

Yellow-bellied Glider

Petaurus australis Shaw, 1791

Other common name Fluffy Glider

Conservation status

The Yellow-bellied Glider is listed as a **Vulnerable Species** on Schedule 2 of the New South Wales *Threatened Species Conservation Act, 1995* (TSC Act).

Description (summarised from Russell 1995)

Head and Body Length

270-300 (280)mm

Tail Length

420-480 (433)mm

Weight

450-700g

The Yellow-bellied Glider has grey fur above, whitish to orange fur underneath and large bare ears. Individuals have a gliding membrane that extends from the wrists to the ankles. The head and body of the Yellow-bellied Glider is much longer than that of the Sugar or Squirrel Glider but shorter than in the Greater Glider. The tail is fluffy and about one and a half times the length of its body and relatively much longer than in other gliders. Males and females are similar in appearance.

Vocalisation is a loud shriek beginning at a high pitch and ending with a throaty rattle. Several other calls are made when in trees and during gliding.

Distribution

The Yellow-bellied Glider has a patchy distribution along the east coast and adjacent ranges of Australia from south-eastern South Australia to North Queensland. The southern subspecies *P. australis australis* occurs along the east coast of Australia to central Queensland and the northern subspecies *P.a. reginae* occurs in two small populations in north Queensland (Russell 1995).

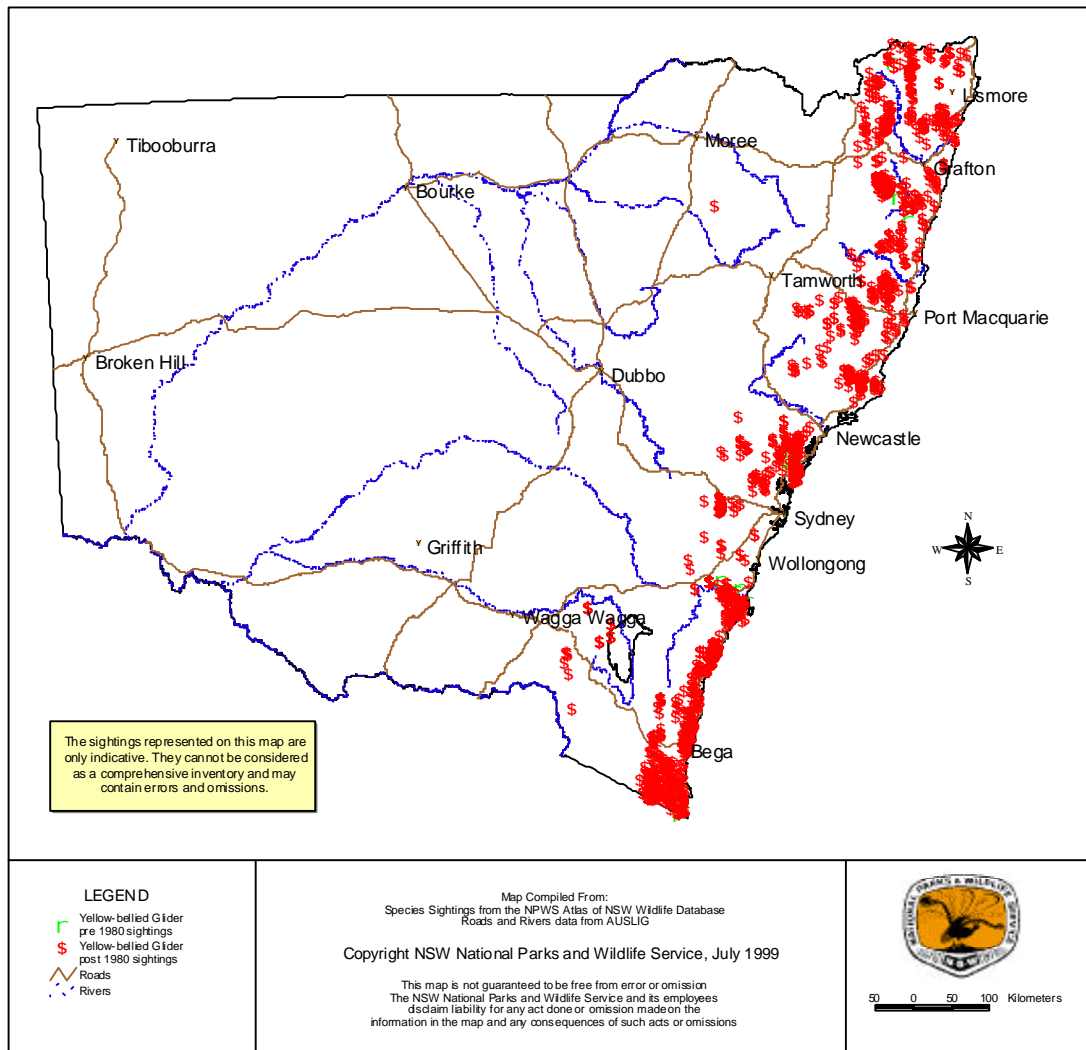
Recorded occurrences in conservation reserves

The species occurs in various conservation reserves along the east coast and adjacent inland areas in NSW (NPWS 1999).



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Yellow-bellied Glider



NPWS records of the Yellow-bellied Glider in NSW

Habitat

Within its range the Yellow-bellied Glider is restricted to tall, mature forests in regions of high rainfall. The isolated population in northern Queensland lives only in dense forests at high altitudes where the temperatures are lower than are typical for the latitude (Smith & Russell 1982).

Preferred habitats are productive, tall open sclerophyll forests where mature trees provide shelter and nesting hollows and year-round food resources are available from a mixture of eucalypt species (Goldingay & Kavanagh 1991; Tanton 1994; Craig 1985). The patchy distribution of this species is perhaps determined by the local availability of a variety of suitable flowering trees with overlapping blossoming periods. Critical elements of habitat include sap-site trees, winter flowering eucalypts, mature trees

suitable for den sites and a mosaic of different forest types (Tanton 1994).

In north-east NSW, favoured habitat is predicted to occur in the cold to warm mixed sclerophyll forests of the coastal plains and mid to high elevation moist and dry escarpment forests (Gimore & Parnaby 1994). Yellow-bellied Gliders utilise a variety of tree species, including *Eucalyptus maculata*, *E. viminalis*, *E. ovata*, *E. cypellocarpa*, *E. obliqua*, *E. propinqua*, *E. punctata dydyma*, *E. fastigata*, *E. radiata*, *E. intermedia*, *E. gummifera*, *E. globoidia*, *E. muellerana*, *E. agglomerata*, *E. bosistoana*, *E. elata*, *E. signata*, *E. teriticornis*, *E. amgophiroides*, *E. pilularis*, *E. maidenii* and *Acacia* spp. (Tanton 1994; Mackowski 1988; Goldingay 1992). In north Queensland this species forages exclusively on *E. resinifera* (Russell 1995).

Ecology

The Yellow-bellied Glider is nocturnal, resting during the day in leaf-lined dens in hollow tree limbs or trunks of living, smooth-barked eucalypts (Russell 1995). The species is agile and very active, travelling for over 2km from the den to forage (Russell 1995). Foraging occurs across the topographic sequence, within a wide range of canopy heights and foraging patterns are related to phenological changes in eucalypts. A very high proportion of nocturnal activity (90%) is dedicated to foraging (Goldingay & Kavanagh 1991).

The diverse diet of the Yellow-bellied Glider is primarily made up of eucalypt nectar, eucalypt sap, honeydew, manna and invertebrates found under decorticating bark and pollen (Goldingay & Kavanagh 1991). A characteristic feeding habit of the species involves incising the bark of eucalypts to obtain sugar-rich sap. The incisions, or 'sap sites', in the trunk of the tree are often triangular or v-shaped (Mackowski 1988). Individuals will generally select a single tree and will use it exclusively for a number of seasons (Mackowski 1988). Such food trees are heavily scarred with incisions.

The Yellow-bellied Glider has a large home-range of between 30 and 65ha (Goldingay & Kavanagh 1991) and usually occurs in densities of 0.05-0.14 individuals per hectare (Russell 1995). This is a gregarious species and lives in family groups of between 3 (in the southern parts of its range) and 6 (in the north).

A single young is born between May and September, with the variation likely to reflect the abundance of food resources (Goldingay & Kavanagh 1991). The young remains in the pouch for up to 100 days after which time it is left in the nest while the mother forages. After leaving the pouch, the young is suckled for up to 60 days (Russell 1995). Individuals live for at least 6 years (Goldingay & Kavanagh 1991).



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Threats

- Loss and fragmentation of habitat through clearing and the activities associated with clearing
- Logging of oldgrowth elements removes the number of hollow bearing trees available for nesting
- Inappropriate fire regimes reduces the availability of food resources and isolates populations making them vulnerable to regionally catastrophic events
- Predation by foxes and cats

Management

- Alteration of prescribed burning and grazing regimes to ensure the enhancement and maintenance of floristic and structural diversity of the vegetation within known or potential habitat
- Protection and maintenance of known or potential habitat, specifically protecting sap-site trees, winter-flowering eucalypts

- Introduced animal control programs, targeting recently disturbed areas with known or potential habitat
- Further survey and habitat quality assessment for the species

Recovery plans

A recovery plan is being prepared for this species.

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