

TURPENTINE–IRONBARK FOREST OF THE SYDNEY BASIN BIOREGION

Before European settlement, forest, woodland and heathland ecological communities, including the Turpentine–Ironbark Forest of the Sydney Basin Bioregion, covered the Sydney region. This ecological community is now restricted to small bushland remnants nestled amongst the suburbs of Sydney and the Blue Mountains.

The Turpentine–Ironbark Forest is listed as a critically endangered ecological community under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). It is also recognised as two separate endangered ecological communities in New South Wales listed under the *Threatened Species Conservation Act 1995*. The NSW-listed ecological communities are known as the Sydney Turpentine–Ironbark Forest and the Blue Mountains Shale Cap Forest.

What is the Turpentine–Ironbark Forest of the Sydney Basin Bioregion?

The Turpentine–Ironbark Forest typically occurs in moderately wet sites, with an annual rainfall of 800–1100 mm per year, and on clay soils derived from Wianamatta shale. The forest has several vegetation layers in its undisturbed state. The tree canopy is dominated by Turpentine and a variety of eucalypt species, depending on location in the landscape. Smaller trees and shrubs grow underneath the tree canopy. The vegetation on the ground is a mix of herbs and grasses.

Typical plant species found in the Turpentine–Ironbark Forest are listed in the table. The list is not exhaustive and not all of the species listed will occur in every patch of Turpentine–Ironbark Forest.

Many patches of Turpentine–Ironbark Forest have become degraded with the remaining ecological community now embedded within an urban environment. The listed ecological community includes patches with an intact vegetation structure, a tree canopy cover greater than 10%, and an area greater than one hectare. Patches with less than 10% tree canopy cover are also included if they are more than one hectare in size and are part of a native vegetation remnant larger than five hectares.

Typical plant species

Dominant trees

Narrow-leaved Ironbark (*Eucalyptus crebra*)
Mountain Grey Gum (*Eucalyptus cypellocarpa*)
Round-leaved Gum (*Eucalyptus deanei*).
Red Ironbark (*Eucalyptus fibrosa*)
Mountain Mahogany (*Eucalyptus notabilis*)
Grey Ironbark (*Eucalyptus paniculata*)
Grey Gum (*Eucalyptus punctata*)
Sydney Blue Gum (*Eucalyptus saligna*)
Turpentine (*Syncarpia glomulifera*)

Small trees and shrubs

Parramatta Wattle (*Acacia parramattensis*)
Breyenia (*Breyenia oblongifolia*)
Prickly Beard-heath (*Leucopogon juniperinus*)
Narrow-leaved Orangebark (*Maytenus silvestris*)
Mock Olive (*Notelaea longifolia*)
White Dogwood (*Ozothamnus diosmifolius*)
Rough-fruit Pittosporum (*Pittosporum revolutum*)
Sweet Pittosporum (*Pittosporum undulatum*)
Elderberry Panax (*Polyscias sambucifolia*)
Native Peach (*Trema aspera*)

Grasses and herbs

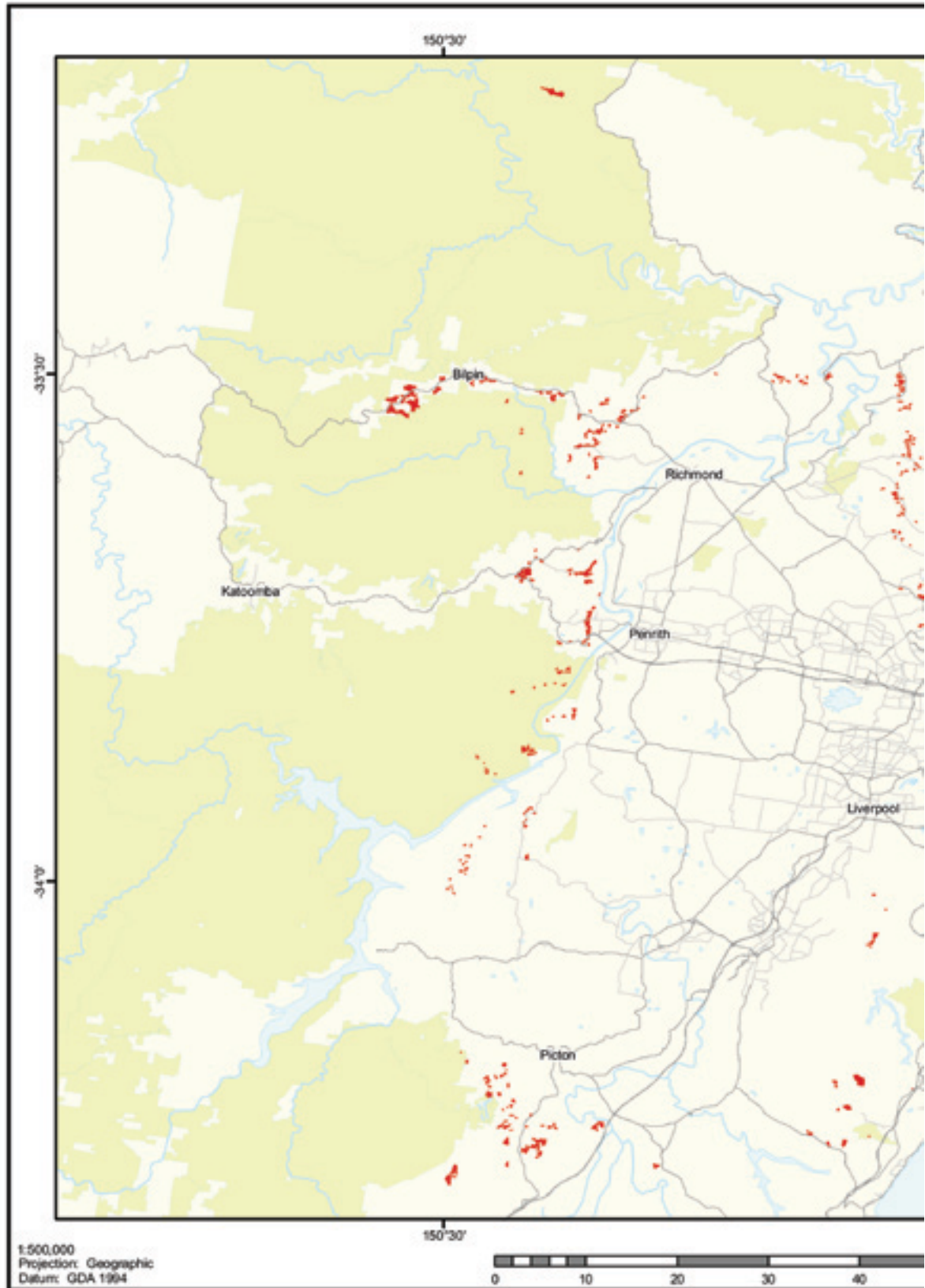
Forest Hedgehog-grass (*Echinopogon ovatus*)
Weeping Grass (*Microlaena stipoides*)
Basket Grass (*Oplismenus aemulus*)
Pastel Flower (*Pseuderanthemum variabile*)
Kangaroo Grass (*Themeda triandra*).

Where does the Turpentine–Ironbark High Forest occur?

The Turpentine–Ironbark Forest occurs mainly on the Cumberland Plain of the Sydney region, with patches extending onto the adjoining plateaux. It is known from the Local Government Areas of Auburn, Bankstown, Baulkham Hills, Blue Mountains, Campbelltown, Canterbury, Concord, Hawkesbury, Hornsby, Kogarah, Ku-ring-gai, Lane Cove, Liverpool, Parramatta, Penrith, Ryde, Sutherland, Wingecarribee, Wollongong and Wollondilly.



Nationally threatened species and ecological communities





Turpentine - Ironbark Forest of the Sydney Basin Bioregion

This is an indicative map only and it is not intended for fine scale assessment.

Legend

- Ecological Community Likely to Occur
- Conservation Reserves
- Lakes, Wetlands and Rivers
- Roads

Source:

The distribution of areas where Turpentine - Ironbark Forest of the Sydney Basin Bioregion is likely to occur is from the Native Vegetation Maps of the Cumberland Plain Western Sydney, Final Edition, NSW National Parks & Wildlife Service (2002), Community Id 15 & 43. The following attributes were mapped from the 'Poly Code' field: 'A', 'B', '3A' where their area is 1 ha or more.

Additional areas outside the Cumberland Plains mapping were derived from (where their area is 1 ha or more):

National Vegetation Information Systems (NVIS) - Pre-European and Present Native Vegetation (All Data - Stage 1, Version 2 (2003), the following attributes were mapped from the 'Source_des' field: 9a - Shale Cap Forest, 9c - Ironbark Forest & 9o - Turpentine - Ironbark Forest.

NSW Department of Infrastructure, Planning and Natural Resources - Native Vegetation Map Report Series 4 mapsheet: Parrish and Wollongong. The following veg unit was hand digitized: WSP 47 - Sydney Turpentine Ironbark Forest.

City of Blue Mountains - Vegetation Communities of the Blue Mountains 1999-2002. The following attributes were mapped from the 'COMCODE' field: 2b - Blue Mountains Shale Cap and 2c - Turpentine - Ironbark Forest.

Conservation Reserves from the Department of the Environment and Heritage, Collaborative Australian Protected Areas Database (CAPAD 2000).

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caveat:

The information presented in this map has been provided by a range of groups and agencies. While every effort has been made to ensure accuracy and completeness, no guarantee is given, nor responsibility taken by the Commonwealth for errors or omissions, and the Commonwealth does not accept responsibility in respect of any information or advice given in relation to, or as a consequence of, anything contained herein. The map has been collated from a range of sources, with data at various resolutions. Data used are assumed to be correct as received from the data suppliers.

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The Native Vegetation of the Cumberland Plain data has limitations which are described in the New South Wales National Parks and Wildlife Service (2002) Interpretation Guidelines for the Native Vegetation Maps of the Cumberland Plain Western Sydney, Final Edition, NSW NPWS, Hurstville.

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Photography credits

Front cover and page 2
(top to bottom):

Turpentine-Ironbark Forest
(Sutherland Shire Council),
Narrow-leaved Orangebark
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Botanic Gardens), Parramatta
Wattle (A. McWhirter © Australian
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Page 3 (top to bottom):

Elderberry Panax (© M. Fagg,
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Above:

White Dogwood (D. Greig ©
Australian National Botanic
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Forest (Sutherland Shire Council)

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Why is the Turpentine–Ironbark Forest included on the list of nationally threatened ecological communities?

Over 200 years of intensive land use in the Sydney Basin Bioregion has severely affected the Turpentine–Ironbark Forest. Most of the forest has been cleared. Less than 5% of the original forest is intact and retains the structural integrity of the vegetation. Existing remnants continue to be threatened by clearing and weed invasion.

National listing of the Turpentine–Ironbark Forest aims to prevent its further decline. The listing will help land managers, community groups and other organisations in their efforts to protect and recover the ecological community.

The Australian Minister for the Environment and Heritage decided to list the Turpentine–Ironbark Forest after considering advice from the Threatened Species Scientific Committee. The Committee is an independent scientific body that advises the Minister on the conservation status of native species and ecological communities.

What does the listing of the Turpentine–Ironbark Forest mean for land managers?

National listing means that activities likely to have a significant impact upon the Turpentine–Ironbark Forest should be referred to the Minister for assessment and approval (unless they are subject to an exemption under the EPBC Act). Significant impacts may involve, but are not restricted to, clearing vegetation at a site.

Making a referral under the EPBC Act is easy.

Just complete and submit the relevant form from the Department of the Environment and Heritage (see details below). Based on your referral, the Minister will determine if assessment and approval is required. If approval is not required then you can proceed with the action, as described in your referral. If approval is required, the EPBC Act ensures that the assessment and approval process is undertaken in a timely manner.

The EPBC Act allows for some exemptions to the requirement for assessment and approval. This means that some activities may not need an assessment or approval if you meet certain requirements. Information on exemptions can be found at: www.deh.gov.au/epbc/publications/exemptions.html.

What are the conservation priorities for the Turpentine–Ironbark Forest?

Priority conservation actions that can assist in the recovery of the Turpentine–Ironbark Forest are to:

- prevent further clearing or fragmentation of the ecological community
- manage weed infestations
- identify and fence important remnants to minimise adverse impacts *and*
- rehabilitate degraded remnants.

You may also wish to participate in the development and implementation of your region's Natural Resource Management Plan. In this case, contact the Sydney Metro Catchment Management Authority through their web site at: www.dipnr.nsw.gov.au/nvrig/sydney_metro.html.

Is funding available to help conserve the Turpentine–Ironbark Forest?

Since 1996, the Australian Government has provided over \$770 000 of funding to help protect remnants of the Turpentine–Ironbark Forest. Local community groups and councils have used the funding to enhance these valuable remnants by replanting native species, removing weeds, and maintaining wildlife and vegetation corridors.

Further funding is available for projects to protect and recover nationally threatened species and ecological communities.

- Information about the Threatened Species Network community grants is available at: www.wwf.org.au/tsn.
- Information about Envirofund grants is available at: www.nht.gov.au/envirofund.

Where can I get further information?

Further information is available from the Department of the Environment and Heritage.

- EPBC Act web site: www.deh.gov.au/epbc
- EPBC Act Administrative Guidelines on Significance: www.deh.gov.au/epbc/assessmentsapprovals/guidelines/index.html
- Referral form: www.deh.gov.au/epbc/assessmentsapprovals/referrals/form.html
- Community Information Unit: free call 1800 803 772

Further information on endangered ecological communities and vegetation management laws in NSW is available from the NSW Department of Environment and Conservation:

- www.environment.nsw.gov.au/index.htm and the NSW Department of Infrastructure, Planning and Natural Resources:
- www.dipnr.nsw.gov.au/index.html.