QUEENSLAND GLIDER NETWORK NEWS

Newsletter 20 | December 2012

Colony of squirrel gliders - a sight very familiar to QGN volunteers who assist in nest box monitoring within the Flinders Karawatha Corridor. Image © Todd Burrows

What's news?

Australia helps pave the way

for conservation in Vietnam

On January 5, Wildlife Queensland is hosting a high level delegation from Vietnam for a conservation corridor site visit in Australia, to the Queensland Glider Network's very own Flinders Karawatha Corridor Project. The purpose of the visit is for Vietnam to build on Australia's learnings in the practical establishment of wildlife corridors.

The delegation is seeking to establish a biodiversity conservation corridor among three provinces in Central Vietnam connecting protected areas, learning from Australia's advancements in this field.

Continued page 2

QUEENSLAND GLIDER NETWORK NEWS

Newsletter 20 | December 2012

Australia helps pave the way

for conservation in Vietnam *continued…*

Opening with candid views on effective and measureable conservation practices from Professor Hugh Possingham of The University of Queensland and the ARC Centre of Excellence for Environmental Decisions, the site visit aims to provide practical knowledge on managing wildlife corridors, maximising outcomes, and measuring success.

Wildlife Queensland highlights how partnerships between government and community groups can maximise the results of financial investment in conservation, based on QGN's own work within the corridor.

By examining the grass roots level actions to enhance wildlife habitat and increase connectivity within the Flinders Karawatha Corridor, we can help demonstrate how to stretch conservation-spent dollars further.

Each learning that we can convey translates as a greater conservation achievement for Vietnam's Conservation Corridor Project – on a national scale.

The site visit program also covers the rehabilitation work of Logan City Council through the Logan Water Alliance, along with a habitat enhancement site established by Brisbane City Council and the Oxley Creek Catchment Association.

Thanks to Logan City Council's Logan Water Alliance for hosting morning tea for the site visit.

- Karen Brock, Senior Projects Officer

What **marsupial** is that?

Have you ever seen a furry marsupial gliding from tree to tree by using a very long and bushy tail like a rudder? They have large furry ears – much like teddy-bear ears – and a short head with a pointed muzzle. They can glide up to 100 metres and even change direction up to 90 degrees while in the air using their tail to steer.

This fuzzy flier is known as the greater glider or *Petauroides volans*.

The scientific name for the greater glider means flying petaurus-like animal. However, unlike the petaurus gliders (sugar, squirrel, mahogany and yellow-bellied gliders), the gliding behaviour of the greater glider is unique as its gliding membrane stretches from its elbow to its ankle.

A greater glider caught on camera - Image courtesy Doug Beckers

It's the only 'flying' marsupial that folds its forelimbs so that its wrists are tucked under its chin, giving the membrane a triangular shape when outstretched.

They are endemic to Australia, and to see them you would need to visit the east coast of Australia in Queensland, New South Wales or Victoria.

QUEENSLAND GLIDER NETWORK NEWS

Newsletter 20 | December 2012

What **Marsupial** is that?

continued…

They den in hollows in older forests, tall open woodland, eucalypt forests and low woodlands but you will never find them in rainforests.

Another unique feature of greater gliders is their eating habit. As an herbivore, the greater glider is a very picky eater - their diet consists almost exclusively of eucalypt leaves.

It does not usually need to drink – a trait consistent with most arboreal leaf-eaters.

Also like the koala, greater gliders are very selective about which leaves they ingest. They dine on different species of eucalyptus at different times of year, a phenomenon which is still not fully understood. The greater glider prefers leaves from the ribbon, brown barrel, mountain and narrow-leaved peppermint eucalypt tree. They are also feed on the buds and flowers of eucalypts.

They prefer young leaves due to their higher concentration of nitrogen and lower concentration of lignocelluloses (acid-detergent fibre). In order to digest the cellulose, the greater glider has developed an enlarged caecum where bacteria ferment the cellulose to aid digestion, much like the koala.

The body size of the northern sub-species of the greater glider – 650 grams – is estimated to be the smallest body size possible to be totally dependent on leaves. The majority of species that are reliant on plant material for their energy intake are relatively big. This allows a far greater volume of nutrient-poor food to be consumed, along with the slower passage this material requires through the gut.

As a nocturnal mammal, greater gliders sleep during the day and come out at night to eat the eucalyptus foliage. Their eyes shine in an intense white/golden colour when spotlighted. So, you can also distinguish them from other glider species by this feature.

Article written by Jian Zhao

A pale morph greater glider on a QGN spotlight - Image courtesy Shari English

References:

Smith, G.C., Mathieson M., and Hogan L. (2007). Home range and habitat use of a low-density population of greater gliders, *Petauroides volans* (Pseudocheiridae: Marsupialia), in a hollow-limiting environment. Wildlife Research 34: 472-483.

Kavanagh R.P., and Lambert M.J. (1990). Food selection by the greater glider, *Petauroides volans*: Is foliar nitrogen a determinant of habitat quality? Australian Wildlife Research 17: 285-99.

Pope, M.L., Lindenmayer, D.B., and Cunningham, R.B. (2004). Patch use by the greater glider (*Petauroides volans*) in a fragmented forest ecosystem. I. Home range size and movements. Wildlife Research 31: 559-568.

Lindenmayer, D.B., Cunningham, R.B., Tanton, M.T., Smith, A.P., and Nix, H.A. (1990). Habitat requirements of the mountain brushtail possum and the greater glider in the montane ash-type eucalypt forests of the central highlands of Victoria. Australian Wildlife Research 17: 467-478.

Wintle, B.A., Kavanagh, R.P., McCarthy, M.A., and Burgman, M.A. (2005). Estimating and dealing with detectability in occupancy surveys for forest owls and arboreal marsupials. Journal of Wildlife Management 69: 905-917.

Foley, W.J., and Hume, I.D. (1987) Nitrogen requirements and urea metabolism in two arboreal marsupials, the greater glider (*Petauroides volans*) and the brushtail possum (*Trichosurus vulpecula*), fed eucalyptus foliage. Physiological Zoology 60: 241-250.

Foley, W.J., Lassak, E.V., and Brophy, J. (1987). Digestion and absorption of eucalyptus essentials oils in greater glider (*Petauroides volans*) and brushtail possium (*Trichosurus vulpecula*). Journal of Chemical Ecology 13: 2115-2130.

Harris, J.M., and Maloney, K.S. (2010). *Petauroides volans* (Diprotodontia: Pseudocheiridae). Mammalian Species 42: 207-219.

QUEENSLAND GLIDER NETWORK NEWS

Newsletter 20 | December 2012

Mahogany update

The mahogany glider – classified as endangered (IUCN Redlist 2012) – continues to face easily avertable problems, the most damaging of which is barbed fencing. Barbed wire fences have very low visibility and gliders cannot escape their barbs once they have hooked into their gliding membrane. It is a slow and terrifying death. Using split poly pipe over the barbs at identified danger point near tree trunks and making the wire more visible are simple, cost effective ways to assist which would make a world of difference if implemented universally.

Moreover, in the wake of the damage that has been caused by Cyclone Yasi, destroying much of the gliders' natural habitat causing loss of connectivity, they are more prone to such incidents.

This disturbing image is of a female mahogany glider found dead on a barbed wire fence along Ellerbeck Road, Cardwell. Photo © Daryl Dickson

However, negotiations regarding the planting of corridor trees to enable connectivity between remnant patches of native forest for mahogany gliders are continuing on a positive note.

The talks, between Hancock Queensland Plantations and Wildlife Queensland members, are progressing at a steady rate, and all those participating are confident of reaching a sensible outcome for the benefit of mahogany gliders and other native animals, before the deadline arrives.

Two English relatives of Tully branch members of Wildlife Queensland, upon learning of the mahogany glider's plight, have set up a tree in the Fakenham Parish Church in Norfolk, England. Each tree has a collection box where members of the 25,000 visiting throng can make charitable contributions.

Sue Smith, Wildlife Queensland Tully Branch president, said the most welcome gesture from people in a far-off land was like "… hands reaching across the sea… and clearly displayed people worldwide were feeling for all the endangered animals put under threat by human activity".

If people on the other side of the world can help, so can you! If you would like to know further how you can help these fast disappearing creatures, read on here about the wildlife friendly fencing project, an alliance that a number of groups including Wildlife Queensland support.

Or you could adopt a glider for Christmas. Consider a gift that gives twice – Wildlife Queensland is asking you to adopt a glider for someone special and also support conservation efforts to assist the endangered mahogany glider and other glider species.

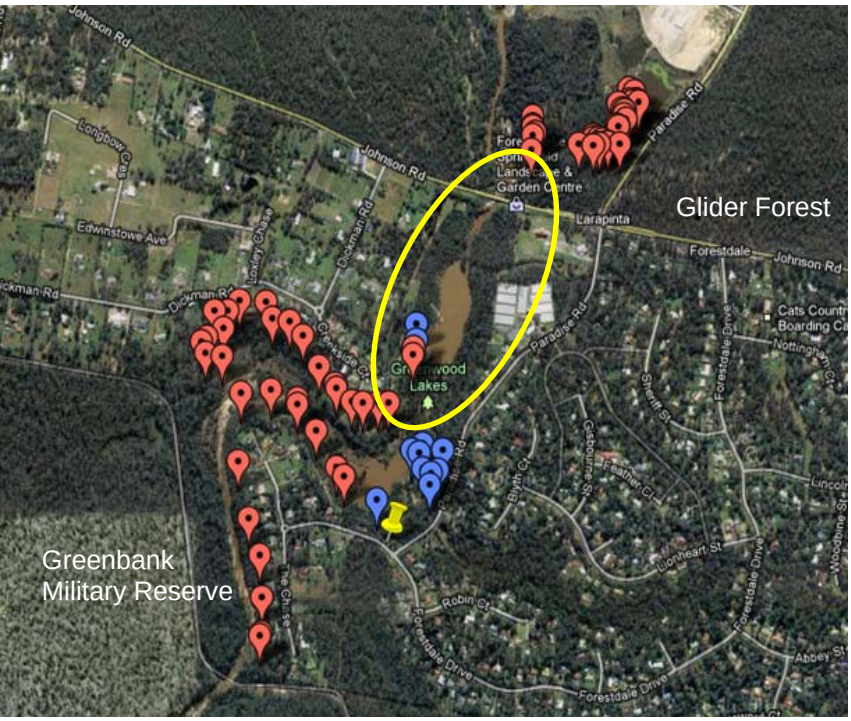
Queensland is home to all six of Australia's glider species. Please help us keep it that way.

Article edited by Pranitha Reddy

QUEENSLAND GLIDER NETWORK NEWS

Newsletter 20 | December 2012

Flinders Karawatha Corridor pilot update



As our pilot site work for glider habitat enhancement and connectivity project within the Flinders Karawatha Corridor progressed, we came to the hurdle of needing nest boxes to connect glider habitats in areas without natural hollows. As QGN is completely funded by members, adoptions and donations, we don't have the funds available to pay $85 per glider box for this purpose.

With a little bit of brain-storming and a lot of goodwill, we approached a few organisations with the ability to help.

Austral Plywoods agreed to donate their marine ply off cuts for the project, the Woodturner's Society of Queensland agreed to donate their time to make 50 nest boxes – and threw in the hinges and 10 additional boxes!


Photo © John Birbeck

We now have the new glider homes we need to provide the last habitat link in our pilot site.

Next year we will be painting and installing our boxes, so if you would like to be a part of it – contact us now!

St Peter's gliders

Back in 2010, then 8 year-old Ashlin from St Peters Catholic Primary School, contacted the Queensland Glider Network after she was concerned about the wildlife living in trees about to be felled at the school. Our Logan branch kindly donated a glider, possum and parrot nest box.

2 years later, we monitored the boxes for Ashlin and her year 5 class, finding a colony of squirrel gliders had already moved in! If it weren't for Ashlin's care, then these gliders would have had to find a new home.

Image 1: Nest box installation at St Peter's Catholic Primary School, Rochedale—courtesy St Peters. Image 2: This photo of squirrel gliders is very similar to the colony found in the St Peter's nest box © Wildlife Queensland

QUEENSLAND GLIDER NETWORK NEWS

Newsletter 20 | December 2012

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:

95 William St Brisbane
Qld 4000 Australia

wpsq@wildlife.org.au
ph 07 3221 0194

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

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

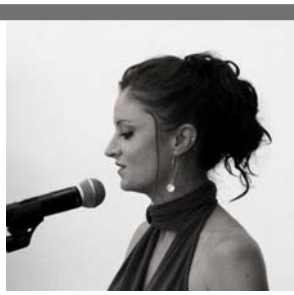
www.wildlife.org.au/projects/gliders/tales

QGN News is only available electronically.

Any opinions by contributors made in this newsletters are accepted in good faith and not necessarily those of the publishers

www.wildlife-australia.org

About our contributors



Karen Brock is a Senior Projects Office for Wildlife Queensland and contracts as a Tourism Analyst and Event Director for Tony Charters and Associates. She holds a Bachelor of Science in the fields of Ecology and Zoology with a background in fieldwork and research in Australian Ecology, as well as Interpretation and Education Programs.

Pranitha Reddy is a media studies student interning at Wildlife Queensland. She assists with social media and communications, as well as fauna survey work. Pranitha is an ardent follower of anything to do with wildlife, and is a strong advocate of our conservation policies.

Jian Zhao is a PhD student in Chemistry from the Queensland University of Technology. She assists with both field and research for Wildlife Queensland's projects division. *I really appreciate the staff at Wildlife Preservation Society of Queensland helping me know more about those wildlife in Australia and the work they have done.*