

Threatened Species Conservation

Threatened species in NSW

Australia has experienced a great loss of biodiversity since European colonisation in 1788. Some 125 plant and animal species or subspecies are known to have become extinct – including seven per cent of Australia's known mammal species. This gives Australia the worst mammal extinction rate out of the world's seven continents in the last 200 years.

In New South Wales, threatened species are listed as either presumed extinct, endangered or vulnerable. These include:

- over 40 animal species and over 40 plant species presumed extinct,
- over 60 animal species and over 300 plant species considered endangered,
- over 170 animal species and over 210 plant species considered vulnerable.

Listing of threatened species

The *Threatened Species Conservation Act 1995* (TSC Act) protects all threatened plants and animals native to NSW. It provides for the identification, conservation and recovery of threatened species, endangered ecological communities, endangered populations and vulnerable ecological communities.

How does this effect Private Native Forestry

Private Native Forestry, through the harvesting and removal of trees, construction of roads, disturbance to understorey plants, ground logs and leave litter, may impact on threatened species and their habitat. The level of impact depends on factors such as the extent, intensity and cutting cycle frequency of harvesting, the season in which harvesting occurs, the location of harvesting within the landscape (e.g. near a stream or wetland), and the sensitivity, response and recoverability of any threatened species to disturbance.

Impacts can be direct, such as removal or damage to a threatened plant, or indirect, such as the removal of a hollow-bearing tree and subsequent loss of nesting or breeding hollows for threatened animals such as the Powerful Owl or Yellow-bellied Glider.

Measures aimed at protecting threatened species and biodiversity during forestry operations are targeted at three levels:

- the landscape approach where individual areas of high habitat value, such as forests adjoining streams (riparian corridors), rainforests, old growth forests, rocky outcrops, cliffs and caves are set aside from harvesting;
- site specific tree retention measures such as retention and protection of individual habitat trees, feed trees and roost, nest and food resource trees within the net harvest area; and
- individual threatened species prescriptions, such as additional feed tree retention or protection of specific habitat areas, triggered by the presence of a threatened species within or adjoining the net harvest area.



Shane Ranning

Threatened plant - *Boronia umbellata*

These measures are not aimed, *per se*, at protecting every individual animal or plant within a threatened species population, but seek to provide sufficient protection of key habitat and foraging resources to allow populations to remain viable and persist in perpetuity. This is essential to the maintenance of biodiversity.

Identification of threatened species

Over 900 plant and animal species in NSW have been listed as threatened. The lists of threatened species can be viewed on the Department of Environment and Climate Change (DECC) website. Identification of these threatened species in the landscape can be difficult and often requires specialised botanical or ecological skills. For example, many threatened animals are secretive and only emerge at night. The following are ways to help investigate whether threatened species occur on your property.



Identification of threatened species – helpful information

Species Records

You can make a search of threatened species records for your locality through the NPWS Wildlife Atlas Records Database which can be accessed on the DECC website. This atlas contains recorded sightings of plants, mammals, birds, reptiles, amphibians and endangered invertebrates in NSW. Not all the information associated with the individual records is available on the website, however you can apply to the DECC for more detailed information about individual sightings (terms and conditions apply). This information will give you a guide as to what threatened animals and plants have been recorded in the locality and may be expected to occur on your property, if suitable habitat exists. It should be noted, however, that this is only an indicative list of what has been surveyed and recorded and is not a comprehensive record of what threatened species may actually occur.

The screenshot shows the 'Search the Atlas of NSW Wildlife' web page. It features a search form with three main sections: 1. 'Plants or animals?' with radio buttons for 'Animals' and 'Plants'; 2. 'How many Species?' with radio buttons for 'All species', 'Threatened species', 'A class of species only?', and 'Just one species?'; 3. 'Period of records?' with radio buttons for 'All records' and 'Records since 1992'. There is also a 'What area?' section with a dropdown menu and a 'Search the atlas!' button. The page includes logos for BioNet, NSW National Parks & Wildlife Service, and the Natural Heritage Trust.

The DECC website for the Wildlife Atlas is: <http://wildlifeatlas.nationalparks.nsw.gov.au/wildlifeatlas/watlas.jsp>

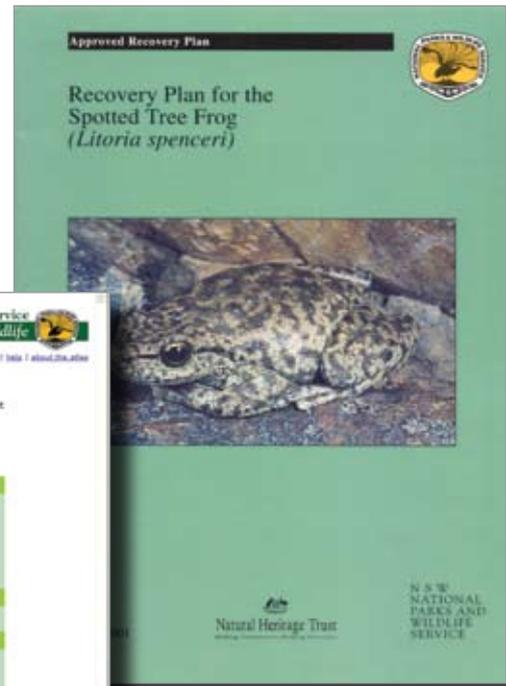
Species Profiles

You can get more details of a particular species by checking the threatened species profiles found on the DECC website. Over 100 threatened species profiles can be investigated, showing you what the species looks like as well as information on species distribution, habitat, ecology and threats. The profiles also explain what steps are being taken to help the recovery of the species. Refer to DECC website at <http://www.threatenedspecies.environment.nsw.gov.au/index.aspx>

Species Recovery Plans

A number of Recovery Plans for Threatened Species have been approved. These plans provide information on recovery actions for individual species. Recovery Plans may be viewed on the DECC website (refer to PNF Advisory Note 14).

DECC Threatened Species website allows a user to search for individual threatened species.



Other Information

If you do not have access to the web, you can contact DECC or a specialist fauna or flora consultant who can provide advice on threatened species in your locality.

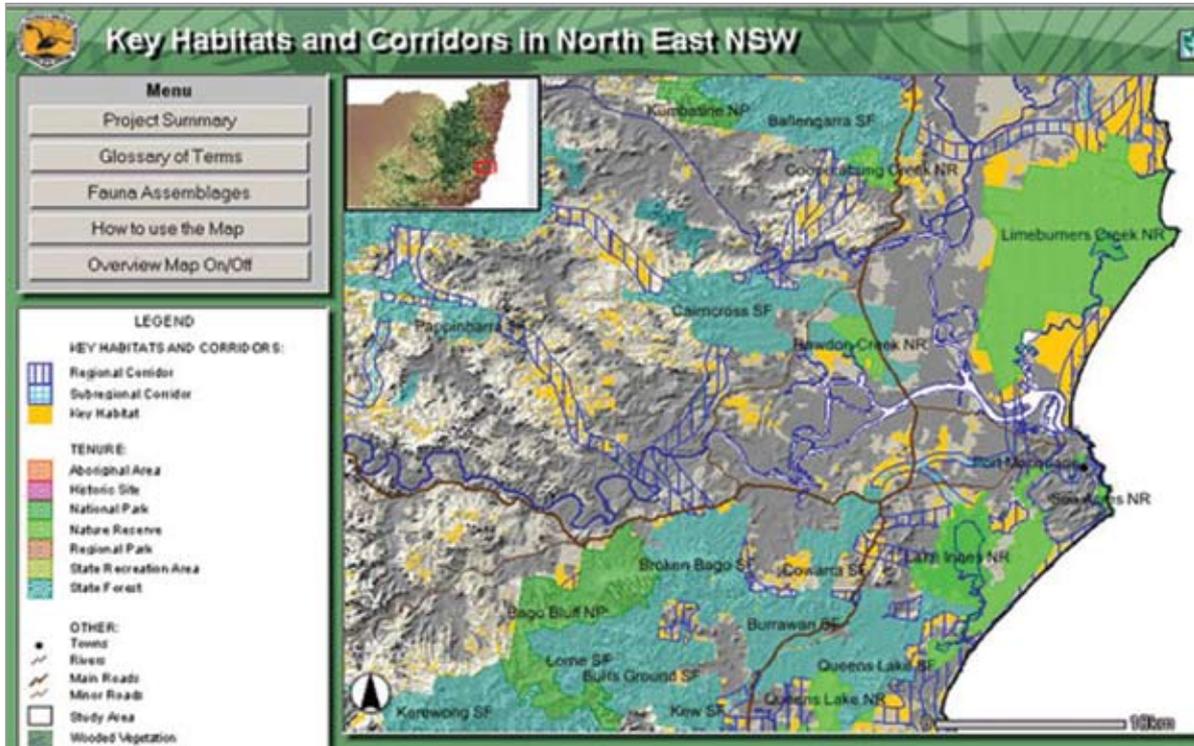
Useful Websites

- Threatened Species Network www.wwf.org.au/tsn
- Australian National Botanical Gardens www.anbg.gov.au
- Environment Australia www.ea.gov.au
- Greening Australia www.greeningaustralia.org.au
- Birds Australia www.birdsaustralia.com.au
- Community Access to Natural Resource Information www.canri.nsw.gov.au

Key Habitats and Corridors

The Department of Environment and Climate Change (DECC) has mapped at a regional scale Key Habitats and Corridors in northern NSW to provide a framework of key fauna habitats and linking habitat corridors. Key habitat and corridor maps and the data used in this project are available through the CANRI website at www.canri.nsw.gov.au. This website allows the user to interrogate the Key Habitats and Corridors mapping and access other information such as the project summary and key fauna species profiles. Refer also Natural Resources Management Advisory Series Note 15 - Wildlife Corridors on the DEC website at:

http://www.nationalparks.nsw.gov.au/PDFs/landholder_notes_15_Wildlifecorridors.pdf



Example of the CANRI website information

DECC website for threatened species profiles: <http://www.threatenedspecies.environment.nsw.gov.au/index.aspx>

How does this affect Private Native Forestry

The conservation and recovery of threatened species, endangered ecological communities and endangered populations requires a cooperative approach across all land tenures and landscapes.

With respect to Private Native Forestry, the protection of threatened species, endangered ecological communities and endangered populations is provided through both a broader landscape approach where individual areas of high habitat value are required to be set aside from harvesting, and through the provision of site specific tree retention measures and individual threatened species prescriptions triggered by the presence of a threatened species within or adjoining the net harvest area.

Listed Species Ecological Prescriptions

These are individual threatened species prescriptions that must be applied within the harvesting area where there is a known record (sighting or record on the NSW Wildlife Atlas), or evidence or sign of presence (e.g. faecal pellet (scat), latrine site, nest, chewed seed cones etc.) of a threatened species. Primarily, the prescriptions require either an additional width to existing stream exclusion zones, exclusion or buffer zones around the threatened species record, particularly for plants, or addition retention of hollow-bearing trees or feed trees in the area surrounding the record.

Where private native forestry areas adjoin public lands, the area (or part of this area) required by the prescription to be protected may be taken up in the public lands if it can be demonstrated that the species has been protected and the conditions of the relevant Threatened Species Licence or Integrated Forestry Operation Agreement have been met.

Protection of habitat

- Exclude stock (or reduce stocking numbers) from areas of remnant native vegetation. This will protect and enhance understorey species, allow for natural regeneration and reduce soil compaction.
- Protect native vegetation along gullies, watercourses, ridges and other steep lands.

- Promote regeneration or revegetate areas with locally occurring native species to enhance and provide links between remnant native vegetation.
- Avoid removing older and dead standing trees, fallen timber and logs and ground cover such as rocks as they provide important habitat for threatened species.
- Help control feral animals and management of invasive weeds and control domestic pets.
- Seek advice when considering “burning off” to minimise impacts on native plants and animals.



Koala

John Turbill

Applying buffers to sensitive habitats

- Applying a vegetated buffer zone to sensitive vegetation types and threatened species habitat areas (rock outcrops, hollow-bearing trees, nest trees, feed trees etc.) is an important management action in helping to ensure the long-term survival and recovery of threatened species.
- Buffers may range from riparian strips of 20m either side of streams and gullies to larger buffers of several hundred metres or more surrounding key habitat features such as nest trees or specific records of sensitive species.

Further Reading

- DECC: www.environment.nsw.gov.au

