

Mahogany Glider (*Petaurus gracilis*)

Conservation Status

NATIONAL: Endangered (*Environment Protection and Biodiversity Conservation Act 1999*)

Description

The Mahogany Glider is the second largest of six gliders occurring in Queensland. Fully grown Mahogany Gliders are around 600mm long from head to tail-tip and weigh 300-450g. Colour varies from overall mahogany brown to grey-brown along back and a buff coloured belly. The mahogany glider, in common with other gliders, has a fold of skin which stretches between the front and rear legs. This acts as a parachute enabling individuals to glide for distances averaging 30m and sometimes longer. The long tail is used for stabilisation especially when coming in to land on tree trunks.



Habitat

Mahogany gliders are restricted to the coastal southern Wet Tropics region of northern Queensland. They live in a narrow and highly fragmented band of forest extending around 140km from Toomulla north of Townsville to Tully and up to 40km inland. The mahogany glider requires a relatively open forest structure for efficient gliding and tends to avoid dense vegetation such as rainforest.

Distribution

Land clearance for agriculture, grazing, forestry and human settlement has reduced the total area of remaining mahogany glider habitat to around 110,000ha, which is less than 20 per cent of the total area considered to be present at time of European settlement. The present population has been estimated to comprise about 1,500 individuals.

Diet

The mahogany glider forages alone at night feeding on nectar, pollen and sap of over twenty different species of trees and shrubs. It also eats honeydew (a sweet sticky substance excreted by insects such as aphids), insects such as lerps and the arils of wattles (an aril is a protein-rich stringy structure which connect seeds to the pod). Gliders act as pollinators of tree species such as eucalyptus and banksia and are hence an important part of the ecosystem.

Breeding

Mahogany gliders appear to form monogamous relationships. Individuals may den with their mate or alone and can use up to 10 dens in a single season. Mahogany gliders use hollows in large eucalypts and bloodwoods, lined with a thick mat of leaves, as dens.

Mahogany gliders first breed at around 12–18 months and wean their young after four–five months. Typically a litter of 1-2 young, is born between April and October. After weaning, juveniles of both sexes disperse from the parental home range. Mahogany Gliders will actively mark and defend home ranges of up to 20 ha by chasing out other individuals.

Threats

The major threat to the Mahogany Glider is the destruction, degradation and fragmentation of its habitat. Lack of suitable habitat for young gliders to disperse may also constrain further population expansion. The mahogany glider requires more or less continuous vegetation cover to range freely. Infrastructure corridors such as major roads, railway lines and powerlines, along with land clearing, present barriers to movement. The other main threats are entanglement in barbed wire fencing, road kills and predation by cats.

Recovery Plan

Early in 2011, Cyclone Yasi devastated the Mahogany Glider's habitat. Recovery plans focussed on providing emergency food and nest boxes until the habitat recovered sufficiently to allow the Gliders to fend for themselves. FAME provided funding to assist with monitoring mahogany glider feed stations and den boxes from 2011-2012.

Longer term planning has identified "strategic rehabilitation areas", critical landscape linkages that are presently cleared or heavily fragmented (Far North Queensland Regional Plan 2009-2031) which aimed at guiding where landholders and stakeholders can direct habitat restoration. Plantings have already been undertaken using trees and shrubs grown through a nursery program at local primary schools. Also rope bridges and launching poles have been established along major highways to allow Mahogany Gliders to safely move back and forth between vegetation either side of the road. Artificial den boxes have been installed at selected sites of fragmented habitat and landholders are being encouraged to replace the top strand of barbed wire with plain wire.

References & More Information

Strahan R (Ed) 1995. *Mammals of Australia*. The Australian Museum Trust. Reed New Holland, Australia.

Department of Environment and Resource Management 2011. *Mahogany Glider*. Queensland Government. http://www.derm.qld.gov.au/wildlife-ecosystems/wildlife/threatened_plants_and_animals/angered/mahogany_glider.html.