Research Needs Catalogue user guide

Version 1.0

What it is

The Research Needs Catalogue is a searchable catalogue of knowledge gaps and research needs for NSW threatened species, threatened ecological communities and key threatening processes.

Use the catalogue as:

- a guide to identify key research needs, whether you're an internal or external research partner
- an opportunity to discover research synergies, with an aim to share resources for greater efficiency
- a tool for connecting research partners with our species managers and practitioners, allowing research to have more end-user applications.

Terms of use

We request that any information used from this catalogue to form research projects is done in collaboration with the relevant species project coordinator. This will enable end-user participation in project design, ensure the research meets conservation manager needs, and maximise the impact of any research. If you are external to the NSW Department of Climate Change, Energy, the Environment and Water, please email sos.scienceresearch@environment.nsw.gov.au and we will connect you with the species project coordinator relevant to your interests.

Source

The knowledge gaps in the catalogue have been identified from conservation strategies, key threatening process strategies, workshops, and/or consultation with species experts, and the Saving our Species database.

If you would like to add a knowledge gap, please email the Saving our Species Science and Research team: sos.scienceresearch@environment.nsw.gov.au.

Table 1 **Confidence levels for different knowledge gaps identified in the Research Needs Catalogue**

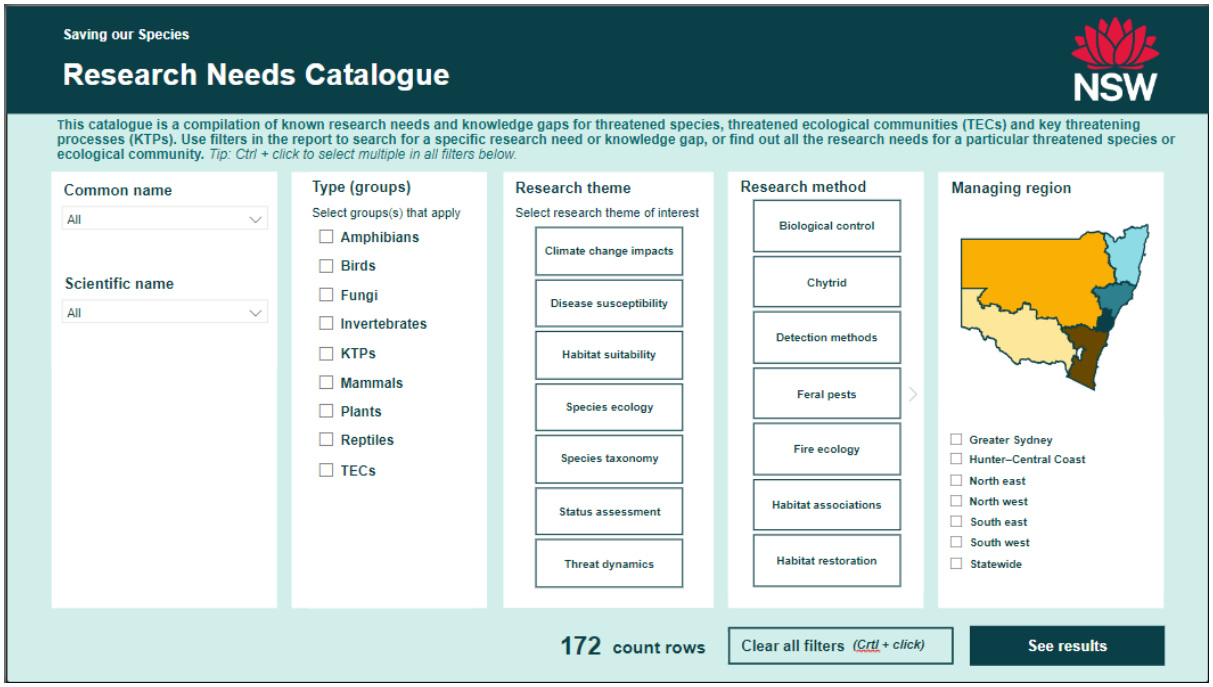
Confidence	Definition	Source
High	Multiple individuals (an expert panel) have agreed on research needs or knowledge gaps that address a critical threat or management action	Conservation strategies
High	Multiple individuals (an expert panel) have agreed on the critical research required for key threatening process management	Key threatening process strategies
Medium	Research addresses or is linked to an identified threat in the BioNet Atlas	BioNet Atlas identified threat
Low	A species expert has identified a knowledge gap or research need of value which does not currently align with an identified threat in BioNet or fall under the species conservation strategy	Other

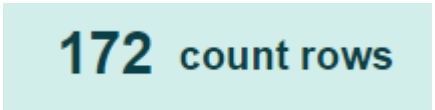
Note: confidence here is not used to rank or prioritise the knowledge gap, but to provide guidance as to the source and the number of experts who identified it. We suggest consulting with the relevant species project coordinator to find out more about research needs tagged as low confidence as they may still hold high value where critical threats are still unknown.

How to use the Research Needs Catalogue

Apply filters to narrow your search of the catalogue.

- **Search by name**: underneath ‘Common name’ or ‘Scientific name’ in the first column, click the ‘All’ dropdown and a search bar will appear. To locate a species, key threatening process or threatened ecological community, you can then either start typing the name until it appears, or scroll down to find it in the alphabetical list.
- **Search by type (group):** Saving our Species ‘types’ are species and threatened ecological communities grouped by taxon or groups.
- **Search by research theme:** these are broad research categories.
- **Search by research topic:** use this filter to narrow the search to a sub-research theme, method or topic.





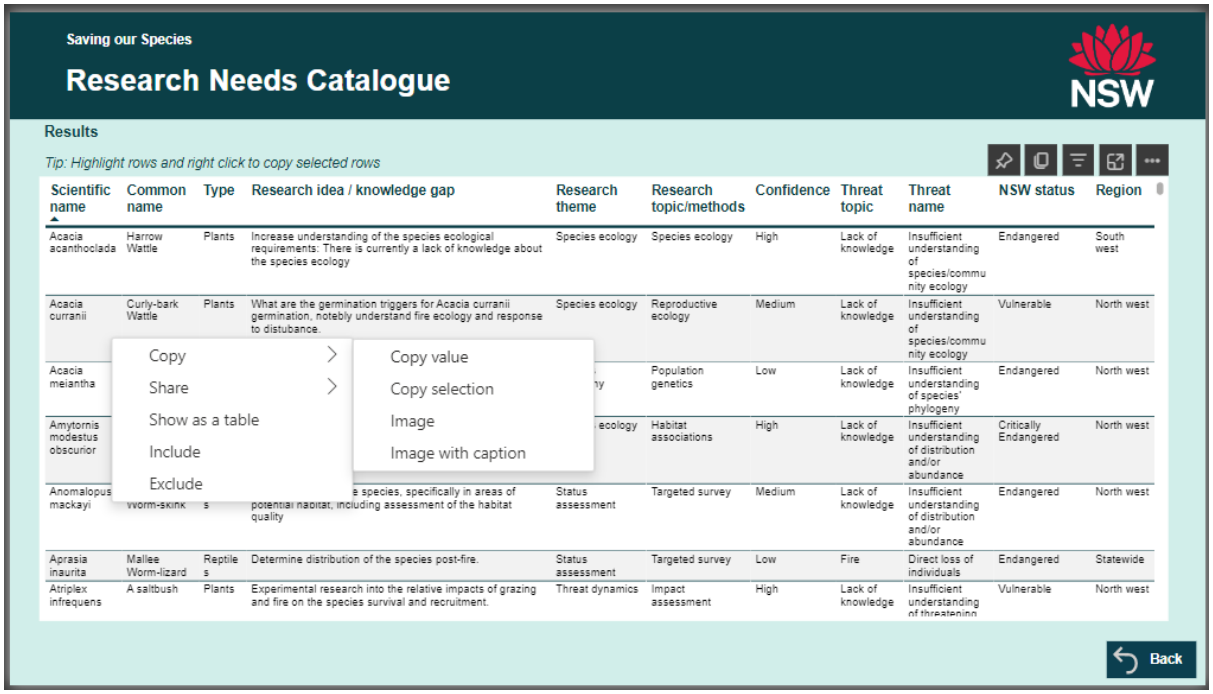
This is the number of records under the current filters.

To clear all filters, hold down the ‘Ctrl’ key and click this button.

Click this button to view a table of results comprising research needs or knowledge gaps under the current filter.

Exporting data

In the Results tab you'll see a table with more information on the research needs under your current filter. Highlight rows and right-click to copy the selection.



Click the 'Back' button to return to the search page.

Table 2 Results table columns and definitions

Name	Definition
Scientific name	Scientific name
Common name	Common name according to Saving our Species nomenclature
Type	Saving our Species taxonomic grouping
Research idea / knowledge gap	Description of the research need or knowledge gap
Research theme	Broad research theme (see Table 3)
Research topic/methods	Specific research topic or method (see Table 3)
Confidence	Confidence in source, as per Table 1
Threat topic	Broad threat topic
Threat name	Threat category related to research need or knowledge gap
NSW status	Conservation status of species or threatened ecological community in New South Wales

Table 3 Research themes and associated research topic or method (sub-theme)

Research theme*	Research topic/methods
Investigation of climate change impacts	Species distribution model
Investigation of disease susceptibility	Animal pathogens
	Chytrid
	Myrtle rust
	Phytophthora
	Sporicidal fluke infestations
Investigation of habitat suitability	Habitat restoration
	Refugia/corridors
	Translocation
	Water quality/health
Investigation of species ecology	Fire ecology
	Habitat associations
	Mycology
	Reproductive ecology
	Species distribution model
	Species ecology
	Symbiosis
	Translocation
	Understand threats
Investigation of species taxonomy	Population genetics
	Taxonomy
Investigation of threat dynamics	Biological control
	Detection methods
	Feral pests
	Impact assessment
	Predator behaviour
	Reproductive ecology
	Species distribution model
	Toxicology
Population and threat assessment	Impact assessment
	Phytophthora
	Survey methods
	Targeted survey

*Research themes align with Saving our Species database.

Releasing lab-reared Bell's turtle (*Myuchelys bellii*) hatchlings. Photo: David Waugh/DCCEEW

Please provide any feedback on this user guide or the Research Needs Catalogue at sos.scienceresearch@environment.nsw.gov.au.

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