

Central Queensland Koala Volunteers



AUTUMN EDITION 2011

St Bees Island March 2011

In March, I lead a koala team consisting of Adelia Nollet (a visiting student from France) and Rolf Schlagloth (a koala researcher from Ballarat who has moved to Central Queensland recently).

We were joined by a team of six from the Queensland Parks and Wildlife Service and the Queensland Herbarium. We assessed the state of the island after the big wet and maintained the island weather stations. The QPWS team was doing some monitoring ahead of strategic burning of the island grasslands planned for later this year (if it is dry enough).

The island looked very green. All the creeks and springs were running water. The humidity ranged upwards from 75% during the day and, although the temperatures only reached the low 30's °C, the slack air meant that we were wet from perspiration most days. Adelia and Rolf were attempting to track and locate a few collared koalas. However, only four radio collars seem to have survived the wet season so data gathering was sparse. I was looking at the weather stations. Three of the four were operating so we will gather some data from this cyclone season. The koalas seemed healthy but were staying in the shady rainforest shrubs and leafy eucalypt canopies to stay cool.

The best news was that there were quite a few blue gum (*Eucalyptus tereticornis*) seedlings across the island following the removal of the vast majority of goats. The bad news was that, in the absence of goats, the lantana has thickened rapidly and long sleeved shirts and long trousers are standard dress now.

There were new caretakers on the island (John and Helen). This lovely couple has been very helpful and they were always cheerful.

Alistair

Senate inquiry into the status of the koala

The Senate inquiry into the status of the koala has received a large number of submissions from a wide spectrum of the community. These submissions can be read by going to the Senate website and following the links to the koala inquiry. Not all are in favour of increased protection for the koala and some reflect very local concerns. Taken together, however, the range of concerns illustrates the controversy and emotion that koalas raise in our society. Hopefully the Senate inquiry will lead to some practical pathways to conserve this iconic species.

Alistair

Field trips

This year the field program is very confused as all trips have been rescheduled due to wet weather. Two more St Bees Island field trips are planned (July, September). The dates are not yet set. Accommodation on the island is restricted with only one cottage available to field teams. So if you are interested in joining us please check to see if space is available. We hope to run two trips to Springsure. The first will be in autumn or early winter and will be of short duration – a few days. The second will be for about two weeks in October and will be a tree planting trip. Again, if you are interested in joining either of these trips, please contact us and we'll advise of dates as they are decided and of available space.

Alistair



Most koalas were in the outer branches curled tightly in driving rain and gusty winds. Why didn't they seek shelter low down or under the dense canopy of rainforest trees and shrubs?



Blue gum seedling emerging above dense grasses on St Bees Island -providing fodder for future koala generations. Before the goat cull such seedlings were impossible to find. Now seedlings are common - especially at the outer edge of the forest.



Another wet day on St Bees Island. Space was at a premium as the team attempted to dry boots, clothing and equipment.

Adelia Nollet and Rolf Schlagloth resting on St Bees Island after a torrid search for koalas in Honeymoon Bay.



Janette Kemp from the Queensland Herbarium and Andrew Dinwoodie from QPWS assess fauna habitats ahead of burning later this year. Look in the background at the thickening shrub layer in this formally open grassy forest. A lack of goats and a run of wet years have released luxuriant growth.



Central Queensland Koala Volunteers
www.cqkoala.org.au
Autumn Edition 2011

Mission

CQ Koala Volunteers seek the conservation of the koala and other tree living mammals in Central Queensland by

- *Supporting research into koalas, other arboreal mammals and their habitat through (a) providing volunteer support to research projects, and (b) assisting in the raising of funds for research and the volunteer teams;*
- *Developing public awareness of the needs of koalas, tree living mammals and their habitat requirements generally;*
- *Fostering community support for koalas and tree living mammals generally;*
- *Encouraging and assisting with the development of habitat rehabilitation projects where necessary through the region;*
- *Supporting the rehabilitation and release of sick, injured or displaced koalas and tree living mammals.*

The Central Queensland Koala Volunteers are not about stopping development. They seek to encourage planned development, which allows for the co-existence of koalas and other tree living mammals with human activity.

Funds are used to buy equipment for the researchers, to fund volunteer field teams and provide limited support for animal carers. Donations may also be made to the Koala Research Centre of Central Queensland and are tax deductible.

Office Bearers

*Alistair Melzer, signatory, Chairperson
Carmen Drake, signatory, CKQV representative
on Koala Research Centre Board*

*Shirley Hopkins, signatory, Treasurer
Doreen Lovett, Editor: drl33@bigpond.com
Nick Quigley OAM, Web designer
Web: www.cqkoala.org.au*

***Direct correspondence to
Central Queensland Koala Volunteers
PO Box 1489***

or call Denise on 0749309944 and leave a message.

Springsure field trip December 2010

With the probability of rain, Alistair, Linda and I travelled to Springsure for a short 'listening' field trip. Before we had arrived at Emerald the road was closed to one-way traffic at one of the creeks. The weather was very uncertain and it would not take much for us to be held up in Springsure. At Springsure we unpacked our gear then went to get groceries and as Alistair had to meet with a council member, Linda & I did a tour of the Art gallery attached to council offices. The display was work of friends Veronica Zeil and Ainslie McMahon. I made inquiries about exhibitions and ended up booking an exhibition for May, 2011.

Our 'listening' shift started about 7pm so after an early meal we headed to Minerva Park, it was beginning to rain so we donned raincoats, boots etc. We were set up at three sites along the road running parallel with Norwood Creek. I was at the furthest end armed with umbrella, torch, mosquito repellent, chair plus paper & pen to record any sounds of koalas calling. Alistair had chosen this time of the year as it is mating time for koalas and any males in the area would be calling loudly to attract the females.

I crouched under my umbrella listening for that familiar nasal snorting sound, but the rain, wind and constant buzzing of mossies around my face made it difficult to hear any other sound. In spite of that I did managed to detect a far off call of a koala. After about 3 hours of listening for calls, we returned to the unit to dry ourselves off. We each had heard calling so koalas are still in the area even though the numbers are depleted. Both Alistair and Linda said the croaking of frogs along the creek almost drowned out any other sounds.

The morning was sunny but with threatening clouds passing overhead. We went back to the

*Central Queensland Koala Volunteers
www.cqkoala.org.au
Autumn Edition 2011*

Park where Linda and I did a searching sweep of an area while Alistair checked on the young eucalyptus trees that volunteers had planted during the year. The good season had resulted in massive growth of blady grass along the creek line making it hard to find some of the trees, but some appeared to be healthy though when you look at the very large dead trees it is going to be so many, many years for them to be replaced.

The afternoon was spent checking the trees that were planted on the water reserve. Quite a few of these trees were virtually drowned by the unusually wet season. The reserve was an old drovers camp ground so we fossicked about and I found a 1904 penny in a spot where Alistair had previously found a farthing. I thought they should stay together so gave him the penny. We then did a koala search, finding scratches but no animals.

At dusk we set off to listen for calls along Arcturus Road and again there was a constant chorus of frogs along with the mosquito buzzing. The sky was clear, with the stars just magnificent. I really enjoyed the couple of hours star gazing but unfortunately, I heard no calling of koalas - very depressing as this area was abundant with koalas when I started helping with research twenty years ago. Alistair heard calls as did Linda so with good seasons maybe numbers will increase. I believe there is a mine about to be opened up in the area so we can only hope someone will consider the koala and its habitat.

We left for Rockhampton the next day with rain developing behind us, we arrived home to hear that rain had closed the roads between Emerald and Rockhampton the next day. It was a very enjoyable couple of days,
Carmen Drake

Many thanks to Ruth Crosson of Gladstone for displaying Central Koala Volunteer information and photos of research and field work at Tondoon Botanical Gardens during the month of February with S.G.A.P. displays.
Carmen

Alistair has received permission from the Canberra Times to publish the article '*Koala Number Crunch*' which is on the following pages.



KOALA NUMBER CRUNCH

There hasn't been a national koala census, and under the federal listing process, if you can't count them, you can't protect them, **ROSSLYN BEEBY** writes

Ask a wildlife ecologist, wildlife carer or a Canberra environment bureaucrat why koalas aren't listed as a vulnerable species under federal law, and they'll explain there's a particularly knotty piece of red tape to unpick. It's the Catch-22 of koala conservation. Yes, there's a long list of threats to their survival in the wild, including infectious diseases, habitat loss, roadkill, dog attacks, bushfires and a rising incidence of renal failure that's possibly caused by loss of leaf moisture linked to climate change. But no, koalas don't meet current criteria for a species to be listed under federal biodiversity protection laws. Why not?

In a nutshell, because no one can tell the Canberra bureaucrats how many koalas are out there. There hasn't been a national koala census, and under the federal listing process, if you can't count them, you can't protect them. It's a numbers game.

Under section 179 of the Federal Environment Protection and Biodiversity Conservation Act (passed in 1999, amended in 2006) a species must meet at least one of five criteria to be eligible for protection as vulnerable, endangered or critically endangered. But despite decades of scientific research showing high koala mortality rates caused by roadkill (more than 5000 have been killed on urban roads in south-east Queensland over the past 10 years), disease and bushfires, the koala theoretically can't meet any of the Federal Government's listing criteria.

The first is proof of "a substantial reduction in numbers". The other criteria are: limited geographic distribution; evidence of a continuing decline in numbers; low numbers of adults; and a 10 to 50 per cent probability of future extinction in the wild.

But if it's just a matter of counting koalas, why hasn't an army of eager conservation volunteers with counters and clipboards been fanning out across Australia's eastern forests? Well they have, but as koala ecologists patiently explain, koalas are notoriously difficult to spot in the wild. Volunteer surveys conducted in rugged bushland also tend to make middle-management bureaucrats in government agencies a little nervous about public liability insurance coverage if a survey goes pear-shaped – particularly as the average age of most conservation volunteers is 50-plus. A snake bite, a bad fall, heat exhaustion, even a heart attack – there's a lot to worry about. So that leaves

scientists relying on volunteers from local bush-care groups to help with poorly resourced koala monitoring surveys funded – in the case of the Central Queensland Koala Volunteers – by selling tins of chocolate-coated macadamia nuts, toy koalas, caps and sweatshirts.

The bottom line is long-term scientific research to monitor koala populations is so poorly funded by federal and state governments there's no reliable national estimate of koala numbers.

The Australian Wildlife Hospital at Beerwah, in Queensland's Sunshine Coast hinterland, treats more than 600 diseased or injured koalas a year. But the hospital's research director and chief veterinarian Dr John Hangar estimates this is only 30 per cent of the numbers of injured koalas – about 2000 at the last count – presented to Queensland wildlife organisation each year.

"I recognise that there are criteria that guide the listing of species under the EPBC Act. If these criteria currently unequivocally prevent the listing of the koala, then they must be changed," he wrote in a submission to a current Senate inquiry into the status and sustainability of Australia's koala populations.

Hangar argues there "is an abundance of anecdotal and some supporting scientific evidence for widespread declines in koala populations", particularly those close to urban developments where some regional koala populations have become extinct over the past 20 years. He also points out that although the high prevalence of disease in koalas "has been recognised for well over a century", the impact of these diseases has only recently been recognised – to quote the obtuse jargon used in federal environmental protection assessments – "as a key threatening process".

Hangar has published several research papers on koala retrovirus disease, which has been linked to cancers, leukaemia, and an AIDS-like collapse of the immune system in koalas. He argues that regulatory authorities in Queensland and NSW "are largely ignorant" of the threat posed by disease "mainly due to the poor level of veterinary support and disease surveillance provided to key koala rehabilitation centres".

The koala retrovirus "has the potential to be one of the most significant factors in the severity and prevalence of serious disease in koalas, and yet the funding allocated to better understanding it has been pitiful", he writes. "It is our opinion that this virus may be as devastating to

koalas as the Tasmanian devil facial tumour disease in devils or chytrid fungus disease in frogs. Both have received orders of magnitude more funding than has research on the koala retrovirus."

Australian Greens leader Senator Bob Brown made two attempts to secure a Senate inquiry into the status, health and sustainability of koala populations, finally succeeding in getting the motion passed in November last year. Announcing the six-month inquiry last year, Brown said that despite its iconic status, "we know very little about the threats to Australian koalas".

The inquiry has received more than 80 submissions, chiefly from scientists, small community conservation groups, local councils, wildlife shelters and ordinary Australians concerned about the effects of urban sprawl, logging and mining on local koala populations. But Australia's mainstream conservation groups – the Australian Conservation Foundation, Wilderness Society, Greenpeace and World Wildlife Fund Australia – are conspicuously absent. Submissions are now closed, and only two major green groups, the Humane Society International and Friends of the Earth, have filed, arguing for a rethink on the flawed federal listing process.

One of the most moving personal submissions is from a South Gippsland tax accountant (whose name is withheld by the inquiry) who volunteered to work at a local wildlife shelter which treated more than 100 injured koalas – including the iconic Sam, the koala filmed drinking from a firefighter's water bottle – in the aftermath of Victoria's 2009 Black Saturday bushfires.

"I have no science to provide you with and no formal reports. There is no funding for the shelter to care for the koalas and so there is no money or time to be able to formally study and document the plight of the local koalas," the submission says.

"I wish that all on the [Senate] committee could have spent the incredible time that I have with these animals. It takes a very long time to rehabilitate a sick or wounded koala – and even longer for burns – but the reward is seeing that magnificent creature rapidly climb to the top of a huge eucalypt upon its eventual release."

Another submission (name also withheld) is from a Brisbane couple who spent two years "and thousands of dollars" on costs, appealing a decision by Brisbane City Council to approve a development subdivision in the suburb of Fig Tree Pocket.

"Our interest in this development was due to

the evidence of [the inhabitation of] koalas and other fauna," the submission says.

"We have numerous examples of emails between [the Brisbane City] Council ecologist and Council town planners and the developer where the advice of the ecologist was dismissed ... Suburban areas are not assessed or mapped for koala habitat. Because the koalas in our neighbourhood do not appear on the state government maps, no detailed assessment on the viability of these populations due to the proposed development will be conducted by the local or state government. These koalas, and numerous other significant fauna will become extinct in this area."

One of Australia's leading koala ecologists, Central Queensland University biologist Dr Alistair Melzer, argues in his submission that a better scientific understanding of "the koala's role in Australia's eucalypt ecology" is needed.

"Getting the story right for the koala also gets it right for the ecosystems on which they depend," he says.

"In Canberra, the status of the koala is reviewed within the context of the regulations which, despite the concerns of the scientific community, do not seem to be sensitive to the real state of the environment."

Last week, *The Canberra Times* reported scientific evidence obtained by NSW National Parks and Wildlife service ecologists Chris Allen and Dr Andrew Claridge that explodes popular myths about koala habitat and feeding ecology. The discovery also illustrates the obstacles encountered by members of the public when they try to contribute to scientific knowledge.

Back in the early 1990s, retired Canberra academic and artist Garth Dixon noticed deeply gouged bite-marks on the bark of brittle gum trees (*Eucalyptus mannifera*) on a 2000ha conservation property south-west of Bredbo that he jointly owns with a group of friends. Dixon was convinced the marks were made by koalas eating the bark, but says his observations were dismissed by scientists as "a flight of fancy by an enthusiastic amateur naturalist". After years of his theory "being pooh-poohed by all the experts", Dixon contacted Allen, after hearing of his work with koala surveys in NSW south coast forests. After seeing these "koala chew trees", Allen contacted Claridge who has pioneered the use of infra-red cameras to replace trapping in Australian wildlife surveys. They set up cameras at six "chew trees" and were rewarded by footage which clearly shows koalas eating bark.

But lists of primary and secondary koala food trees, compiled by government conservation and forestry agencies, as well as the Australian Koala Foundation in Queensland, don't include brittle gum. Bredbo's bark-chewing koalas are poised to rewrite the rules on koala habitat protection and the trees considered essential to their foraging ecology.

Six months ago, the federal Environment Department's threatened-species committee concluded its third investigation into whether the koala should be listed as a vulnerable species. Previous investigations occurred in 1996 and 2004, and concluded with the koala being rejected as a contender for listing as a potentially vulnerable species.

As the committee's chair, University of Queensland environmental management expert Associate Professor Bob Beeton states in his letter to federal Environment Minister Tony Burke, the most recent investigation "arose as a direct request from the then minister [Peter Garrett], based on a 2007 election promise that an evaluation of the status of the koala would be undertaken by the committee." Beeton told the minister that although koalas were "potentially eligible for listing as vulnerable", there was insufficient data on population numbers to make an informed decision.

"The eligibility for listing of the koala is totally dependent on criterion one, relating to the extent of recent population decline," he wrote.

"The committee concluded that the koala was not eligible for listing as nationally threatened but noted that reaching a conclusion was challenging. They found a key hurdle to the assessment were the significant gaps in knowledge about the national koala population."

The number of submissions by small community conservation groups to the Senate inquiry suggests the big green lobby groups may be out of step with public conservation concerns. While bigger green groups are not

prioritising wildlife conservation, figures from wildlife shelters across Australia show an increasing number of people are enrolling for wildlife-carer courses.

The irony is that while the big green groups are jostling to be seen as serious players in shaping climate-change policy, scientists and grassroots groups are slowly collecting evidence that suggests koalas are likely to be frontline climate-change casualties. A study by the Australian National University has demonstrated warming temperatures are altering the chemical composition and moisture content of eucalyptus trees. In Queensland, Alistair Melzer has noticed a rise in renal failure among koalas, and previously commented that photos of koalas seeking water during heatwaves are indicative of heat stress and severe dehydration.

There's also a conflict between koalas and coalmining. A Senate submission by Glenn Beutel raises concerns about the impact of a proposed open-cut coalmine expansion on the small town of Acland, on Queensland's Darling Downs, and its local koala populations. Beutel, a 57-year-old former caravan park operator, is fighting to save the town and its wildlife, and his PowerPoint-style submission suggests a koala levy should be imposed on the mining industry to fund koala research.

It's a good-humoured submission, given Beutel stands to lose his modest home if the mine expansion goes ahead, and argues the case for koalas and a sustainable coal industry to coexist. Beutel ends his submission with a photograph he took of a koala, backside to the camera, ambling along one of Acland's streets and a quote from American comedian Groucho Marx: "Why should I care about future generations? What did they ever do for me?"

Rosslyn Beeby is Science and Environment Reporter.



Despite its iconic status, 'we know very little about the threats to Australian koalas'.





Bush spots: Clockwise from left: Rosemary von Behrens takes a photo of a koala high in a tree near Bredbo, south of Canberra; Chris Allen, of the NSW National Parks and Wildlife Service, and Dierk von Behrens look at a tree that has been chewed by koalas near Bredbo; and a koala snuggled in a tree. Photos: ANDREW SHEARGOLD



