



Mammal Mail

The Newsletter of the Tree-Kangaroo & Mammal Group

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

Thurs, March 7th Malanda Hotel: 5:30pm Committee meeting. Members are welcome to attend.

Thurs, April 4th Malanda Hotel: 5:30pm Committee meeting, followed at 7:30pm by a very special joint presentation with **Birdlife Australia** by **Dr. Steve Williams**.

Thur, May 2nd Malanda Hotel: 5:30pm Committee meeting. Members are welcome to attend.

Is your membership up for renewal? Please check (contact either Simon or Amy) and RENEW YOUR MEMBERSHIP. Please remember that TKMG memberships run for the financial year so memberships are due for renewal July 1st. Look for a date on your mailing label or email version of the newsletter.

FROM THE PRESIDENT-AGM Report

by Peter Valentine

The year to date has seen an active program of work by members and committee of TKMG. Our membership remains steady at about 150 financial members and many other supporters who participate in activities and otherwise engage in our long term aims of conservation outcomes for all of our outstanding mammals.

We have continued work with our various projects, thanks to financial support from different funding bodies and partners in each project.

Rock Road Connectivity Project

The 3 year/\$100,000 Everyone's Environment grant was successfully completed in this period. The TKMG Final Report was accepted 6/3/18 with the comment "Thanks for submitting your final report for this project. I have assessed the Report and must congratulate you on the excellent outcomes of this project. The time lapse photos are excellent." Overall, about 10 hectares (35,000 seedlings) were revegetated to reconnect a large (ca 1,000 hectare) remnant forest back to the Herberton Range NP section of the WTWHA.

This Project has enjoyed support from multiple partners including South Endeavour Trust, TREAT, Qld Parks and Wildlife Service, Tablelands Regional Council and School for Field Studies. Special mention goes to Mark McCaffrey for his dedicated service managing the on-ground works and almost superhuman effort to keep on top of all the maintenance.

Kenny Road Fauna Overpass

The rope ladder bridge was successfully installed to allow arboreal mammal access between revegetated areas. The overpass will be monitored by motion activated camera to determine success. Thanks in particular to Energy Qld (formerly Ergon) for providing pro-bono crew and equipment to undertake the installation under direction of our expert consultants Biotropica.

“Kickstart” Natural Regeneration Project

Building on the success of a 5 year trial addressing barriers to natural regeneration of rainforest, \$25,000 funding from Qld Govt Community Sustainability Action Grant is allowing a further 3 hectares of disused pasture on Cloudland Nature Refuge to be rehabilitated. Cloudland adjoins the Rock Road Connectivity Project. The experimental trial again involved multiple partners including Griffith and Queensland Universities, Tablelands Regional Council, local landholders and the School for Field Studies and came out of the WTMA led “Making Connections” Caring for our Country project. Special mentions for Prof (now Emeritus) Carla Catterall (GU) and Kylie Freebody (TRC) for their leadership.

Kimberley – the 3D Virtual Reality tree-kangaroo

Kimberley was officially launched at the Malanda Falls Visitor Information Centre in July. The experience has proven very popular at the Visitor Information Centre, with 117 out of 146 survey respondents rating it a 5/5 and another 26 giving it 4/5. TKMG was invited by Advance Queensland to demonstrate Kimberley at the Brisbane EKKa in August, receiving a fantastic response from ‘show goers’ over 3 full days. Funding to develop Kimberley over 3 years came from Terrain NRM, the Australian Govt’s Community Heritage and Icons Grants, and the Qld Govt’s Engaging Science Grants and Gambling Community Benefit Fund. Special mention for Aidan Possemiers, PhD candidate at JCU, who has made a significant time contribution to the project.

Yellow Bellied Glider project - Tumoulin Forest Reserve

Since last year TKMG is now hosting a very active Yellow-bellied Glider project that is currently monitoring the YBGs in the Tumoulin Forest Reserve and using song-meters in a trial to test their utility. This group, ably led by John Winter, Rupert Russell and Amanda Kaiwi, has demonstrated the capacity of song-meters to record glider activity some distance from their food trees. We have developed a notification protocol with the regional management agency regarding intentions to burn so that members working in the forest are kept informed of any fire plans.

Grant Application – Norman Wettenhall Foundation

In partnership with Dr Scott Burnett of the University of the Sunshine Coast, we successfully applied for funds to the Norman Wettenhall Foundation. These funds have been used to support the project of Jesse Rowlands on the conservation status of the Northern Spotted-tail Quoll (*Dasyurus maculatus gracilis*). We will hear tonight some of the results from this work. The Foundation was also keen to help equip TKMG to support citizen science in our region and some funds were used to purchase “critter cams” that will now establish another exciting ongoing program within TKMG to support wildlife monitoring by our members. More on that later also.

TKMG Presentations

On behalf of TKMG I offer thanks to the people who made excellent presentations through the year, beginning with Martin Willis who talked about African Mammals at the AGM last year and then on successive occasions, Alan Gillanders who shared his experience with wildlife management training in Africa; Amy Shima who reported on the long-running mortality study on Lumholtz Tree Kangaroos; Jim Thomas who shared the wonderful work he and Jean do in Papua New Guinea with tree kangaroo conservation and now tonight we have a treat from Macy Hales on wildlife awareness (part of her Malanda School project) and also from Jess Rowles for his presentation on Spotted-tailed Quolls later tonight.

Faunal Extinction Crisis Workshop

As a departure from practice, in August we ran a workshop/forum about the current faunal extinction crisis in Australia. This allowed a good opportunity to discuss our concerns and identify possible responses for the national government. We used the results of the forum to help write our submission to the Senate Inquiry, a ten-page document that identified a series of potential changes to try and better protect our wildlife. These

included more effective laws (with less capacity for Ministers to undermine the law), much more commitment (few threatened species have recovery plans, and none is funded properly); much greater investment in conservation lands (especially in Queensland that has such a low proportion of our state in protected areas), and better investment in traditional ecological knowledge in managing the environment. The full submission is available online, along with the other 172 submissions from across Australia, many from our region including Terrain, WTMA, CAFNEC, BirdLife NQ, Kuranda Envirocare, Bats and Trees Society, Cairns; Environmental Defenders Office (NQ) and many national organisations with interests in the region. All submissions are available on line and the first hearings will occur next week and the report is due in December this year. It will be revealing to see how the Australian Government responds.

One critical issue for our wildlife is the growing adverse conditions across the nation as a result of the slow but inevitable changes in the environment due to climate change. While there is a stated commitment by Australia to the Paris Accord (to take necessary actions to keep global warming to not more than 1.5 degrees above the pre-industrial level) it is clear that actions to date do not support that agreement. In the wet tropics region, we already have good evidence of the likely outcomes for many species in the face of global warming and those outcomes are disastrous.

Proposal for TRC emblem

With regard to our continuing program to try and have the TRC adopt the Lumholtz Tree Kangaroo as our Council mammal emblem, it is disappointing to report that there is little sign of response from Council. I have most recently raised this again with the Mayor at the celebration of 30 years of World Heritage at the Malanda visitor centre with a follow-up letter but so far to no avail. This hesitation from Council is most puzzling.

Thank you, Committee Members

I want to conclude by acknowledging the outstanding support that the members of our Committee provide for the ongoing activities of TKMG. Without such a vibrant committee, little could be achieved. Vice-President Amy Shima was always available for help when needed, especially when I had surgery late last year and again while I was away for two months earlier this year. Secretary Simon Burchill was a stable influence and contributes significantly at the stall at the Yungaburra Markets each month, as did Committee member Ceinwen Edwards whose help on many fronts is appreciated. Ruth Whiston carefully managed our finances and always ensured the Committee was well-briefed on income and expenditure. Dave Hudson yet again showed outstanding leadership in the search for funds for many different purposes, and managing the grants we already had and the on-ground work they supported. Margit Cianelli managed to keep us all grounded in the reality that individual animals are continually impacted by our human activities and showed the importance of caring for those many damaged individuals. Leanne Hales contributed as a Committee member at our meetings when possible despite her active work requirements and took the leadership on some new projects. I also thank Keith Smith and Alan Gillanders who have stepped up to assist with the necessary independent fund management committee associated with the tax-deductible arrangements.

In conclusion let me also thank our many supporters, especially Global Sustainability Solutions who have sponsored our web site and our newsletter; our local newspapers who have provided much needed publicity about our activities (The Tablelander, the Eacham Times and the Mareeba Express); Wendy Cooper for support of the William T. Cooper Award; the Malanda Hotel who host our Committee meetings and our many partners in our projects.

I would invite and encourage any members who have the inclination to join the committee and assist in an area where your skills will be valued.

Peter Valentine, President TKMG. October 2018.

Outcomes from TKMG Urgent Request for Green-ringtail Possum Deaths Reports

By Amy Shima



Figure 1: Releasing the green ringtail possum back into the forest (Photo by A. Shima)

Recently, after being contacted by Drs. Andrew Dennis and John Winter, TKMG took action to inform members about the potential adverse impact the unusually hot and dry conditions on the Atherton Tablelands might have on our local possum population.

Dr. Andrew Krockenberger from James Cook University demonstrated that green ringtail possums cannot thermoregulate at high temperatures and that extended periods of high environmental temperatures will kill them. Green ringtail (and other species such as Herbert River ringtails and lemuroid possums) have been seen dropping from trees during hot periods or being found dying or dead while hanging to trees by their tails.

TKMG took action to notify members via the TKMG website and Facebook page and with a direct, 'urgent action needed' email targeting members in Queensland. There was a good response to the email with several people reporting that they were keeping an eye on the possums in their area but that the animals appeared to be coping. An urgent call was received from the Malanda Falls Visitor Centre Green reporting on a green ringtail possum on the ground along one of the walking tracks. The animal was promptly and expertly retrieved by Dr. Sherri Huntress (a TKMG Committee member and retired wildlife veterinarian). The animal underwent medical assessment by TKMG wildlife veterinarians (Amy Shima & Sherri Huntress), received appropriate treatment and was held for approximately 36 hours. The animal (a young female) was successfully released very near where it was rescued.

With the onset of rains and cooler weather, we are optimistic that this intervention was successful and that this young female will continue to thrive in the forest near Malanda Falls Visitor Centre. Thanks to all who helped (especially Paul at the Visitor Centre) for promptly reporting the distressed possum.



Figure 2: Back Home (Photo by A. Shima)

Myrtle Rust - So what has been happening over the past 6 years?

By Dr Jarrah Wills, Queensland Herbarium and Keith Smith, Qld department of Environment & Science

Myrtle rust (MR) is a fungal disease which infects plants in the Myrtaceae family. It was first detected in Australia in NSW in 2010. MR has spread from Gosford NSW all the way up the eastern sea board to Bamaga at the tip of Cape York. It has also been detected in gardens in Tasmania and Melbourne. More recently MR has spread to NZ, where their response has been huge.

In Qld, it is generally confined to the Great Dividing Range and eastward to the coast and some islands, from the NSW border to Cape York. It is believed that it has not moved into the drier eucalypt woodlands to the west (although areas of dry vine scrub have not been surveyed yet).

As the Wet Tropics harbours a huge diversity of badly impacted myrtle groups, this region seems to be the worst impacted from the current strain of MR. It is severely impacting range restricted endemics (e.g. *Gossia lewisensis*), keystone ecological species (e.g. River Gum *Tristaniaopsis exiliflora*) and some large emergent trees (e.g. Johnstone River Yellowwood *Ristantia pachysperma*). Some species are much more susceptible than others and there seems to be some differences in resistance between plants of the same species and at different life stages and seasons. Some species may well be removed from at least some parts of the landscape as a consequence of MR.

MR is so widespread that it is unlikely that nursery stock will further spread the Rust. The live plant trade, people, water and particularly wind have done a fantastic job anyway.

One concern is the potential waste of effort that may have occurred by planting vulnerable species in biodiversity plantings. I.e. the seedlings may have been carefully nurtured and leave the nursery free of MR but are rapidly picking up the rust when planted in the landscape-and subsequently die. However, no systematic monitoring has occurred to determine the short and long term effect of MR on vulnerable Myrtaceae in plantings.

An interesting conundrum has been raised: should nurseries avoid MR vulnerable species all together, or should they persist and use surviving plants that show strong resistance? Should nurseries persist with MR control measures or stop? Do nurseries/restoration workers have the capacity to investigate survival of planted-out species and share knowledge of which species battle through and survive? Or are they better placed to avoid vulnerable species all together in search of maximum survival rates?

Prevention of other strains of MR from entering the country, selective breeding for resistance, translocations outside of MR range and monitoring ecological impacts as they unravel are actions that urgently need to be investigated.

If you have observations, knowledge or capacity to provide input into the Myrtle Rust studies, please contact Dr Jarrah Wills at email: Jarrah.Wills@des.qld.gov.au

Seeking information on Little red flying fox (*Pteropus scapulatus*) - foraging and occurrence

By Melanie Venz, Queensland Herbarium

As a part of a broader project on Little red flying foxes (LRFFs) with CSIRO (Dr David Westcott as project leader) and the Department of Environment and Science (DES), the Queensland Herbarium is developing 1: 100,000-scale maps of important foraging resources for LRFFs in Queensland.

To do this, we need to understand what plant species they are feeding on, and when. As someone with relevant experience and expertise, we would like to ask about your observations of flying fox (all nectar feeding species, but esp. LRFF) diet and foraging. We are particularly interested in nectar-feeding records, but general information is also useful. General occurrence records (including barbed wire entanglements, etc.) will also assist with temporal aspects of the project.

We are seeking the following information:

- **Have you seen nectar feeding in flying foxes?**
 - **Which** LRFF, unknown *Pteropus*, Other?
 - **What** plant species (if known) were they feeding in?
 - **When?** Exact dates are preferred, but even approximate date, month, season, year are useful.
 - **Location?** (GPS reading, map reference, Regional Ecosystem if known, general area)?
 - **Number** of animals? What was the level of use (approx. abundance estimates of animals or extent)?
- **Have you seen 'significant' flowering events of flying fox food species** (such as *Corymbias* and *Melaleucas*)? (i.e., larger than usual or over an extensive area)
- **Who else should we contact?** For more information about the LRFF Resource Distribution Mapping project, please contact anyone from the Queensland Herbarium project team:



Figure 3: LRFF Herbert River
(photo by P. Valentine)

Dr Teresa Eyre Teresa.Eyre@des.qld.gov.au 07 3896 9834,
Dr Geoffrey Smith Geoffrey.C.Smith@des.qld.gov.au 07 3896 9301
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Melanie Venz

(Zoologist, Queensland Herbarium, Department of Environment and Science)

Citation for Keith Smith: The William T. Cooper Award 2018.

By Peter Valentine

This citation is associated with the awarding to Keith Smith of the William T. Cooper Conservation award. The award was presented to Keith by Dr. John Winter, who was the recipient of the very first William T. Cooper award.

Keith Smith has worked for Queensland Government Environmental agencies, (mostly the Queensland Parks and Wildlife Service) for many decades. He shares his passion for his work with everyone he meets and shows great enthusiasm when assisting people. Those who have been fortunate enough to have been helped by Keith or have worked with him enjoy the enthusiasm and expertise he brings to his work. Keith's knowledge of the wet and dry tropics wildlife and landscapes, derived over a period of 30 years working in national park management and endangered species recovery in this region, has been invaluable for many organisations and individuals and is an indication of his commitment to the protection of the Far North region.



Figure 4: Keith Smith, Wendy Cooper and Peter Valentine (photo by A. Shima)

Keith has worked with Nature Refuges and their custodians over the past 20 years, recruiting over 50 new Nature Refuges and providing outstanding support and advice to landholders across the region. He has a knack for connecting people which results in the sharing of lessons learnt as well as resources, getting the best possible outcomes for like-minded people with conservation goals.

Keith Smith is a measured, informative and constructive communicator who inspires passion for the environment. He maintains a sense of humour, humility and pragmatism which makes him the perfect conduit between government and on-ground conservation practitioners.

It is clear to all who know Keith that the wildlife in our region are all the more secure because of his focus and commitment on their conservation. TKMG congratulates Keith for his exceptional contributions over his entire working life.

Recommended Reading, Watching & Events

By Peter Valentine

Australia's faunal extinction crisis

Have a look at the latest Qld Govt State of the Environment Report which highlights the threats that climate change poses to the upland endemics of the Wet Tropics WHA and the appalling lack of attention being given to this potential Faunal Extinction by all levels of govt.

<https://www.stateoftheenvironment.des.qld.gov.au/heritage/world/climate-change-pressure-on-the-wet-tropics-of-queensland>

Senate inquiry into the faunal extinction crisis

This topic has been discussed previously in TKMG meeting. The deadline for the report has been postponed. This means it will come out after the Federal Election and will lose the impact of potentially becoming an election issue.

https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Faunal_extinction

Video - Explore the secret lives of Tropical North Queensland's endangered species

WTMA and Terrain have this latest video on threatened species and ecosystems of the wet tropics. Unfortunately, the upland endemics are not included. <https://www.youtube.com/watch?v=5lnE925kL1A>

Volunteer Opportunities

On-going volunteer opportunities: We always welcome members who are willing to spend part of their Yungaburra Market Saturday helping out at the TKMG market stall. Even if you can only stay for a short while, it will help and you'll be doing your part to help TKMG get the message out about tree-kangaroos and other mammals in the Wet Tropics and Atherton Tablelands. For further information, please contact Simon Burchill 0407---091---347 or sbburchill@gmail.com or any of the TKMG Committee members.

Do you have writing, editing and publishing skills? The newsletter editor would welcome assistance from anyone with an interest in writing and editing and in tree-kangaroos and other mammals. It's a big job to get the newsletter out and having someone else to help with the task would be most welcome. If you think you might be interested, please contact Lee (0417 843 205) or tkmgnewsletter@gmail.com.

Do you have computer/internet/website skills? TKMG would love to have a member (or members) step up to help with the new website and our Facebook page. Please contact any of the Committee members for more information.

Tree-kangaroo and Mammal Group is a Community Organization so, step up and be an **active** member of our community. Volunteer to help us spread the word about the fascinating environment and amazing animals who inhabit it.

New TKMG Mammal Mail Editor

By Lee Beecheno

Hello TKMG members and MM readers and thank you for the opportunity to return to the TKMG Committee and MM editor role. I was a proud member and editor for TKMG some years ago but haven't been able to participate due long work rosters away. I've luckily been able to find employment closer so now, although still away a lot, I've got the opportunity to reconnect with my family, friends and community.

I'm really looking forward to working with everyone in TKMG and as editor of MM. I'd love to hear from members and readers. Send in photos or stories of your interactions/experiences. Let me know if you have ideas for articles, would like to contribute something or any other suggestions.

Kind regards, Lee ☺



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