



Mammal Mail

April 2006

Newsletter of the Tree-Kangaroo & Mammal Group Inc.

Committee:

President: Jack Grant
 VP: Sue Mathams
 Secretary: Rowena Grace
 Treasurer: Larry Crook
 Committee members: Alan Gillanders,
 Mark McCaffrey, Angela McCaffrey,
 Margit Cianelli, Ross Chapman,
 Ceinwen Edwards.



**Next Meeting May 11th 7.30
 Malanda Hotel**

Guest Speaker: Jim Thomas
 of the Tenkile Conservation
 Alliance.

The Tenkile Conservation
 Alliance (TCA) aims to save the
 critically endangered Tenkile, or
 Scott's Tree Kangaroo
 (*Dendrolagus scottae*), from
 becoming extinct.

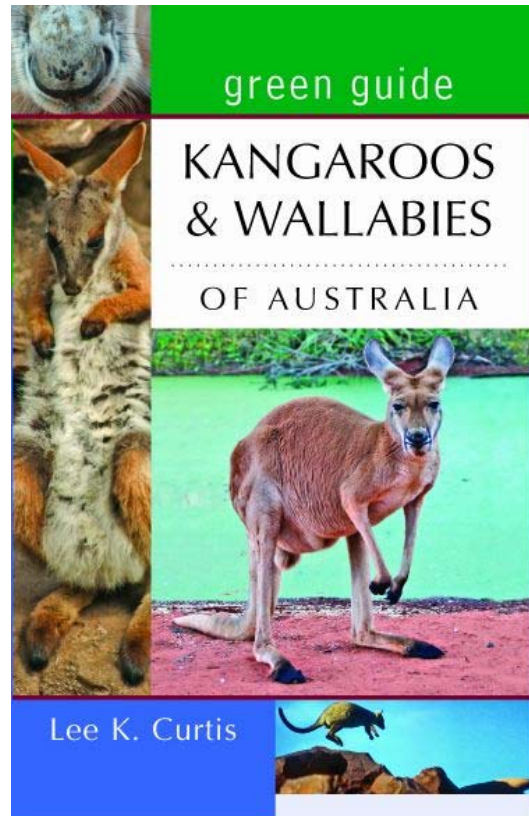
The Tenkile is one of the most
 endangered mammal species in
 the world with as few as one
 hundred individuals remaining.
 So it is really now or never to
 save the Tenkile.

TCA works in the Torricelli
 Mountains of Papua New Guinea
 researching the animal, providing
 education to the schools and
 helping the community.

The Tenkile Conservation
 Alliance is a non-government
 organisation based in Papua New
 Guinea.

We will hear of some of Jean and
 Jim Thomas' adventures as they
 work with the local communities
 to implement a moratorium on
 tree-kangaroo hunting. The
 Alliance works to provide
 information and skills to develop
 other protein and fresh food
 sources.

A committee meeting starts at 7.



GREEN GUIDE - KANGAROOS AND
 WALLABIES OF AUSTRALIA

A REVIEW by Sharon Williams

It's a fact book, it's a field guide, it's green
 guide Kangaroos and Wallabies.

What a wonderful little treasure. A handy sized
 book which kids (or kids at heart, like me) could
 pack up in their bag to take on the family holiday or
 keep in the book collection for wonderful general
 information on some of our amazing creatures.

Green Guide Kangaroos and Wallabies subtly
 promotes the importance of conservation and
 education but makes it enjoyable to read. The
 photographs are just gorgeous and adorn every
 page, with a well written description of the species,
 as well as additional, very informative facts. .. p 2

from page 1

I loaned my copy of the book to my nephew and he was suitably impressed by not only the information, but the fact that the words poo and fart were used in the book. He read the "What's So Great About Roo Farts?" part out loud... and taught his whole family something they never knew. He kept reading.

Overall, the information is easy to read and comprehend, with sections which alternate between habitat information, facts and detailed descriptions ... in just the right balance.

This book inspires me to visit every corner of our amazing country (there is a map in the front of the book to help with my plan). Of course, I want to see every Kangaroo and Wallaby possible now ... aaah, the travel list gets longer. Thank you!

New wastewater and greywater code commences

On 1 March 2006 the Plumbing and Drainage Legislation Amendment Regulation (No 1) 2005 commenced, giving effect to the new Queensland Plumbing and Wastewater Code governing greywater in seweraged areas, which replaces the Onsite Sewerage Code. The Amendment Regulation also includes the criteria local governments must apply in granting a compliance permit for greywater use, and the relevant criteria for declaring areas to be unsuitable for greywater use.

This Amendment Regulation coincides with the commencement of the Plumbing and Drainage and Other Legislation Amendment Act 2005, which allows homeowners in seweraged areas to divert greywater from showers, bathtubs and washing machines to their gardens via underground watering systems.

Communities for Communities is a quarterly newsletter published by the federal Department of the Environment and Heritage (DEH). The newsletter aims to keep the public informed about listings and nominations made under the EPBC Act, and information and resources available on the DEH website.

The second issue focuses on ecological communities, and discusses the new approach to describing ecological communities on the basis of condition rather than composition, to exclude vegetation in poor condition. According to the newsletter, landowners will no longer have to seek approval under the EPBC Act for actions occurring on land containing degraded examples of a listed ecological community. To access the newsletter see www.deh.gov.au/biodiversity/threatened/publications/communitiesnewsletter/index.html.

from the Environmental Defenders Office Bulletin

Editor's Note: How will this affect Mabi forest fragments damaged by the visit of cyclone Larry?

Platypus Care

What is it?

PlatypusCare was established by the Australian Platypus Conservancy in 2002. Wildlife Queensland became a collaborator in 2004, when we started the Queensland PlatypusCare project. Our main objectives are to raise public awareness about the platypus and its habitat and to collect reliable data on the distribution and abundance of the platypus in Queensland.

What happens to the collected information?

One of the main aims of our project is to be able to provide information on platypus distribution to planning authorities, at the local and state government levels, in the hope of better land and catchment management for platypus. As such, all platypus sighting information that we receive is collated into a single database and disseminated to the relevant local council, and to the EPA. We can also use the information ourselves to lobby for protection of important platypus habitats.

The Queensland PlatypusCare project depends on the input of community platypus sightings. You can contact them at 07 3221 0194 or at platypus@wildlife.org.au.

Mammals Online

The University of Michigan Museum of Zoology has an excellent online mammalian classification, which goes down to species level.

<http://animaldiversity.ummz.umich.edu/site/index.html>

Mammals are dealt with much more extensively than other classes. Following these to species level, information about the species, including skulls, pictures, life history, distribution, life history, conservation status etc. can be found, along with a list of relevant scientific papers, some with online links. One of these led to South American information at Mamíferos de Argentina (Mammals of Argentina)

<http://www.cricyt.edu.ar/INSTITUTO/S/iadiza/ojeda/mamarg.htm>

with links to various websites on marsupials and other South American mammals, some in Spanish. These can be readily translated by installing the Google Toolbar which under the "Page Info" button, automatically translates any website into English.

Environment Minister launches new Wildlife Conservancy for Tropical Queensland

In a move underlining the Queensland government's support for the establishment of a strong community-based nature conservation sector, the Minister for the Environment, Hon Desley Boyle MP launched the Wildlife Conservancy of Tropical Queensland on Friday 7th April.

For many this heralds a new dawn in regional nature conservation. Across the world, nature conservation is increasingly becoming the responsibility of community-based organisations. In the future as now, neither the States nor the Commonwealth will be in a position to continue to meet the expanding cost of nature conservation from tax revenues alone. We must therefore seek new ways to conserve our biodiversity over the long term – especially in global biodiversity 'hotspots' such as Tropical Queensland. Given the distribution of our population and sheer scale of our continent, plus an urgent need for support of local efforts, the Wildlife Conservancy of Tropical Queensland has been established to meet a rapidly growing regional demand for effective and practical community-based conservation.

Reflecting a sea change in Australian nature conservation, this initiative – the first of its kind in regional Australia – brings together an alliance of five voluntary wildlife organisations, each with a different focus, but common conservation aims; ranging from the Tree-kangaroo and Mammal Group to the Mareeba Wetland Foundation. The Conservancy's principal areas of operation are conservation land management, rescue and rehabilitation of native wildlife, conservation advice, education and training, and research and monitoring of wildlife health.

One of the Conservancy's key early aims is to raise \$1million to fund the construction and equipping of a purpose built wildlife hospital, to be known as the Tropical Wildlife Centre, for the veterinary care, research, conservation and rehabilitation of wildlife.

Dr Annabelle Olsson, President of the FNQ Wildlife Rescue Association and Board member of the Conservancy said, "The idea of a regional conservancy has gradually come together over the past couple of years, and is the realisation of a dream. Regional wildlife conservation groups will now be able to gain recognition and funding through a focussed

body, which will make us all more effective in what we do. I encourage as many people as possible to support the Conservancy's exciting new initiative, the Tropical Wildlife Centre.

Professor David Bellamy OBE, Chairman of the Council of Governors of the Conservancy said, "All around the world, wildlife groups have realised the power of regional coalitions and working together to achieve their aims. I'm delighted to be part of this ground-breaking initiative and will be actively campaigning to attract the ongoing support which it so richly deserves."

Tim Nevard, President of the Mareeba Wetland Foundation, said, "With the support of government and the community, the Conservancy has the potential to be a leading non-government nature conservation body, working closely with business, industry and all levels of government to ensure that biodiversity conservation becomes an integral part of the sustainable development of our region".

For further details, please contact Gwyneth Nevard (info@wildlifequeensland.com.au and 0408 932303) or visit the Conservancy's website on www.wildlifequeensland.com.au



Maria Pesavento maintains our website as part of the community service she provides. Thank you Maria.

Hypsiprymnodon Carcasses Wanted

If you find any Musky Rat-Kangaroos dead could you please drop them in to CSIRO as their skeletons are needed for scientific research. Hypsiprymnodon do not tend to cross roads or other light gaps. This is good in that they don't get hit by cars very often. This is bad in that they cannot recolonise areas from which they have gone missing because of loss of habitat or other reasons. Other carcasses can also be left at CSIRO. Attach your name and as much collection detail about the place, time and animal as you can; **but no** TKs or Echidnas. Already frozen is best for the staff to handle.

Virus starts cancer in koalas

A VIRUS that jumped to koalas, possibly within the past 200 years, is responsible for the astonishingly high incidence of koala cancer, Australian researchers have found. In a peculiar scientific twist, the virus is similar to those that trigger leukaemia in cats and gibbon apes. The virus is not known in other marsupial species.

"The initiating factor is the viral infection itself," virologist Paul Young said. "That leads to cancers like leukaemia and lymphoma and also to immune suppression and subsequent infections like Chlamydia," said Dr Young, leader of the University of Queensland team that nailed the virus.

According to Dr Young and his colleagues, doctoral student Rachael Tarlinton and veterinary scientist Joanne Meers, fewer than 1% of humans die of leukaemia or lymphoma. However, up to 70 per cent of captive koalas and 3 to 5 per cent of wild koalas die of cancer. The killer virus - an endogenous gamma retrovirus called KoRV - was identified four years ago by another UQ group.

Dr Young and his colleagues then looked for the virus in 150 koalas, half of which were wild animals brought to clinics including Moggill Koala Hospital near Brisbane. The remaining koalas live in the colony at Dreamworld on the Gold Coast, which helped fund the research.

Every koala tested positive for KoRV, which is inherited. But those with cancers and immunosuppressive diseases had high viral levels,

Because KoRV is so close to the gibbon virus, it is suspected that it jumped to both apes and koalas from another species.

Source: *The Australian Newspaper*, July 17 2004

Position Vacant Editor of Mammal Mail

Alan and Larry will help your becoming established in the position. Usually 4 editions/annum

Wildlife Australia Magazine Review

By Lee K. Curtis

**Help save our native wildlife!
Subscribe to an enthralling read that will delight
your senses.**

In each issue of *Wildlife Australia Magazine* (WAM), a host of enthusiastic and experienced contributors are eager to charm you, the reader, with an enchanting account of their often mud-caked, insect infested, burr ridden and sunburnt voyage of discovery into the awe inducing realm of Australia's wildlife—from fungus filaments, vibrant flowers and noble trees to tiny bugs, amazing birds, reptiles, mammals and their all encompassing ecosystems.

WAM was founded in 1963 by an illustrious foursome: poet Judith Wright, painter Kathleen MacArthur, publisher David Clouston and naturalist David Fleay. All were firmly committed to ensuring the wellbeing of native Australian wildlife. Forty-three years later, WAM continues to pulsate with the passion and determination passed on to its subsequent producers and contributors by the original founders.

The stunning visual contributions made by WAM's artists—photographers, painters and illustrators—are skilfully woven throughout the text by an equally passionate editor and a graphic designer. The result? A concert of enticing words and visual treats that will tickle your palate and sate your curiosity...temporarily. Like gourmet feast, it will leave you craving more—available for your consumption in the next issue of WAM.

Looking ahead to the themes for 2006: Join us as we float down Australian rivers, crawl through the undergrowth with David Attenborough and creatures low on the food chain; visit places in South Australia where wildlife has escaped human influence; and take a stroll through ever so inspiring wild gardens. New contributors are always welcome and are not restricted to the above themes.

Along with the inspiring topical feature articles, you will enjoy regular columns such as:

- **Scratchings and Rustlings:** the Queensland Museum's Greg Czechura provides an enthralling insight into the workings of our natural world.
- **City Animal:** Dr Darryl Jones tells us what the good, the bad and the ugly get up to in our urban environment.
- **WPSQ in action:** read about the projects and environmental challenges of a wildlife conservation group. .. p 5

- **Cyber Jungle:** explore the wilds of the world wide web
- **Comment:** delve into the fascinating world of enviro-philosophy
- **Nature Watch:** news on the latest research and discoveries from around Australia and the world
- **Young & Wild:** fun and informative pages for children supplied by Steve Parish
- **Australian Skies:** learn about movements of stars and planets

Subscriptions and back issues can be ordered over the internet: www.wildlife.org.au or contact the Wildlife Preservation Society of Queensland 95 William St Brisbane Qld 4000 phone: 07 3221 0194.



On the Spot

a regular feature extracted from Alan's Wildlife Tours' Newsletter

The Forest, two weeks Post Larry

The Curtain Fig and Cathedral Fig are both still standing and in good condition as are the Twin Kauris at Lake Barrine. After Cyclone Winifred the Golden Pendas, *Xanthostemon crysanthus*, had an additional flowering. It will be interesting to see if that is repeated. The first trees to produce huge flushes of new growth then were Plum Satinash, *Syzygium wilsonii ssp cryptophlebium*. The hot pink columns in the forest were the first major sign of recovery. The reason they were in columns is that the side branches were missing and the leaves were sprouting from epicormic buds under the bark on the trunks of the trees.

The fallen fruit is now largely eaten or gone rotten and the leaves are brown. The animals are very hungry but not yet starving. There are new leaves

emerging which gives one hope for the foliavores but it will be some time before there is much fruit around. The problem for the trees is that there is now so much pressure on the few remaining ones. Silver Ash, *Flindersia schottiana*, have produced some new leaves on most trees and the Coppery Brushtail Possums are enjoying them. If African studies can be extrapolated to here it is likely that leaves grown under stress will produce higher phenol and alkaloid levels. This puts more strain on the animal's digestive system and liver. In one small fig tree at our place we had about 70 Double-eyed Fig-Parrots. All the ripe and near ripe figs were eaten in a few minutes.

There is the smell of a new dead animal, probably a mammal, in the forest. Perhaps it died of old injuries sustained in the cyclone but starvation cannot be ruled out as there is very little for them to eat.

Lomatian Oak, *Lomatia fraxinifolia*, is in flower. Beetles are the major pollinators of this tree but they are eating most of the flowers so I think that seed set will be reduced. In January I reported on the remarkable flowering of the Silver Quandong. The fruit set was not wonderful and many trees were in bud or flower for a second time when Larry struck. Now they have lost all that flower and fruit. This is the case for many trees. It means that there will be little fruit on any of the Quandongs of any species until the end of 2007. During the dry season the smaller fruited Quandongs are important food sources for pigeons, bowerbirds and other frugivores. Kuranda Quandongs, *Elaeocarpus johnsonii*, are in flower where they had some protection from the blow. These are beautiful trees with large glossy leaves which turn an orange-red before dropping. The flowers are white, pendant bells to 2 cm with fringed margins. The occasional plant has flowers with a pink tinge. The fruit are a dull blue-green and are eaten by Cassowaries. The seeds are eaten by native rats and people. The taste is like that of the flesh of a mature coconut.

The Red Bauple Nut, *Hicksbeachia pilosa*, is in flower. The racemes of this small understory tree can be almost a metre in length but are usually more like 40 cm long. Flower colour varies from almost black, through purples and maroons to light pink. The red fruit split fairly easily to reveal an edible nut. The palatability of the nuts varies like most wild food and can be improved with roasting. *Helicia nortoniana*,

Norton's Oak is also in flower. The greenish yellow flowers are small on a raceme of about 6 cm. Pigeons will be grateful for any seed which sets this year. Rats also like the 1 cm nuts.

We have seen four of the Tree-Kangaroos since Larry: Kate, Amanda, Jill and Jill's at heel young. Rex's big trees are still standing but there is no sign that he has been using them. ... 6

5 .. They are very open at the moment. Green Ringtails have been feeding in the fallen branches but now the leaves are getting past it. The Tulip Oaks have more leaves than most of the trees but no Greens have been observed feeding in them. The leaves of *Ficus copiosa*, the Plentiful Fig, have been the main source of food. A few smaller specimens of this tree have fruit which is ripening and there is some fruit to come on *Ficus septica*.

Fewer reptiles have been seen than our usual numbers except for Chameleon Geckoes which have not been seen at all. This could be because it is so difficult to observe the forest floor with all the trash about but we have made a concerted effort without success.

Butterflies and moths are in good numbers. While it is not uncommon for these to feed on fruit, it seems to be a major food source at the moment. Those little flies which breed in rotting fruit appear to have completed a cycle since the storm as they are everywhere. One only has to take out a piece of fruit to have them gather round. Other tiny insects are also out in great numbers at night. I believe them to be flies but 10X magnification was not enough to be sure. Many huge Longicorn Beetles are to be seen on the fallen timber. They will lay their eggs in the logs, aiding the breakdown of the wood. Other wood beetles assist by opening the timber, allowing water and fungi in. Their feeding produces saw dust. Passilid Beetles even chew wood to feed their squeaking larvae. Mosquitoes have bred and are even to be encountered at my nocturnal tour site. There are at least four species sitting on the screen doors right now. Before the cyclone a mass of slug like larvae of one of the blue butterflies was denuding a *Pouteria obovoidea*, Yellow Boxwood. These caterpillars were grey, flat, with yellow stripes. Now it does not look out of place in the forest at all.



Alan offers a free return nocturnal tour for local guests introducing new customers. Conditions apply, contact Alan, 40953784, for details

Update, Four Weeks Post Larry

We have now seen another of the tree-roos, Amanda, but they are not being seen on a regular basis. An orphan Green Ringtail which would still be receiving supplementary milk from its mother seems to be doing alright on a diet consisting largely of Mulberry-leaved Stinging-tree, *Dendrocnide photinophylla*. One Fig of Plenty, *Ficus copiosa*, survived the blow with about 200 leaves more or less intact.

Now it has only two ratty leaves and new shoots. The Green Ringtails ate all the old leaves and many new shoots but now seem to be leaving them alone.

Where to from here for the Forest and its Animals?

Notes compiled from interviews with local naturalists, John Winter and Andrew Dennis

Following the death of many trees during and after Cyclone Larry there will be a famine for nectar and fruit feeding animals. This famine will last this year and gradually ease in following years. Trees which would have fruited later this year have in many cases lost their fruit. The fruit which fell during the cyclone has largely been eaten or gone off. Some more unripe fruit has fallen in the last few weeks as the stressed trees try to recuperate. Highly mobile frugivores like bats and pigeons will continue to leave the area. Wompoo Pigeons are being seen on the coast in unprecedented numbers. Musky Rat Kangaroos do not move across large distances so will stay and starve. Animals which have a flexible niche will alter their feeding habits. Generalists like the White-tailed Rat are more able to cope with changes. Possums have a slightly more restricted diet but should do reasonably well if they get through the first few months.

Reproduction and the recruitment of young will be diminished until resources stabilise again and then may increase to fill the available space. Despite the famine and its effects on animal populations it seems safe to say that no species will be endangered by the event and all will eventually recover.

Such a large disturbance will create a new recruitment surface for the plants; with the death of many and the opening of the canopy the floristic composition of the forest is likely to change as seedlings and sapling different to the original canopy trees take advantage of the loss of competitors. Many cyclone scrubs – formed by the dominance of vines reducing tree, sapling and seedling growth – are likely to form in the worst effected patches. Individual plants sheltered in gullies etc that are able to produce fruit will have extra attention from seed dispersers and are likely to have their genes moved more widely than normal. However, this will be balanced by increased pressure from seed predators if they have seeds palatable to predators. It's a bit like semi cleaning the slate and seeing who among a high local diversity is lucky enough to get a foothold and take advantage of the new space. We should see more pioneer species moving into the forest and likely more weeds – particularly short lived herbaceous weeds whose fruit will be available to seed-dispersing animals.

There are quite a number of research plots in the area effected that will all serve as good baseline data to measure changes and responses in everything from vegetation to some of the animal populations. Funding is needed for these projects.

Bats and Cyclone Larry

News from the Tolga Bat Hospital

Jenny MacLean

Thankyou to all those who've been thinking of us and sending greetings. This is some news of how Tolga Bat Hospital and the bats fared through Cyclone Larry. We were only about 20 kms from its eye as it travelled inland from Innisfail. It was VERY windy (200kms/hour??), still a category 4, and we had 180mm of rain in the 3 hours.

Partly through good management, and partly luck, no trees fell on the house or bat cages. No damage was done to structures, people or resident bats. However there is massive damage to the surrounding forest and gardens. It's going to be a long slow clean up. We were without power for 10 days, but one of our members got power back on in Atherton after 4 days so that allowed us to get back on to the computer, make banana smoothies and other essentials.

A complication with the lack of power was the cleaning system for the cages. All the waste is collected in a tank, and then pumped up to the septic. The tank was rapidly filling. I rang Norm at the T. Hire on the remote chance that I could hire a generator even for an hour. One had just come in, and due to go out again later that day – but we were able to have it for the hour. A few days later we again needed a generator and were able to borrow one from Mark at Northern Plastics and Rural. The local supermarket IGA let us store our frozen banana smoothie in their large freezer. We have had tremendous support from local businesses as well as from members. Mark and Angela McCaffrey deserve special mention for coming out the day after the cyclone to help clear the driveway.

Immediately after the cyclone we were very busy stockpiling 1000 kgs reject bananas from our local banana farmer. The banana farms were picking up as many fallen bunches as they could, and packing them for market. We were using about 200 kgs of bananas a week so could foresee big problems with supply. Now one month after the cyclone, we have been able to source a few farms that have some crop to pick and are happy to help us out, but the amounts are limited and transport is a problem. We rely heavily on bananas and apples to feed the bats. The freight on apples from our regular supplier went up by 70% after the cyclone, but Peter from The Humpy has been a great help and we are back to a manageable price.

We have had a number of bats brought in since the cyclone:

- Spectacled flying foxes - one orphan with a severe fungal infection from the trauma, one wild pup with both wings 'shredded', 4 with compound fractures of humerus,

3 electrocuted, and another unable to use one wing/thumb,

- Black flying fox – 1 male with compound fracture humerus. (This is the second Black flying fox from the Tolga Scrub in the last 6 months, which is very interesting in the light of Sam Fox's PhD, so we have taken some genetic material for her)
- Tube-nosed fruitbats – 14, all but one off barbed wire. I have no explanation for this, other than that they are hungry and not coping as well.

It is very hard to know how the general population of bats fared during the cyclone. They would undoubtedly have come lower in the trees during the cyclone, but would still have been whipped about mercilessly. There have been quite a few reports of unusual bat activity since the cyclone and some indications that many are very hungry. The numbers at Tolga have reduced dramatically but this can be normal for April as many bats move to the coast by winter. Flying foxes are extremely mobile and will probably fare better than a lot of other species post-cyclone as they can move to lesser-affected areas. However I believe the mortality rates for the young (most about 6 months old and only just weaned) will be very high.

We were able to get out to the Tolga Scrub to feed the orphans on the afternoon of the cyclone. There were very few bats that had made it back to camp that morning and only 30 orphans came down for a feed. We had considered bringing home as many orphans as we could catch the day before. Over the next few days though, many returned and we were feeding about 100 orphans 2 days later. We also get quite a few orphans from previous years, many of whom we are able to get close enough to for scanning a microchip.

At this time we would normally be reducing the amount of food going out to the released orphans. However there is now very little fruit and blossom left for them in the cyclone-devastated areas, and if the colony remains at Tolga, these orphans will need support feeding for much longer than usual.

We have a new website up as of 2 weeks ago
www.tolgabathospital.org

Editor's note: Many bat colonies a largely empty during winter. While individual bats will move between camps on an irregular basis and the colonial structure of the camps is fluid, there is something strange happening each winter. Up to three quarters of the Wet Tropics population of Spectacled Flying Foxes may be unaccounted for in winter. Do they form small, unobtrusive camps; do they hide in deep unvisited valleys or do they even leave the country? The Cape York population does not show a marked increase at this time. If you find bats in strange places let Jenny know.