The Inquiry into the status, health and sustainability of Australia's koala population

Submission by Carolyn Beaton (www.koaladiaries.com.au)

Introduction

www.koaladiaries.com.au is a website designed to educate and engage the community in koala conservation. It is a hub for community participation in saving Australia's iconic koala, under threat of extinction from urban development, loss of habitat and disease. Our online koala sighting survey uses leading edge GIS software from ESRI Australia to capture data of koala sightings Australia-wide, helping to drive awareness and generate new learning about koalas. With a single national database of koala sightings, we seek to bring together key stakeholders, including researchers, government agencies and the community, to collaborate on more informed policies to save the koala.

Carolyn's role as co-founder of this website was preceded by three years employment at the Australia Zoo Wildlife Hospital (Sunshine Coast) and time spent as a volunteer koala carer.

Purpose of this Submission

The purpose of this submission is to provide further information, evidence and observations in relation to the following terms of reference (tick as appropriate):

[×] The iconic status of the koala and the history of its management;

☐ Estimates of koala populations and the adequacy of current counting methods;

☐ Knowledge of koala habitat;

[×] Threats to koala habitat such as logging, land clearing, poor management, attacks from feral and domestic animals, disease, roads, and urban development;

☐ The listing of the koala under the EPBC Act;

☐ The adequacy of the National Koala Conservation and Management Strategy;

☐ Appropriate future regulation for the protection of koala habitat;

☐ Interaction of state and federal laws and regulations; and

[×] Any other related matters.

Evidence and Observations

1. SIGNIFICANT LOSS OF KOALA HABITAT

Koalas are an irreplaceable national and international asset but are at risk because they are a species that has been subject to significant loss of habitat, particularly in South-East Queensland.

Issues which have contributed to this risk include:

a. The relationship between the Queensland Government and the development industry

- In Queensland, the Labor government gives every impression of being beholden to the development industry, with both parties driven by short term self-interest. On the Sunshine Coast, when local government attempts to sure up areas deemed to be a priority for koala conservation, there have been examples of the Department of Infrastructure and Planning overriding it in favour of developers or state infrastructure projects.
- Successive state Labor governments in Queensland have displayed a "bulldozer" mentality with regard to overcoming objections to new development by key stakeholders, other than the development industry.

b. Loopholes related to land clearing

Queensland has one of the highest rates of land clearing in Australia. Many of the ecological attributes that make wildlife habitats robust and resilient have been severely diminished here in recent years. The processes that cause this diminishment are ongoing.
Traditional land-clearing (vegetation clearing) methods result in the death of koalas either directly through injuries caused during operational works, or secondarily as a consequence of displacement from their habitat.

- Currently there is no explanation as to how developers working in koala habitat areas in Queensland are being policed to ensure compliance with the latest round of planning legislation that came into effect in 2010.
- Notably, Queensland's Department of Environment and Resource Management (DERM) has no code of practice for contract koala spotters (of varying experience and capabilities) working on development sites.
- Also, relying on "sequential clearing" of development sites, as a means to protect koalas, underlines a fundamental lack of understanding of the natural instincts of koalas and the impact of displacement, particularly in

urban and peri-urban areas – inevitably fatal strikes by rail or road traffic, attacks by domestic dogs, swimming pool drowning and other misadventure.

c. Sustainability

- The notion of "ecologically sustainable communities" has largely been overlooked in planning processes.
- The intent of planning policies reviewed by the Queensland government in 2010, supposedly to improve koala conservation outcomes, flies in the face of the same government's South East Queensland Regional Plan and its strong push for human population growth.
  In 2009 and early 2010 the Queensland Government released, in quick succession, a plethora of plans and legislation affecting the property industry. These included, amongst others, the *South East Queensland (SEQ) Regional Plan*, the *Sustainable Planning Act*, the *Draft Queensland Coastal Plan 2009*, the *Queensland Planning Provisions*, the *SEQ Climate Change Management Plan*, the *Draft Koala SPRPs*, the *Proposed Koala SPRPs* and the *Draft Koala SPP*. Even the Property Council Queensland pointed to "inconsistencies" and Executive Director Steve Greenwood said "It is apparent that there has been a lack of coordination in the preparation of all of these documents."

Evidence or Observations that I have to support this position includes

- The "bulldozer" attitude of the Queensland Government has most recently been evidenced by its audacious handling of the proposed Caloundra South development on the Sunshine Coast, an area earmarked to house 50,000+ residents. In January 2011 Sunshine Coast Council applied to the Supreme Court of Queensland for a judicial review into the State Government's decision to declare the Caloundra South area as an Urban Development Area under the control of the Urban Land Development Authority.

  Council's grounds for the application to the Supreme Court were based on the process used by the State Government to make its decision, in particular that the exercise of power to make the decision was so unreasonable that no reasonable person could have exercised it.

  Council believes there has been a breach of the rules of natural justice in the making of the government's decision and is seeking to have the decision set aside.

  Sunshine Coast Mayor Bob Abbot said that council was concerned about the decision making processes followed in relation to the designation by the State

Government on such a critical part of the region's planning and growth management strategy.

Independent State MP, Peter Wellington, said in Parliament, "I urge this House to support my motion for planning control for the development of the Caloundra South area to be returned to the Sunshine Coast Regional Council. This is the fourth largest council in Queensland. This debate will be about the way this government does business in Queensland and about its justification for taking planning control for the proposed massive development at Caloundra South from the Sunshine Coast Regional Council and handing it to an unelected, government appointed authority that is answerable only to the Minister without providing any detail other than two lines of regulation to support this."

- Professor Edward Blakely, a world expert on suburban economic development, and currently Honorary Professor in Urban Policy at Sydney University, recently (02.02.11) made the following observation to the *Sunshine Coast Daily* about how business is conducted in Queensland: "Good science gets no hearing. Yet some developers can waltz in and get a day with the Minister. I find that incredible and scary ... Politicians are servicing money, not need."

- Seemingly a case in point – the State Government's Department of Infrastructure and Planning acting on behalf of a Noosa Hill unit developer in 2009 to have the Sunshine Coast Council alter its planning scheme – see article ***Re-zoning in limbo*** (courtesy of the *Noosa News*) attached.

- A further example of the government's disregard of community sentiment and environmental values lies at Eerwah Vale/Ridgewood/West Cooroy, home to a hinterland koala population under immediate threat due to a major infrastructure project to be undertaken by Powerlink. This project will test the intent of the State Government's planning instruments employed in 2010 (in the words of Stirling Hinchcliffe MP) to "ensure that future land use and infrastructure projects, protect and enhance koala conservation values."

  While the need for such infrastructure is evident, the local community is bewildered by the chosen path through pristine forest and rural properties that are home to a healthy koala population, rather than via the shorter and less environmentally sensitive infrastructure corridor of the Bruce Highway. This land was scientifically tested (under the former Maroochy Shire) and judged to have high ecological value, notably because it holds the headwaters of the North Maroochy River. It was the subject of waterways rehabilitation works under the Maroochy Shire Council because of its importance to the region's biodiversity and water quality.

Eerwah Vale residents are especially concerned in respect to the protection of koala habitat, as a section of the Cooroy West State Forest (koala habitat) was logged in late 2008. This also resulted in significant community protest.

- Loss of koala habitat has been particularly marked in the former Noosa Shire, Sunshine Coast. A report which studied koala habitat in the Noosa region between 1860 and 1999 (Seabrook, McAlpine, Phill, Callaghan and Mitchell) concluded that fifty percent of koala habitat was lost in the area during this period. The loss could be attributed to vegetation clearing associated with dairy farming in the early 20th century and, more recently, the planting of exotic pine plantations, urbanization and rural subdivision.

  Today, evidence we have collected via www.koaladiaries.com.au puts the total surviving koala population within the former Noosa Shire at approximately 30 individuals, when only two decades ago numbers were believed to be in the hundreds. Presently, only 11 individuals inhabit one of the last koala refuges in the region, in the Noosa National Park, which was known to have a population in excess of 30 koalas just five years ago and an abundant population ten years ago.

- With few exceptions, local governments seem to take the view that koala conservation is exclusively a State responsibility, and expend no funding to that end. I understand koalas inhabit over 250 local government areas nationwide.

Recommendations for Consideration by the Committee

- Ensure absolute protection of koala habitat;
- Restore or create habitat corridors (fenced, overpasses/underpasses if necessary) that facilitate movement of koalas between habitat remnants in safety;
- Koalas that are likely to be displaced or impacted by land-clearing or other development processes should be managed in a scientifically considered manner that is humane and maximises the benefit for conservation of the species. There needs to be a strict policy – and policing/enforcement of that policy.
- Personnel engaged to manage wildlife on development sites must be appropriately skilled and accredited. They must adhere to a Code of Practice – see suggested *Draft Code of Practice for the welfare of wild animals affected by land clearing and other habitat impacts and wildlife spotter/catchers* attached.
- It is important that the respective responsibilities of local and state governments in the protection and conservation of koalas and koala habitat is well defined.
- All new developments to meet certain criteria to ensure ecologically sustainable outcomes – these to be applied in a consistent manner.

2. DISEASE EPIDEMIC

Koalas are at risk because Queensland populations, in particular, are suffering significant declines related to a disease epidemic which has been largely left unchecked. I am of the belief that koalas are succumbing to two epizootics which are virtually unprecedented, in terms of scale/prevalence, in wildlife populations: Chlamydiosis and Koala Retrovirus (KoRV)-associated disease.

Issues which have contributed to this risk include:

- Disease in koalas, causing significant morbidity and mortality, has been identified as a critical threatening process contributing to dramatic population decline but has been very much underestimated in magnitude by governments at all levels. Although habitat loss and fragmentation are processes most implicated in koala population declines, disease is often a contributing factor to localized extinction.
- The Queensland Government has been exceptionally slow to respond to the koala disease epidemic, making a one-off allocation of $400K available for koala disease research for the first time in 2010. Whilst welcome, this level of funding falls well short of what is required for koala research scientists to make meaningful inroads into the crisis. By comparison, the Tasmanian Government has committed in excess of $20 million to Tasmanian Devil disease research.
- Because DERM does not permit the translocation of koalas, the resultant narrowing of the gene pool, especially in already fragmented populations, is likely to be exacerbating the disease epidemic – ie. I believe a wider gene pool would ultimately lead to healthier, more robust koalas that are better able to withstand the impacts of disease.
- Stakeholders possessing the lion's share of knowledge regarding koala disease exist outside of DERM, whose personnel have shown scant understanding of the complexities of the issue. In Queensland that expertise lies predominantly within the Koala Research Network, a group of 36 leading koala research scientists.

Evidence or Observations that I have to support this position includes:

- In mid 2010 the Australia Zoo Wildlife Hospital on the Sunshine Coast released figures which put disease as the number one killer of koalas admitted in 2009/10, with road trauma and dog attacks ranking second and third. The Hospital had admitted approximately 900 koalas within the twelve month period.
- 354 sick and injured koalas from the former Noosa Shire were admitted to a care facility between 2000 and 2009. 52 percent died in care.

60 percent of koalas rescued from the Noosa area and referred to the Australia Zoo Wildlife Hospital between March 2004 and July 2009 presented with clinical signs of disease (43 percent with Chlamydia, which causes blindness, infertility, urinary tract infection and kidney failure, and sometimes pneumonia and flu-like syndromes).

Recommendations for Consideration by the Committee

- Preserve and protect large koala populations to conserve genetic diversity, ie. allowing the free flow and interchange of genes within the population to be maximized.
- The Federal Government to make significant funding available for koala disease research and that this be guaranteed for a minimum five year period to avoid fluctuations in funding.
- Dr Jon Hanger BVSc (Hons) BVBiol PhD MACVSc, formerly Director of Research and Ecological Services/Senior Veterinarian at the Australia Zoo Wildlife Hospital, now Manager of Operations, Wildlife for RSPCA Queensland, has arguably treated more koalas than any other wildlife professional in Australia. He was the first person to genetically sequence the Koala Retrovirus, as part of his PhD studies in 1999, and is an ongoing collaborator in koala disease research studies being undertaken at the University of Queensland and the Queensland University of Technology. He is also a member of the Koala Research Network and the State Government's Koala Taskforce. I would nominate Dr Hanger without hesitation as an appropriate expert for the Committee to refer to should they wish to learn more about the impact of koala disease in Queensland.

3. POOR MANAGEMENT

Koalas are at risk in Queensland because of poor management at the hands of the Beattie and Bligh Labor Governments.

Issues which have contributed to this risk include:

a. Flawed koala management policy

- Arguably, one of the greatest causes of koala declines in urban areas has been, and remains, the requirement set down by DERM for rehabilitated koalas to be returned to their area of rescue regardless of the potential risk of further injury or loss of life. This is a serious failing of government policy designed with the intent of protecting koalas.
- In respect to other scenarios where the presence of koalas becomes untenable, DERM does not permit intervention (ie. managed translocations by koala experts). The "hands-off" approach so staunchly defended by DERM has failed miserably. There should be no doubt that there are situations that warrant intervention – ie. when not intervening leaves koalas in a life-threatening situation.
- DERM has resisted urgent calls for the review of their policy relating to the release of hand-raised joeys (ie. that have never lived independently in the wild). These young koalas draw the short straw if they were rescued from an urban area. I believe there is a strong argument for hand-raised, sub-adult koalas to be released into a safe habitat area so they have the best possible chance of living a full life and producing offspring. They are denied that chance presently.

b. Flawed koala mapping

- Koala habitat mapping (*South East Queensland Koala Habitat Assessment and Mapping*) commissioned in 2009 by the Queensland Government was found to be flawed, in respect of accurately categorizing koala habitat types, and drew scathing criticism from a wide circle of stakeholders – including conservation groups, local government authorities and landowners throughout South East Queensland. Chief among their criticisms was the methodology employed in this mapping project – which relied on the remote digital analysis of aerial image pixels (pertaining to tree colour).

c. Non-management of national parks and protected areas

- Only 98 of the 576 parks and protected areas under the care of Queensland's DERM have a management strategy. Some of the last koala footholds, like Noosa National Park, do not have a management plan. One is left to assume that DERM only produces plans for areas where they consider they have the resources to implement them. The result is neglect in key areas where intensive management could otherwise resurrect koala populations in decline.

Evidence or Observations that I have to support this position includes.

3a.

- Research conducted by Deidre DeVilliers in Queensland concluded that, under present policy constraints, approximately 60% of hand-released koalas die in their first year after release.
- The current koala plan in Queensland expressly forbids the translocation of koalas from development sites. This paradigm is flawed because it results in an unacceptably high level of mortality (loss of individuals) and therefore loss of genetic diversity.
- To date the Queensland Government has commissioned scientific research in respect to koalas in the Pine Rivers and Redlands areas only. With the benefit of this trend data, which showed significant declines in koala numbers, DERM has deemed these areas to be "Priority Koala Management Areas". The many other declining populations in the state, including the Noosa population and others in the South-East corner, are not afforded any special protection measures nor receive any level of management or monitoring unless it is privately funded, and this is a rare event.

3b.

- The consultants responsible for the delivery of the koala mapping project to the Department of Environment and Resource Management (DERM), GHD, claims it recommended comprehensive ground truthing (field verification of koala habitation), and that this was not conducted to the extend required (only randomly).
  It is not clear whether the koala mapping project was therefore compromised due to budget or time constraints, or some other reason.

It should be noted that, at the same time this project was being undertaken, Queensland's economic position was floundering in the wake of the global financial crisis and the startling evaporation of the State Government's budget surplus, and it was clear that the Bligh government was at pains to provide some buoyancy to the development industry in particular.

3c.

- The State Auditor General informed Queensland's Parliament in late 2010 that, in respect to national parks and protected areas, there is no co-ordination of the information that is monitored, the data is not used for planning or to form conservation objectives and, according to former Shadow Minister Glen Elmes, "there is no evidence that the department has met its legislative requirements for an integrated and comprehensive strategy for the whole of the state." The Auditor General's report says that "the relatively small number of completed park management plans reduces the department's capacity to measure its success and accurately report its findings to Parliament and other key stakeholders."
- Noosa National Park – Queensland's "most visited" national park, with over one million visitors every year - and formerly a koala hotspot, has no management plan. The last plan was written in 1999, when koalas were "easily visible" in the Park. Today just 4 koalas remain in the headlands section, and 11 within the Park in its entirety. This is in spite of the Park being situated in an area where its residents readily espouse "green" values and have actively campaigned for the local koala population to be monitored and managed, viz:

  - **December 2008 –**

  Noosa Koala Summit convened by Sunshine Coast Regional Council as a result of community concerns about koala declines expressed in the local press.
  Council subsequently recommended "no further action is required at this time" – justifying the decision on the basis that no "independently verifiable scientifically based information" had been presented.

  - **June 2009 –**

  Proposed koala recovery/management plan for Noosa prepared by Carolyn Beaton and Dr Jon Hanger.

  - **September 2009 –**

  Noosa delegation met with the Premier's environmental policy advisors in Brisbane seeking support and/or funding for the plan – they suggested the delegation meet with Kate Jones MP, Minister for Climate Change and Sustainability.
  Noosa residents participated in the "Save the Koalas" Rally in Brisbane (approx. 2000 people marched on Parliament House to highlight the plight of Queensland's koalas).
  Meanwhile, the outdated DERM management plan for Noosa National Park lapses – it has not been reviewed since 1999.

- **November 2009** –
  Noosa delegation met with Kate Jones MP, Minister for Climate Change and Sustainability, and tabled a detailed plan to undertake a scientific assessment of the health and viability of the Noosa National Park koalas as Step 1 of the recovery process. Despite an assurance that the plan would be given due consideration, no response was ever received.
- **February 2010** –
  Koaladiaries.com.au (a website designed to engage the community in koala conservation efforts) launched by Noosa residents, Carolyn Beaton and Alex Harris.
- **June 2010** –
  Submission made to Threatened Species Scientific Committee in support of the listing of the koala as a nationally threatened species under the Environmental Protection and Biodiversity Act (1999) (EPBC Act). This submission included the veterinary records relating to 354 sick and injured koalas rescued from the Noosa region since 2000. 52% of those koalas had died in care.
- **August 2010** –
  Two environment grant applications submitted by Wildcare Australia to local and federal governments, seeking seed funding to commence urgent scientific health and viability assessment of the Noosa National Park koalas.
- **September 2010** –
  DERM management plan for Noosa National Park is now one year overdue for review.
- **December 2010**–
  Wildcare Australia advised by both the Sunshine Coast Council and the Federal Government (Caring for our Country grant scheme) that grant applications had been unsuccessful. In rejecting the application, the Sunshine Coast Council advised it was "of the view that the management of the koala population in this area is the responsibility of the Queensland State Government Parks & Wildlife Service."
  In both instances, funding of less than $20,000 had been sought.

- In April 2010, during informal discussions with Queensland Parks and Wildlife Service staff working at Noosa National Park, I gleaned that they were unaware of the existence of DERM's Koala Conservation Unit. The obvious implication is that this Unit, which is supposedly charged with playing a leading hand in the conservation of the koala in Queensland, has contributed zero to the koalas of the Noosa National Park.

- Research recently conducted by the World Wildlife Fund and the University of Queensland concluded that if endangered species were to be saved, their habitat had to be put in a national park or habitat destruction had to be stopped by law. WWF scientist Martin Taylor said, "Governments may be tempted to slash parks budgets in hard times. This research shows that this would be a short-sighted mistake. National parks are not only critical tools for saving our threatened wildlife but also bring in more than $19 billion in foreign exchange from tourists every year."

Recommendations for Consideration by the Committee

- Thorough mapping of koala habitat be conducted without regard to land tenure, current or proposed use or political considerations, and that the methods for mapping are scientifically robust and accurate.
  It should be noted however that the Australian Koala Foundation (AKF) lays claim to having already accomplished this, but quizzically, and for reasons best known to its officials, the Queensland Government chose to ignore the AKF's $8 million mapping project, preferring to commission their own habitat mapping instead.
- The mapping of koala habitat must be used as a tool to define acceptable and unacceptable land-uses and to protect habitat primarily, rather than being used as the primary mechanism for the protection of the koalas themselves. This is a major deficiency of the current regulatory framework.
- Federal funding to be made available for experts to actively manage the populations most at risk. Small populations of koalas that are isolated from others have little chance of long-term survival without active monitoring and management.
- The translocation of koalas (by experts) needs to be acknowledged as an appropriate and scientifically valid management strategy for the recovery of koala populations most at risk of localized extinction. Translocations to be conducted in accordance with strict protocols, standards and procedures, including a stringent health assessment of each and every koala prior to any movement.
- Healthy hand-raised joeys to be released into national parks and protected areas deemed to be suitable and safe habitat.
- If unable to adequately manage national parks and protected areas, DERM should enter into partnership arrangements - potentially with non-profit organizations with a strong track record in land and species management.

In summary, there has never been a more important time to develop radical new approaches to saving the iconic koala – the current methodology is simply not working.

Koalas are adaptable, however the strength of forces working against them are presently too great in Queensland.

This State has an appalling track record in respect to koala conservation and concerned stakeholders can only anticipate the eventual extinction, sooner rather than later, of koalas in the wild if there are not significant management/remedial actions implemented as a matter of urgency. That Queensland, and Australia, has to date avoided international condemnation for its management of koalas is remarkable.

The Committee should make no mistake – Queensland has been the killing fields for koalas and South-East Queensland has arguably incurred the greatest loss of koalas compared to any other region in Australia. In the past 14 years tens of thousands of koala deaths have been recorded (and many have gone unrecorded), we have seen the localized extinction of many populations, and this has resulted in the wide-held belief in conservation circles that our state's koala population is now past its tipping point.

There has been a toll on people too – property owners, wildlife volunteers and professionals, scientists and other experts amongst them - who have had concerns about the loss of Queensland's biodiversity, and the koala and its habitat in particular. With a strong sense of stewardship of the environment a common sentiment, they have consistently raised objections to the State Government in regard to its policies, often robustly and fluently in the public arena. But few have found the fortitude, in the path of mounting bureaucracy and a seemingly no-win situation, to keep fighting for the koala, having been whipped at every turn.

For those who remain actively working to save this embattled species the way forward from here seems clear: the establishment of a holistic and long-term management plan to ensure the presence of healthy, wild koala populations.

That funding for such a plan won't come from DERM seems a given, particularly in the wake of Queensland's recent natural disasters. This department, that had already been crying poor, is apparently on notice of budget cuts. I feel strongly therefore that a hand-over of responsibilities by all States to a Federal Government willing to dedicate significant resources to a recovery and management program underpinned by federal legislation is the only action that will improve koala conservation outcomes.

Appendices

1. Gardiner, P, "Re-zoning in limbo" courtesy of the *Noosa News*, 28 July 2009

2. Hanger, J & Nottidge, B. *Draft Code of Practice for the welfare of wild animals affected by land clearing and other habitat impacts and wildlife spotter/catchers* 2009