

Brief Review - National threat classification of New Zealand vascular plants

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Introduction

Every 5 years the conservation status of all NZ indigenous plant species are reviewed using the NZ threat classification system (Figure 1). Last year the 2017 revision was published (Summary: Table 1).

Changes relating to the Bay of Plenty:

- The definition of an indeterminate entity has been broadened in order to capture undescribed species. - This was to try to prevent the risk of extinction of species which haven't yet been described and to highlight where taxonomic review is needed. This change lead to more than 200 taxa and tag names being assessed for the first time.
- 61 species have moved to a worse category due to actual decline.
- Disease or potential disease has lead to a decline in threat status of Kauri and all native myrtles. **Kauri dieback** (*Phytophthora agathidicida*) still has no cure and despite work done to reduce human contact with kauri trees the disease is still spreading. **Myrtle rust** arrived in NZ in May 2017. At risk from this disease are the 27 named myrtle species and other dependent species such as the dwarf mistletoe (*Korthalsella salicornioides*). Based on how cultivated NZ myrtles are impacted in Australia it is likely that we haven't seen the full impact in NZ yet. Presently *Lophomyrtus bullata* and *Lophomyrtus obcordata* are the most affected by this disease in NZ.
- The continued decline of *Brachyglottis kirkii* var. *kirkii* (Kirks tree daisy) in areas not protected from possum browse has led to the change in threat status from "At Risk-Declining" to "Threatened-Nationally Vulnerable" - It is thought that this species could become extinct in areas that aren't protected from possum browse.
- The unexplained decline of poroporo in the last 30 years (*Solanum aviculare* var. *aviculare*) has led to a change in classification from "At Risk-Declining" to "Threatened-Nationally Vulnerable". To investigate poroporo's decline, a citizen science project was set up in 2015 using the NatureWatch platform, "What's up with our Poroporo", to log observations of three taxa, *S. aviculare* var. *aviculare*, var. *latifolium* and *S. laciniatum*. This data confirmed that the once weedy *S. aviculare* var. *aviculare* is now scarce throughout its range.

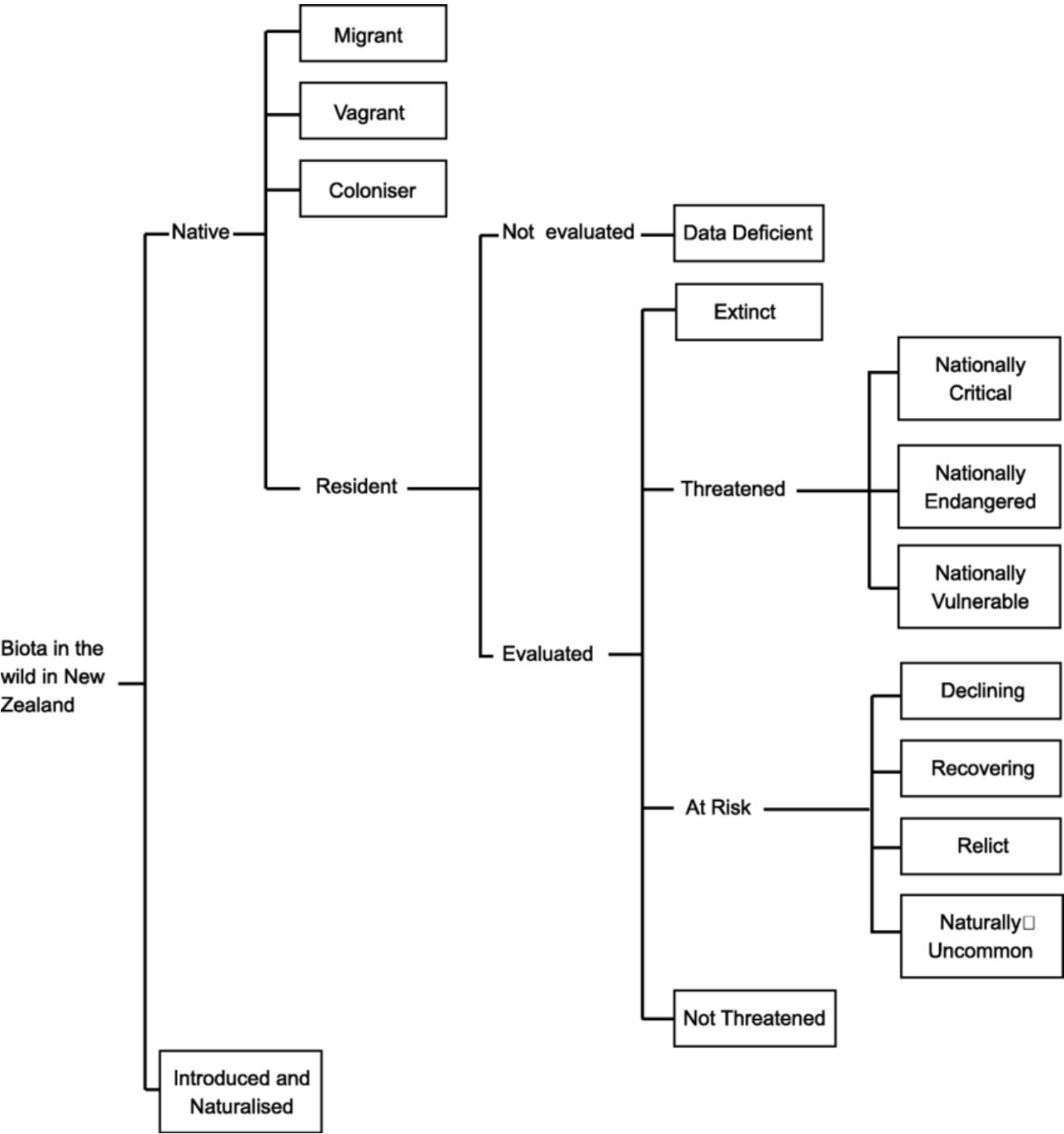
Table 1: (Statistical summary of the status of New Zealand vascular plant species assessed in 2012 (de Lange et al. 2013) and 2017 (this document) (1))

Category	Total 2012	Total 2018
Extinct	8	7
Data deficient	77	107
Threatened – Nationally Critical	155	213
Threatened – Nationally Endangered	62	77
Threatened – Nationally Vulnerable	72	113
At Risk – Declining	102	158
At Risk – Recovering	7	8
At Risk – Relict	13	23
At Risk – Naturally Uncommon	628	662
Non-resident Native – Vagrant	12	14
Non-resident Native – Coloniser	17	20
Not Threatened	1427	1383
Introduced and Naturalised	1	1
Total	2581	2786

References

1. Peter J. de Lange, Jeremy R. Rolfe, John W. Barkla, Shannel P. Courtney, Paul D. Champion, Leon R. Perrie, Sarah M. Beadel, Kerry A. Ford, Ilse Breitwieser, Ines Schönberger, Rowan Hindmarsh-Walls, Peter B. Heenan and Kate Ladley. *Threat Classification series 22*. Department of Conservation, Wellington. 2018
<https://www.doc.govt.nz/about-us/science-publications/conservation-publications/nz-threat-classification-system/>
2. Andrew J. Townsend, Peter J. de Lange, Clinton A.J. Duffy, Colin M. Miskelly, Janice Molloy and David A. Norton. *New Zealand Threat Classification System manual*. P11. Department of Conservation, Wellington. 2008
<https://www.doc.govt.nz/globalassets/documents/science-and-technical/sap244.pdf>

Figure 1: Threat Classification system (from The New Zealand Threat Classification System Manual (2))



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