

Biodiversity Conservation Trust

Stefan Giessler– Ecologist

Biodiversity
Conservation
Trust



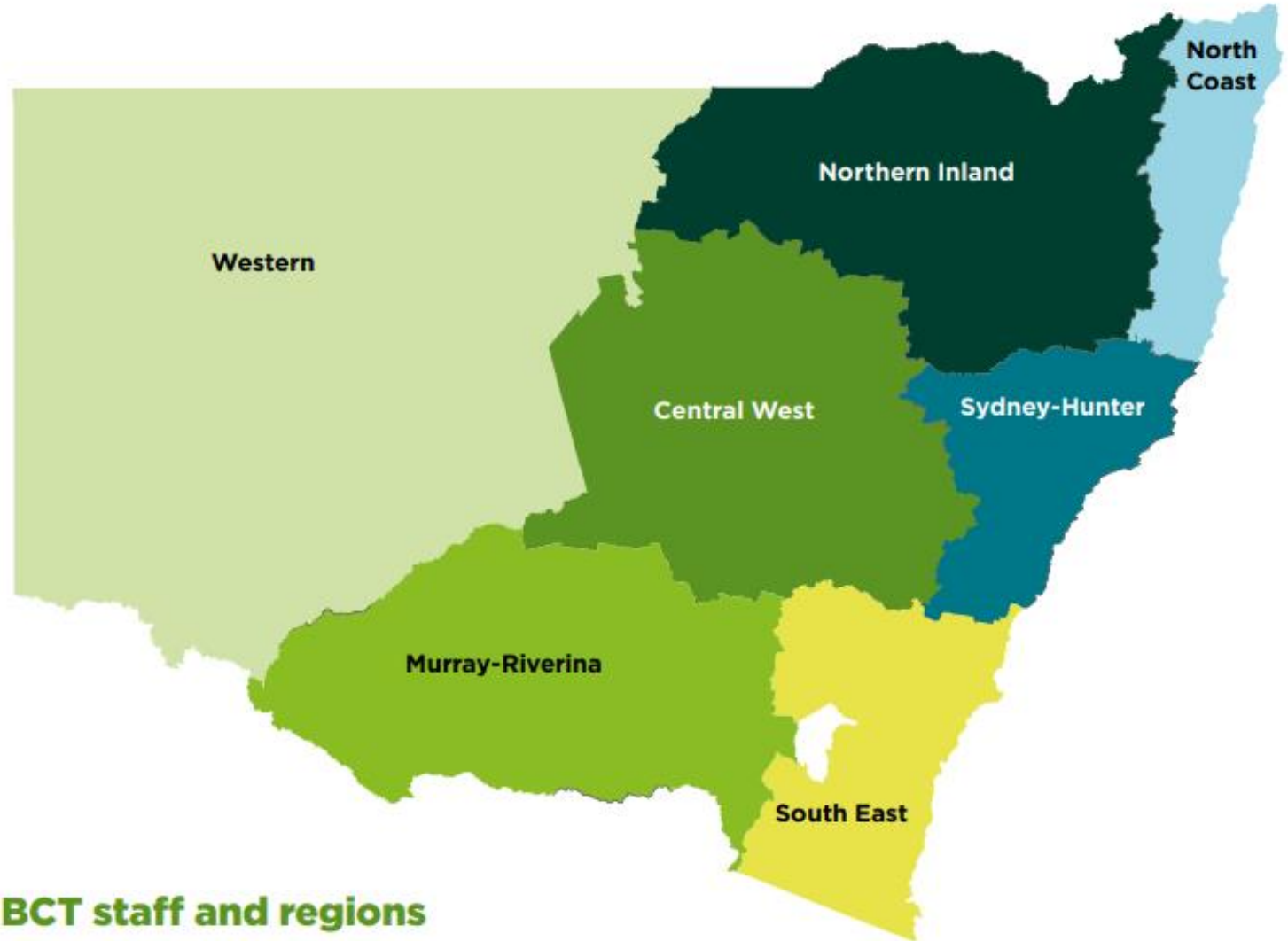
Who are we?

**A statutory not-for-profit body
established under the
Biodiversity Conservation Act
2016 in August 2017 to support
and expand private land
conservation in NSW**



Where we work

- The BCT operates across seven regions.
- Our regional teams include ecologists and regional conservation staff who work with new and existing landholders to enter into and manage their agreements
- The majority of our staff work from regional hubs, with offices across the State.
- Our head office is Parramatta (4PSQ)



What we do

The BCT's purpose is partnering with landholders to enhance and conserve biodiversity across NSW.

Our vision is vibrant private land conservation areas protecting our unique and diverse plants and animals.

Our aspirational aims over the four-year period (2021-2025) of our business plan are to:

- enter 400 private land conservation agreements with landholders
- secure 200,000 hectares of new conservation areas
- protect examples of another 50 unique under-represented NSW landscapes.

Threatened Species Records - MacDonal Valley

1279 Records in the Greater MacDonal Valley

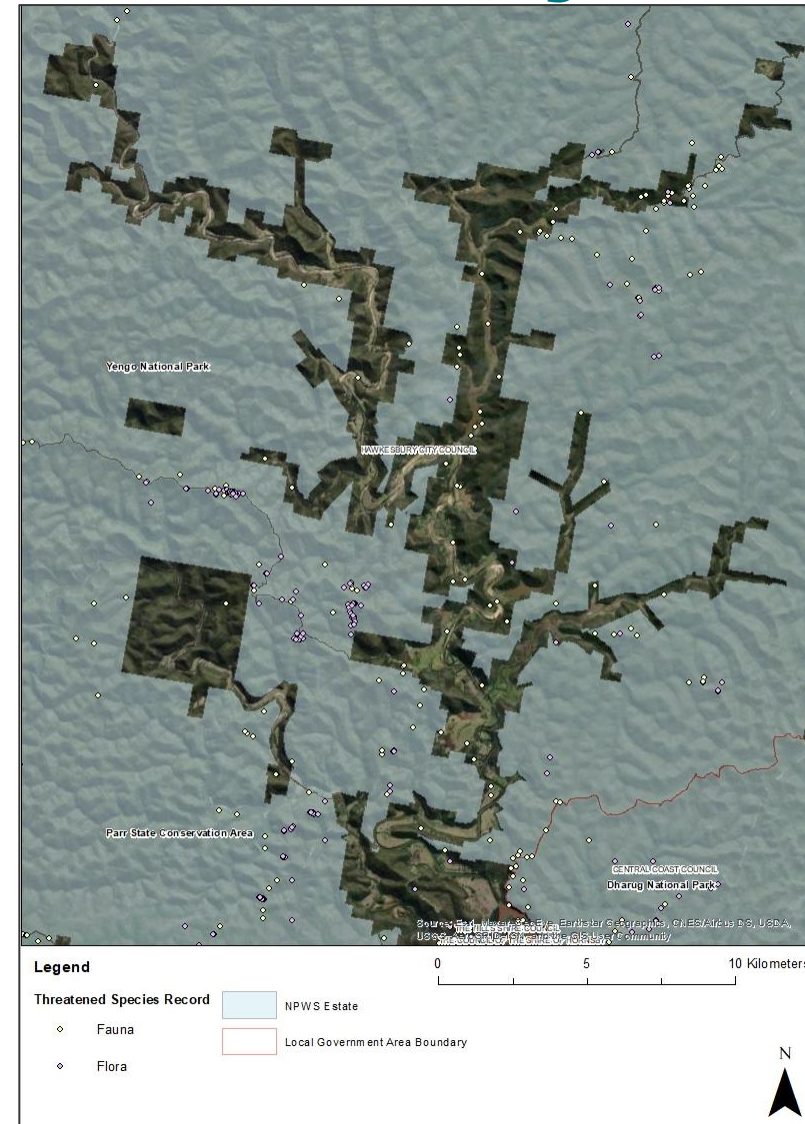
- Sixty-three (63) vulnerable / endangered species
- Seventeen (17) flora species
- Forty-six (46) fauna species

SOS site managed species include:

- Brush-tailed Rock-wallaby (*Petrogale penicillata*)
- *Olearia cordata*
- *Zieria involuocrata*

Associated endangered ecological communities include:

- Swamp Sclerophyll Forest on Coastal Floodplains
- Swamp Oak Floodplain Forest
- Freshwater Wetlands on Coastal Floodplains



Threatened Species Records - MacDonalD Valley – Brush-tailed Rock-wallaby

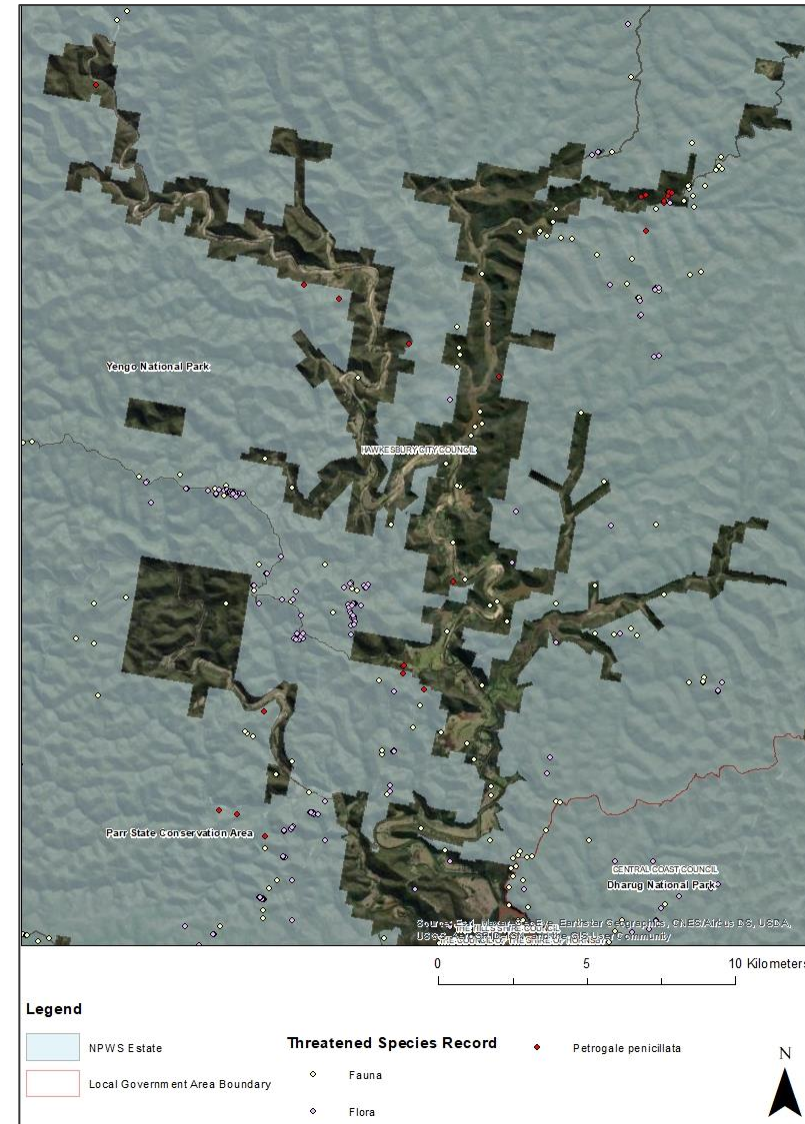
Twenty-two (22) records in the Greater MacDonalD Valley

Endangered status in NSW, Vulnerable status Commonwealth.

Habitat: Occupy rocky escarpments, outcrops and cliffs with a preference for complex structure.

Threatening processes:

- Restricted and fragmented populations;
- Predation;
- Competition;
- Habitat modification.



Brush-tailed Rock-wallaby

Identification:

- Long and bushy, dark rufous-brown tail. Bushier towards its tip.
- Brown body-fur that tends to be rufous on the rump and greyer on the shoulders.
- Characteristic white cheek-stripe and a black stripe from its forehead to the back of its head.



Threatened Species Records - MacDonalld Valley – *Olearia cordata*

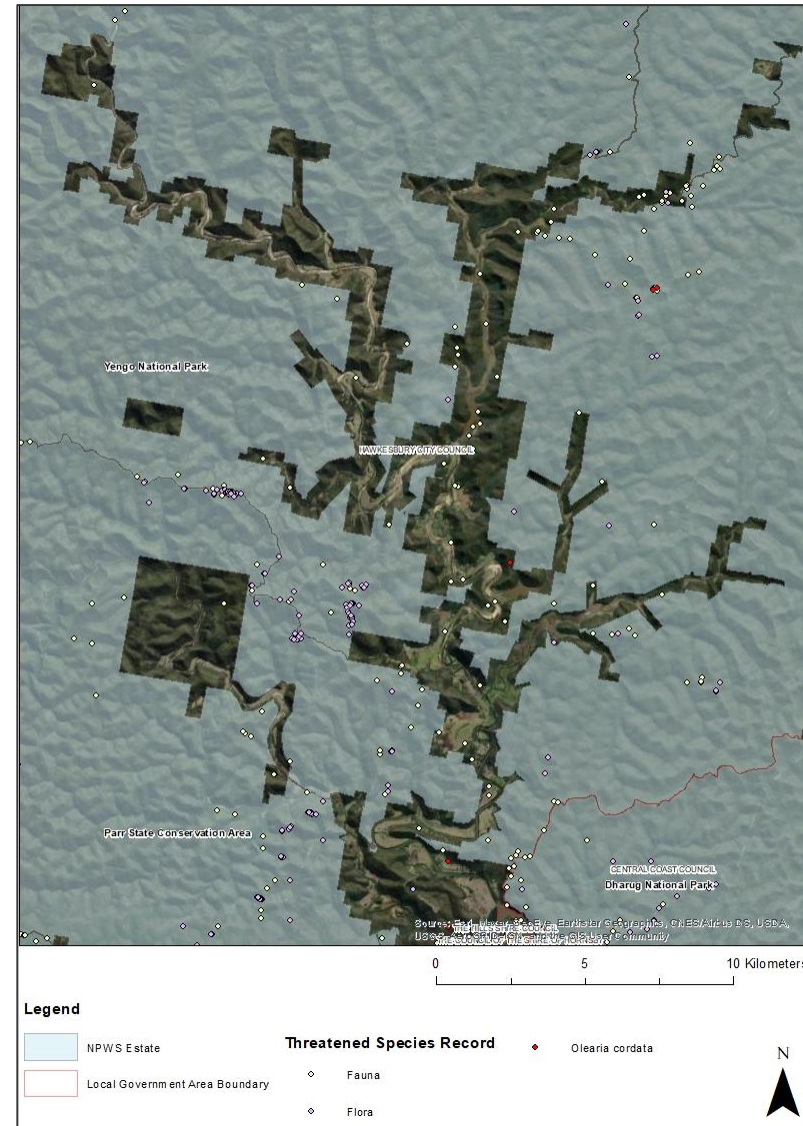
Nineteen (19) records in the Greater Macdonald Valley

Vulnerable status in NSW, Vulnerable status Commonwealth.

Habitat: Grows in dry open sclerophyll forest and open shrubland, on sandstone ridges. Grows in shallow or skeletal soils, on steep to gentle slopes,

Threatening processes:

- Competition from weeds
- Altered fire regimes
- Changed drainage patterns



Olearia cordata

Identification

- Ray florets 10–18, deep blue to mauve.
- Disc florets 33–35, yellow.
- Aromatic, slender shrub growing to 2 m
- The stems and leaves are densely covered with hairs and glands
- Flowers are daisy like and mauve to deep blue with yellow centres
- Leaves alternate, scattered; lamina linear to narrow-lanceolate



Threatened Species Records - MacDonal Valley – *Zieria involuocrata*

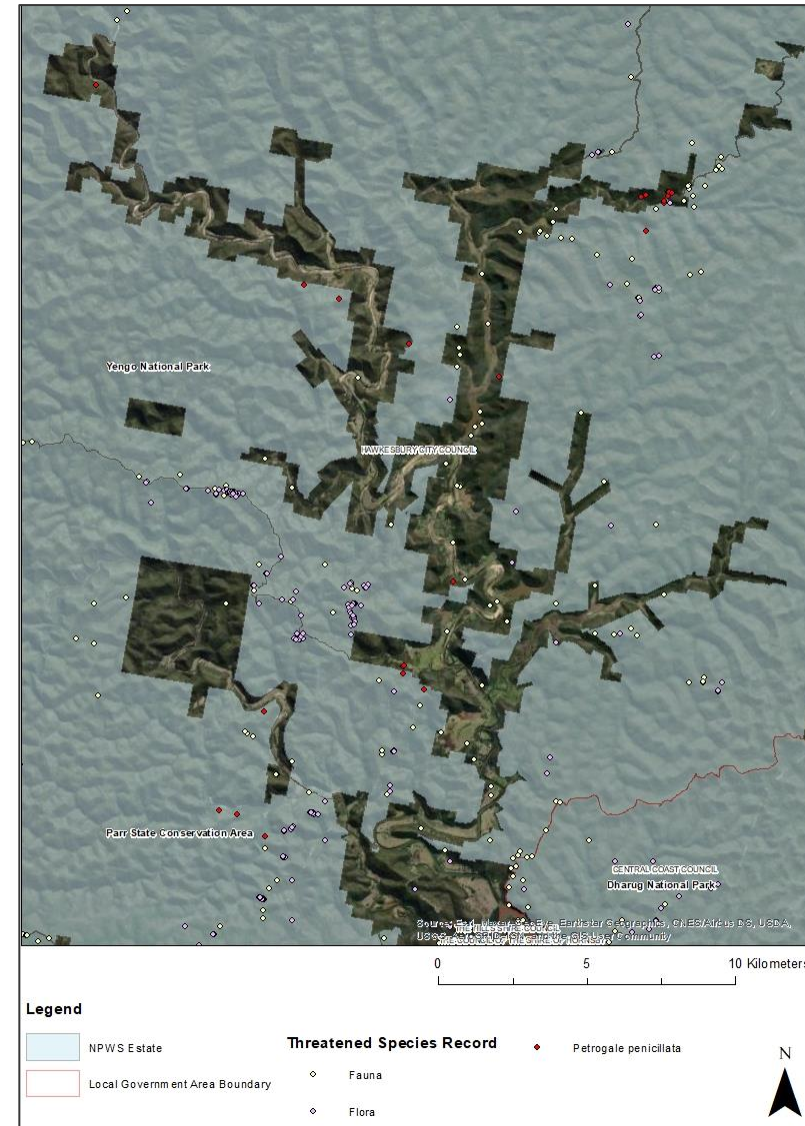
Two-hundred and ninety-eight (298) records in the Greater MacDonal Valley

Endangered status in NSW, Vulnerable status Commonwealth.

Habitat: Found primarily in sheltered forests on mid- to lower slopes and valleys. Occurs primarily on Hawkesbury sandstone.

Threatening processes:

- Habitat destruction
- Altered fire regimes
- Altered flow regimes



Zieria involucrata

Identification

- A small, sparse shrub. 1 – 2 metres in height.
- Branches and leaves are covered with hairs which form a soft, velvety covering.
- Leaves are opposite and consist of either a single leaflet or three leaflets.
- The flower clusters (3 – 21) are shorter than the leaves.
- Flowers are white with pink tinges, and slightly hairy.



Threatened Ecological Communities - Swamp sclerophyll forest on coastal floodplains

Associated with PCT 4057 - Sydney Creekflat Swamp
Mahogany-Paperbark Forest

Endangered Ecological Community in NSW &
Commonwealth.

Habitat: Swamp Sclerophyll Forest is associated with humic
clay and sandy loam soils on waterlogged or periodically
flooded areas.

Characteristic species include:

- Swamp Mahogany (*Eucalyptus robusta*)
- Broad - leaved Paperbark (*Melaleuca quinquenervia*)
- Forest Oak (*Casuarina glauca*)
- Cheese Tree (*Glochidion ferdinandi*)
- Flax – leaved Paperbark (*Melaleuca linariifolia*)



How can I contribute?

Citizen Science – contribute to datasets

* The Australian Museum Frog ID application

- Free phone application that identifies amphibians based on calls.
- Contributes to a nation-wide database of frog calls to document the true species diversity, distributions and breeding habitats of Australian frogs.

* Nature Mapr

- Free phone application/ website where records can be uploaded.
- You can submit photo of plants or animals; you do not need to know the species. Just provide details.

* Inaturalist

- Free phone application/ website where records can be uploaded.
- Similar to Nature Mapr.



How can I contribute?

BCT Conservation land management course

- <https://www.bct.nsw.gov.au/elearning>
- Free online course with no eligibility that covers items including:
 - Monitoring;
 - Supplementary habitat;
 - Hydrology;
 - Pest management

BCT Webinars

- <https://www.bct.nsw.gov.au/events>

Additional Resources

- Tree's Near Me Application
- Atlas of Living Australia
- Community Groups (Facebook ect)

FrogID

Frogs play a crucial role in maintaining healthy ecosystems, and it's essential to support them on our properties. By recording their calls with the Australian Museum's FrogID app, we can contribute to a deeper understanding of frogs and the overall health of our ecosystems.

Scan the QR code to download the FrogID app, register for free, and record frog calls.

Use the "Near Me" filter on FrogID to learn more about local frog species, their habitats, and breeding patterns.

For more information, please visit www.frogid.net.au.

Common farm dam frogs of Greater Sydney

Plant locally native trees and shrubs, creating windbreaks and shade to reduce evaporation and provide refuge for frogs and other wildlife.

Some frogs breed exclusively in flooded grassland patches and temporary water bodies.

Shallow areas support wildlife, including frogs and wading birds.

Floating vegetation and semi-submerged logs provide habitat for tadpoles, frogs, and other wildlife.

Dense native grasses can filter water at the bottom, while sporadically planted trees and shrubs can help stabilize it, providing habitat for frogs.

Frogs of the region

1. Common Eastern Froglet (*Crickia signata*)
2. Eastern Barge Frog (*Limnodynastes dumerilii*)
3. Striped Marsh Frog (*Limnodynastes lineatus*)
4. Spotted Marsh Frog (*Limnodynastes dorsalis*)
5. Green Tree Frog (*Litoria caerulea*)
6. Eastern Dwarf Tree Frog (*Litoria fallax*)
7. Broad-gained Rocket Frog (*Litoria latopalmata*)
8. Heron's Tree Frog (*Litoria genivittata*)
9. Screaming Tree Frog (*Litoria quiritatus*)
10. Nyer's Tree Frog (*Litoria nyer*)
11. Whistling Tree Frog (*Litoria verreauxi*)
12. Orange Burrowing Frog (*Platyspectrum ornatum*)
13. Smooth Toadlet (*Liporhina deweyana*)

Bold = most common
Scientific names current as of August 2023.
For latest information, consult FrogID app or website.

Tip for supporting frogs

- Learn about frogs and their breeding habitats with FrogID.
- Be cautious with chemicals and herbicides, especially during breeding times.
- Create or improve frog-friendly habitats.
- Prevent frog disease spread by cleaning and disinfecting footwear and equipment between habitats.
- Help frog research by submitting FrogID recordings daily or weekly. (Every call counts!)

Frogs a digital tool developed by the Australian Museum, an initiative of the Australian Research Council.

Supporting Partner: NSW Government, Biodiversity Conservation Trust, AUSTRALIAN MUSEUM

Reach the FrogID app's "Explore" tab to discover information about frogs and potential breeding habitats on your property.

What are we doing - EMM

Ecological Monitoring Module (EMM)

BCT's monitoring methodology. How we collect and analyse data to inform evaluation and reporting of ecological outcomes at site, regional and state scales.

Baseline Survey Outcome Report August 2022 available. The outcomes included:

- BCT agreement sites are protecting significantly more critical threatened species and climate refuge habitat than typical sites in the landscape and are also protecting high quality koala habitat.
- The protective value of BCT agreements has resulted in an estimated 9,000 hectares of avoided biodiversity loss.



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Biodiversity Conservation Trust Ecological Monitoring Module Biodiversity Outcomes Report

Baseline | August 2022

Agreement types

We currently offer three types of voluntary private land conservation agreements:

Wildlife Refuge Agreements

Entry level agreement which can be revoked at the request of the landholder (minimum 10 ha)

Conservation Agreement

In-perpetuity agreement (minimum 20 ha)

Biodiversity Stewardship Agreement

In-perpetuity agreement which generates biodiversity credits

We also support landholders with a range of legacy agreements established under former legislation / with previous agencies including:

Wildlife Refuge Agreements

Registered Property Agreements

National Parks and Wildlife Act 1974 Agreements

Nature Conservation Trust Agreements

Bio Banking Agreements

Third party agreements:

If you don't meet the eligibility criteria for BCT agreements, please contact one of our trusted partners to explore alternative conservation options that suit you and your land.



**HUMANE SOCIETY
INTERNATIONAL**
AUSTRALIA



Landcare
New South Wales



Mid Coast 2 Tops
Landcare
Connection



Questions??

