

# Poplar Box & Belah Woodland Regional Ecosystem 11.3.17



## Technical Information

**Description:** Poplar box *Eucalyptus populnea* woodland with clumps of belah *Casuarina cristata* and/or brigalow *Acacia harpophylla* and often an understorey of tall shrubs eg. wilga *Geijera parviflora* on alluvial plains.

**Protected areas:** No representation in national parks.

**Comments:** Occurs in the southern part of bioregion. Has been extensively cleared or thinned for cropping and pasture. This ecosystem is often an ecotone and tends to merge with poplar box *Eucalyptus populnea* shrubby woodland.

**Estimated extent:** About 10% remains of an estimated preclearing area of 590 000ha.

**Conservation status:** Endangered.

## Habitat values

Poplar box is an important hollow forming tree in southern inland Queensland and provides homes for a vast array of animals. Eleven of Australia's fifteen possum and glider species need hollows, as do one in five birds including parrots and raptors. Hollows also provide shelter for species of bats, reptiles and frogs.

Species that prefer these eucalypt woodlands with denser vegetation and a shrubby understorey include reptiles like the common scaly-foot *Pygopus lepidopodus* and bearded dragon *Pogona barbata*, birds such as the white-throated tree creeper *Cormobates leucophaeus*, red-winged parrot *Aprosmictus erythropterus* and red-backed fairy-wren *Malurus melanocephalus* and mammals such as the common dunnart *Sminthopsis murina*, swamp wallaby *Wallabia bicolor* and yellow-bellied sheath-tail bat *Saccolaimus flaviventris*. Poplar box is also a food tree for the koala *Phascolarctos cinereus*.

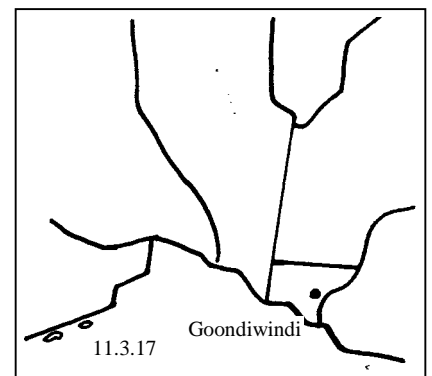


Photo: Qld Parks and Wildlife Service

*The red-backed fairy-wren Malurus melanocephalus favours shrubby woodlands.*

## Did you know....

- This regional ecosystem is endangered and has declined as a result of clearing for cropping and pasture
- Poplar box is a major hollow forming tree species in southern Queensland
- Belah is a deep rooted and salt tolerant species and its removal may increase salt levels in sub-artesian water



**Locations in Province 36:** Take the Barwon Highway west of Goondiwindi for 15.6km from the Autopro roundabout. Turn left onto Callandoon Rd to Broomfield. This RE is 7.2 and 8.5km from the Highway on left. Also found on Moorooobie Road. Take the Kildonan Rd out of Goondiwindi. Turn left onto Moorooobie Rd 5.1km from the roundabout. This RE is on the right 2.7km from Kildonan Road.



Photo: Qld Parks and Wildlife Service

*Swamp wallabies* *Wallabia bicolor* seek refuge in the understorey of these denser woodlands.

### Production values

Poplar box flowers are a moderate source of nectar and a minor source of pollen for bees. However, because the flowering pattern of this species is unreliable it is not highly valued by apiarists (Anderson 1993).

Belah and brigalow are deep rooted and salt tolerant species. Removal of this ecosystem could lead to increased salt levels in sub-artesian water.

Belah is a useful fodder tree for sheep and cattle during drought. Wilga is also a good source of fodder of high nutritional value for stock. The flowers are regarded as a moderate supplier of pollen, but minor source of nectar and produce a dark, strong-flavoured honey (Anderson 1993).



Photo: Queensland Herbarium, QPWS.

*Flowers of wilga* *Geijera parviflora*.

### Further reading:

Anderson E. (1993). *Plants of central Queensland - their identification and uses*, DPI QLD Government, Brisbane, QLD.

Boland D.J., Brooker M.I.H., Chippendale G.M., Hall N., Hyland B.P.M., Johnston R.D., Kleinig D.A. and Turner, J.D. (1984). *Forest trees of Australia*, Nelson - CSIRO, Melbourne, Vic.

Dorrcott K., Voller P. and Lawrie B. (1998). *Balancing production with nature conservation - case studies from southern inland Queensland*. Department of Environment, Brisbane, QLD.

### Management notes

While belah is an invasive species and often regenerates and invades other vegetation communities, stands of old growth belah (that may be over 200 years old) are rare and this poplar box and belah woodland ecosystem is endangered. The structure of these old growth communities is important, with the different layers of vegetation providing habitat for different wildlife species. Regrowth has some value and can be used to generate connections between old growth stands.

How close an area of bushland is to other areas of natural vegetation is important in conserving diversity of plants and animals. Many species need continuous or near-continuous areas of habitat for breeding and for re-colonising areas after disturbances such as fire, drought or human activity. Small species in particular are not able to cross large expanses of unsuitable habitat.

Wherever possible, remnants of this endangered ecosystem should be connected to other patches of remnant vegetation. This aids in the movement and dispersal of wildlife and also provides improved windbreaks. Connecting remnant vegetation patches to strips of vegetation retained along watercourses has enormous value for wildlife and can provide a network of retained native vegetation across the catchment.

The size of an area of retained vegetation will influence its value for nature conservation. A larger area will generally contain more species of wildlife and more individuals than a smaller area of the same vegetation type. Larger areas are also more likely to survive in the long term because

they are less susceptible to damage by fire, wind exposure or tree dieback.

Shape is important as, for any given area of vegetation, the shape with the smallest perimeter or edge length is least affected by outside disturbances. These disturbances, known as "edge effects", can impact on remnants for 20m or more inwards from the perimeter, reducing the effective size of the patch wildlife habitat. Long narrow areas are the most susceptible. The closer an area of bushland is to a square or a circle, the better are its chances of long-term survival.

Considering these principles in the retention of native vegetation and the design of windbreaks and shadelines can greatly increase the value of a property for nature conservation.

Photo: Qld Parks and Wildlife Service



*The bearded dragon* *Pogona barbata* is a reptile found in forests and woodlands that shelters under low vegetation.

### For further information contact:

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