

Yellow-Bellied Glider

Feed Trees

The Yellow-bellied Glider

The Yellow-bellied Glider (*Petaurus australis*) is an arboreal (tree living) glider possum that is listed as **Vulnerable** on Schedule 2 of the NSW *Threatened Species Conservation Act 1995* (TSC Act).

The Yellow-bellied Glider has a patchy distribution in a wide range of forest habitats through eastern Australia. Distribution of this species has declined up to 50% over some areas of its former habitat.

Where does the YBG occur?

The Yellow-bellied Glider generally prefers reasonable quality, tall open forests which contain a mix of larger older trees containing large hollows for shelter and nesting as well as other eucalypt species to provide a diversity of food resources all year.

This species is quite specific in the resources it requires for survival. These include a distribution of suitable sized tree hollows, winter flowering eucalypts to provide nectar and pollen, eucalypt trees suitable for tapping sap and trees with loose, shedding bark for foraging a range of insect prey. Additionally, honeydew, manna and occasionally *Acacia* gum are used.

Yellow-bellied Gliders may use a number of den trees within their home range depending on seasonal food resources and breeding. They usually live in family groups which occupy large home ranges in the order of 30 to 65 hectares depending on availability of denning hollows and food resources.

What do they eat?

A particularly important component of this species' diet is obtained through licking sap tapped from incisions made in the bark of mostly eucalypt trees. This behaviour occurs on a variety of mostly smooth-barked eucalypt trees, with only single trees within a stand of similar trees used for tapping sap. Tree selection may change over seasons and time, although an individual tree may be used for 10 years or more.

How to recognise a feed tree

Trees incised by Yellow-bellied Gliders for tapping sap can be recognised by the presence of a series of gnawed incisions made into the bark of the trunk of the tree. These incisions are usually shaped in a shallow V with the length of the incision being measured during



Examples of incisions in trees made by Yellow-bellied Gliders

Photographs: Di Brown, Peter Richards & Shane Ranning



Yellow-bellied Glider Sap Feed Trees

Broad-leaved Apple (<i>Angophora subvelutina</i>)	Grey Box (<i>E. moluccana</i>)
Large-leaved Spotted Gum (<i>Corymbia henryi</i>)	Messmate (<i>E. obliqua</i>)
Pink Bloodwood (<i>C. intermedia</i>)	Blackbutt (<i>E. pilularis</i>)
Spotted Gum (<i>C. maculata</i>)	Grey Gum (<i>E. propinqua</i>)
Cabbage Gum (<i>Eucalyptus amplifolia</i>)	Grey Gum (<i>E. punctata</i>)
New England Blackbutt, Gum-topped Peppermint (<i>E. andrewsii</i>)	Narrow-leaved Scribbly Gum (<i>E. racemosa</i>)
Orange Gum, Bancroft's Red Gum (<i>E. bancroftii</i>)	Sydney Blue Gum (<i>E. saligna</i>)
Mountain Blue Gum, Round-leaved Gum (<i>E. deanei</i>)	Narrow-leaved Red Gum (<i>E. seeana</i>)
White Gum (<i>E. dunnii</i>)	Scribbly Gum (<i>E. signata</i>)
Thin-leaved Stringybark (<i>E. eugenioides</i> (includes <i>E. nigra</i>))	Forest Red Gum (<i>E. tereticornis</i>)
Flooded Gum, Rose Gum (<i>E. grandis</i>)	Brush Box (<i>Lophostemon confertus</i>)
Silvertop Stringybark (<i>E. laevopinea</i>)	

Source: Approved Recovery Plan for the Yellow-bellied Glider (Feb 2003)

one study as typically 12cm in length, with an incised channel 1 to 5cm wide and up to 1cm deep (Mackowski 1988). The shape, length and depth of incisions, however, may vary considerably depending on tree species and individual animals with some incisions being flat shaped and over 50cm in length.

Trees being used by this species for tapping sap can be recognised by the presence of one or more of these incised shallow V to flat incisions in the bark on the trunk of the tree. The presence of dried sap may also be observed 'bleeding' from the incision and often there may be the remains of chewed bark lying at the base of the tree trunk.

What can you do?

Retention of a variety of preferred Yellow-bellied Glider sap feed trees (refer to table above) and in particular, trees with signs of incisions as described above are vital for the conservation of this species. All sap trees with recent incisions less than two years old as evidenced by non-occlusion of the incision (i.e. where the incision has not closed) must be retained from harvesting activities.

Protection of forests, particularly forests with older trees containing hollows, is vital for the survival of the Yellow-bellied Glider (see Advisory Note 10 'Old-Growth Forests').

Yellow-bellied Gliders are also hollow dependent species requiring a distribution of suitably sized tree hollows for denning and breeding (see Advisory Note Number 1 'Hollow-bearing Trees'). A 50m exclusion zone must be implemented around trees used as dens by Yellow-bellied Glider's.

References and Further Reading

- Mackowski, C M (1988), Characteristics of eucalypts incised for sap by the Yellow-bellied Glider in Northern NSW, Aust. Mammal. 11:5-13
- For more information on this species please refer to the 'Species Profile' and the Approved Recovery Plan available on <http://www.nationalparks.nsw.gov.au/npws.nsf/content/recovery+plans>
- DECC www.environment.nsw.gov.au