



Shale Sandstone Transition Forest

Conservation Status

Shale-Sandstone Transition Forest is listed as an endangered ecological community under the *Threatened Species Conservation Act 1995* and the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999*.



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Description

Shale-Sandstone Transition Forest occurs at the edges of the Cumberland Plain where shale rock and clay soils gradually change to sandstone. The boundaries of this plant community are indistinct. The main tree species are forest red gum (*Eucalyptus tereticornis*), grey gum (*E. punctata*), stringybarks (*E. globoidea*, *E. eugenioides*) and ironbarks (*E. fibrosa* and *E.*

crebra). There are two forms of Shale-Sandstone Transition Forest: low sandstone influence and high sandstone influence. The high sandstone influence form includes sandstone species, such as tick bush (*Kunzea ambigua*) and narrow leaved geebung (*Persoonia linearis*), and is most widespread in the southern section of the Cumberland Plain. The low sandstone influence form has an understorey layer that is closer to Cumberland Plain Woodland and includes shrub layer dominated by blackthorn (*Bursaria spinosa*) with grasses, such as kangaroo grass (*Themeda australis*), hedgehog grass (*Echinopogon ovatus*), and other herbs, such as *Dichondra repens*.

Distribution

Before European settlement, Shale-Sandstone Transition Forest was extensive at the edges of the Cumberland Plain and covered 43,990 hectares. Today, it is reduced to 22.6 percent of its original extent in an area bounded by Sackville (north), Mulgoa (west), Wilton (south) and Revesby (east) (NPWS 2002a, NPWS 2002b).

Shale-Sandstone Transition Forest occurs in the Bankstown, Baulkham Hills, Blacktown, Campbelltown, Hawkesbury, Liverpool, Parramatta, Penrith, Sutherland and Wollondilly local government areas.

Examples to see

Good examples of Shale-Sandstone Transition Forest can be seen at Bents Basin Reserve, Scheyville National Park, Parramatta

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Ecology

Shale-Sandstone Transition Forest is well adapted to fire, being on the edges of the Cumberland Plain, often close to sandstone areas. Some species in shale areas regenerate from profuse annual seeding and underground tubers. High sandstone influence sites have poor rocky soils that support a diverse shrub layer, including wattle and pea flower species that rely on nitrogen fixing root nodules and soil/root fungi to obtain nutrients.

Threats

The greatest threat to Shale-Sandstone Transition Forest is clearing for agriculture and urban/rural residential development. Other threats include grazing, mowing, rubbish dumping, weed invasion and frequent fire.

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 drafted.

High conservation value remnants of Shale-Sandstone Transition Forest will 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. All vegetation layers should be maintained as the removal of the understorey followed by slashing/mowing encourages weeds. Once threatening processes, such as grazing and mowing are removed, Shale-Sandstone Transition Forest can regenerate strongly. Wattle and pea species have seeds that can persist in the soil seedbank and, following fire, will colonise disturbed margins. Woody weeds should be controlled to prevent them dominating the understorey.

For further information contact

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References

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