

ACKNOWLEDGEMENTS

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GREATER GLIDER FACTS

- Worlds largest gliding marsupial and second largest gliding mammal
- Can glide up to 100m
- More closely related to ring-tail possums than gliders
- Up to approx. 1m in length, 1.7kg in weight & multiple colours
- Hollow dependent & nocturnal
- Feeding specialists eucalypts (same as koalas)
- Decreased by 80% over last 2 decades
- Listed as endangered to extinction

WHY DO THEY NEED HOLLOWS?

Hollows are used by greater gliders as nighttime dens for reproduction and protection from their greatest predator, the powerful owl. Greater gliders are known have relatively small home ranges of 1 to 9ha but with up to 20 dens that they use on a random rotational basis, presumably to evade powerful owls who will stake out hollows waiting for the occupier to return.



GREATER GLIDER HABITAT

- Prefer dry ironbark forests in the Burnett. This might be because there are more hollows not because they prefer eating it.
- They do occupy eucalypt forest, open woodlands and gum topped box forests providing there is enough 'nesting' habitat
- Hollow dependent No hollows. No Greater Gliders.
- No information on what they prefer to eat in the Burnett (in other areas it incl. spotted gum, pink bloodwood, narrow leafed ironbark and red gum

BUSHFIRES, FOOD & HOUSING

- Bushfires denude a landscape and heat the soil at depth, increasing weeds and decreasing preferred specie diversity
- Bushfires also increase native animals and livestock's vulnerability to starvation and predation
- If hot enough they will destroy old trees (living & dead) and therefore nesting habitat
- Cultural & cool burns have the benefit of reducing fuel loads, removing woody weeds & pest species, improving pasture & maintaining the integrity of large trees & canopy cover



HIGH GROUND & SLOW BREEDING Tend to prefer habitat of hills & ridgetops, away from riparian zones

- & waterways
- Obtain their water from their diet & can't swim, lessening the need and desire to be near water
- Highly solitary
- Can live up to 15 years old
- Only share den space during breeding season
- Do not reproduce every season slowing their breeding, conservation/recovery efforts

FLYING WITH YOUR ELBOWS OUT

- The gliding membrane connects at the elbows
- Other mammals connect as the wrists
- When gliding, they tuck their paws under their chin and extend their elbow forward
- Highly maneuverable in flight
- Capable of turns of up to 90 degrees
- Can glide up to 100m in a single flight





SHOULD YOU RESTORE.... OR RETAIN HABITAT?

- Easier & cheaper to manage, protect & retain habitat
- Old hollow trees are not ideal for timber harvesting but can exist well in grazing production & as seed trees in private forestry harvesting systems
- Old trees provide shade, biodiversity and fertility values while maintaining critical habitat for native species such as birds and gliders
- Regrowth is easier and cheaper when restoring habitat • Supplementary planting may boost restoration efforts where natural germination is limited in number or species

HOLLOWS ARE THE GREATEST LIMITING FACTOR IN GREATER GLIDER ABUNDANCE

ARE NESTING BOXES A GOOD ALTERNATIVE?

If there is a housing shortage in you local greater glider community, strategically placed nesting boxes can provide a suitable short-term alternative (up to 10 years). Another more permanent option is having living hollows professionally carved into large trees by an arborist. While they will last the life of the tree (presumably >100 years) they are more expensive to install.



WHAT SPECIES SHOULD I ENCOURAGE?

- Not just eucalypts!
- Biodiversity is essential for ecosystems and fertility. Encourage what existed prior to disturbance (Qld gov. website in guide)
- Greater Gliders prefer to eat young leaves of eucalypts (high in Nitrogen & low in fiber)
- Also known to eat buds & flowers of eucalypts, young cones of radiata pines, wattle leaves (phyllodes - not true leaves) & mistletoe.
- Variety is key! Planting tips in the Guide (eg. within gliding distance)

FOOD FOR THOUGHT!

The more critters eating lots of different things & pooping out bite sized fertiliser pellets The more fertile your soil & more productive your land is long-term

OTHER BENEFITS OF TREES TO AGRICULTURE Restoration & retention of habitat trees also assists

- Erosion control
- Stream bank stabilisation
- Improved water quality & other natural capital values
- Shade for livestock
- Improved soil fertility & moisture retention for pasture growth
- More pollinators for cropping & horticulture
- Carbon sequestration
- Carbon, co-benefits & biodiversity markets (\$\$\$)

GLIDER-FRIENDLY & CATTLE PROOF FENCING

- Barbed is necessary in grazing production systems
- Cattle have little respect for plain wire unless electrified (not always financially or practically viable)
- But barbed wire can be lethal to gliders
- 1 x 'plain top wire' can dramatically improve glider injuries & fatalities without compromising the effect on cattle with the remaining barbed wire
- Most economic to do during construction
- Prioritise treed fence lines. Not necessary in open pasture

Gliders are more vulnerable to entanglement along movement corridors and in forested areas.

These are priority zones for glider-friendly fencing.



SPOT-LIGHTING GREATER GLIDERS

- Spotlighting to see eyeshine in the tree tops
- White-yellow to bright-orange eyeshine
- Greater Gliders are very quiet they do not vocalise
- Do not continue to shine in the eyes
- Us a dimmer, swap to the duller torch light or use a red filter once you've spotted some gliders
- Nights of little to no moon while focusing on the high branches of the oldest trees is also useful

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STAG-WATCHING & WILDLIFE CAMERAS

- Stake out suspected dens (hollows) of old trees on dusk
- Do not directly spotlight the hollow. They will avoid emerging until they are satisfied you gone
- Remain silent & continue for at least 1 hour after sunset
- Place wildlife cameras at nesting boxes or suspected den sites
- Remember it may take a while for gliders to feel comfortable with a new box so be patient
- You may wish to occasionally use a lure such as **real** Canadian Maple Syrup for monitoring but not as a feeding station





NESTING BOX ALTERNATIVES

- Habitat retention is easier and cheaper than restoration
- And more time efficient.
- Natural hollows are naturally thermal regulating and last >100yrs
- Nesting boxes are a good temporary option 5-10yrs
- Mounting fallen hollows in trees is an option
- Having a licensed professional arborist install hollows into established living trees will also last the life of the tree. Potentially many hundreds of years.









