

## *Eucalyptus albens*

*Eucalyptus albens* is a tree to 25 m high. The bark is grey with whitish patches, fibrous-flaky ('box-type'), persistent on the full trunk, smooth above, grey, shedding in short ribbons [10]. The trunk may reach a diameter of 50-100 cm [13]. *E. albens* has large grey to glaucous juvenile leaves, dull greyish to glaucous adult leaves and elongated usually glaucous buds.

The specific name *albens* comes from Latin *alba* meaning white, referring to the general whitish appearance of the tree and the white wax on the flower buds and fruits [3, 9, 12], hence the common name of White Box [9].

Population map: [www.ala.org.au/explore/species-maps/](http://www.ala.org.au/explore/species-maps/)

### Natural Populations

*Eucalyptus albens* is a small to medium-sized box tree occurring from south-eastern Qld, through the western slopes of NSW and Vic, with a small population near Melrose in the southern Flinders Range of SA [10].

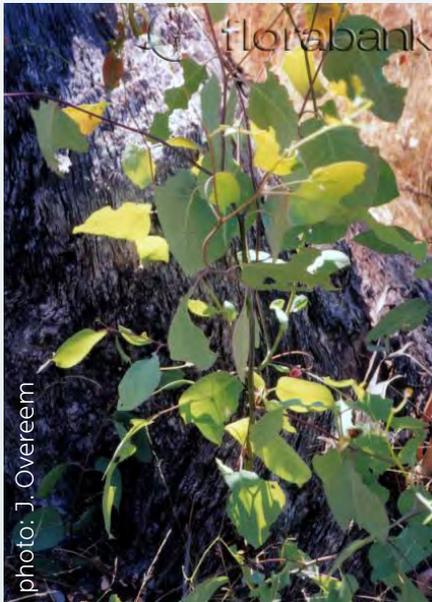
*E. albens* is widespread and often the dominant tree species [3, 10]. It grows in grassy or sclerophyll woodlands on a range of soils, usually of higher fertility, on gentle slopes and plains, broad shallow valleys and on the lower slopes of hills and mountains [13, 14].

The glaucous buds and juvenile leaves distinguish it from other box trees. In addition it occurs on more elevated, stony sites than does the related box tree *E. microcarpa* [9, 12].

The apparent rarity of *E. albens* at high altitude has been explained by assuming an intolerance to low

temperatures [8]. However, it was recorded at altitudes up to 925 m a.s.l. near Orange but at lower altitudes further south [8].

Although *E. albens* is a widespread and common tree within its range, the grassy woodland community of which it forms one of the overstorey species is highly endangered, with only 0.05% of its original distribution still intact [15, 16].



## Flowering and Seeds

Flower buds appear in November and December and are carried for 5-10 months [4]. Flowers are creamy-white [3], and usually found from April to November, the period varying with the season and locality [4]. Heavy flowering usually occurs every 2-3 years [3, 4, 7], but variations in rainfall and other seasonal factors may mean suitable flowering occurs in most years in part of the species' range [4].

Seed collection can be undertaken throughout year, although summer and autumn is best [3].

Collect the woody fruits as they turn from green to brown. Place in a dry spot in a paper bag or on paper sheets and fruit should open to release seeds and chaff. Shake bunches of fruits to release all seeds. Sieve to remove capsules etc and store cool and dry [1].

Material shedded from the capsules includes both viable seeds (only a few per capsule) and 'chaff' (infertile seeds), which usually exists in greater quantities than seeds. Seeds

are usually various shades of brown, while chaff is dry, woody and usually tan brown. Generally, the chaff is not separated from seed, even with commercial seed lots [5].

## Cultivation and Uses

Propagation is from seed (235-630 viable seeds per gram [6]), which germinates best at 25 °C [3]. Fresh seed germinates readily [2]. As a general rule, only 20-25 % of seeds produce a vigorous seedling suitable for pricking out [6].

The species establishes reasonably well when direct seeded [3]. Generally 10-60 grams of seed is required per kilometre to achieve a natural bush effect [6].

*E. albens* is useful for medium to high-level cover in windbreaks. It provides excellent shade for livestock and dwellings [3]. It is useful for recharge control plantings as it uses large amounts of ground water, and the large spreading roots make it useful in erosion control [3]. It tolerates short periods of inundation and drought, and is moderately frost tolerant [3].

The timber is hard, heavy, durable and pale coloured, with a density of about 1100 kg/m<sup>3</sup>. It is used for fencing and farm construction [3], for heavy engineering construction, poles and railway sleepers [9, 12, 13]. It is also an excellent fuel, burning for long periods due to its density [3].

*E. albens* is an important species for wildlife. The flowers are an important nectar source for birds such as honeyeaters (including the Regent Honeyeater) and parrots (including Swift Parrot) over winter when other nectar sources are scarce. The nectar is also a food source for gliders, native moths, butterflies and other insects, which in turn provide food for insect-eating birds. Hollows in mature trees provide refuge and nesting sites for many birds and



mammals, including the Sugar Glider and Squirrel Glider, which also obtain sap from trunks [1, 3].

White box is a valuable winter honey and pollen tree for Northern NSW and Southern Qld beekeepers [11]. It is a major source of honey in NSW

[4]. Cold nights and sunny days are necessary for good nectar flow [4]. *E. albens* produces large quantities of pale cream pollen, which is readily collected by bees [4].

To source seeds or plants:  
[www.grassywoodlands.org.au](http://www.grassywoodlands.org.au)

### References

- [1] Carr, D. (1997). *Plants in Your Pants: a pocket guide for the identification and use of the common plants of the northwest slopes*. Greening Australia NSW, Armidale.
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- [3] Stelling, F. (ed.) (1998). *South West Slopes Revegetation Guide*. Murray Catchment Management Committee, Albury, NSW.
- [4] Clemson, A. (1985). *Honey and Pollen Flora*. Melbourne: Inkata Press.
- [5] Ralph, M. (1993). *Seed Collection of Australian Native Plants For Revegetation, Tree Planting and Direct Seeding*. 2nd ed. Fitzroy, Victoria: Bushland Horticulture.
- [6] Ralph, M. (1997). *Growing Australian Native Plants from Seed For Revegetation, Tree Planting and Direct Seeding*. Fitzroy, Victoria: Murray Ralph/Bushland Horticulture.
- [7] Semple, W. S., Koen, T. B., Henderson, J. (2007). Seed fall and flowering in White Box (*Eucalyptus albens* Benth.) trees near Cowra, New South Wales. *Australian Forestry*. Vol. 70, No. 4, Sept 2007: 242-252. Online: <http://search.informit.com.au/documentSummary;dn=211030753493404;res=IELHSS>
- [8] Semple, W. S., Koen, T. B. (2005). Altitude, frost and the distribution of White Box (*Eucalyptus Albens*) on the Central Tablelands and adjacent slopes of NSW. *Proceedings of the Linnean Society of New South Wales*. Vol. 126, 171-180. Online: <http://search.informit.com.au/documentSummary;dn=866022644886123;res=IELHSS>

### Internet links

- [9] Australian National Botanic Gardens website, EUCLID, Eucalypts of Southern Australia: <http://www.anbg.gov.au/cpbr/cd-keys/Euclid/sample/html/ALBENS.htm>
- [10] PlantNET National Herbarium of New South Wales: PlantNET National Herbarium of New South Wales: <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Eucalyptus~albens>
- [11] HoneBee Australis, Beekiping in Australia: <http://www.honeybee.com.au/Library/pollen/albens.html>
- [12] EUCLID, Eucalypts of southeastern Australia: <http://www.publish.csiro.au/samples/euclid/eucs/ALBENS.htm>
- [13] Ecocrop website: <http://ecocrop.fao.org/ecocrop/srv/en/cropView?id=5833>
- [14] Australian National Botanic Gardens & Australian National Herbarium, Harden Species List: <http://www.anbg.gov.au/greening-grainbelt/harden-species-list.xls>
- [15] NSW Department of Environment, Climate Change and Water: <http://www.environment.nsw.gov.au/determinations/BoxgumWoodlandEndComListing.htm>
- [16] Australian Government Department of Sustainability, Environment, Water, Population and Communities: <http://www.environment.gov.au/epbc/publications/box-gum.html>