.Rich.) Allan	mapou	Not Threatened			
<i>Myrsine divaricata</i> A.Cunn.	weeping mapou	Not Threatened			
<i>Myrsine nummularia</i> (Hook.f.) Hook.f.		Not Threatened			
<i>Neomyrtus pedunculata</i> (Hook.f.) Allan	röhutu	Nationally Critical	De	DP	De = <a href="#">impacts of myrtle risk is unknown</a>
<i>Nertera ciliata</i> Kirk		Not Threatened			
<i>Nertera depressa</i> Banks & Sol. ex Gaertn.		Not Threatened		SO	
<i>Nertera villosa</i> B.H.Macmill. & R.Mason		Not Threatened	TL		TL = H: Long Flat, Hunter Valley, Otago. Accession number: H <a href="#">CHR 113477</a>
<i>Notogrammitis angustifolia</i> (Jacq.) Parris		Not Threatened			
<i>Notogrammitis angustifolia</i> subsp. <i>nothofagei</i> (Parris) Parris		Not Threatened		SO	
<i>Notogrammitis billardierei</i> (Willd.) Parris		Not Threatened		SO	
<i>Notogrammitis crassior</i> (Kirk) Parris		Not Threatened		SO	
<i>Notogrammitis heterophylla</i> (Labill.) Parris		Not Threatened		SO	
<i>Notogrammitis patagonica</i> (C.Chr.) Parris		Not Threatened		SO	
<i>Olearia arborescens</i> (G.Forst.) Cockayne & Laing		Not Threatened			
<i>Olearia avicenniifolia</i> (Raoul) Hook.f.		Not Threatened			
<i>Olearia ilicifolia</i> Hook.f.		Not Threatened			
<i>Olearia moschata</i> Hook.f.		Not Threatened			
<i>Olearia nummulariifolia</i> (Hook.f.) Hook.f.		Not Threatened			
<i>Olearia odorata</i> Petrie		Not Threatened	TL		TL = H, S: Maniototo Plain, Otago / Maniototo to Lake Hāwea / Between Roxburgh and Speargrass Flat, Clutha Valley / North of Roxburgh, Clutha Valley / Cromwell / Upper Clutha basin. Accession numbers: S <a href="#">WELT SP023630</a> , <a href="#">WELT SP032636</a> , <a href="#">WELT SP032640</a> , <a href="#">WELT SP057388</a> ; <a href="#">WELT SP057339</a> ; <a href="#">WELT SP057340</a>
<i>Ophioglossum coriaceum</i> A.Cunn.		Not Threatened			
<i>Oreobolus impar</i> Edgar	comb sedge	Not Threatened			
<i>Oreobolus pectinatus</i> Hook.f.	comb sedge	Not Threatened			
<i>Oreobolus strictus</i> Berggr.	comb sedge	Not Threatened			
<i>Ourisia caespitosa</i> Hook.f.		Not Threatened			
<i>Ourisia glandulosa</i> Hook.f.		Not Threatened	TL		TL = H: Otago Lake District, alpine. Accession number: H K?
<i>Ourisia macrocarpa</i> Hook.f.		Not Threatened			
<i>Ourisia sessilifolia</i> Hook.f. subsp. <i>sessilifolia</i>		Not Threatened	TL		TL = H: Mount Brewster, on the West Coast–Otago boundary. Accession number: H K?
<i>Oxalis exilis</i> A.Cunn.		Not Threatened		SO	
<i>Oxalis magellanica</i> G.Forst.		Not Threatened		SO	
<i>Paesia scaberula</i> (A.Rich.) Kuhn		Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Parablechnum minus</i> (R.Br.) Gasper et Salino	swamp kiokio	Not Threatened		SO	Previous Name and Authority: <i>Blechnum minus</i> (R.Br.) Ettingsh.
<i>Parablechnum montanum</i> (T.C. Chambers et P.A.Farrant) Gasper et Salino	mountain kiokio	Not Threatened			Previous Name and Authority: <i>Blechnum montanum</i> T.C.Chambers & P.A.Farrant
<i>Parablechnum novae-zelandiae</i> (T.C.Chambers et P.A.Farrant) Gasper et Salino	common hard fern	Not Threatened			Previous Name and Authority: <i>Blechnum novae-zelandiae</i> T.C.Chambers & P.A.Farrant
<i>Parablechnum procerum</i> (G.Forst.) C.Presl	small kiokio	Not Threatened			Previous Name and Authority: <i>Blechnum procerum</i> (G.Forst.) Sw.
<i>Parapolystichum glabellum</i> (A.Cunn.) Labiak, Sundue & R.C.Moran		Not Threatened			
<i>Parsonsia capsularis</i> (G.Forst.) R.Br. var. <i>capsularis</i>	New Zealand jasmine	Not Threatened			
<i>Parsonsia heterophylla</i> A.Cunn.		Not Threatened			
<i>Pelargonium inodorum</i> Willd.		Not Threatened		DP, EF, SO	
<i>Pellaea rotundifolia</i> (G.Forst.) Hook.	button fern	Not Threatened		TO	
<i>Pennantia corymbosa</i> J.R.Forst. & G.Forst.	kaikomako	Not Threatened			
<i>Pentachondra pumila</i> (J.R.Forst. & G.Forst.) R.Br.		Not Threatened		SO	
<i>Pentapogon aucklandica</i> (Hook.f.) de Lange & L.M.H.Schmid		Not Threatened			
<i>Pentapogon avenoides</i> (Hook.f.) P.M.Peterson, Romasch. & Soreng		Not Threatened			Previous Name and Authority: <i>Deyeuxia avenoides</i> (Hook.f.) Buchanan
<i>Pentapogon crinita</i> (L.f.) P.M.Peterson, Romasch. & Soreng		Not Threatened		EF, SO	Previous Name and Authority: <i>Dichelachne crinita</i> (L.f.) Hook.f.
<i>Phlegmariurus varius</i> (R.Br.) A.R.Field & Bostock		Not Threatened		SO	
<i>Phormium cookianum</i> Le Jol. subsp. <i>cookianum</i>	mountain flax	Not Threatened			
<i>Phormium tenax</i> J.R.Forst. & G.Forst.	flax	Not Threatened		SO	
<i>Phyllachne colensoi</i> (Hook.f.) Berggr.		Not Threatened		SO	
<i>Phyllocladus alpinus</i> Hook.f.		Not Threatened			
<i>Pimelea oreophila</i> C.J.Burrows subsp. <i>oreophila</i>		Not Threatened			
<i>Pimelea oreophila</i> subsp. <i>lepta</i> C.J.Burrows		Not Threatened	TL		TL = H: Taiari/Taieri Ridge, east Otago. Accession number: H <a href="#">OTA 041293</a>
<i>Pittosporum colensoi</i> Hook.f.		Not Threatened			
<i>Pittosporum eugenioides</i> A.Cunn.	lemonwood	Not Threatened			
<i>Pittosporum tenuifolium</i> Sol. ex Gaertn.	kohuhu	Not Threatened			
<i>Plagianthus divaricatus</i> J.R.Forst. & G.Forst.		Not Threatened			
<i>Plagianthus regius</i> (Poit.) Hochr. subsp. <i>regius</i>	lowland ribbonwood	Not Threatened			
<i>Plantago lanigera</i> Hook.f.		Not Threatened	TL		TL = H, ISL, T?: St. Mary Ecological District / Otago Lake District, alpine / Mount Kyeburn / Maniototo. Accession number: H <a href="#">AK 8666</a> , K000340079?; ISL <a href="#">WELT SP002306</a> ; T? <a href="#">WELT SP002301</a> , <a href="#">WELT SP002306</a>
<i>Plantago novae-zelandiae</i> L.B.Moore		Not Threatened	TL		TL = T?: Mount Kyeburn. Accession number: T? <a href="#">WELT SP002320</a>
<i>Plantago raoulii</i> Decne.		Not Threatened			

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### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Plantago triandra</i> Berggr.		Not Threatened			
<i>Plantago unibracteata</i> Rahn		Not Threatened	TL		TL = T?: Mount Kyeburn. Accession numbers: T? <a href="#">WELT SP002984</a> , <a href="#">WELT SP002300</a>
<i>Pakau pennigera</i> (G. Forst.) S.E. Fawc. et A.R. Sm.		Not Threatened		TO	Previous Name and Authority: <i>Pneumatopteris pennigera</i> (G.Forst.) Holtum
<i>Poa breviglumis</i> Hook.f.		Not Threatened			
<i>Poa buechananii</i> Zotov		Not Threatened			
<i>Poa cita</i> Edgar	silver tussock	Not Threatened	TL		TL = ISL: Otago. Accession number: ISL <a href="#">AK 1876</a>
<i>Poa colensoi</i> Hook.f.		Not Threatened			
<i>Poa hesperia</i> Edgar		Not Threatened			
<i>Poa imbecilla</i> Spreng.		Not Threatened	TL		TL = I, L, I or ISL: Manuherikia Plain, "Vincent Co. & Blacks, same station" / Blacks, Ophir, Manuherikia plain. Accession numbers: I <a href="#">WELT SP067003/B</a> ; L <a href="#">WELT SP067003/A</a> ; I or ISL <a href="#">WELT SP06990</a>
<i>Poa kirkii</i> Buchanan		Not Threatened			
<i>Poa matthewsii</i> Petrie		Not Threatened	TL		TL = L, ISL: Catlins River, Otago, sea level / Waipahī, S. Otago, on banks of river. Accession numbers: L <a href="#">WELT SP066983</a> , <a href="#">WELT SP066929</a> ; ISL <a href="#">CHR 6768</a>
<i>Poa novae-zelandiae</i> Hack.		Not Threatened			
<i>Poa sublimis</i> Edgar		Not Threatened			
<i>Poa subvestita</i> (Hack.) Edgar		Not Threatened			
<i>Podocarpus laetus</i> Hooibr. ex Endl.	Hall's totara	Not Threatened			
<i>Podocarpus nivalis</i> Hook.		Not Threatened			
<i>Podocarpus totara</i> var. <i>totara</i> G.Benn. ex D.Don	tōtara	Not Threatened			
<i>Polystichum cystostegium</i> (Hook.) J.B.Armstr.		Not Threatened			
<i>Polystichum neozelandicum</i> Fée	shield fern	Not Threatened			Previous Name and Authority: <i>Polystichum neozelandicum</i> Fée subsp. <i>neozelandicum</i>
<i>Polystichum neozelandicum</i> subsp. <i>zerophyllum</i> (Colenso) Perrie	shield fern	Not Threatened			
<i>Polystichum vestitum</i> (G.Forst.) C.Presl	prickly shield fern	Not Threatened			
<i>Potamogeton cheesemanii</i> A.Benn.	red pondweed	Not Threatened		SO	
<i>Potentilla anserinoides</i> Raoul		Not Threatened		DP	
<i>Prasophyllum colensoi</i> Hook.f.	leek orchid	Not Threatened			
<i>Pectinopitys ferruginea</i> (G.Benn. ex D.Don) C.N.Page	miro	Not Threatened			Previous Name and Authority: <i>Pumnpityis ferruginea</i> (D.Don) de Laub.
<i>Pseudodiphasium volubile</i> (G.Forst.) Holub		Not Threatened		SO?	Previous and Name Authority: <i>Lycopodium volubile</i> G.Forst.
<i>Pseudopanax arboreus</i> (Murray) Philipson	Five finger	Not Threatened	NR		Indigenous and naturalised populations
<i>Pseudopanax colensoi</i> (Hook.f.) Philipson var. <i>colensoi</i>		Not Threatened			
<i>Pseudopanax colensoi</i> var. <i>ternatus</i> Wardle		Not Threatened			
<i>Pseudopanax crassifolius</i> (Sol. ex A.Cunn.) K.Koch	lancewood	Not Threatened			
<i>Pseudopanax linearis</i> (Hook.f.) K.Koch		Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Pseudowintera colorata</i> (Raoul) Dandy	horopito	Not Threatened			
<i>Pteridium esculentum</i> (G.Forst.) Cockayne		Not Threatened		SO	
<i>Pterophylla racemosa</i> (L.f.) Pillon & H.C.Hopkins	kāmahi	Not Threatened			
<i>Pterostylis areolata</i> Petrie		Not Threatened			
<i>Pterostylis australis</i> Hook.f.		Not Threatened			
<i>Pterostylis banksii</i> A.Cunn.	greenhood orchid	Not Threatened			
<i>Pterostylis graminea</i> Hook.f.		Not Threatened			
<i>Pterostylis montana</i> Hatch		Not Threatened			
<i>Pterostylis venosa</i> Colenso		Not Threatened			
<i>Pyrrosia eleagnifolia</i> (Bory) Hovenkamp		Not Threatened			
<i>Ranunculus acaulis</i> Banks & Sol. ex DC.		Not Threatened		SO	
<i>Ranunculus amphitrichus</i> Colenso	waoriki	Not Threatened		SO	
<i>Ranunculus cheesemanii</i> Kirk		Not Threatened			
<i>Ranunculus crithmifolius</i> Hook.f.		Not Threatened			
<i>Ranunculus foliosus</i> Kirk		Not Threatened	TL		TL = L: Otago. Accession number: L <a href="#">WELT SP000332</a>
<i>Ranunculus glabrifolius</i> Hook.		Not Threatened		SO	
<i>Ranunculus gracilipes</i> Hook.f.		Not Threatened	TL		TL = N, S: Maungatua (Hill) / Mount Maungatua, Taiari/Taieri Country. Accession numbers: N <a href="#">CHR 334052</a> ; S <a href="#">WELT SP000366</a> , <a href="#">WELT SP000367</a>
<i>Ranunculus multiscapus</i> Hook.f.		Not Threatened			
<i>Ranunculus reflexus</i> Garn.-Jones		Not Threatened	TL		TL = T? or S?, T?: Routeburn, Valley of the Dart (Dart Valley). Accession numbers: T? <a href="#">WELT SP000358</a> ; T? or S? <a href="#">WELT SP000359</a> , <a href="#">WELT SP000358</a>
<i>Ranunculus sericophyllus</i> Hook.f.		Not Threatened	TL		TL = H, N, lost: snow holes on Mount Brewster and Hopkins River / Bold Peak. Accession numbers: H K? lost?; N <a href="#">CHR 76532</a>
<i>Raoulia buchananii</i> Kirk		Not Threatened	TL		TL = S, lost: Mount Alta / Wānaka Ecological District. Accession numbers: S <a href="#">AK 10095</a> , lost?
<i>Raoulia glabra</i> Hook.f.		Not Threatened			
<i>Raoulia grandiflora</i> Hook.f.		Not Threatened			
<i>Raoulia hectorii</i> Hook.f. var. <i>hectorii</i>		Not Threatened	TL		TL = H, T (possible): Otago Lake District "subalpine" / Old Man Range. Accession number: H K?; T (possible): <a href="#">WELT SP046434</a>
<i>Raoulia subsericea</i> Hook.f.		Not Threatened			
<i>Raoulia tenuicaulis</i> Hook.f.		Not Threatened			
<i>Raukaua anomalus</i> (Hook.) A.D.Mitch., Frodin & Heads		Not Threatened			
<i>Raukaua edgerleyi</i> (Hook.f.) Seem.		Not Threatened		DP	
<i>Raukaua simplex</i> (G.Forst.) A.D.Mitch., Frodin & Heads		Not Threatened			
<i>Ripogonum scandens</i> J.R.Forst. & G.Forst.	supplejack	Not Threatened			
<i>Rorippa palustris</i> (L.) Besser		Not Threatened		SO	
<i>Rubus australis</i> G.Forst.	bush lawyer	Not Threatened			
<i>Rubus cissoides</i> A.Cunn.	bush lawyer	Not Threatened			
<i>Rubus schmidelioides</i> A.Cunn. var. <i>schmidelioides</i>	bush lawyer	Not Threatened			

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Rubus schmidelioides</i> var. <i>subpauperatus</i> (Cockayne) Allan	bush lawyer	Not Threatened			
<i>Rubus squarrosus</i> Fritsch	leafless lawyer	Not Threatened			
<i>Rumohra adiantiformis</i> (G.Forst.) Ching		Not Threatened		SO	
<i>Ruppia polycarpa</i> R.Mason		Not Threatened		SO	
<i>Rytidosperma australe</i> (Petrie) Connor & Edgar		Not Threatened	TL	SO	TL = H, I, TF: Mount Ida Range / Maniototo County / Macraes. Accession numbers: H <a href="#">WELT SP040330</a> ; I <a href="#">CHR 20141</a> , <a href="#">WELT SP039845</a> ; TF <a href="#">CHR 4091</a>
<i>Rytidosperma clavatum</i> (Zotov) Connor & Edgar		Not Threatened			
<i>Rytidosperma corinum</i> Connor & Edgar		Not Threatened			
<i>Rytidosperma gracile</i> (Hook.f.) Connor & Edgar		Not Threatened		SO	
<i>Rytidosperma nigricans</i> (Petrie) Connor & Edgar		Not Threatened			
<i>Rytidosperma setifolium</i> (Hook.f.) Connor & Edgar		Not Threatened			
<i>Rytidosperma unarede</i> (Raoul) Connor & Edgar		Not Threatened			
<i>Samolus repens</i> var. <i>repens</i> (J.R.Forst. & G.Forst.) Pers.		Not Threatened		SO	
<i>Sarcocornia quinqueflora</i> subsp. <i>quinqueflora</i> (Bunge ex Ung.-Sternb.) A.J.Scott		Not Threatened		SO	
<i>Schefflera digitata</i> J.R.Forst. & G.Forst.	patē	Not Threatened			
<i>Schoenoplectus pungens</i> (Vahl) Palla		Not Threatened		SO	
<i>Schoenus concinnus</i> (Hook.f.) Hook.f.		Not Threatened			
<i>Schoenus pauciflorus</i> (Hook.f.) Hook.f.		Not Threatened			
<i>Scleranthus uniflorus</i> P.A.Will.		Not Threatened			
<i>Senecio glomeratus</i> Poir. subsp. <i>glomeratus</i>		Not Threatened		SO	
<i>Senecio minimus</i> Poir.	fireweed	Not Threatened		SO	
<i>Senecio quadridentatus</i> Labill.	cotton fireweed	Not Threatened		SO	
<i>Senecio wairauensis</i> Belcher	mountain fireweed	Not Threatened			
<i>Solanum laciniatum</i> Aiton	porporo	Not Threatened		SO	
<i>Sophora microphylla</i> Aiton	kōwhai	Not Threatened			
<i>Spergularia tasmanica</i> (Kindb.) L.G.Adams	New Zealand sea spurrey	Not Threatened		SO	
<i>Stellaria gracilentia</i> Hook.f.	Slender chickweed	Not Threatened			
<i>Stellaria parviflora</i> Hook.f.	New Zealand chickweed	Not Threatened		SO	
<i>Stellaria roughii</i> Hook.f.	Scree chickweed	Not Threatened			
<i>Sticherus cunninghamii</i> (Heward ex Hook.) Ching	umbrella fern	Not Threatened			
<i>Streblus heterophyllus</i> (Blume) Corner	small-leaved milk tree	Not Threatened			
<i>Suaeda novae-zelandiae</i> Allan		Not Threatened			
<i>Taraxacum zealandicum</i> Dahlst.	New Zealand dandelion	Not Threatened		SO	Previous Name and Authority: <i>Taraxacum magellanicum</i> Sch.Bip.
<i>Tetragonia trigyna</i> Banks et Sol. ex Hook.f.	native spinach	Not Threatened		SO	Previous Name and Authority: <i>Tetragonia implexicoma</i> (Miq.) Hook.f.

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## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Thelymitra cyanea</i> (Lindl.) Benth.	swamp sun orchid	Not Threatened		SO	
<i>Thelymitra hatchii</i> L.B.Moore	Hatch's sun orchid	Not Threatened			
<i>Thelymitra longifolia</i> J.R.Forst. & G.Forst.	white sun orchid	Not Threatened			
<i>Thelymitra nervosa</i> Colenso	spotted sun orchid	Not Threatened			
<i>Thelymitra pauciflora</i> R.Br.	sun orchid	Not Threatened		SO	
<i>Thelymitra pulchella</i> Hook.f.	striped sun orchid	Not Threatened			
<i>Tmesipteris elongata</i> P.A.Dang.	fork fern	Not Threatened		SO	
<i>Tmesipteris tannensis</i> (Spreng.) Bernh.	fork fern	Not Threatened			
<i>Trichomanes venosum</i> R.Br.		Not Threatened		SO	
<i>Triglochin striata</i> Ruiz & Pav.	arrow grass	Not Threatened		SO	
<i>Trisetum lepidum</i> Edgar & A.P.Druce		Not Threatened			
<i>Trisetum spicatum</i> (L.) K.Richt.		Not Threatened		SO	
<i>Trisetum tenellum</i> (Petrie) A.W.Hill		Not Threatened			
<i>Typha orientalis</i> C.Presl		Not Threatened		SO	
<i>Urtica ferox</i> G.Forst.	tree nettle	Not Threatened			
<i>Urtica sykesii</i> Grosse-Veldmann & Weigend	scrub nettle	Not Threatened	TL	SO	TL = H: Waipori Falls, approx. 25 km south of Ōtepoti Dunedin. Accession numbers: H <a href="#">CHR 546587 A</a> , <a href="#">CHR 546587 B</a>
<i>Utricularia dichotoma</i> Labill.	Bladderwort	Not Threatened		SO	
<i>Veronica buechananii</i> Hook.f.		Not Threatened	TL		TL = H, S, ISL. T?: Otago Lake District, alpine / Waitaki Ecological Region / Wānaka Ecological District. Accession numbers: H K?; S <a href="#">AK 8146</a> ; ISL <a href="#">AK 8138</a> ; T? <a href="#">WELT SP005364</a>
<i>Veronica decora</i> (Ashwin) Garn.-Jones		Not Threatened			
<i>Veronica densifolia</i> (F.Muell.) F.Muell.	hebejeebie	Not Threatened	TL		TL = H, L, ISL: Otago Lake District alpine / peaty ridges at Rough Peaks, Lake Whakatipu / Eyre Ecological District. Accession numbers: H K?; L <a href="#">CHR 70216</a> , <a href="#">CHR 70216 P</a> ; ISL <a href="#">AK 107847</a>
<i>Veronica elliptica</i> G.Forst.		Not Threatened		SO	
<i>Veronica epacridea</i> Hook.f.		Not Threatened			
<i>Veronica hectorii</i> Hook.f. subsp. <i>hectorii</i>		Not Threatened	TL		TL = H: Mount Alta. Accession number: H K?
<i>Veronica lyallii</i> Hook.f.		Not Threatened			
<i>Veronica lycopodioides</i> Hook.f.		Not Threatened			
<i>Veronica odora</i> Hook.f.		Not Threatened			
<i>Veronica pauciramosa</i> (Cockayne & Allan) Garn.-Jones		Not Threatened	TL		TL = L, ISL: upper Routeburn Valley, up to Lake Harris / Dart Ecological District. Accession numbers: L W?; ISL <a href="#">AK 107674</a>
<i>Veronica pulvinaris</i> (Hook.f.) Cheeseman	plantaginaceae	Not Threatened			
<i>Veronica salicifolia</i> G.Forst.		Not Threatened		SO	

Continued on next page

## Regional conservation status of indigenous vascular plants in Otago

### Regionally Not Threatened

Name and Authority	Common Name	National Conservation Status	Regional Qualifiers	National Qualifiers	Notes
<i>Veronica subalpina</i> Cockayne		Not Threatened	TL		TL = H, CT, T?: subalpine scrub head of Estuary Burn, Lake Wānaka / Arawata Ecological District. Accession numbers: H <a href="#">CHR 33029</a> ; CT <a href="#">WELT SP017380/A</a> , <a href="#">WELT SP017381</a> ; T? <a href="#">CHR 549641</a>
<i>Veronica thomsonii</i> (Buchanan) Cheeseman	snow hebe	Not Threatened	TL		TL = L, L?: Mount Pisa, Otago / Mount Alta / Pisa Ecological District. Accession numbers: L <a href="#">AK 8335</a> , <a href="#">WELT SP042922/A</a> ; L? <a href="#">AK 8335</a>
<i>Viola cunninghamii</i> Hook.f.	mountain violet	Not Threatened		SO?	
<i>Viola filicaulis</i> Hook.f.	forest violet	Not Threatened			
<i>Wahlenbergia rupestris</i> G.Simpson	white harebell	Not Threatened	TL		TL = H, I: Alexandra, Central Otago. Accession numbers: H <a href="#">CHR 76430</a> ; I <a href="#">CHR 550042</a> , <a href="#">CHR 550043</a>
<i>Wahlenbergia albomarginata</i> subsp. <i>albomarginata</i> Hook.	New Zealand harebell	Not Threatened			
<i>Waireia stenopetala</i> (Hook.f.) D.L.Jones, M.A.Clem. & Molloy	yellow beaks	Not Threatened			
<i>Wolffia australiana</i> (Benth.) Hartog & Plas	water meal	Not Threatened			
<i>Zotovia colensoi</i> (Hook.f.) Edgar & Connor	grass	Not Threatened			
<b>TAXONOMICALLY INDETERMINATE (2)</b>					
<i>Agrostis</i> (a) (CHR 402485; Dunstan Range)		Not Threatened		DP	
<i>Ozothamnus vauvilliersii</i> Hombr. & Jacquinot ex Decne.	mountain tauhinu	Not Threatened			

*Regional and national qualifiers:* CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural State; NStr = National Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure?Overseas; TO = Threatened Overseas' TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

*Type localities:* H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isoneotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Assessed taxa not in the New Zealand Threat Classification System (14)

Taxa considered to be in the Otago region but have not been assessed in the New Zealand Threat Classification System for indigenous vascular plant taxa (de Lange et al. 2018). These taxa are mostly 'taxonomically indeterminate', i.e., used loosely to include both undescribed entities which still require formal taxonomic research to confirm their validity and provide them with a formal name and, occasionally, described species whose validity is in question.

**Table 4: Assessed indigenous vascular plant taxa in Otago not in NZTCS**

Name and Authority	Common Name	Regional Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<b>REGIONALLY DATA DEFICIENT (4)</b>													
<i>TAXONOMICALLY INDETERMINATE (4)</i>													
<i>Carex potens</i> K.A Ford		Regionally Data Deficient									TL		TL = T?: Old Man Range. Accession numbers: T? <a href="#">WELT SP001701</a> , <a href="#">WELT SP001703</a>
<i>Celmisia</i> aff <i>graminifolia</i>		Regionally Data Deficient											
<i>Craspedia</i> sp. "Tautuku"		Regionally Data Deficient		Yes									
<i>Veronica matthewsii</i>		Regionally Data Deficient									TL		TL = L: Humboldt Mountains, Dart Ecological District. Accession number: L <a href="#">AK 7955</a>
<b>REGIONALLY CRITICAL (4)</b>													
<i>TAXONOMICALLY DETERMINATE (1)</i>													
<i>Myosotis venticola</i>		Regionally Critical	A (3)	Yes		≤ 1 ha			Low	Low	DPR, DPS, DPT, NR, NS, NStr, Sp, TL		
<i>TAXONOMICALLY INDETERMINATE (3)</i>													
<i>Apium</i> "inland saline"		Regionally Critical	A (3)	Yes	Yes	≤ 1 ha			Low	Low	DPS, DPT, NStr, RE, RR, Sp		
<i>Brachyscome</i> "Taiari"		Regionally Critical	A (3)	Yes	Yes	≤ 1 ha			Low	Low	DPR, DPS, DPT, NStr, OL, RE		

Continued on next page

## Regional conservation status of indigenous vascular plants in Otago

Assessed taxa but not in NZTCS

Name and Authority	Common Name	Regional Conservation Status	Regional Criteria	National Stronghold	Regional Endemic	Regional Population	Regional Area	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Regional Qualifiers	National Qualifiers	Notes
<i>Meliccytus</i> aff. <i>crassifolius</i> (b) (CHR 616706; Cape Saunders)		Regionally Critical	A (1)	Yes	Yes	≤ 250 mature individuals			High	Low	DPR, DPT, RR		
<b>REGIONALLY ENDANGERED (1)</b>													
<i>TAXONOMICALLY INDETERMINATE (1)</i>													
<i>Stellaria</i> cf. <i>roughii</i> CHR 595279		Regionally Endangered	B (3)				≤ 10 ha	Stable: ±10%	Low	Low	DPR, DPS, DPT, RR, Sp		
<b>REGIONALLY NATURALLY UNCOMMON (2)</b>													
<i>TAXONOMICALLY INDETERMINATE (2)</i>													
<i>Montia</i> "String Bog"		Regionally Naturally Uncommon		Yes	Yes		< 100000 ha	Stable: ±10%	Low	Low	DPS, DPT, NStr, RE, RR, Sp		
<i>Oxalis</i> "Otago scree"		Regionally Naturally Uncommon		Yes			< 100000 ha	Stable: ±10%	Low	Low	NS		
<b>REGIONALLY NOT THREATENED (2)</b>													
<i>TAXONOMICALLY INDETERMINATE (2)</i>													
<i>Anisotome flabellifolia</i> Simpson		Regionally Not Threatened											TL = H: Flagstaff Hill, Ōtepoti Dunedin. Accession number: <a href="#">CHR 75688</a>  Other known Name and Authority: <i>Anisotome aromatica</i> var. <i>flabellifolia</i> (G.Simpson) Allan
<i>Geranium</i> aff. <i>microphyllum</i>		Regionally Not Threatened		Yes			> 1000 ha	Stable: ±10%	Medium	Medium	DPS, DPT, NStr, PF, Sp		

*Regional and national qualifiers:* CD = Conservation Dependent; DPR = Data Poor Recognition; DPS = Data Poor Size; DPT = Data Poor Trend; De = Designated; EF = Extreme Fluctuations; NR = Natural Range Limit; NS = Natural State; NStr = Natural Stronghold; OL = One Location; PD = Partial Decline; RR = Range Restricted; SO = Secure Overseas; SO? = Secure Oversea?; S?O = Secure?Overseas; TO = Threatened Overseas' TO? = Threatened Overseas?; T?O = Threatened? Overseas; CI = Climate Impact; CRN = Conservation Research Needed; EW = Extinct in the Wild; INC = Increasing; PF = Population Fragmentation' PE = Possibly/Presumed Extinct; RE = Regional Endemic; Rel = Relict; RF = Recruitment Failure; Sp = Biologically Sparse

*Type localities:* H = Holotype, I = Isotype; S = Syntype; IS = Isosyntype; L = Lectotype; ISL = Isolectotype; N = Neotype; ISN = Isonotype; TF = Type Fragment; NT = Not Typified; ? = uncertainty on locality type; T? = where type was mentioned but not described further. Abbreviations for Herbarium are: AD = State Herbarium of South Australia; AK = Auckland War Memorial Museum Herbarium; BD = DSIR Botany Division, now in CHR; CHR = Allan Herbarium; K = Royal Botanic Gardens Kew; LY = Claude Bernard University; MO = Missouri Botanical Garden; NSW = Royal Botanic Gardens, National Herbarium of New South Wales; OM = Otago Museum, now in either WELT or OTA; OTA = Otago Regional Herbarium; W = Wellington Dominion Museum, now in WELT; WELT = Museum of New Zealand Te Papa Tongarewa

## Adventive indigenous vascular plant taxa from Aotearoa New Zealand reproducing in the wild in Otago.

Indigenous Aotearoa New Zealand taxa introduced to Otago that are wild and reproducing but are not considered native to the region

**Table 5: Adventive indigenous vascular plant taxa from Aotearoa New Zealand that have been introduced to Otago**

Name and Authority	Common Name	National Conservation Status	Notes
<i>TAXONOMICALLY DETERMINATE</i>			
<i>Brachyglottis repanda</i> J.R.Forst. & G.Forst.	rangiora	Not Threatened	In the South Island occurs in northwest Nelson to just south of Greymouth in the west, and near Kekerengu in the east. Naturalised on Banks Peninsula, Otago Peninsula, and on Stewart Island at Oban
<i>Coprosma grandifolia</i> Hook.f.	large-leaved coprosma	Not Threatened	Naturally occurs on the North to South Islands. In the South Island extending to Lake Ianthe in the west and the Marlborough Sounds in the east. Naturalised populations are common round settled areas, particularly in eastern Otago
<i>Coprosma repens</i> Hook.f.	taupata	Not Threatened	Occurs naturally in Three Kings, North and South Islands as far south as Greymouth in the west and Rarangi in the east but now extensively naturalised throughout the South Island, Stewart and Chatham Islands
<i>Coprosma robusta</i> Raoul	karamu	Not Threatened	Found in North and South Islands south to Banks Peninsula. Naturalised populations occur in Otago and Southland (typically around planting sites).
<i>Hoheria sexstylosa</i> Colenso	lacebark	Not Threatened	Naturally occurs probably as far south as Banks Peninsula but distinguishing between natural populations and those arising from planted individuals is difficult. Now common around settled areas in eastern Otago.
<i>Metrosideros excelsa</i> Sol. ex Gaertn.	pōhutukawa	Nationally Vulnerable	Naturally occurring north of Poverty Bay and north Taranaki, but can be now found as far south as Ōtepoti Dunedin where trees regularly produce wild seedlings
<i>Olearia paniculata</i> (J.R.Forst. & G.Forst.) Druce	akeake	Not Threatened	Occurs naturally on both the North and South Island from East Cape to south Canterbury. Widely planted in eastern Otago where occasional naturalised populations now occur.
<i>Pseudopanax laetus</i> (Kirk) Philipson		Declining	Occurs naturally in the northern half of the North Island but has naturalised around Ōtepoti Dunedin and elsewhere from introduced plants

## Discussion

Regional threat assessments have been completed by regional councils in Aotearoa New Zealand, with the resulting regional threat lists being used as a tool to help maintain indigenous biodiversity. This report is the first regional assessment of the conservation status of indigenous vascular plant taxa in the Otago region. A total of 1242 indigenous vascular plant taxa were recorded in the Otago region from the national assessment (de Lange et al 2018). Of these indigenous vascular taxa, 115 were Regionally Data Deficient, 227 were Regionally Threatened, 275 were Regionally At Risk, and 614 Regionally Not Threatened. The panel also assessed 14 taxa not included in the national assessment of indigenous vascular plants. An additional 10 taxa were Regionally Extirpated (likely now extinct in the Otago region).

### *Regionally Extirpated indigenous vascular plant taxa*

The number of regionally extirpated indigenous vascular plant taxa in Otago is 10 (Table 1). These include 9 regional extirpations and 1 national extinction. Of the 9 regional extirpations, five were in the Nationally Threatened categories (Nationally Critical = 3; Nationally Endangered = 1; Nationally Vulnerable = 1), two were At Risk (both Declining), and two were Not Threatened. A total of five taxa were at their historical – or indigenous – range, the inferred range of the taxon in pre-human times meet its natural limit in the region. For the nationally extinct taxon, *Stellaria elatinoides*, type gatherings and notes in the literature indicate that the species was in Otago (Heenan 2019). While *S. elatinoides* is currently classified in the national assessment and implied to be Globally Extinct, this taxon is not included in *Stellaria multiflora* subsp. *multiflora* which is widespread but uncommon in eastern and southern Australia (Heenan 2019).

### *Regionally Data Deficient indigenous vascular plant taxa*

In the Otago region 115 indigenous vascular plant taxa were identified as Regionally Data Deficient (Table 2). These taxa are suspected to be threatened or, in some instances, possibly extinct in Otago but are not definitely known to belong to any category due to a lack of current information about their distribution and abundance (Townsend et al. 2008). The percentage of the total number of indigenous vascular plant taxa in Otago from the national assessment that were Regionally Data Deficient species was 9.5%.

Although the true status of Regionally Data Deficient taxa will span the entire range of available categories in the Otago region, like in national assessments (Townsend et al. 2008) and globally in the International Union for Conservation of Nature (IUCN Standards and Petition Committee, 2023), taxa in this list are mainly in this status because they are very seldom seen, so most are likely to end up being considered

threatened and some may already be extinct. In the national assessment the collection of sufficient demographic data to allow evaluation is considered a high priority for 'Data Deficient' taxa, as such data may confirm whether these taxa are 'Threatened' or 'At Risk' (Townsend et al. 2008).

#### *Regionally Threatened indigenous vascular plant taxa*

Two hundred and twenty-seven indigenous vascular plant taxa from the national assessment were assessed as Regionally Threatened (Table 3.5). The percentage of Regionally Threatened taxa was 18.3%. These taxa are grouped into the three categories: Regionally Critical with 93 taxa, Regionally Endangered with 68 taxa, and Regionally Vulnerable with 66 taxa. Generally, Regionally Threatened taxa were more severely threatened in Otago than they are in the national assessments.

#### *Regionally At Risk indigenous vascular plant taxa*

The number of Regionally At Risk indigenous vascular plant taxa in Otago from the national assessment was 275 (22.3%; Tables 3.4.1 and 3.4.2). The percentage of Regionally Declining was 4% and Regionally Naturally Uncommon was 16%. While taxa that qualify as Regionally At Risk do not meet the criteria for any of the Regionally Threatened categories, they are declining (though buffered by a large total population size and/or a slow decline rate), biologically scarce, recovering from a previously threatened status, or survive only in relictual (surviving remnant) populations (Townsend et al. 2008).

Regionally At Risk taxa are grouped into two categories only: Regionally Declining with 50 taxa, and Regionally Naturally Uncommon with 225 taxa. Compared to the national assessment for indigenous vascular plant taxa (de Lange et al. 2018), no Regionally Relict or Regionally Increasing were assessed.

#### *Regionally Not Threatened indigenous vascular plant taxa*

In Otago, 614 indigenous vascular plant taxa were identified that were Regionally Not Threatened (Table 3.6). Among these taxa, some indigenous Myrtacea taxa were designated as Regionally Not Threatened from higher threat assessments in de Lange et al. (2018), including mānuka (*Leptospermum scoparium* var. *scoparium*), mākahikātoa (*Kunzea serotina*), rawirinui (*K. robusta*), and rōhutu (*Neomyrtus pedunculata*). The national assessments were assessed in 2017 as more severely threatened due to the then recent arrival of myrtle rust (caused by *Austropuccinia psidii*) to Raoul Island (Kermadec Islands group) and northern Aotearoa New Zealand in April and May 2017, respectively, and a lack of knowledge how it would affect indigenous Myrtacea taxa. Although myrtle rust has now been found across the North Island and in the upper areas of the South Island (including occasionally in Christchurch), the risk posed to Myrtacea taxa in Otago was generally considered to be lower than has been assessed in northern locations. Note that recent assessments

for indigenous vascular plant taxa in Wellington and Tāmaki Makarau / Auckland also assessed some indigenous Myrtaceae taxa with a reduced risk of extinction status than the earlier national assessment when the threat of myrtle rust had greater uncertainty (Crisp 2020; Simpkins et al. 2023; cf. de Lange et al. 2018). Moreover, modelling of climate suitability for myrtle rust (using different approaches and algorithms) in Aotearoa New Zealand appears to be lower in the south of the South Island than in the north of the South Island and in the North Island (e.g., Kriticos et al. 2008, 2013; Narouei-Khandan et al. 2020). Ongoing research and monitoring of the impacts of myrtle rust, including mostly from outside the Otago region, would provide valuable information for future region assessments on indigenous vascular plant taxa.

#### *Regionally Non-resident indigenous vascular plant taxa*

The only indigenous vascular plant taxa to Otago that was in the non-resident category was *Disphyma clavellatum* (Table 3.5). This taxon was considered to be a Regional Coloniser, like its national status (de Lange et al. 2018), because it established without direct or indirect help from humans and has been successfully reproducing in the wild since 1950, and otherwise would have triggered a 'Threatened' category due to its small population size.

#### *Assessed indigenous vascular plant taxa not in the New Zealand Threat Classification System*

Fourteen taxa were assessed to be legitimate taxon by the expert panel but were not included in the NZTCS (Table 4). Of these taxa, four were considered Regionally Deficient, three Regionally Critical, one Regionally Endangered, three Regionally Naturally Uncommon, and two Regionally Not Threatened.

#### *Adventive indigenous vascular plant taxa*

While several adventive indigenous vascular taxa are found in Otago, common examples are provided in Table 5. These indigenous Aotearoa New Zealand taxa are those introduced to the region that are wild and reproducing but were considered not to be native to Otago (see Table 5 for more details).

#### *Select regional qualifiers for indigenous vascular plant taxa discussion*

Otago was identified as a National Stronghold (i.e., containing > 20% of the national population) for 321 of Regionally Threatened and Regionally At Risk taxa. Of those taxa with National Strongholds in Otago, at least 36 are not found elsewhere, i.e., they are Regional Endemics (see Appendix 4 for Regionally Threatened and Regionally At Risk). Of these Regional Endemics there were more in the Regional Threatened category with 21 taxa (Regionally Critical = 14; Regionally Endangered = 6; Regionally Vulnerable = 1), than in the Regionally At Risk category with 16 taxa (Regionally Declining = 2; Regionally Naturally Uncommon = 14); at least one taxon was assessed as in the Regionally Data Deficient category. For the National Stronghold qualifier, the

number in the Regionally Threatened category was 130 taxa (Regionally Critical = 43, Regionally Endangered = 48, Regionally Vulnerable = 39), Regionally At Risk taxa had 186 taxa (Regionally Declining = 40, Regionally Naturally Uncommon = 146), and Regionally Data Deficient had two taxa.

Regionally Threatened and Regionally At Risk taxa in Otago included 215 taxa at their Natural Range limits in the north and south, not including Regional Endemics. Such information could potentially be used to identify sites that may require monitoring or management; for example, to understand or to mitigate the effects of human-induced climate change on these taxa. Of these taxa, 101 were Regionally Threatened with the remainder being Regionally At Risk. Note that for other Regional Categories (e.g., Regionally Data Deficient, Regionally Not Threatened) were not considered for Natural Range limits, at this stage.

The number of indigenous vascular plant taxa with the One Location qualifier in the Otago region is 35. When assessing the One Location qualifier for taxa, there were eight Regional Endemics, of which all these taxa were assessed as being Regionally Critical. The number of taxa with only One Location in Otago but also found outside the region was 26. Of the taxa with the One Location qualifier, 32 taxa were Regionally Threatened (Nationally Critical = 25, Nationally Endangered = 3, Nationally Vulnerable = 4) and three taxa were Regionally At Risk (Naturally Uncommon = 3).

In the Otago region the number of taxa identified with type localities was identified as 280 (Tables 1–4). This included 184 taxa with holotypes (or possible holotypes) and 54 taxa with isotypes (or possible isotypes). Although the number of type localities identified in the region was high, its likely more type specimens are from the region.

### *Summary*

For the first time in this report, indigenous vascular plant taxa in Otago were identified and collated systematically by local experts. A consistent framework was then followed to assign the status and trends of the taxa in the region. Although efforts were taken to be as comprehensive as possible in this assessment on indigenous vascular plant taxa in the Otago region, it is acknowledged that some taxa may have been missed in this process. It is anticipated that future iterations of threat assessments for indigenous vascular plants in the Otago region may include additional taxa, and/or removal of others. Similar to the taxa list and the threat assessments, the qualifiers for all Regionally Threatened and At Risk taxa were assessed as comprehensively as possible, with care taken to consult the relevant literature – both grey and published – and experts, where appropriate.

The Department of Conservation – Te Papa Atawhai is tasked with managing indigenous taxa nationally under the Wildlife Act, but regional and district councils

have a statutory obligation to manage the habitats of Threatened taxa under the RMA. By understanding regional population sizes and having a knowledge of habitats of threatened taxa, their threats can be managed and their recovery supported. For example, this includes for informing Assessments of Environmental Effects conducted through RMA consenting processes; identification of ecologically significant areas as provided for in the proposed Otago Regional Policy Statement and National Policy Statement for Indigenous Biodiversity as they include criteria for include for taxa that are only found in the region (i.e., regional endemics), have distribution limits in the region, have type localities in the region, and/or regionally uncommon species; and for the prioritisation of conservation activities undertaken by regional councils, territorial authorities and unitary councils, such as monitoring, pest animal and plant control or eradication, and restoration programmes. Potential benefits to be gained from assessing the threat to indigenous taxa at a regional scale, as well as the national scale include:

- improved knowledge of the status of taxa across the landscape,
- direction for local government and community groups to prioritise conservation actions that can work in synergy with or provide additionality to the work of DOC,
- an improved ability to protect taxa through regulatory processes, and
- improved national conservation assessments of species through greater local input.

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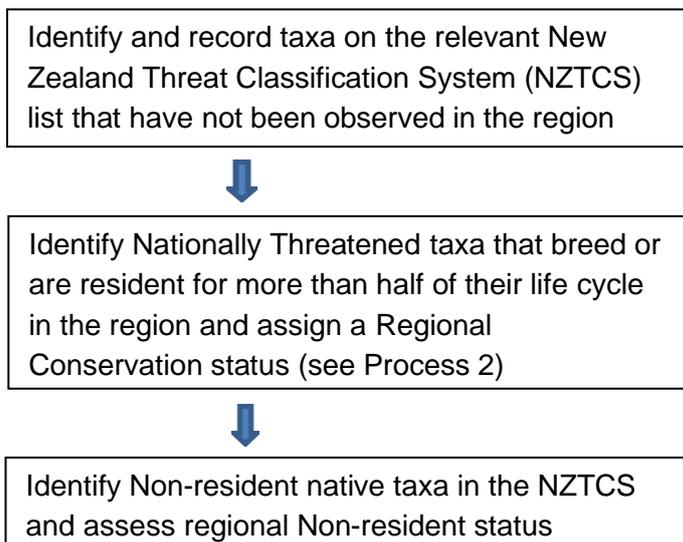
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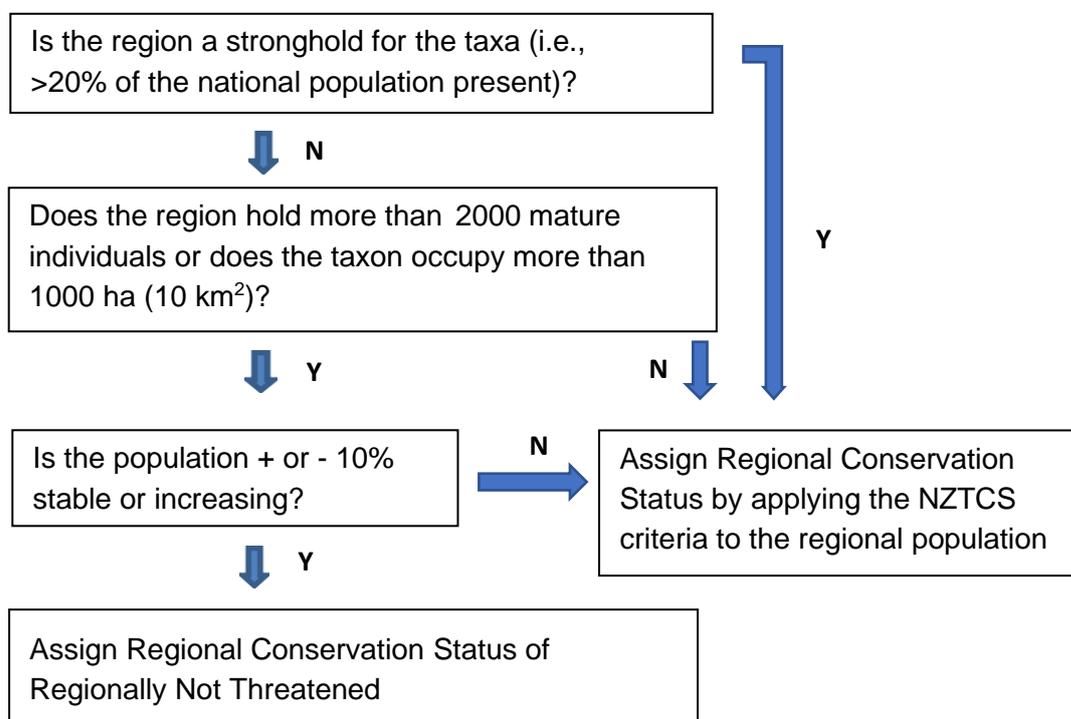
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## Appendix 1: Process for determining the regional threat status of taxa

### Process 1: Determination of regional threat status



### Process 2: Determination of strongholds and Regionally Not Threatened species



## Appendix 2: List of Regional Qualifiers for Regional Conservation Threat Assessments

Code	Qualifier	Description
FR	Former Resident	Breeding population (existed for more than 50 years) extirpated from region but continues to arrive as a regional vagrant or migrant. FR and RN are mutually exclusive.
HR	Historical Range	The inferred range (extending in any direction) of the taxon in pre-human times meets its natural limit in the region.
IN	Introduced Native	Introduced to the region, though not known to have previously occurred in it.
NS	National Stronghold	More than 20% of the national population breeding or resident for more than half their life cycle in the region.
NR	Natural Range	The known range (extending in any direction) of the taxon meets its natural limit in the region.
RE	Regional Endemic	Known to breed only in the region.
RN	Restored Native	Reintroduced to the region after having previously gone extinct there.
TL	Type Locality	The type locality of the taxon is within the region. Ignore if the taxon is or has ever been regionally extinct

### Appendix 3: List of National Qualifiers from the New Zealand Threat Classification System (Townsend et al. 2008; Michel 2021; Rolfe et al. 2021)

Code	Qualifier	Qualifier Type	Description
DPR	Data Poor: Recognition	Assessment Process Qualifier	Confidence in the assessment is low because of difficulties determining the identity of taxon in the field and/or in the laboratory. Taxa that are DPR will often be DPS and DPT. In such cases, the taxon is most likely to be Data Deficient.
DPS	Data Poor: Size	Assessment Process Qualifier	Confidence in the assessment is low because of a lack of data on population size.
DPT	Data Poor: Trend	Assessment Process Qualifier	Confidence in the assessment is low because of a lack of data on population trend.
DE	Designated	Assessment Process Qualifier	A taxon that the Expert Panel has assigned to what they consider to be the most appropriate status without full application of the criteria. For example, a commercial fish that is being fished down to Biomass Maximum Sustainable yield (BMSy) may meet criteria for 'Declining', however, it could be designated as 'Not Threatened' if the Expert Panel believes that this better describes the taxon's risk of extinction.
IE	Island Endemic	Biological Attribute Qualifier	A taxon whose naturally distribution is restricted to one island archipelago (e.g., Auckland Islands) and is not part of the North or South Islands or Steward Island/Rakiura. This qualifier is equivalent to the 'Natural' Population State value in the database.
NS	Natural State	Biological Attribute Qualifier	A taxon that has a stable or increasing population that is presumed to be in a natural condition, i.e., has not experienced historical human-induced decline.
RR	Range Restricted	Biological Attribute Qualifier	A taxon naturally confined to specific substrates, habitats or geographic areas of less than 100 km <sup>2</sup> (100,000 ha), this is assessed by taking into account the area of occupied habitat of all sub-populations (and summing the areas of habitat if there is more than one sub-population), e.g., Chatham Island forget-me-not ( <i>Myosotidium hortensia</i> ) and Auckland Island snipe ( <i>Coenocorypha aucklandica aucklandica</i> ).  This qualifier can apply to any 'Threatened' or 'At Risk' taxon. It is redundant if a taxon is confined to 'One Location' (OL)
Sp	Biologically Sparse	Biological Attribute Qualifier	The taxon naturally occurs within typically small and widely scattered subpopulations. This qualifier can apply to any 'Threatened' or 'At Risk' taxon.
NO	Naturalized Overseas	Population State Qualifier	A New Zealand endemic taxon that has been introduced by human agency to another country (deliberately or accidentally) and has naturalised there, e.g., <i>Olearia traversiourum</i> in the Republic of Ireland.

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Regional conservation status of indigenous vascular plants in Otago

List of National Qualifiers from the New Zealand Threat Classification System

Code	Qualifier	Qualifier Type	Description
OL	One Location	Population State Qualifier	<p>Found at one location in New Zealand (geographically or ecologically distinct area) of less than 100,000 ha (1000 km<sup>2</sup>), in which a single event (e.g., a predator irruption) could easily affect all individuals of the taxon, e.g., L'Esperance Rock groundsel (<i>Senecio esperensis</i>) and Open Bay leech (<i>Hirudobdella antipodum</i>). 'OL' can apply to all 'Threatened', 'At Risk', 'Non-resident Native' – Coloniser and Non-resident Native – Migrant taxa, regardless of whether their restricted distribution in New Zealand is natural or human-induced.</p> <p>Resident native taxa with restricted distributions but where it is unlikely that all sub-populations would be threatened by a single event (e.g., because water channels within an archipelago are larger than known terrestrial predator swimming distances) should be qualified as 'Range Restricted' (RR).</p>
SO	Secure Overseas	Population State Qualifier	The taxon is secure in the parts of its natural range outside New Zealand
SO?	Secure Overseas?	Population State Qualifier	It is uncertain whether a taxon of the same that is secure in the parts of its natural range outside New Zealand is conspecific with the New Zealand taxon.
S?O	Secure? Overseas	Population State Qualifier	It is uncertain whether the taxon is secure in the parts of its natural range outside New Zealand.
TO	Threatened Overseas	Population State Qualifier	The taxon is threatened in the parts of its natural range outside New Zealand.
T?O	Threatened Overseas?	Population State Qualifier	It is uncertain whether a taxon of the same name that is threatened in the parts of its natural range outside New Zealand is conspecific with the New Zealand taxon.
T?O	Threatened? Overseas	Population State Qualifier	It is uncertain whether the taxon is threatened in the parts of its natural range outside New Zealand.

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*List of National Qualifiers from the New Zealand Threat Classification System*

<b>Code</b>	<b>Qualifier</b>	<b>Qualifier Type</b>	<b>Description</b>
CI	Climate Impact	Pressure Management Qualifier	<p>The taxon is adversely affected by long-term climate trends and/or extreme climatic events.</p> <p>The following questions provide a guide to using the CI Qualifier:                      Is the taxon adversely affected by long-term changes in the climate, such as an increase in average temperature or sea-level rise?                      If NO = no Qualifier but needs monitoring and periodic re-evaluation because projected changes to the average climate and sea-level rise may adversely impact the taxon (including via changes to the distribution and prevalence of pests, weeds and predators) in the future.                      If YES = CI Qualifier                      Is the taxon adversely affected by extreme climate events, such as a drought, storm or heatwave?                      If No = no Qualifier but needs monitoring and periodic re-evaluation because projected changes to the climate are likely to increase the frequency and/or severity of these events in the future.                      If YES = CI Qualifier</p> <p>Use of the Climate Impact Qualifier would indicate the need for more in-depth research, ongoing monitoring of climate impacts, and potentially a climate change adaptation plan for the taxon</p>
CD	Conservation Dependent	Pressure Management Qualifier	<p>The taxon is likely to move to a worse conservation status if current management ceases. The term 'management' can include indirect actions that benefit taxa, such as island biosecurity.</p> <p>Management can make a taxon CD only if cessation of the management would result in a worse conservation status. The influence of the benefits of management on the total population must be considered before using CD. The benefit of managing a single subpopulation may not be adequate to trigger CD, but may trigger Partial Decline (PD).</p> <p>Taxa qualified CD may also be PD because of the benefits of management.</p>
CR	Conservation Research Needed	Pressure Management Qualifier	<p>Causes of decline and/or solutions for recovery are poorly understood and research is required.</p>

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Regional conservation status of indigenous vascular plants in Otago

List of National Qualifiers from the New Zealand Threat Classification System

Code	Qualifier	Qualifier Type	Description
EW	Extinct In The Wild	Pressure Management Qualifier	The taxon is known only in captivity or cultivation or has been reintroduced to the wild but is not self-sustaining. Assessment of a reintroduced population should be considered only when it is self-sustaining. A population is deemed to be self-sustaining when the following two criteria have been fulfilled: it is expanding or has reached a stable state through natural replenishment and at least half the breeding adults are products of the natural replenishment, and it has been at least 10 years since reintroduction
EF	Extreme Fluctuations	Pressure Management Qualifier	The taxon experiences extreme unnatural population fluctuations, or natural fluctuations overlaying human-induced declines, that increase the threat of extinction. When ranking taxa with extreme fluctuations, the lowest estimate of mature individuals should be used for determining population size, as a precautionary measure.
INC	Increasing	Pressure Management Qualifier	There is an ongoing or forecast increase of > 10% in the total population, taken over the next 10 years or three generations, whichever is longer.  This qualifier is redundant for taxa ranked as 'Recovering'.
PD	Partial Decline	Pressure Management Qualifier	The taxon is declining over most of its range, but with one or more secure populations (such as on offshore islands).  Partial decline taxa (e.g., North Island kākā <i>Nestor meridionalis septentrionalis</i> and Pacific gecko <i>Dactylocnemis pacificus</i> ) are declining towards a small stable population, for which the Relict qualifier may be appropriate.
PF	Population Fragmentation	Pressure Management Qualifier	Gene flow between subpopulations is hampered as a direct or indirect result of human activity. Naturally disjunct populations are not considered to be 'fragmented'.
PE	Possibly/Presumed Extinct	Pressure Management Qualifier	A taxon that has not been observed for more than 50 years but for which there is little or no evidence to support declaring it extinct.  This qualifier might apply to several Data Deficient and Nationally Critical taxa.
RF	Recruitment Failure	Pressure Management Qualifier	The age structure of the current population is such that a catastrophic decline is likely in the future.  Failure to produce new progeny or failure of progeny to reach maturity can be masked by apparently healthy populations of mature specimens.

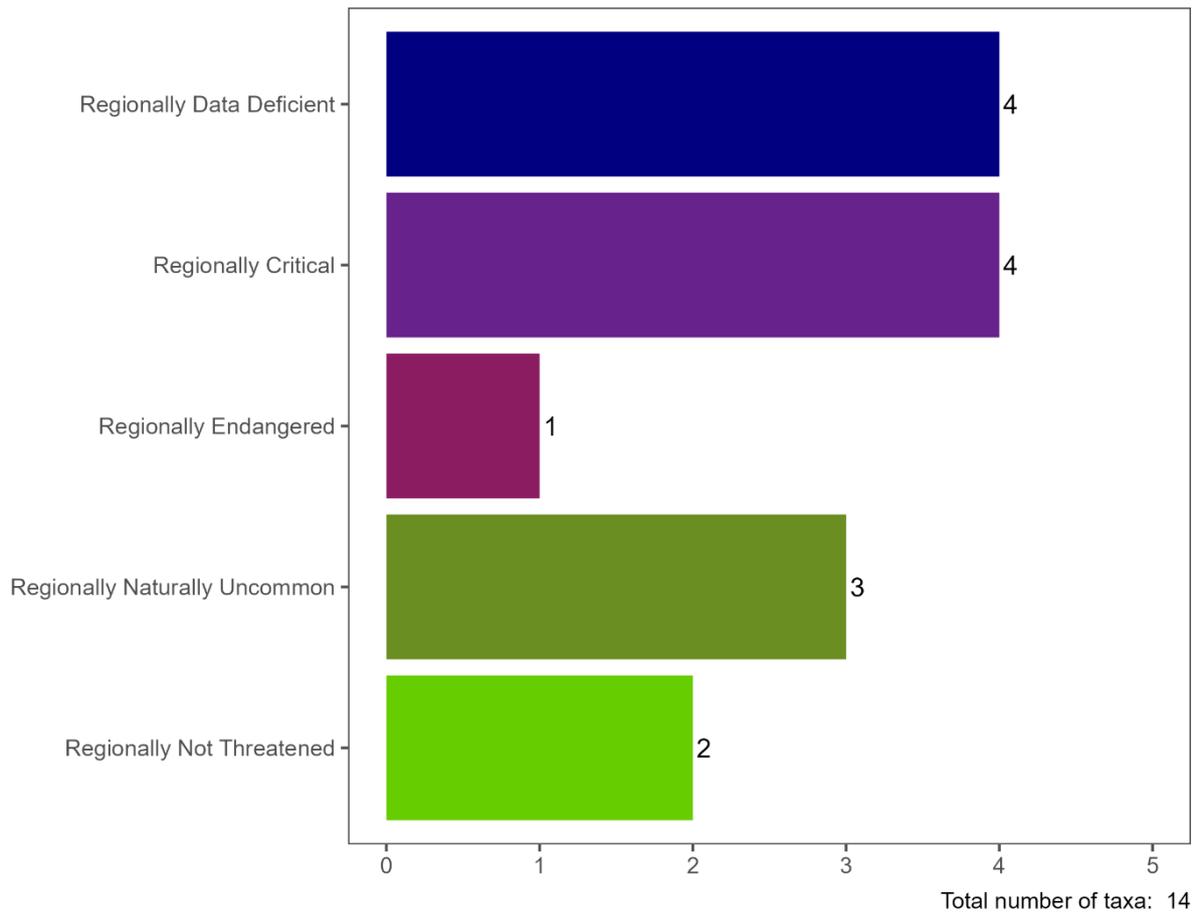
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Regional conservation status of indigenous vascular plants in Otago

*List of National Qualifiers from the New Zealand Threat Classification System*

<b>Code</b>	<b>Qualifier</b>	<b>Qualifier Type</b>	<b>Description</b>
Rel	Relict	Pressure Management Qualifier	<p>The taxon has declined since human arrival to less than 10% of its former range but its population has stabilised.</p> <p>The range of a relictual taxon takes into account the area currently occupied as a ratio of its former extent. Reintroduced and self-sustaining populations within or outside the former known range of a taxon should be considered when determining whether a taxon is relictual.</p> <p>This definition is modified from the definition of the At Risk – Relict category in the NZTCS manual (Townsend et al. 2008). The main difference is that trend is not included in the qualifier definition. This enables the qualifier to be applied to any taxon that has experienced severe range contraction, regardless of whether that contraction continues or has been arrested.</p> <p>This qualifier complements the ‘Naturally Uncommon (NU)’ qualifier which can be applied to taxa whose abundance has declined but which continue to occupy a substantial part of their natural range.</p>

**Appendix 4. Regional conservation status for 14 indigenous vascular plants in the Otago region not assessed in the national assessment (de Lange et al. 2018).** See Figure 1 for the threat statuses of the 1242 indigenous vascular plants in Otago also assessed national nationally (de Lange et al. 2018)



## Appendix 5: Indigenous vascular plants found only in Otago

This table shows regional endemics that were considered Regionally Threatened or Regionally At Risk

Name and Authority	Common Name	Regional Conservation Status	National Conservation Status	Distributional Notes
<i>Abrotanella patearoa</i> Heads		Regionally Naturally Uncommon	Naturally Uncommon	Eastern and Central Otago: Rock and Pillar Range, Lammerlaw Top, Umbrella Mountains, Garvie Mountain
<i>Acaena</i> aff. <i>rorida</i> (OTA 59561; Pool Burn)	bidibidi	Regionally Critical	Nationally Critical	Maniototo and Macraes
<i>Acaena tesca</i> B.H.Macmill.	bidibidi	Regionally Naturally Uncommon	Not Threatened	Central and Southern Otago
<i>Anisotome</i> (b) (CHR 511716); "Otago bog")		Regionally Naturally Uncommon	Naturally Uncommon	Pisa Range
<i>Anthosachne aprica</i> (Å.Löve & Connor) C.Yen & J.L.Yang	blue wheat grass	Regionally Vulnerable	Naturally Uncommon	Central Otago
<i>Apium</i> "inland saline"		Regionally Critical		Central Otago
<i>Brachyscome</i> "Taiari		Regionally Critical		Central Otago
<i>Brachyscome humilis</i> G.Simpson & J.S.Thomson	daisy	Regionally Naturally Uncommon	Naturally Uncommon	Rock and Pillar Range and Lammerlaw/Lammermoor Ranges
<i>Cardamine sciaphila</i> Heenan	cress	Regionally Critical	Nationally Critical	Central Otago - the highest parts of the Dunstan Mountains and Pisa Range
<i>Carex applanata</i> Thorsen & de Lange		Regionally Endangered	Naturally Uncommon	Central Otago, including the Old Woman, Old Man, Umbrella, Garvie, Pisa and The Remarkables Range
<i>Carmichaelia compacta</i> Petrie	Cromwell broom	Regionally Declining	Naturally Uncommon	Central Otago, centred on the Kawarau and Cromwell Gorges and immediate surrounding area, also near Alexandra, Omakau, and Cromwell
<i>Celmisia haastii</i> var. <i>tomentosa</i> G.Simpson & J.S.Thomson	daisy	Regionally Naturally Uncommon	Naturally Uncommon	Rock and Pillar Range

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Regional conservation status of indigenous vascular plants in Otago

*Regional endemic continued*

Name and Authority	Common Name	Regional Conservation Status	National Conservation Status	Distributional Notes
<i>Celmisia lindsayi</i> Hook.f.	Lindsay's Daisy	Regionally Naturally Uncommon	Naturally Uncommon	Coast from Clutha River to Chaslands Mistake
<i>Craspedia</i> (y) (CHR 516260; Cape Saunders)		Regionally Critical	Nationally Critical	Otago Peninsula
<i>Craspedia argentea</i> Breitw. & K.A.Ford, sp. nov.		Regionally Critical	Nationally Critical	One location in the Upper Clutha Catchment, Central Otago
<i>Festuca matthewsii</i> subsp. <i>pisamontis</i> Connor		Regionally Naturally Uncommon	Naturally Uncommon	Central Otago: Dunstan, Pisa, and Kopuwai   Old Man Range
<i>Gingidia grisea</i> Heenan		Regionally Declining	Naturally Uncommon	North-eastern Otago, from near the Millhouse (Herbert) south to Mt Watkin/Hikaroroa (Waikouaiti), east to Macraes Flat and then west to Shag and Moeraki Points.
<i>Helichrysum simpsonii</i> subsp. <i>tumidum</i> (Cheeseman) de Lange & Blanchon		Regionally Vulnerable	Nationally Vulnerable	Otago Peninsula
<i>Kelleria villosa</i> var. <i>barbata</i> Heads		Regionally Naturally Uncommon	Naturally Uncommon	Rock and Pillar Range
<i>Lepidium crassum</i> Heenan & de Lange	thick-leaved scurvy grass	Regionally Endangered	Nationally Endangered	Once found in the Waitaki Valley, an inland location, to coastal locations from Oamaru to North Head, Waikawa Harbour in the south Catlins. Now most common on Otago Peninsula, but occurs in small populations from near Kakanui, North Otago to The Nuggets, South Otago
<i>Lepidium kirkii</i> Petrie	salt-pan cress	Regionally Critical	Nationally Critical	Formerly widespread on saline/sodic soils from the Ida Valley and Maniototo plans south to Alexandra in the Manuherikia Valley, but now only known only Central Otago
<i>Leptinella</i> aff. <i>pectinata</i> (a) (CHR 580894; Nevis)		Regionally Critical	Nationally Critical	One location in Nevis Valley

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Regional conservation status of indigenous vascular plants in Otago

*Regional endemic continued*

<b>Name and Authority</b>	<b>Common Name</b>	<b>Regional Conservation Status</b>	<b>National Conservation Status</b>	<b>Distributional Notes</b>
<i>Luzula traversii</i> var. <i>tenuis</i> Edgar	wood-rush	Regionally Endangered	Naturally Uncommon	Central Otago
<i>Melicytus</i> aff. <i>crassifolius</i> (b) (CHR 616706; Cape Saunders)		Regionally Critical		Otago Peninsula
<i>Montia</i> "String Bog"		Regionally Naturally Uncommon		The Remarkables
<i>Myosotis albosericea</i> Hook.f.		Regionally Critical	Nationally Critical	One location on the southern Dunstan Range, Central Otago
<i>Myosotis bryonoma</i> Meudt, Prebble & Thorsen	forget-me-not	Regionally Naturally Uncommon	Naturally Uncommon	High-elevation bogs and wet places in mountain ranges of Otago
<i>Myosotis glabrescens</i> L.B.Moore	Forget-me-not	Regionally Critical	Data Deficient	Hector Mountains and Harris Mountains
<i>Myosotis goyenii</i> subsp. <i>goyenii</i> Petrie		Regionally Endangered	Naturally Uncommon	Central Otago
<i>Myosotis hikuwai</i> Meudt et al. 2022.		Regionally Critical	Nationally Critical	One location on outwash gravel terraces, near Wānaka
<i>Myosotis oreophila</i> Petrie		Regionally Critical	Nationally Critical	Central Otago
<i>Myosotis umbrosa</i> Meudt, Prebble & Thorsen		Regionally Critical	Nationally Critical	Rock and Pillar and Lammerlaw Ranges
<i>Pimelea sericeovillosa</i> subsp. <i>alta</i> C.J.Burrows		Regionally Naturally Uncommon	Naturally Uncommon	Pisa Range
<i>Poa pygmaea</i> Buchanan		Regionally Naturally Uncommon	Naturally Uncommon	Pisa Range and Mount St Bathans

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Regional conservation status of indigenous vascular plants in Otago

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*Regional endemic continued*

Name and Authority	Common Name	Regional Conservation Status	National Conservation Status	Distributional Notes
<i>Ranunculus</i> (c) (CHR 472008; Garvie Range)		Regionally Naturally Uncommon	Data Deficient	Garvie Range
<i>Solenogyne christensenii</i> (Petrie) de Lange, Jian Wang ter & Barkla, comb. nov.		Regionally Critical	Nationally Critical	One location in the upper Clutha Valley. Believed extinct from the Hanmer Plains, Canterbury.