AUTUMN EDITION 2015

Central Queensland Koala Volunteers

Chlamydia, just a symptom not the cause

Who isn't curious about those furry creatures that live in trees (mainly, but not exclusively, eucalypts) and eat their foliage? Who wouldn't want to know information about their social interactions, diseases which may affect them, the type of trees they eat, how they reproduce and so on? I am, of course, talking about the Koala (*Phascolarctos cinereus*), the cryptic marsupial endemic of Australia.

Reality is, there is still much to be known about these gorgeous marsupials, but, maybe, we are running out of time. In fact there are many reasons to be worried about their future. One of the main concerns is the impact of *Chlamydia*, the disease which is sexually transmitted and can affect their health and their reproduction. This is especially the case when the animals are stressed by various factors such as habitat loss, drought or when they have to be moved to other areas (translocation).

Chlamydia pecorum which is the species affecting koalas, is not the same which affects humans (nothing to worry about!); it is found in koalas throughout their range, from Victoria to Queensland. The symptoms of chlamydiosis are various because the disease can affects different organs. Koalas can become blind if their eyes get infected, they can suffer pneumonia if their lungs are infected, or can become sterile and suffer incontinence if their urogenital tract is infected.

Research is currently being carried out to find a suitable vaccine which could, one day, protect koalas from this disease. But what will protect them from the stresses that are causing it in the first instance? The reality is that humans' expansion to rural areas is decreasing the available koala habitat and this causes animals to lose their home. Many are removed from their trees and translocated to other areas, where very likely there are koalas with *Chlamydia* or those that are moved carry the disease with them and spread it.

So what can be done? We need to protect koala habitat, of course other species, not as iconic, would benefit as well. We need to set aside much more land, which will be protected forever and this land has to be connected through corridors which are possibly away from roads so that koalas can move freely without being run over by vehicles (but that's another story which can be told next time).

Protecting koalas for generations to come, means protecting the environment for the benefit of all species.

Flavia Santamaria

St Bees Island Research Activities

Research Camp

A healthy St Bees Island koala. While we can detect traces of Chlamydia genetics in some island koalas, the disease is not active in the population. (Photo A Melzer 2010)

The research platform (7m x 4m shed and covered work area) is currently being fabricated. This will be ready for transport by barge to St Bees Island shortly. Actual date will depend on weather and tides. The building materials will be manually transferred to the beach and then carried to site. We're looking for willing workers to assist. Also we will need to cart freshwater from the beach to the site in 20l water bottles so that the foundations can be mixed and poured. If you are interested in helping please let me (Alistair) know. I'll cover transport, food and accommodation costs.

Koala Counting

We'll have a mid-year field trip to carry out the annual goat, wallaby and koala audit. Usually this is in July; this matched QPWS vegetation monitoring. However, QPWS will not be conducting the monitoring this year, so we may travel earlier. Check the web site for details. We have two French interns (Fanny and Jenny) travelling with us on this trip. However, some volunteers would make this work more efficient. The trip will be 10 days long and gives the participants an in-depth experience of the island ecosystems and landscapes. Last year the data suggested that koala numbers may be declining. Was this a reaction to two cyclonic storms in one season after a very dry spring?

Earthwatch St Bees Island

A renewed Earthwatch program will start late this year. This will be a start-up visit that will determine the operating framework for more extensive trips in 2016. There will be space for a limited number of volunteers from 2016. Let me know if you are interested.

Springsure Habitat Restoration Trials

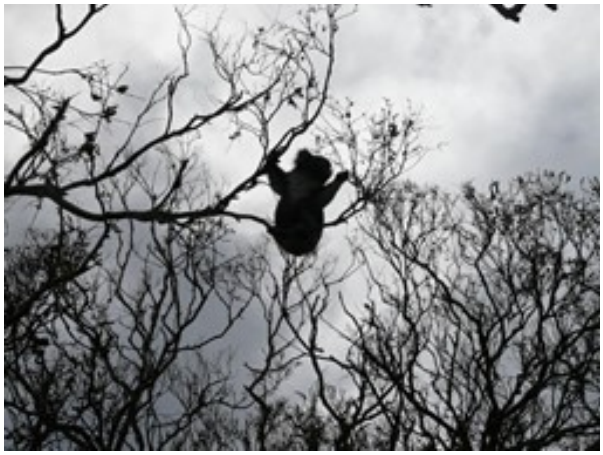
Our tree planting trials along Norwood Creek at Springsure have survived the dry 2014 spring and are growing well. There have been some losses due to the attention of cattle. Despite that most of the advance tree plantings are well established and over head high. Spotlight census continue to show a stable low number of koalas but with an abundance of brush-tail possums. This work was funded by a Community grant from Xstrata Coal.

Regional koala habitat mapping

The mapping of remaining koala habitat across the Central Highlands, Isaac, Rockhampton and Livingstone local government areas is almost complete. These

maps will be publically available in the next three months. This work was funded by a Community grant from Xstrata Coal.

Cape Otway Research



Searching for that last leaf. (Cape Otway 2013 A Melzer)

In conjunction with Dr Desley Whisson from Deaken University and Earthwatch Australia, we have been following the fate of koalas near Cape Otway in southern Victoria. This is an ongoing study of a wide ranging koala population. Koalas are found across a number of forest types from tall mountain eucalypt forests (Tasmanian blue gum, Mountain grey gum greater than 40m high) to low forests of manna gum (less than 10m high). The koala population in the manna gum increased exponentially to the point when the eucalypts were defoliated and started to die back. Many koalas were starving and dying. We observed koalas on the ground trying to eat bark, grass and fern. Others were climbing to the extremity of branches and hanging off the end by one paw while grasping for solitary leaves. Tourists stopped to take photos of cute koalas on stark leafless branches not aware of the ecological catastrophe around them. Local land holders were patrolling their properties collecting dead koalas each morning. Foxes were scavenging freshly dead animals or orphan joeys. The Victorian Government decided that a humane intervention was warranted. A team visited the site on a number of days. As many koalas as possible were caught and given heath checks. Those that were relatively fit were released. Those that were in extremis were humanely euthanized. There was also considerable concern for the fate of the trees. At this stage whole mana gum forest patches were dead, most others were defoliated. People nailed metal sheets around the base of trees to keep the koalas out. Branches were lopped to stop koalas from getting to the trees via neighbouring trees or from the roof of buildings. Others began planting mana gum seedlings. There was extensive public concern and growing anger and anguish. Local media took an interest. Koala researchers and the government veterinary team were abused by some. After about a year the immediate crisis passed. The surviving trees have re-sprouted. However, the surviving koalas are breeding rapidly and population pressure on the regrowth is increasing. It looks like the same scenario will be repeated until both the mana gum and koala populations are exhausted.

My next visit to the site is in September. What will I see?

A few weeks ago there was a flurry of media comment from the Australian Koala Foundation and some journalists about a secret cull of the koalas. This was clearly wrong. Firstly, the population was not culled. Rather, koalas in extremely poor condition were humanely killed while relatively healthy animals were left to survive as best they could as their food supply disappeared. Secondly, this government intervention was undertaken in the public and local media eye.
Whilst the reasons for raising the spectre of a koala cull by the Australian Koala Foundation and various journalists are unclear-although founded on a genuine concern for the conservation of the koala; the result was to rekindle the emotional stress felt by those involved in dealing with the crisis at the time. It did nothing to further the species' conservation.

In reality, the management of overabundant populations in Victoria and South Australia has been traumatic for the participants and costly for the governments involved over many decades. The problem remains unresolved. Southern koalas have an ecology that leads to population overabundance in certain forest types or isolated forest fragments. Translocation and/or sterilisation programs in South Australia and Victoria have seen most available habitats containing sufficient koala numbers, and temporary relief in some source populations. However, the problem remains. Creation of new habitat is of limited benefit as koalas quickly take advantage of new forest or are translocated to the new sites. Plantation forest have been colonised by koalas for example, creating animal welfare and ethical problems at harvest time.

Human intervention is unlikely to solve this problem. Most likely the best approach is to let nature take its course. However, inevitably this will see koalas die from starvation in places and some forest types (coastal mana gum communities) eliminated or altered in structure and composition. This will be hard to watch. However, it is clear that attempts to drive public concern by misguided claims of deliberate culling will not help deal with the problem.

Fortunately for us, Queensland koalas do not have the same tendency to outstrip their habitat. This may well be due to environmental stresses that keep population numbers in check.

Alistair Melzer

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.

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