Information for NZTCS Assessments

The aim is to collate information on species or taxa relevant to assessments under the New Zealand Threat Classification System (NZTCS, <u>https://nztcs.org.nz</u>). Please complete this form and provide as much detailed information as possible, anecdotal information is also welcomed. Complete a separate form for each species or lower-level taxon individually by duplicating the 'Taxon Details' table below as needed. Do not use jargon, be clear and concise. When completed, send to the NZTCS administrator at <u>ThreatStatus@doc.govt.nz</u>.

Supplier's Contact Details		
Your name		
Address		
E-mail		
Telephone numbers		

Taxon Details		
Scientific name		
Common name		
Taxonomic status	Does the taxon have a formally published name that is generally accepted by those working on the group? Yes / No	
Notes	(provide any relevant information known about this taxon)	
Population Size & Trend		
Location	(geographic extent of this information)	
Estimated population size	(Provide estimates for the total number of individuals or area of occupancy, number of sub-populations, multiple-year estimates if available)	
Estimated number of mature individuals	(Provide estimates of total number of breeding individuals, multiple-year estimates if available,)	
Estimated population trend – Past	(Provide estimates of trend: stable, percentage increase or decrease, estimated period in years, is the trend consistent across the species range?)	
Estimated population trend - Future	(Provide estimates of percentage increase or decrease, estimated period [10 years or 3 generation time], is the trend expected to be consistent across the species range?)	
Identified threats	<i>(list and explain identified threats that are impacting on population size and trend, e.g. predator, habitat loss, etc)</i>	

Notes on population size and trend	(e.g. change in population range)		
Conservation Status & Qualifiers			
Current threat status and qualifiers	(if the species has not been assessed before, it is a 'New Listing')		
Recommended threat category and conservation status	(using the latest <u>NZTCS manual</u> , suggest the relevant threat category for the taxon)		
Recommended qualifiers	(see list of qualifiers below, explain why these qualifiers apply to the taxon)		
Notes	(provide any further information to support your recommendations)		

Qualifiers

Qualifiers are an integral part of this classification system. They provide additional information about a taxon's assessment, status and management. Detailed definition can be found at https://nztcs.org.nz/content/NZTCS_QUALIFIERS.

- **BIOLOGICALLY SPARSE (Sp)**: The taxon naturally occurs within typically small and widely scattered subpopulations. This qualifier can apply to any 'Threatened' or 'At Risk' taxon.
- CLIMATE IMPACT(CI): The taxon is adversely affected by long-term climate trends and/or extreme climatic events.
- CONSERVATION DEPENDENT (CD): The taxon is likely to move to a worse conservation status if current management ceases.
- CONSERVATION RESEARCH NEEDED (CR): Causes of decline and/or solutions for recovery are poorly understood and research is required.
- DATA POOR: RECOGNITION (DPR): Confidence in the assessment is low because of difficulties in determining the identity of the taxon in the field and/or in the laboratory.
- DATA POOR SIZE (DPS): Confidence in the assessment is low because of a lack of data on population size.
- DATA POOR: TREND (DPT): Confidence in the assessment is low because of a lack of data on population trend.
- EXTREME FLUCTUATIONS (EF): 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.
- EXTINCT IN THE WILD (EW): The taxon is known only in captivity or cultivation or has been reintroduced to the wild but is not self-sustaining.
- INCREASING (Inc): 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. Note that this qualifier is redundant for taxa ranked as 'Recovering'.
- ISLAND ENDEMIC (IE): A taxon whose natural distribution is restricted to one island archipelago (e.g. Auckland Islands) and is not part of the North or South Islands or Stewart Island/Rakiura.
- NATURAL STATE (NS): 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.
- NATURALISED OVERSEAS (NO): A New Zealand endemic taxon that has been introduced by human agency to another country (deliberately or accidentally) and has naturalised there e.g., *Olearia traversiorum* in the Republic of Ireland.
- ONE LOCATION (OL): Found at one location in New Zealand (geographically or ecologically distinct area) of less
 than 100 000 ha (1000 km²), in which a single event (e.g. a predator irruption) could easily affect all individuals of the
 taxon, e.g. L'Esperance Rock groundsel (*Senecio esperensis*) and Open Bay Island leech (Hirudobdella antipodum).

'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. 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).

- PARTIAL DECLINE (PD): The taxon is declining over most of its range, but with one or more secure populations (such as on offshore islands).
- POPULATION FRAGMENTATION (PF): Gene flow between subpopulations is hampered as a direct or indirect result of human activity. Naturally disjunct populations are not considered to be 'fragmented'.
- POSSIBLY EXTINCT (PE): 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.
- RANGE RESTRICTED (RR): A taxon naturally confined to specific substrates, habitats or geographic areas of less than 1000 km² (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 (*Myosotidium hortensia*) and Auckland Island snipe (*Coenocorypha aucklandica aucklandica*). This qualifier can apply to any 'Threatened' or 'At Risk' taxon. It is redundant if a taxon is confined to 'One Location' (OL).
- RECRUITMENT FAILURE (RF): The age structure of the current population is such that a catastrophic decline is likely in the future.
- RELICT (Rel): The taxon has declined since human arrival to less than 10% of its former range but its population has stabilised.
- SECURE OVERSEAS (SO): The taxon is secure in the parts of its natural range outside New Zealand.
- SECURE OVERSEAS? (SO?): It is uncertain whether a taxon of the same name that is secure in the parts of its natural range outside New Zealand is conspecific with the New Zealand taxon.
- SECURE? OVERSEAS (S?O): It is uncertain whether the taxon is secure in the parts of its natural range outside New Zealand.
- THREATENED OVERSEAS (TO): The taxon is threatened in the parts of its natural range outside New Zealand.
- **THREATENED OVERSEAS?** (**TO?**): 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.
- **THREATENED? OVERSEAS (T?O):** It is uncertain whether the taxon is threatened in the parts of its natural range outside New Zealand.