



QGN News #7

December 2008

Welcome to Queensland Glider Network News

At last, I hear you say, here's an update from QGN! We're sorry for not talking to you for so long— but we have been busy helping gliders. In particular searching out funding for projects as well as campaigning for glider habitat in Brisbane and in north Queensland.

We were successful in receiving a grant from the Gambling Community Benefit Fund to run an exciting new program called 'Scouting for Gliders'. Three scout and guide groups in the Brisbane area will attend educational workshops, activities and

fieldwork run by Wildlife Queensland's QGN. The focus will be on identifying glider species, their food and habitat trees, and learning about conservation issues in local bushland.

Another grant application we applied for - but unfortunately did not receive - was for a mahogany glider project and campaign. This was a huge blow. As you will read on page 5 and on our website, this glider is heading once again towards extinction and we are concerned at the lack of action by the state government.

For more details go to www.wildlife.org.au/news

We hope you enjoy this latest edition of QGN News!

Ewa Meyer
WPSQ Projects Manager

PS Don't forget to check out our new portal at my.wildlife.org.au Post us a question ... or an answer ... or create your own blog!



Mahogany Glider photo: Daryl Dickson. What an amazing long tail!



Poles Apart—but how far?

Fragmentation of native habitats is a significant threatening process which impacts Australia's native

animals. As areas become disconnected, animals are unable to survive in the isolated fragments which remain. Many animals cannot cross the barriers which occur between remnant patches, and local extinction of populations can occur.

In light of this, considerable effort is put into connecting these fragments. Movement corridors, consisting of strips of native vegetation, are an important component of reducing isolation. But even well vegetated corridors can still have barriers such as roadways which limit their effectiveness. A common solution to overcome this barrier is the construction of fauna underpasses and overpasses. These are effective for a variety of native fauna, but apart from being extremely expensive, they may not cater for some arboreal species. Research into the use

of rope ladders strung across roadways and the development of glider poles is providing a relatively cheap alternative for connecting fragments and ecological corridors.

Tina Ball (Qld Parks and Wildlife and Central Qld University) and Ross Goldingay (Southern Cross University) investigated the use of glider poles by squirrel gliders at Padaminka Nature Refuge, near Mackay. Their project, which involved installing five 12m high poles across a 70m gap between two woodland remnants, was the first attempt in the world to test the use of such a structure to provide connectivity for gliding mammals.



The poles, made of untreated hardwood power poles, were 30cm in diameter and staggered 16-22m apart between the remnants. The poles were fitted with refuges made of PVC pipe and a horizontal crossbar was connected near the top as a launching point. After the poles were installed, the usage by squirrel gliders was

Poles Apart—but how far?

recorded using traps, radio tracking and hair funnels. Squirrel gliders trapped in the remnants were also released from the poles to determine their ability to utilise the poles.

The results of their study indicated the gliders readily climbed and glided from the poles, with several individuals captured on the poles. On one occasion a radio-tracked individual was observed gliding from pole to pole between remnants. This individual was recorded foraging in the other remnant on two separate nights. Furthermore, hair funnels indicated that the glider poles were still being used up to 12 months following the study.



This research has important implications for conservation of Australia's arboreal gliders. The use of glider poles allows habitat fragments to be connected for gliding mammals in a relatively inexpensive manner. Such poles may also be useful for fauna overpasses which do not contain mature trees, as gliding mammals are unlikely to travel at ground level on the overpasses.

Glider poles are becoming an increasingly regular sight on roadways and fauna overpasses around Australia, so next time you're driving a country road with bush on both sides, look out for glider poles which connect the fragmented patches.

The summary has been prepared by Nick Murray from: Ball, T. M. and Goldingay, R. L. 2008 *Can wooden poles be used to reconnect habitat for a gliding mammal?* Landscape and Urban Planning 87, 140-146

All photos courtesy of Tina Ball.

Tina adds ...

If the poles are for facilitating glider crossing across a road (therefore not between 2 isolated remnants in a paddock situation), the taller the better as they can glide further and land higher up on the pole.

You can get up to about 21.5m power poles but of course the price will vary dependent on size of the pole. So the significance of the distance between poles can be the difference between a safe landing high on the receiving pole or connecting with oncoming traffic - especially given that the gliding capacity of juvenile gliders or females carrying large pouch young may be less than that of adults. For major roads, this means a pole needs to be either side of the road and in the median strip.

As a general rule distances between poles need to be conservative to increase chances of a safe crossing by being able to land higher up on the pole (12m tall pole = 20m apart, or for every 1m in height of pole they should cover a distance of about 1.6m horizontally). Their gliding capability is probably higher than that ratio however using the smaller ratio improves their chances of landing higher on the pole from the ground.



Deck your walls with wildlife

Help support the Queensland Glider Network by purchasing a set of 3 glider posters of the sugar, greater and mahogany gliders. Only \$20 set, inc p&p and gst. Order by phone 07 3221 0194.

Visit Wildlife Preservation Society of Qld online: www.wildlife.org.au Email: wpsq@wildlife.org.au

Share your knowledge and create your own blog!

Have you visited the QGN interactive forum? Go to my.wildlife.org.au and talk to us, share information about gliders, show us your photos and meet other QGN members.

Another Glider Population Faces Uncertain Future

One of Brisbane's last remaining major Greenfield sites, home to an array of urban wildlife including a population of squirrel gliders is set to be developed. The Fitzgibbon Urban Development Area (UDA) is 295 hectares of land situated 12 kilometres from the Brisbane CBD. 117 hectares is squirrel glider habitat already divided by Beams Road. One third of this squirrel glider habitat is earmarked for destruction by the Urban Land Development Authority (ULDA). This UDA is different to other UDA's in that a substantial amount of bushland and wetlands remain on this site. (A UDA is a piece of land, mostly owned by the state government that is earmarked for fast tracked development, and announced by Premier Anna Bligh earlier this year.)

Fitzgibbon Wildlife Values

26 threatened species, including 9 plants, 7 birds, 1 frog, 6 mammals and 2 reptiles have been recorded in the study area according to the Brisbane City Council's Aspley District Local Plan. The site is an important corridor for many species of wildlife including gliders, koalas, and several birds of prey such as the grey goshawk. Fitzgibbon provides a very important east-west corridor linking the D'Aguilar Ranges to Moreton Bay, plus a north-south corridor linking the Tinchi Tamba and Boondall Wetlands. The sizable population of squirrel gliders living in the area is already under significant strain as existing infrastructure such as rail lines and major roads limit their capacity to migrate to other feeding areas. Further habitat fragmentation and degradation will create insurmountable odds for them. Apart from habitat loss, the ULDA acknowledges that this development will further isolate the squirrel glider populations leading to inbreeding in the future. The only 'solution' offered was that in the future some of the young would be relocated to other squirrel glider population areas.

The Development Process

The current Government has put much of our wildlife at risk when fast tracking such developments because there is simply not enough time to adequately plan and consider all environmental impacts. The relevant environmental studies for Fitzgibbon haven't even started let alone finished, yet a development application is currently being processed. This



development fails to adequately consider the impacts it will have on the environment and community.

What the Community is Doing

QGN was alerted to the issue by one of our concerned members. After contacting the local WPSQ branch it became evident that this member shared the same concerns as many others within the community. Individuals and groups including WPSQ Boondall to Tinchi-Tamba Branch, Friends of Cabbage Tree Creek and Fitzgibbon Residents Action Group were all working hard to ensure that the natural environment is not jeopardised by unsustainable development. The Fitzgibbon community have been voicing their concerns for some time through involvement in the Fitzgibbon Community Reference Group, consultation with the UDLA, writing submissions on development applications, alerting their local and state members of Parliament about the issue and raising awareness within the community.

What You Can Do

Let your voice be heard. Remember if you're concerned about a local wildlife issue one of the most effective and simplest things you can do is send a letter or email to your local and/or state Member of Parliament and CC the local media, asking them to take the necessary action to protect your wildlife and your lifestyle.

Remember, you are not alone. WPSQ assists the community to protect wildlife and their habitat throughout Queensland. Please also contact us if you are concerned about any local bushland under threat. Phone us on 3221 0194 or email wpsq@wildlife.org.au

Written by Fiona Maxwell, WPSQ community conservation officer and Jennifer Singfield, president of Boondall - Tinchi Tamba Branch.

For more information

Urban Land Development Authority -

www.ulda.qld.gov.au/01_cms/details.asp?ID=33

Friends of Cabbage Tree Catchment - info@mbcc.org.au

WPSQ Boondall to Tinchi-Tamba Branch - boondalltt@wildlife.org.au

Fitzgibbon Residents Action Group - FRAG@aapt.net.au

Have you seen our **Australian gliders**

Wallchart?

To download your free copy, go to www.wildlife.org.au/w-qgn.html

Yellow-bellied glider *Petaurus australis*

Feature Glider #6

The yellow-bellied glider is a medium-sized glider of the tall open forest. Weighing up to 700g, and with a tail almost 1.5 times their body length, this possum-sized glider is the second largest arboreal glider in Australia.

They are typically dull grey above with a dark dorsal stripe, with white to creamy yellow underparts. Their large naked ears, dull red eye-shine and highly vocal nature make them readily distinguishable in the field.

The yellow-bellied glider is the most vocal of all of Australia's gliders. Whilst foraging, individuals call frequently to maintain territories and for interactions within social groups. There are two calls (whirring and moaning) which are made only while gliding.

There are two recognised subspecies: *Petaurus australis australis* south of Mackay and *Petaurus australis reginae* north of Cardwell. They have a patchy distribution throughout their range, occurring predominantly in wet sclerophyll forest including *Eucalyptus resinifera* and *E. grandis*.

They usually live in small social groups of two to six individuals, which are maintained through active calling. Groups generally consist of one adult male, one or more adult females and their young. An area of up to 80 ha is maintained and defended from other social groups.

Diet consists mostly of plant exudates such as sap, nectar, honeydew and manna, with insects and spiders also making up a portion of their diet. Eucalypt sap is obtained by making a characteristic V-shaped incision into the trunks and limbs of trees, which is maintained by regular chewing. Some trees have been known to be used as sap trees for decades.

As their food resources are often quite widespread, yellow-bellied gliders are highly mobile, active gliders. They spend up to 90% of the time outside their den undertaking foraging-related activities. This is quite different to the greater glider, *Petauroides volans*, which feeds on leaves, readily available close to the den and therefore may spend less time foraging.

Yellow-bellied gliders are monogamous. Females produce one young every 1 or 2 years. Young are carried in a pouch for a period of approximately 3 months, and will stay in the den for another 2-3 months. At 1.5 - 2 years, young may leave their parent home-range. They may live for up to 6 years.

Major threats to yellow-bellied gliders include habitat loss, habitat fragmentation and bushfire. Management



Photo: Teresa Eyre

Photo: Steve Parish Publishing



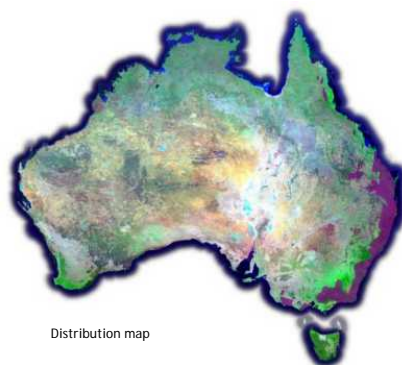
actions aimed at reducing these threats include protection of suitable habitat, limiting habitat fragmentation and producing planning instruments which aim to reduce these threats.

Further Reading:

NSW National Parks and Wildlife Service (2003) *Recovery Plan for the Yellow-bellied Glider* (*Petaurus australis*). NSW National Parks and Wildlife Service. Hurstville, NSW.

Menkhorst, P. and Knight, F. (2004) *A Field Guide to the Mammals of Australia*. Oxford University Press, Victoria.

Van Dyck, S. and Strahan, R. eds. (2008) *The Mammals of Australia*. Reed New Holland, Sydney.



Distribution map

Nestbox temperature update

Gliders go to great lengths to find a good tree hollow. But the pressures of habitat loss and competition make finding a suitable tree hollow an increasingly difficult task. Luckily, many gliders readily resort to the use of artificial nestboxes, but will any old nestbox do?

Several people contacted us after reading about the research by Joanne Isaac (James Cook University) reported in QGN News 6. This research indicated that nestboxes in tropical areas can reach temperatures as high as 37.5°C, far too hot for a glider to handle. Just by placing it in a shadier areas, the internal temperature of a nestbox can be reduced by as much as 6°C.

Tina Ball, from Queensland Parks and Wildlife in Mackay, wrote to

us about her investigations of the internal temperatures of a variety of different nestbox designs and found that nestbox design had a considerable impact on internal temperatures. Nestboxes made of hardwood experienced a smaller range of internal temperatures than boxes made of pine or PVC pipe.

However, wooden nestboxes are heavy and can be easily



destroyed by termites. So Tina designed and built one from PVC which is lightweight, termite proof, has a long life span, and most importantly does not experience the internal temperature extremes recorded in normal PVC nest 'cylinders'. It has a foam insulating layer sandwiched between two layers of PVC pipe.

This nest 'cylinder' displayed improved thermal properties and when installed in the field, had a pair of resident gliders within a couple of months.

Mahogany Glider — not such a happy anniversary

The mahogany glider, *Petaurus gracilis*, was thought to be extinct, until its remarkable rediscovery at Barratts Lagoon North Qld by Dr Steve Van Dyck of the Queensland Museum on 6 December 1989. This species has been the subject of repeated recovery plans formulated by the Qld state government and endorsed by the federal government but almost no action has been funded. We may well be squandering our second chance with this species.

Queensland's endangered species are moving ever closer to extinction while our governments, state and federal, write and rewrite reports, plans and lists of priority actions: these do not add up to conservation or recovery. Unless resources are made available to fund these priority actions, our animals are destined to join our shameful list of extinctions. The endangered mahogany glider, found only in a small area of north Queensland, is a prime example of this neglect.

The revised IUCN Red list released in October 2008 listed this species as endangered due to continuing decline of the extent and quality of habitat. Saturday 6 December marked the 19th anniversary of the rediscovery of this rare and beautiful gliding possum. However, the wild population is now estimated to be no more than 1500 individuals. The government's action list necessary to give this priority species a chance at survival amounts to under \$700,000—we spend more on community festivals and fireworks in our major cities.

My new year wish is that the government stop pretending to act, stop wasting time on words and start funding action.

Daryl Dickson, Cardwell

For more information about WPSQ's mahogany glider campaign go to www.wildlife.org.au/news

Protecting wildlife
Influencing choices
Engaging communities

Help needed for Scouting for Gliders project.

Can you climb trees? Or even ladders? If so, we may need your help to install some nestboxes in April 2009. Please contact ewameyer@wildlife.org.au

The Queensland Glider Network is a



program run by The Wildlife Preservation Society of Queensland (*Wildlife Queensland* or WPSQ). We are a community environmental organisation with a diverse membership drawn together by a common interest in wildlife. *Wildlife Queensland* started in 1962 and since then has been working to protect Australia's precious and vanishing

natural environment. If you would like to join WPSQ, subscribe to Wildlife Australia Magazine or are interested in volunteering, please contact us:

wpsq@wildlife.org.au
ph 07 3221 0194
95 William St Brisbane Qld 4000



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.

We hope that you find this newsletter of interest and that the QGN will provide a valuable meeting place and resource centre for all people with an interest in gliders, their habitat and the issues facing their conservation. Email us on glider@wildlife.org.au

To join QGN (it's free) - download the membership form from <http://www.wildlife.org.au/qgnsurvey.pdf>

Share your knowledge and create your own blog!

Have you visited the QGN interactive forum? Go to my.wildlife.org.au and talk to us, share information about gliders, show us your photos and meet other QGN members.

About our contributors

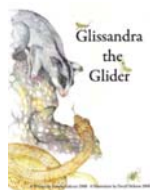
Many thanks to the following QGN members who contributed to this newsletter:

Daryl Dickson, Cardwell.



Daryl is the artist behind Wildcard Art and has recently illustrated a beautiful children's book called *Glissandra the Glider*, written by Pam Galeano. Much of Daryl's time is spent rehabilitating injured mahogany gliders. The first captive-bred mahogany glider to be returned to the wild

was released on Daryl's property. Daryl was recently the recipient of the Cassowary Arts Award in Cairns.



For beautiful wildlife cards and artwork, visit www.wildcardart.com.au

Nick Murray, Brisbane.



Nick is an ecologist who has recently returned from Macquarie Island, where he was researching albatross and giant petrels. Nick is an outstanding photographer and his image of the black-browed albatross graces the front of the Spring 2008 Wildlife Australia Magazine.



To see Nick's photography and feature article or to subscribe to WAM, visit

www.wildlife-australia.org

Tina Ball, Mackay.



Tina is a researcher with Queensland Parks and Wildlife with a broad range of interests including quolls (above photo).

'Can wooden poles be used to reconnect habitat for a gliding mammal?' (with Ross Goldingay) was of great interest to QGN, as was Tina's research using nest cylinders for gliders.

