ENDANGERED ECOLOGICAL COMMUNITY INFORMATION

Blue Gum High Forest

Conservation Status

Blue Gum High Forest is listed as an endangered ecological community under the *Threatened Species Conservation Act* 1995.



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Description

Blue Gum High Forest is a moist, tall open forest community. Its dominant canopy trees are Sydney blue gum (Eucalyptus saligna) and blackbutt (E. pilularis). trees include forest oak (Allocasuarina torulosa) and gum Sydney red (Angophora costata). Understorey plants prickly include beard heath (Leucopogon juniperinus), narrowgeebung leaved (Persoonia linearis) and hop bush (Dodonaea triquetra). In moist rainforest species, such as cheese tree (Glochidion ferdinandi) and lillypilly (Acmena smithii) are common and the understorey is dominated by ferns, such as soft bracken (Calochleana dubia) and maiden hair (Adiantum aethiopicum).

Distribution

Blue Gum High Forest is restricted to the high rainfall ridgelines on the northern side of Sydney from Crows Nest to Hornsby and extends west along the ridges between Castle Hill and Eastwood. Blue Gum High Forest occurs in the Hornsby, Kuringai, Willoughby, Baulkham Hills and Parramatta local government areas.

Examples to see

Blue Gum High Forest can be seen at the Dalrymple-Hay Nature Reserve, St Ives.

Ecology

Blue Gum High Forest occurs only in areas where rainfall is high (above 1100 millimetres per year) and the soils are relatively fertile and derived from Wianamatta shale. In lower rainfall areas, it grades into turpentine-ironbark forest. The rainforest understorey species rely on birds and mammals to disperse their seeds and are vulnerable to fire. Along the drier ridgelines, fire would have been more frequent and an important factor in maintaining understorey diversity.

Threats

There is now only 4.5% of the original extent of Blue Gum High Forest and the small remnants that remain are highly vulnerable to further fragmentation (NPWS 2002a, NPWS 2002b). Other threats come from development and increased nutrients, mowing and clearing. Absence of fire has resulted in the dominance of *Pittosporum undulatum* in the understorey and the long-term loss of other species. Where natural



NSW NATIONAL PARKS AND WILDLIFE SERVICE bushfire cycles cannot be reinstated, *Pittosporum* may be controlled to maintain species diversity.

Recovery and management

The recovery of this ecological community is being addressed as part of the Cumberland Plain Endangered Ecological Communities Recovery Plan, which is currently being prepared.

Because the original extent of Blue Gum High Forest has been greatly reduced, high conservation value remnants will be identified in the recovery plan and recommended for protection through a range of mechanisms including reservation, environmental protection zoning and development control processes. Other protection measures can be through plans of management and voluntary conservation agreements. These measures will enable the remnants to be better managed for conservation and vegetation corridors to be formed. Bush regeneration strategies also to be developed need implemented for Blue Gum High Forest. Canopy trees need to be regenerated as many original trees are ageing. The edges of remnants need to have weeds controlled and natural regeneration to occur. Fire should be used to control some species and stimulate natural regeneration.

For further information contact

Central Threatened Species Unit, NSW Department of Environment and Conservation, PO Box 1967, Hurstville NSW 2220 Phone 02 9585 6678. www.nationalparks.nsw.gov.au

References

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NPWS (2002b) Interpretation Guidelines for the Native Vegetation Maps of the Cumberland Plain, Western Sydney, Final Edition, NPWS, Sydney.

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