



## Mammal Mail

The Newsletter of the Tree-Kangaroo & Mammal Group

Published 4X a year

Vol 13 No 4 May/June/July 2013

---

### What's Going On? Don't Miss These Upcoming Events

**May 2nd:** TKMG Committee meeting 5:30pm Malanda Hotel

**June 6th:** TKMG Committee meeting 5:30pm Malanda Hotel, followed by a presentation at 7:00pm by the Lumholtz Tree Kangaroo Community Action Plan Working Group

**July 4th:** TKMG Committee meeting 5:30pm Malanda Hotel

**August 1st:** TKMG Committee meeting 5:30pm Malanda Hotel, followed at 7:00pm by a presentation by Jim Thomas (Director, Tenkile Conservation Alliance) about the on-going work with tree-kangaroos and community in Papua New Guinea.

---

### Changing of the Guard

*by Keith Smith*

The February TKMG meeting saw the retirement of Alan Gillanders and the acceptance by members of Keith Smith as President. Alan will of course continue as an active member and an effective ambassador for wildlife conservation in the region. Alan is keen to direct more of his spare energies toward developing a high standard of guiding in the Wet Tropics, TREAT and habitat revegetation activities. The meeting sincerely thanked Alan for his role as President.

Keith Smith has somewhat reluctantly accepted the delegation as President and is keen to work with the experienced committee members to see TKMG continue as a widely representative and productive community organisation. Keith will be familiar to many as the local nature refuge officer with the State Government (currently with the Department of Environment and Heritage Protection). He has lived and worked on the Tablelands for the past 12 years and has worked with QPWS/EPA in its various forms for over 30 years.

---

### Tree Kangaroo Community Action Plan Update

*by Keith Smith*

*What became of all the butchers paper and sticky dots from the July 2012 conference at Lake Tinaroo?*

A small dedicated group of volunteers have been beavering away preparing a draft **Community Action Plan for the conservation of the Lumholtz's tree-kangaroo and its habitat**. The long-term objective of the Plan is that all populations of the species are secure throughout their range and an active and aware local community is managing threats to support a viable network of habitat for the long term conservation of the Lumholtz's Tree-kangaroo. Initially led by Alan Gillanders, the working group comprises: Simon Burchill, Ilona Moerman, Siggy Heise-Pavlov, David Hudson, Margit Cianelli, Ceinwen Edwards, Rowena Grace and Keith Smith with valued input from Karen Coombes and Alice Crabtree.

A draft copy of the Community Action Plan will be presented for comment at the TKMG meeting on Thursday 6<sup>th</sup> June. There will be a PowerPoint presentation on the plan and question/answer session by the working group.

The Plan has been developed as a concise, practical instrument to direct conservation actions for specific goals. For each goal the Plan lists key objectives with specific actions that are considered achievable within a 5 year timeframe. Potential partners are listed against each action. The Plan emphasizes the need for a coordinated approach to achieve the key goals.

The 5 key goals of the Plan are:

Goal 1: An aware and engaged community.

Goal 2: Adequate LTK habitat in sound condition, protected and well connected.

Goal 3: Direct human-related threats are mitigated.

Goal 4: Protocols based on sound knowledge and experience are applied in LTK Husbandry, Rehabilitation and Release.

Goal 5: Understanding the Species.

Members are encouraged to watch out for the draft plan when it is released and to take time to provide feedback to the working group. The working group will assess all feedback on the plan and the draft amended where required. It is hoped that a final version of the Plan will be put to the wider TKMG membership at the August meeting for endorsement.

---

## **Tree-Kangaroos Featured in Australian Geographic Magazine**

*by Amy Shima*

"Ghosts of the Forest" --is a special 18 page cover feature story in the March/April issue of Australian Geographic magazine focuses on tree kangaroos. The article includes information, maps, detailed illustrations and fantastic photographs of many of the tree kangaroos of Australia and New Guinea. In addition to some great photos of our "local" Lumholtz tree roos (and their carers), there are excellent photos of the seldom-photographed Bennett's tree kangaroo. The many tree-kangaroo researchers consulted by Australian Geographic included TKMG members Roger Martin, Karen Coombes and Margit Cianelli who helped the writer and photographer get first-hand experience with both Australian species of tree-kangaroo. The article also provides a bit of a preview of the presentation to be given at the August meeting of TKMG from Jim Thomas, director of Tenkile Conservation Alliance. In addition, the article includes links to more photos and amazing video footage of tree kangaroos. Australian Geographic has generously allowed TKMG to obtain extra copies of this issue and copies will be available through the TKMG Yungaburra market stall, at TKMG meetings and also by contacting the secretary or treasurer.

---

## **Update on Community Action Grant: Removing Impacts and Improving Habitat Values on the Atherton Tablelands**

*By Larry Crook*

There are three independent sites within this project. Two deal with native forest revegetation, one on pasture, the other on degraded creek bank, and the third with riparian weed control. On March 2<sup>nd</sup>, volunteers gathered at Sue and Ken Pyke's to plant 2700 trees along a creek gully through a paddock. The planting links with a similar sized planting done the previous March (CAG via Yungaburra Landcare) which in turn links with established riparian forest. The plantings are of substantial width, providing erosion mitigation and increased habitat values. A further 300 trees

were added to Sue's nursery to infill and extend the 2012 planting. Volunteers included TREAT and TKMG members and staff and students of the School for Field Studies. The planting preparation was done by the Pykes and the Tablelands Regional Council's Community Revegetation Unit (CRU). The trees were supplied by the Unit's nursery. Sue and Ken will roll out weed gunnel between the trees and will keep up the weed control as they have so effectively done with the 2012 planting. Sue and Ken grow an orchard of a variety of native food trees such as Davidson Plums.

The second revegetation site is at Andrew Dennis' and Diana House's property on Peterson Creek, near Yungaburra. In December, family and friends planted 150 trees on a weed-cleared site on the creekbank, opposite the Curtain Fig National Park and also extended a previous planting. The trees were supplied by CRU. An erosion gully was planted with *Lomandra* and bales of hay staked across it to prevent soil run-off. Finally, the CRU crew hopped into a dinghy (kindly loaned by David Leach) and paddled out into the lower reaches of Peterson Creek to cut and paste *Turbina* vine and *Asparagus plumosus* which both blanket vegetation and are a serious threat to rainforest margins.

---

## Tree Kangaroo & Mammal Group Library

By Amy Shima

TKMG is organizing a lending library to house books, journals and other printed material related to tree kangaroos. We welcome suggestions for books that members feel should be held in our library, as well as donations of books or funds for purchasing books. The location for the library has yet to be determined but books will be available for loan to members. The Committee is working out details of how books will be lent out and whether non-members will be permitted to borrow books. The Committee has allocated a small fund for the purchase of books; bookshelves and a filing cabinet are also in the works.

If you have recommendations for books or items that you feel should be in the TKMG library or suggestions for where TKMG might house the library, please send your thoughts to Simon Burchill, TKMG Secretary ([sbburchill@gmail.com](mailto:sbburchill@gmail.com)).

---

## Will Yellow-bellied Gliders Survive Commercial Logging?

by John Winter, Wildlife Ecologist

The announcement by the Queensland Government that ecotone forests of north Queensland be re-opened for commercial logging immediately raises concerns for one of the marsupial gliders. It is the yellow-bellied glider (*Petaurus australis* un-named subspecies) which is a denizen of these forests on the western edge of the Wet Tropics bioregion. This population of the glider is classified as Vulnerable under both Queensland's *Nature Conservation Act 1992* and the Commonwealth's *Environmental Protection and Biodiversity Conservation Act (EPBC) 1999*.

The Wet Tropics population of the yellow-bellied glider occurs in three discrete sub-populations on Mt Windsor Tableland, Mt Carbine Tableland and along the greater Cardwell Range from the Herberton Range in the north to the Herbert River Gorge in the south. National Parks Minister, Steve Dickson, has stated that the National Park lands (Mt Windsor and Mt Carbine) would be exempt from logging (Tablelander April 30, 2013) Glider habitat on the Cardwell Range from Koombooloomba south is also in National Park. A small section of the Tumoulin glider population occurs within the Millstream Conservation Reserve which is presumably also exempt from logging

Logging would be permitted in State Forests (SF) and Forest Reserves (FR) containing yellow-bellied glider habitat. These areas include Baldy Mountain FR on the Herberton Range west of Atherton, The Bluff FR

between Herberton and Atherton, Tumoulin SF/FR north of Ravenshoe, and Ravenshoe FR-an area which includes part of the Mt Pandanus glider population.

The strongest case for logging within yellow-bellied glider habitat is that in spite of logging within the past 30 years in the Mt Baldy, Tumoulin and Ravenshoe State Forests and Forest Reserves, the gliders have remained. Logging in these areas was undertaken under the *Code of Practice for Native Forest Management*, which prohibited logging activities within 100 m of a tree with five or more cuts made by the gliders to feed on sap, and within 50 m of a den tree. While it is true that the gliders are still present, there is no data on the numbers of the gliders before and after logging to indicate whether the population decreased, remained stable or even increased, as a result of logging.

In St Marys Forest of SE Queensland yellow-bellied gliders were found to prefer the more commercially viable spotted-gum/ironbark forests. Gliders were found (Eyre & Smith 1997) to be less abundant in more intensively logged forest, indicating that more intensive selective logging may have deleterious impacts on the gliders. Eyre (2004) amplified that the high commercial timber value spotted gum forests of SE Queensland were the favoured habitat of the glider. These forests were harvested more intensively than other forest types, thus reducing their suitability as glider habitat.

What do we know about the Wet Tropics population of the yellow-bellied glider? We know they are confined to the ecotone forest which has a mix of red mahogany (*Eucalyptus resinifera*) used as a source of sap and rose gums (*Eucalyptus grandis*) the favoured den tree. Based on the intensive mapping of sap-feed trees and potential den trees undertaken by the Tablelands National Park Volunteers (TNPV) in Tumoulin Forest it can be shown that the gliders occupy discrete areas within the ecotone forest. In Tumoulin SF and FR this comprises approximately 950 hectares, which represents about one third of the entire Tumoulin forest. Similar calculations can be made for the other areas affected, based on the distribution of known sap-feed trees. In the Bluff Forest Reserve, the site of Russell's (1984) seminal study on the glider's behaviour, the gliders are confined to about 135 hectares in Gilbey Creek catchment, which is one percent of this reserve. The area occupied by yellow-bellied gliders within Baldy Mountain Forest Reserve is approximately 1,280 hectares, which is about 18% of this reserve.

State Forest/Forest Reserve	Area ha	Used by YBG (ha)	% used by YBG
Baldy Mt FR	7,100	1,280	18
Bluff FR	12,856	135	1
Tumoulin SF/FR	3,120	950	30

Intensive logging has already taken place in both Tumoulin SF/FR and Mt Baldy FR, most recently during the late 1990s in Tumoulin and during the early 2000s in Mt Baldy FR. The Gilbey Creek catchment of Bluff FR has been protected from recent logging by a 139 hectare Scientific Area (FSM6), applied as a consequence of Russell's study, when it was a State Forest.

The burning question is whether additional logging in these forests will, by compounding the level of logging intensity, have a deleterious effect on the glider's habitat? It is a question that can be answered only by a scientific assessment of logging intensity from previous harvests and the possible impact of future logging on glider habitat. It is an approach advocated by Goldingay and Jackson (2004) to gain a better understanding of the impacts of logging and the effectiveness of sap tree retention proscriptions.

In the absence of such a rigorous scientific assessment, logging should be delayed within known yellow-bellied glider habitat in the Wet Tropics region. Whether it takes place in the future or not, can be determined using the principles of Active Adaptive Management, which values decisions based on learning, and was defined by Holling 1978 and Waters 1986 (quoted in Wikipedia) as a "social process which aims to actively acquire new knowledge which can be used in adapting management practices".

Finally, does it matter if the gliders become locally extinct in these few forests in the Atherton, Herberton and Ravenshoe districts? After all, the best populations are in protected areas on the Mt Windsor Tablelands, the Mt Carbine Tablelands, and in the Nitchaga area west of Koomboolomba dam. That is a decision for the people of Queensland, and particularly the people of the Atherton Tablelands and surrounding areas to make.

References and further information:

- Eyre TJ (2004) Distribution and conservation status of the possums and gliders of southern Queensland. In 'The Biology of Australian Possums and Gliders'. (Eds RL Goldingay and SM Jackson) pp. 1-25. (Surrey Beatty & Sons: Chipping Norton)
- Eyre TJ, Smith AP (1997) Floristic and structural habitat preferences of yellow-bellied gliders (*Petaurus australis*) and selective logging impacts in southeast Queensland, Australia. *Forest Ecology and Management* **98**, 281-295.
- Goldingay RL, Jackson SM (2004) A review of the ecology of the Australian Petauridae. In 'The Biology of Australian Possums and Gliders'. (Eds RL Goldingay and SM Jackson) pp. 376-400. (Surrey Beatty & Sons: Chipping Norton).
- Goldingay RL, Quin DG, Churchill S (2001) Spatial variability in the social organisation of the yellow-bellied glider (*Petaurus australis*) near Ravenshoe, north Queensland. *Australian Journal of Zoology* **49**, 397-409.
- Quin D, Goldingay R, Churchill S, Engel D (1996) Feeding behaviour and food availability of the yellow-bellied glider in north Queensland. *Wildlife Research* **23**, 637-646.
- Russell R (1984) Social behaviour of the Yellow-bellied Glider, *Petaurus australis reginae* in North Queensland. In 'Possums and Gliders'. (Eds AP Smith and ID Hume) pp. 343-353. (Australian Mammal Society: Sydney).
- Winter JW (1997) 'Distribution of the yellow-bellied glider *Petaurus australis* and two other sympatric Petaurid gliders in the Wet Tropics region of Queensland. A report to the Wet Tropics Management Authority, April 1997.'

*Editors Note: TKMG has sent a letter to the Minister stating that we regard this policy as reversing significant past conservation achievements and greatly increasing the risk that essential habitat areas for these threatened species will be adversely affected. Further, TKMG has sought the support and commitment of the Minister to ensure that the highest level of protection and conservation management is afforded to habitat of threatened wildlife species on Forest Reserve and State Forest land in this region and that such areas be converted to national park as a matter of urgency. TKMG has also expressed a willingness to assist the State Government to identify these areas and participate in the preparation of conservation planning for the species and their habitat.*

---

## "Pigology"

by Dr. Peter ("Piggy") Heise-Pavlov

Dr. Peter "Piggy" Heise-Pavlov gave an informative and entertaining presentation at the April meeting of the TKMG. His observations and tales about studying feral pigs over the past 30 years were listened to with great interest.

"Piggy" related his story of how he got involved with feral pigs (observing that perhaps it was always his destiny as he was born in the Chinese "Year of the Pig"). He entertained and informed the small group with "pig tales" about working on feral pigs in different environments in Australia, related some of his research findings and observations on pig behavior and observed that the study of pigs brought him not only interesting scientific work, great times in the bush and the opportunity to work with some wonderful dogs but also facilitated his meeting his wife (TKMG Committee member, Dr. Sigrid Heise-Pavlov).

For those of you who missed this interesting presentation (or if you were there and want to know more about "Pigology"), you might be interested in obtaining a copy of his book, *"2000 Feral Pigs: My part in their downfall"*. The book is available through Tableland Bookstore in Atherton or by him directly via his email: [alectura@bigpond.com](mailto:alectura@bigpond.com)

## Rainforest Mammals of Peterson Creek *by Simon Burchill*

Over the years, as I have planted and maintained trees on my parents' property (which is part of TREAT's Peterson Creek Wildlife Corridor), I have seen a variety of wildlife, including frogs, snakes, birds, platypus, echidnas, possums and Lumholtz's tree-kangaroos in areas which have been planted by TREAT. Worth noting is that my wildlife sightings are generally during the day (although often early morning or late afternoon/ early evening). I consider that the closest source population for the species that were not previously present, such as Lumholtz's tree-kangaroos and Green Ringtail possums, is a remnant patch of forest which is 600m downstream to the west on the Williams' property.

My high rate of sightings is the result of a combination of factors--the area planted with gums and pines from forestry in the early 1980's has developed a rainforest under-storey but is still relatively open with not many trees with a dense canopy for the TK's to hide in. Partly due to the heavy clay soil, the TREAT plantings along the creek are more open than many plantings. Tree kangaroos mostly use the area of 1000 trees planted in 1998 (one of the older rainforest plantings on the property), in particular the 20 *Elaeocarpus grandis*.

My sightings of Tree-Kangaroo's have varied over the years and I feel that over the last 9 months, I have a much better idea where to look for them. In particular I find that the resident adult female with joey is spending a large part of her time in the forestry planting of gum trees with rainforest under-storey--an area where I had not previously spent much time looking for Tree roo's. The number of Green Ringtail Possums I have seen appears to indicate a healthy population. I can't identify one Green Ringtail from another based on markings, but one adult female seems to prefer particular trees and can be found in them with young nearby at various times. My Platypus sightings are always a little variable, being dependent on how much time I spend close to the creek banks, and because the platypus change the areas they use from one year to the next. Coppery Brushtail Possum sightings are under reported as there is one Coppery that sleeps in a hollow in the top of a broken off *Casuarina* almost every day, I tend to only record this one when I take a photo. Echidna sightings are always likely to be rare, my data shows significant variation from year to year. While I have not keep good records I have disturbed Bandicoots in the plantings usually under a clump of grass or other cover, however in places the ground is thick with bandicoot holes, which would tend to indicate a healthy population.

Lumholtz's Tree Kangaroo's: Based on my observations since 2008, I have some theories about the Tree Kangaroos. My theory is that an adult female moved onto the property sometime in 2008. Without employing a gps collar, the precise area of her home range cannot be determined. I will call her Angie ("A" for Alpha female). Angie is of typical Lumholtz's Tree-Kangaroo colouring, with the most identifying feature (so far) being a large irregular pale patch on the pad of the right foot. My Tree Kangaroo sightings through most of 2011 were somewhat scattered and rare, making it difficult to get an understanding of what I have seen. In hindsight this is partly due to not looking in the area of forestry gums & pines where the TK's (in particular Angie and young) seem to spend most of their time. I am not sure how many joey's Angie has had, but from mid 2011 till at least September 2012 I often saw Angie with an also typical coloured (just slightly pale) joey (which I called Terri). I now find it difficult to positively identify Terri, and don't think I see her very often. I now see Angie with a pale cream coloured joey (I refer to as "Snowy"). I first saw Snowy out of the pouch on the 25 September 2012, and had not seen the joey (even with binoculars) prior to this. Snowy is a cream colour (see photo), apart from the face, paws and tail that are dark as normal. I have also seen the resident male (who is of typical LTK colouring).

Based on my observations, I believe that the tree kangaroos using the property as part of their home range consist of the adult female (Angie), her current joey (Snowy), the previous joey (now adult female, Terri) and the adult male. The animals seem to use the plantings along the creek that form part of the Peterson Creek Wildlife Corridor.

Green Possums: I have seen Green Possums in a wide range of locations including nearly all of the revegetation areas on the property. Some of the Green Possums seem to prefer particular locations or trees and I have irregular but common sightings in a number of locations. During 2011 I saw an adult female with young, and most likely one male on an irregular basis, which contributed to a relatively high number of sightings. However in June 2012 I saw a new high of 5 Green Ringtail Possums in one day (21 June), at various locations. While my sightings are irregular they are common enough to indicate that a number of Green Possums are resident on the property.

Table 1 Wildlife Sightings and Locations

Quarter seen	Species	Locations				Total number of sightings.
		1994 0.75 hectare/300 trees	1998 0.52 hectare/ 1000 trees	2004 0.96 hectare/ 6000 trees	Other	
January - March 2012	Platypus	1				1
	Green Ringtail Possums	14			4	18
	Coppery B Possums	2				2
	LTK		1			1
April - June 2012	Platypus	1	1		1	3
	Green Ringtail Possums	9	1	4	14	28
	Coppery B Possums	4		3		7
	LTK		4	8	4	16
July - September 2012	Platypus	1	3		1	5
	Green Ringtail Possums	4		6	1	11
	Coppery B Possums	2				2
	LTK	4	15	8	11	38
October - December 2012	Platypus		3		3	6
	Green Ringtail Possums		2	2	4	8
	Coppery B Possums	1			1	2
	LTK		14		37	51
	Echidna	1				1
January - March 2013	Platypus		1			1
	Green Ringtail Possums	18	1	1	5	25
	Coppery B Possums	1			1	2
	LTK		3		33	36

Total sightings for the period January 2012 to end of August 2012 where 16 Platypus, 1 Echidna, 90 Green Ringtail Possums, 15 Coppery Brushtail Possums and 142 Lumholtz's Tree Kangaroo's (LTK).

### Conclusion

While the behaviour of individual species is interesting, I feel that overall the most interesting thing is the range of species starting to use the corridor and other forest on the property. The presence of Platypus in the creek, Echidna's and Bandicoots on the ground, possums in the mid to upper canopy and Lumholtz's Tree Kangaroos in the canopy demonstrates that to some extent the wildlife corridor is developing as hoped and providing habitat for the range of mammal species found in nearby intact rainforest.



## Mammal Mail

Newsletter of the Tree Kangaroo & Mammal Group, Inc.

P.O. Box 1409

Atherton, QLD 4883

Please Post to:

Tree Kangaroo and Mammal Group, Inc. (TKMG)

e-mail: [info@tree-kangaroo.net](mailto:info@tree-kangaroo.net)

Website: <http://www.tree-kangaroo.net>

President: Keith Smith 0407-968-129 [keithsue.smith@bigpond.com](mailto:keithsue.smith@bigpond.com)

Treasurer: Ilona Moerman 07-4095-2509 [tkmgtreasurer@exemail.com.au](mailto:tkmgtreasurer@exemail.com.au)

Secretary: Simon Burchill 0407-091-347 [sbburchill@gmail.com](mailto:sbburchill@gmail.com)

Newsletter Editor: Amy Shima 0499-180-961 [tkmgnewsletter@gmail.com](mailto:tkmgnewsletter@gmail.com)

*The opinions expressed in Mammal Mail are not necessarily those of the Tree Kangaroo & Mammal Group, Inc.*



The TKMG Website:

<http://www.tree-kangaroo.net>

is maintained on a volunteer basis by  
Pesavento Web Development & Marketing

<http://www.pesavento.biz>

A Big THANK YOU to Pesavento Web Development & Marketing for your invaluable assistance in enabling TKMG to get their message out to the community and to the world.