

What's news?

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Wildlife Corridors

"A wildlife corridor is a link of wildlife habitat, generally native vegetation, which joins two or more larger areas of similar wildlife habitat"¹.

Since colonisation, habitats have become fragmented due to land clearing for agriculture, urban development and other changes to the natural environment, often driven by human population growth. These fragments are often surrounded by man-made environments such as housing, industry or infrastructure.

In recent times, an increasing environmental focus has been taken by society. Unfortunately it may not have happened soon enough for some species like Coxen's Fig Parrot and the Eastern Bristlebird, which are in heavy decline.

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Image: Squirrel Glider, Witta Conservation Reserve near Maleny, courtesy John Birbeck

Wildlife Corridors

continued...

One school of thought to mitigate this process, and to ensure that wildlife extinctions are kept to a minimum, is the concept of keeping small patches of bushland. This was adopted in response to the sharp increase in urbanisation. However, small patches of habitat could only support the small population that lived in the area, resulting in a lack of genetic diversity.

Thus wildlife corridors came to the fore.

Wildlife corridors are used to link fragmented areas of bushland with each other, resulting in a continuous stretch of habitat for the many different species that use the area. Overpasses, as seen in QGN News 13, are often a component of wildlife corridors. However, one of the most recognisable wildlife corridors are usually found on either side of waterways (the riparian zone)².

In Brisbane, well documented overpasses such as those at Compton and Hamilton Roads assist in creating valuable wildlife corridors, and lesser-known wildlife corridors can be found in the Redland City Council, one stretching from Alexandra Hills to Mount Cotton. This corridor encompasses many well-known areas such as Greater Glider Conservation Area and the Redlands Indigiscapes Centre.

Another large corridor system - the Flinders to Greenbank-Karawatha wildlife corridor - can be seen quite clearly using Google Earth. With a range of over 30km, this corridor system runs from beyond White Rock – Spring Mountain Conservation Estate in Ipswich, to Karawatha Forest. While this corridor varies in density crossing several transit ways, it provides an extended corridor of habitat to encourage genetic diversity and species sustainability in the area.

One of the simplest ways of finding these corridors is by using programs such as Google Earth, using the satellite images to trace potential habitat areas.



Image: Sugar Glider, courtesy Mathew Warren, University of Queensland

Wildlife living in fragmented habitats is susceptible to natural disasters such as flood, bushfire and cyclones as well as disease or inbreeding. In addition, wildlife movement is essential in the search for food, dispersal of young to new home ranges and annual and seasonal migrations³.

Nevertheless, are these corridors ideal in their current form? In a report authored by David Lindenmayer and Henry Nix⁴, it is stated that their findings conformed “to the theory of central place foraging”, which predicts that arboreal animals with a colonial social structure (like sugar gliders) may be “disadvantaged in narrow, linear shaped habitats”.

This is due to the increased possibility of ‘edge effects’. When a corridor is established very near to human development, space may be limited creating difficulty in incorporating buffer zones⁵. In the absence of a buffer zone, wildlife corridors may be susceptible to the influences of noise, light, wind, exotic species of animals and plants, air temperature and soil moisture along its edge. This effect is exacerbated by a high proportion of habitat edge length to unit area and the chance of native wildlife populations being compromised. To minimise these risks, wider corridors are encouraged so the wildlife can move freely in the area.

Interestingly, corridors spanning several

topographical levels – for example corridors ranging from ridges to gullies – rather than those placed on a single topographical level relative to height above sea level were found to experienced greater wildlife diversity⁵.

With current projections showing an estimated 2.9 million people will call the Brisbane area home in 2031⁶, time is running out to secure more of these corridors in the hope of sustaining our native wildlife.

Article written by Matthew McInerney QGN member (see p7)

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Feathertail gliders



A fluffy mammal gliding between trees in the dark, with its legs spread out like wings.

The book I treasured as a small child had photo after photo of flying squirrels found in Japan, my home country. My fascination for these adorable animals is what brought me to volunteer for the Queensland Glider Network. Here in Queensland I encountered their intriguing local Australian gliders, and the feathertail glider is one of them.¹

The feathertail glider, known by its scientific name as *Acrobates pygmaeus*, is unique from the other gliders by its classification, as it is the only species in its genus Acrobatidae.² Its name comes from its distinctive feather-shaped tail, which plays an important role as the feathertail glides between trees.³ The tail helps to steer or act as a brake, and can also be used to grasp onto branches.⁴ Pads on the

back of their feet give further agility by enabling the feathertail glider to cling smooth flat surfaces.⁵

The amazing aspect of the feathertail glider is their size. A recently spotted feathertail glider was so small it could have fit into a matchbox.⁶ They usually grow up to around 6-8cm including its head and body, which makes them the smallest of the six glider species found in Southeast Queensland.⁷

The feathertails prefer tall subtropical and temperate forests and mature woodland. They are fairly widespread around the east and southeast of Australia, although they more common in North-east Queensland than they are in the south. This makes

them "least concern" on the IUCN Red List of Threatened Species, however there are cases of logging and predation by cats and foxes that harm them.⁸

Would you have them in your backyard? Yes, but it would be very difficult to spot them.⁹ There have been quite a few recorded sightings within the Greater Brisbane area.¹⁰ However, their nocturnal life style and small size makes it hard for us to detect feathertail gliders.¹¹ Next time, maybe you should give a second look to a "falling leaf"¹²—you might actually see the feathertail glider's white belly!¹³

Article written by Maki Sumitani
QGN Member (see p7)

Images: (Top left) Russian Flying Squirrel, by Maki Sumitani, courtesy JAF Mate. (Bottom right) Feathertail Gliders, photo © Steve Parish Publishing



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Post-Yasi

Mahogany Glider Project Update

Wildlife Queensland and the broader public responded magnificently to the call for assistance in recovery efforts for the mahogany glider following Cyclone Yasi. With close cooperation between Wildlife Queensland and DERM, three projects to assess the effectiveness of these recovery efforts were initiated.

Kaity Conroy and Lisa Tope, from the Cairns based World Learning School of international Training (SIT) spent a month living in Cardwell. Kaity checked glider supplementary feeding stations fitted with infra red cameras, bought by Wildlife Queensland using funds generously donated by FAME, to assess the use of the stations. Six of the 19 feeding stations were visited by Sugar Gliders, a Striped Possum, Giant White-tailed Rats and Lace Monitors, but none by Mahogany Gliders even though they were known to be in two of the areas sampled. Kaity concluded that any future use of feeding stations should be carefully planned, and used only in fragmented areas with a high likelihood of Mahogany Gliders occurring.

Images: (Below) Lisa Trope handling captured Mahogany Glider from Corduroy Creek prior to release back in the wild.
(Right) - Kaity Conroy with WPSQ volunteer, Jared White, checking a glider supplementary feed station and camera.



Lisa assisted Mark Parsons and other DERM staff in a trapping study at Murrigal, Corduroy Creek, to determine whether Mahogany Gliders were still present in this isolated patch of forest, connected by a rope bridge across the Bruce Highway to a habitat corridor along the creek. A 2005 survey had recorded several Mahogany Gliders and the present project confirmed the presence of at least one pair of gliders together with several Sugar Gliders and a Striped Possum.

Christine Zelenka, James Cook University, is assessing the potential effectiveness of the many nest boxes supplied by Wildlife Queensland supporters. Her results will be available for the next newsletter.

John Winter
Mahogany Glider Project

Operation Nest Box

QGN is working in conjunction with the Flinders to Greenbank-Karawatha Conservation Partnership on glider population conservation within the Flinders to Greenbank-Karawatha corridor. QGN's role includes monitoring existing nest boxes as well as linking fragmented glider populations through additional nest box installation.

Throughout April QGN coordinated four teams of 3-5 members to monitor existing nest boxes within the Oxley Creek Catchment. This catchment is a part of the Flinders to Greenbank-Karawatha wildlife corridor.

A total of 26 nest boxes were monitored in April in Larapinta and Forest Lakes with nest box occupants including squirrel and sugar gliders, ants, bush cockroaches, common brushtail possums and bees. Another 20 boxes are scheduled for monitoring in June.

The next phase of this project involves mapping existing populations and enhancing glider corridors through nest box installation.

QGN on Facebook

Visit our facebook page for updates on our monitoring results, glider discussions or cute glider pics!

Care Net Update

QGN has compiled a database of almost 100 vets and animal clinics in the Brisbane area which accept wildlife. Each of these vets is contacted regularly to collect data on threats to gliders leading to their admission in order to provide a better understanding over time of the dangers to gliders in Brisbane.

QGN in action



Glideways Report Back

Brisbane City Council worked in conjunction with QGN on Glideways - a project in the Kedron Brook Catchment which involves community engagement and training in monitoring of native Australian species, specifically gliders.

Launched on Saturday 6 November 2010, the project aimed to determine the possible presence and the suitability of habitat for glider species – particularly squirrel and sugar gliders.

Following a training workshop, surveys were led by Damian White, one of QGN's ecologists, with 3 surveys in total on 21 November 2010, 8 January 2011 and 9 April 2011.

Squirrel gliders (*Petaurus norfolcensis*) were recorded during two of the three spotlight surveys. On two occasions they were seen to volplane between trees. Other species recorded included – the common ringtail possum (in large numbers), the common brushtail possum and six frog species in addition to the abundant introduced cane toad.

This project provided an excellent opportunity to develop the community's capacity to monitor and conserve local glider populations while raising awareness beyond just the participants. It was great to be involved in this project with Brisbane City Council.

Image: taken on a QGN spotlight evening, courtesy Shari English

Scenic Rim

Glider Workshop

Australia has just six species of gliding possum, and five of these species live in the Scenic Rim, but they are not always easy to observe. Learn about the ecology and behaviour of these fascinating and charming little animals and how to find them, with glider expert Teresa Eyre.

After the workshop we'll search the property for squirrel gliders (which have been seen here) and feathertails (which we think we have seen one of) and across the border (about 10km) where we have seen greater gliders and sugar gliders and possible yellow-bellied. The night will be dark at first, then a near-full moon should rise. Teresa is camping overnight at the Andrew Drynan Reserve, just around the corner from the Araucaria property, so let us know if you would like to do the same.

We will be conducting other surveys through the year to try and determine where gliders are, and where they could be if there were adequate wildlife corridors, so this workshop would be valuable for anyone who would like to join such surveys.

Free Entry but bookings are essential. Phone 07 55441283 or [email](mailto:glider@wildlife.org.au) us
Find us on [Facebook](#) or our main [website](#)

When: 2.00pm to 5.00pm Saturday 18th June
(followed by optional field-trip and/or camp)

Where: Araucaria property, 1770 Running Creek Rd. via Rathdowney (Running Creek Road starts at the Post Office in Rathdowney: travel about 17km and the Araucaria property begins with the forest on the left after Taafe Bridge. The meeting is on the right side of the road after the next bridge, in the large green building with cockatoo mural.

Spotlight on gliders

Last light: The Mt Tamborine spotlight was a small but knowledgeable and enthusiastic group sighting a sooty owl, heard boobook and barn owls, saw king crickets, possum, melomys, glow worms and enjoyed the good company. The Ipswich spotlight sighted *Pteropus alecto* - Black fruit-bat; *Podargus strigoides*- Tawny frogmouth; *Gehyra dubia* - Dtella; *Litoria fallax* - Eastern sedgefrog; *Litoria gracilentia* - Graceful treefrog; *Limnodynastes peronii* - Striped marshfrog; *Mixophyes fasciolatus* - Great barred-frog; *Opisthodon ornatus* - Ornate burrowing frog; *Pseudophryne raveni* - Copper-backed broodfrog.



Image: Ipswich spotlight, courtesy Shari English

Next light: The Queensland Glider Network is organising another glider spotlighting event on 9 July at Wamuran Nature Reserve - a 27 acre sanctuary contiguous with the Mt. Miketeebumulgrai section of Glass House Mountains National Park - from 5:00pm to 6:30pm and QGN members are invited to attend.

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 as soon as possible to register.

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

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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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

To join QGN (it's free) - download the membership form from 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



www.wildlife-australia.org



About our contributors

Maki Sumitani came to Queensland on an exchange term from Vancouver, Canada just 3 months ago. She is currently studying Biology and History at the University of Queensland for her Bachelor's degree. She has always been keen about wildlife and getting outdoors, and finds her time with the Queensland Glider Network has been a great way to learn about the local wildlife.

Matthew McInerney moved to Queensland from New South Wales in 2009 to study Conservation and Land Management, completed his Diploma in 2010, and is now studying a Bachelor of Journalism/Bachelor of Science at the University of Queensland. During this time, he has developed a keen interest in the conservation of our environment, and has become passionate about the protection of our native wildlife.

