

The New Zealand Threat Classification System

A system of threat classification to support the conservation community's work with threatened taxa

In this fact sheet, we use the word 'taxon' (plural 'taxa') to mean scientifically named and described species, subspecies, varieties and forms of plants, animals and fungi, as well as unnamed 'entities' that are believed to be distinct but have not yet been formally described.

The system

The New Zealand Threat Classification System is a national system led by the Department of Conservation (DOC). It is a robust tool that uses objective criteria and information drawn from a wide range of experts to rigorously assess the risk of extinction faced by New Zealand plants, animals and fungi. Each taxon is placed in a category that reflects the level of risk it faces. The system is specifically designed to be relevant to New Zealand's unusual ecological and geographic conditions.

WHY DO WE NEED IT?

New Zealand is a biodiversity hotspot—one of the world's treasure chests of unusual and fascinating life forms, many of which are found nowhere else. Unfortunately, despite some major success stories, New Zealand is also a hotspot for extinctions and for seriously threatened taxa at risk of extinction.

A critical aim of the Government's New Zealand Biodiversity Strategy is to prevent the extinction of New Zealand's unique species. An effective species threat classification system not only provides a fundamental framework for biodiversity recovery programmes, but also has ramifications far beyond that: the risk of extinction faced by a species is one of the main factors considered when prioritising the use of conservation resources.

WHAT IS IT?

The New Zealand Threat Classification System can be used to assess the status of any plant, animal or fungus that has a wild population established in New Zealand and for which there is sufficient information available. It uses the best available information on the population trend (rate of decline or increase) and the size of the population (or, if population size can not be measured, the area occupied by the population) to place each taxon into a category that directly reflects the risk of extinction it faces. All listings are reviewed about every 3 years to detect changes in status over time.

The first version of the New Zealand Threat Classification System was published in 2002. Following rigorous review, a revised manual was published in 2008. This revision introduced a range of improvements, such as ensuring

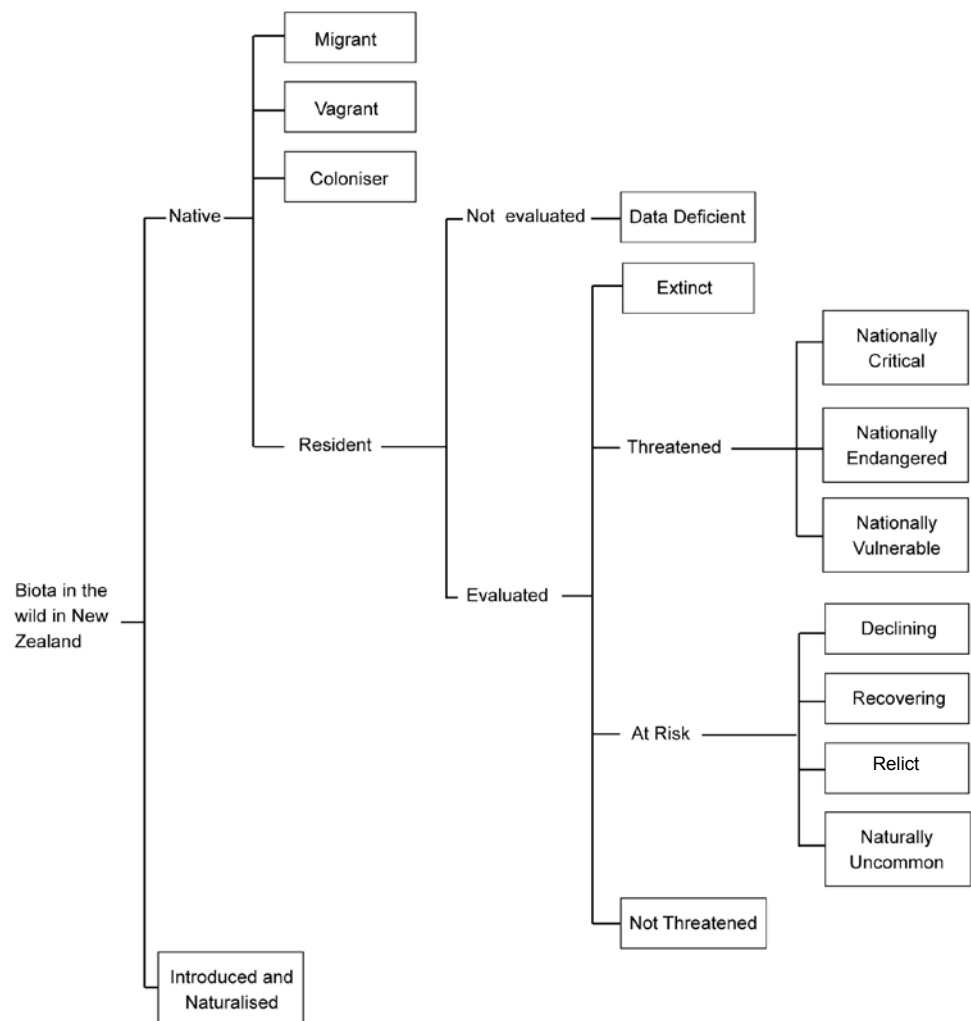


that all possible combinations of status and trend are covered within the different categories. It is also more explicit about the process, and better reflects the type of management action required for taxa in the different categories.

In 2002 and 2007, DOC published lists of threatened taxa using the 2002 criteria. It assessed the following groups of plants, animals and fungi: bats, birds, bryophytes (mosses and their relatives), fish (freshwater and marine), frogs, fungi, invertebrates (land, freshwater and marine), marine mammals, reptiles, seaweeds and vascular plants.

THE STRUCTURE

Taxa are classified into categories, as shown below.



WHO CREATES IT?

DOC is accountable for developing and reviewing the system, and ensuring the creation of ranked listings. However, the listings draw upon the knowledge of the entire community of relevant scientific and conservation experts in the country. There is an expert panel for each taxonomic group (e.g. bats, birds, etc.), which makes decisions about the threat status of individual taxa within that group. These panels include individuals from

DOC, research institutions, universities, other government departments and non-government organisations. Where possible, panel experts are selected through consultation with relevant organisations, such as the New Zealand Entomological Society and the New Zealand Plant Conservation Network. An even broader range of experts is invited to make submissions on the status of threatened taxa.

The system ensures that the best available information is used by broadly canvassing expert opinion at several steps:

- DOC invites submissions on the status of taxa of concern, with notices on the DOC website and Intranet, and via relevant societies and networks.
- Expert panels meet and produce draft lists, drawing on submissions received and their own extensive knowledge.
- Draft lists are distributed for comment and peer review.
- Lists are published both on paper and electronically.

WHAT ABOUT THE INTERNATIONAL 'RED LIST'?

For more than 30 years, the International Union for the Conservation of Nature (IUCN) has produced an international Red List of threatened species. This was designed to detect rarity and decline at global and continental scales. Since many New Zealand species are naturally very restricted in distribution (e.g. to one small island group or mountain range), the seriousness of their status was exaggerated using the IUCN criteria. Therefore, this system was considered too coarse a tool for assessing the status of many New Zealand species.

Consequently, DOC led the process to develop an effective, robust and relevant species threat classification that specifically targeted a geographically diverse, small country that has many naturally restricted as well as many genuinely threatened species. This system is intended to complement, not compete with, the IUCN system.

The IUCN system was revised in 2002, and this reduced the discrepancies between the two systems. However, DOC still believes that the New Zealand system is the best one for species found only in this country.

MORE INFORMATION

The New Zealand Threat Classification System manual can be found on the DOC website at www.doc.govt.nz/upload/documents/science-and-technical/sap244.pdf.

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