



Image: Mahogany glider, Courtesy of Daryl Dickson

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# Mahoganies

## in Cardwell

**T**he mahogany glider is an endangered species known to occur in the Cardwell region, but there are very few known records of them around the township. However, after Cyclone Yasi, when a number of trees on the golf course were chopped down for safety reasons, one was found to contain a mahogany glider. This discovery gave the Giringun Rangers the opportunity to carry out further searches for the gliders in the township area.

The search resulted in a second mahogany glider being recorded in the Cardwell Footy Ground in addition to some less expected guests!



Above: lace monitor, Footy Ground, courtesy John Winter

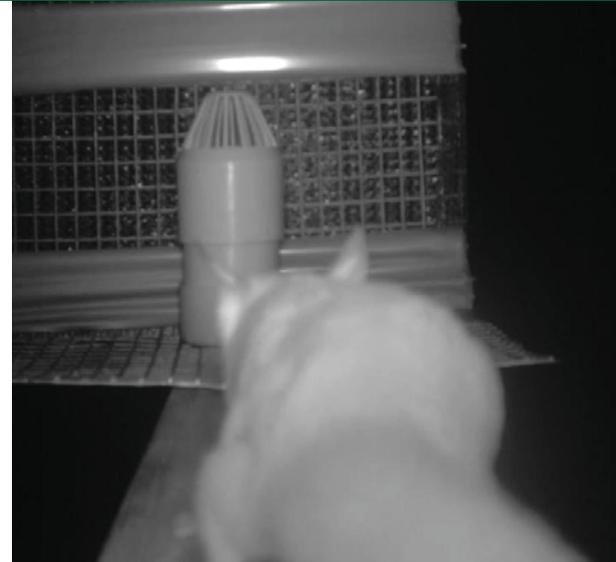
## Mahoganies in Cardwell

*continued...*

The records of these two mahogany gliders indicate that this endangered glider can live in small patches of habitat close to and within the boundaries of Cardwell.

If people wish to keep the mahogany glider in Cardwell, attention needs to be given to the management of their habitat. Because the gliders' habitat is in small, sometimes isolated patches, this will mean:

- keeping habitat patches as large as possible;
- retaining large hollow bearing trees as dens for the gliders;
- retaining tall isolated trees between patches as part of the glide-ways for the gliders' crossing between patches;
- installing glide-poles where gaps are too large for gliders to cross between existing trees; and
- tree plantings to ensure the long term future of the habitat.



Above: Mahogany glider, Footy Ground, courtesy John Winter

Excerpts from 'Mahogany Glider Population around Cardwell Township: a Giringun Ranger project' Giringun Rangers December 2011.

Mahogany Gliders with den young - Daryl Dickson 2012



# Land for wildlife

Many stories and suggestions about revegetation and wildlife encounters were shared at a recent Land for Wildlife Field Day held at Mt Sylvia, south of Gatton. The day went well with approximately 35 landholders keen to learn about habitat revegetation and local wildlife. Chris Pfitzner, from Wildlife Queensland, gave a presentation about gliders and possums to the

interactive crowd, many of whom had many stories to tell. The day also involved talks from two landholders about their experience with revegetation, as well as Ross Patterson who spoke about platypus.

But what is Land for Wildlife?

The Land for Wildlife program began in Victoria in 1981<sup>1</sup>. It is a national program that is currently administered by regional groups and councils in Queensland, for example, the program is delivered in South East Queensland by SEQ Catchments. The Land for Wildlife program aims 'to protect wildlife and flora for the benefit of future generations'<sup>1</sup>.

The program seeks to encourage landholders to preserve habitat for wildlife on their properties; combining nature conservation with land management activities. It aims to do this by providing information and guidance about flora and fauna management through workshops, field days, newsletters, one-on-one property visits and other activities<sup>1</sup>. The program offers information about revegetation, weed control, pest control and ecological processes.

To be eligible to join the Land for Wildlife program you must own a property that<sup>1</sup>:

- is greater than one hectare
- contains native vegetation that offers habitat for wildlife
- has been managed for conservation for a minimum of five years

For those of you lucky enough to tick all of these boxes, the Land for Wildlife Program offers a wealth of handy advice. For the rest of us who have smaller yards and/or are still waiting for their lotto numbers to come up, there are many ways you can contribute to flora and fauna conservation in your own backyard. The SEQ Catchments Land for Wildlife web page offers a number of facts sheets about topics ranging from native plant propagation to weed control methods<sup>1</sup>.

For further information: <http://www.seqcatchments.com.au/programs/land-for-wildlife>

Planting native flora such as eucalypts and wattles will attract gliders and native animals by providing shelter and food. Ensuring pets do not pose a threat to wildlife in your yard will provide them with a safe place.

It is also important to take into consideration how backyard structures such as swimming pools and fences affect wildlife movement. For information on wildlife friendly fences visit: <http://www.wildlife.org.au/wildlife/livingwithwildlife/structures.html>

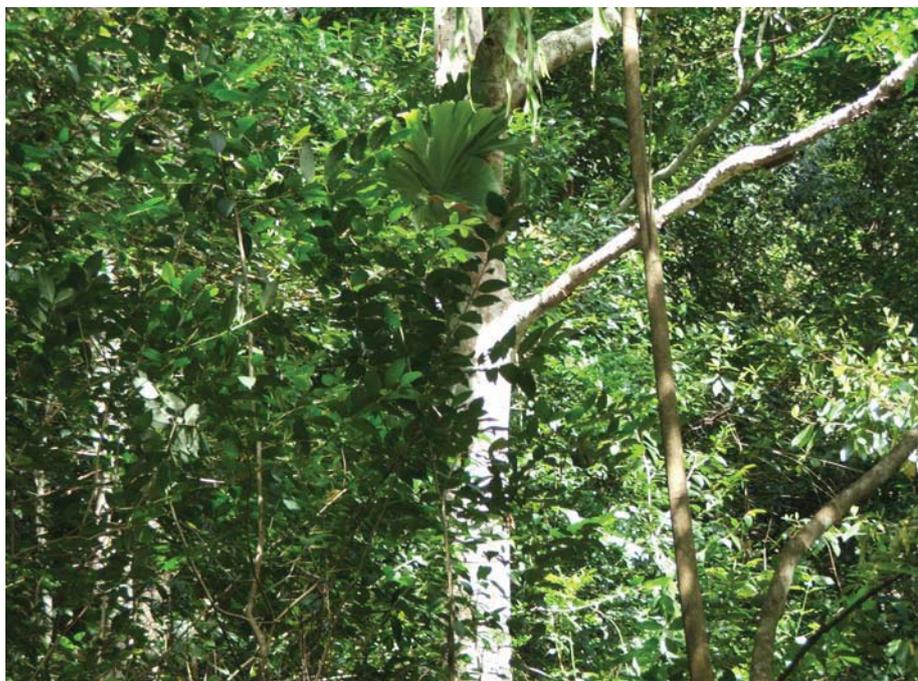


Image: WITTA, Sunshine Coast Hinterland Wildlife Land Fund Limited

## References

1. "Biodiversity - Conservation Partnerships - Land for Wildlife", accessed February 21, 2012, <http://www.seqcatchments.com.au/programs/land-for-wildlife>

# Gliding home

Australian species are finding it progressively harder to locate new homes in a landscape which is becoming increasingly 'treeless'. Dwindling tree hollow numbers are mainly due to deforestation and urbanisation. In these circumstances, nest boxes can provide an artificial alternative for wildlife to ensure their local survival.

## The effect of heat

Do nest box temperatures reflect those in natural hollows? Studies suggest that the nest boxes create a 'microclimate'. The availability of hollows and dens is determined, in part, by the temperature of the space<sup>1</sup>.

Mean daytime temperatures of nest boxes and natural hollows were compared at sites in Whitfield and Corduroy Creek in the Kennedy area of North Queensland. These targeted sugar and squirrel gliders and were made from 15-mm ply with 30-mm hardwood fronts, backs and bases<sup>1</sup>. The mean temperature differential was about  $\pm 1.67^{\circ}\text{C}$  between natural hollows and nest boxes, across sites with a  $6.1^{\circ}\text{C}$  range<sup>1</sup>. Other factors such as canopy cover and nest box direction were also examined, indicating that south-facing nest boxes, and those with less canopy cover, were hotter in the daytime than the natural hollows<sup>1</sup>.

In Louisiana, USA, McComb and Noble (1981)<sup>2</sup>, also found nest boxes were hotter than natural hollows, with

south-east orientated nest boxes reducing exposure to sunlight. In the Australian tropics the sun is vertical most of the day and slightly to the south in the tropical summer meaning that slightly north-east orientated nest boxes would reduce exposure to sunlight in the Australian tropics. Therefore, the orientation of nest boxes needs to be taken into consideration in conservation plans in order to reduce temperature differentials between natural hollows and nest boxes.

The results of these studies indicate that the temperature of nest boxes is, on the whole, hotter than natural refuges. For nest boxes to best reflect the temperatures of natural hollows, canopy cover and orientation should be considered, and options for insulation could be explored.

## The effect of design

Squirrel gliders usually use large trees as den sites<sup>4</sup>, making tree diameter an important factor in determining selection of den trees. Squirrel gliders from temperate woodlands in Victoria prefer larger trees and dead trees as den sites<sup>5</sup>, and show increasing interest in stags. In Mackay, the squirrel glider used stags 50% of the time when compared to other woodland trees<sup>2</sup>. This may be important in terms of wood structure, location and overall appearance of the nest boxes.

In terms of entry, rear entry boxes will exclude birds. However, front entry boxes with baffles across the entrance can help protect the box against Indian mynahs. Carpet attached under the lids can also help to reduce the invasion of bees as the surface becomes unsuitable for hive attachment<sup>4</sup>. These precautions can greatly increase the effectiveness of nest boxes; however, they also increase the cost.

Nest boxes, arguably, show a great potential to increase glider populations in urban or hollow deficient areas. If nest box projects have sufficient funding; consider orientation and design; and have well-structured monitoring and conservation programs, these nest boxes could greatly help protect our cherished species.

## References

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2. McComb, W.L.; Noble, R. E. 1981. Microclimates of nest boxes and natural cavities in bottomland hardwoods. *Journal of Wildlife Management*, Volume 45, pp. 284-289.
3. Crane, M. J.; Montague-Drake, R. M.; Cunningham, R. B.; Lindenmayer, D. B. 2008. The characteristics of den trees used by the squirrel glider (*Petaurus norfolcensis*) in temperate Australian woodlands *Wildlife Research*, Volume 35, Issue 7, pp. 663 – 675.
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5. Van der ree, R. and Claridge, A, W. 2004. Recovering endangered populations in fragmented landscapes: the squirrel glider *Petaurus norfolcensis* on the south-west slopes of New South Wales. *Conservation of Australia's forest fauna*



Image: Squirrel glider in a nest box, courtesy Jason Flynn



## QGN On YouTube

In December last year QGN volunteer Andrea, with assistance from Alana and Carol, created a short video clip on nest box monitoring. The clip was created to raise awareness of the use of nest boxes and the importance of monitoring them.

Check it out! [www.youtube.com/watch?v=9k-y33hnK34&feature=youtu.be](http://www.youtube.com/watch?v=9k-y33hnK34&feature=youtu.be)

## Glider Spotlight

On 31 March 2012, Matthew McInerney and Shari English will take you through the process of hollow formation, hollow abundance prediction techniques and wildlife preferences.

Learn how to predict which trees are most likely to contain hollows, and which hollows to watch at dusk and dawn to spot wildlife activity. Then put your new skills to work at dusk to see if you can spot any wildlife!

All you will need is closed in shoes, a small personal torch and a water bottle.

RSVP is essential as numbers are limited to 12 people – please email [glider@wildlife.org.au](mailto:glider@wildlife.org.au) as soon as possible to register.

Further information and a meeting point will be sent upon registration.



## adopt a Glider



Image: Mahogany glider, Courtesy of Daryl Dickson

Join our Adopt a Glider program and you will be supporting our work for the survival of gliders and their habitat.

For a donation of \$60 or more you can symbolically 'Adopt a Glider' for one year. The 'Adoption' also makes a great gift for Christmas or birthdays – so your valuable contribution gives not just once but twice.

Your presentation folder on gliders will include:

- personalised adoption certificate
- colour brochure featuring gliders and what you can do to help them in your local area
- glider CD containing posters, 6 species wallchart and glider articles
- membership to the Queensland Glider Network (QGN)
- QGN newsletter

We will keep you up to date with how our glider projects are progressing by sending you regular project e-newsletters plus Wildlife Queensland's regular monthly my.Wildlife ebulletin.

To adopt a glider, call the office on 07 3221 0194 or go to our website [www.wildlife.org.au/adoptaglider](http://www.wildlife.org.au/adoptaglider)

The Wildlife Preservation Society of Queensland (*Wildlife Queensland* or WPSQ) has many programs and projects—the Queensland Glider Network (QGN) is one of them.

We are a community conservation organisation with a diverse membership drawn together by a common interest in wildlife.

*Wildlife Queensland* has been working to protect Australia's precious and vanishing natural environment since 1962.

If you would like to become a wildlife protector, a subscriber or a volunteer, please contact us:

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ph 07 3221 0194

[www.wildlife.org.au](http://www.wildlife.org.au)



Whether you are a conservationist, researcher, carer, or simply interested in gliders, you will find QGN has something to offer you, and in turn, you may have information to share with all of us.

Email us your glider news to [glider@wildlife.org.au](mailto:glider@wildlife.org.au)

To join QGN (it's free) - download the membership form from [www.wildlife.org.au/qgn/join](http://www.wildlife.org.au/qgn/join)

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### Do you have a story to share about spotting a glider?

Send it to *Glider Tales* along with a picture if you have one and we may publish it on our website. See

[www.wildlife.org.au/projects/gliders/tales](http://www.wildlife.org.au/projects/gliders/tales)



[www.wildlife-australia.org](http://www.wildlife-australia.org)



## Carol Nouwens

has grown up in Brisbane and Rockhampton and has always enjoyed spending time in the outdoors, appreciating the diverse wildlife present throughout Queensland. She is currently studying a Masters of Environmental Management at the University of Queensland. She has developed an interest in environmental conservation, as well as community education and participation, to enhance people's understanding and involvement in environmental issues.

has a background in Environmental Management and is currently studying a Bachelor of Science majoring in ecology and zoology at the University of Queensland. She has a strong interest in conservation biology and ecology and thoroughly enjoys the practical side of conservation work.

## Alana Valero



# About our contributors