

June 7, 2010

To,
The Threatened Species Scientific Committee

Re: The nomination of the Koala (*Phascolarctos cinereus*) to be listed as a threatened species under the Environment Protection and Biodiversity Conservation Act 1999.

I support the nomination for the koala to be listed as vulnerable. I believe the listing is overdue and is crucial for the long term survival of the koala in its natural range. I offer the following comments with further comments relating to the questions asked for consideration. I do not support the listing of the koala in the “conservation dependent” category. The 1998 National Koala Conservation and Management Strategy did not achieve anything and even though the 2009-14 NKCMS is a much improved document, it has not received any funding so I cannot believe it will be able to achieve its goals. Similarly, the 2008 NSW Recovery Plan for the Koala does not appear to have changed anything because it is business as usual in NSW with development and timber harvesting occurring in core koala habitat and the decline in primary and secondary habitat and koala populations continues.

Whilst this nomination has only selected Criterion 1 to support its listing as vulnerable, I suggest that Criterion 2 and 3 are also relevant.

Criterion 2- its geographic distribution is precarious for the survival of the species and is increasingly limited. (refer also Nomination Qu.15)

The koala has lost most of its primary habitat and remaining habitat is declining in quality and becoming more fragmented. Soil nutrients and moisture have always been limiting factors in the distribution of koalas but with the loss of nearly all their primary habitat to agricultural enterprise and the loss of old growth trees in many forests and along rivers, the koala's distribution is limited to areas along water courses and drainage lines and areas where large/mature trees have been retained.

Criterion 3- the estimated total number of mature individuals is limited to a particular degree. Criterion 3 assumes the mature individuals are all healthy and able to reproduce and recruit young animals to the population. However this is not the case in NSW, Queensland and parts of Victoria because of the impact of disease.

The koala carries two diseases (Chlamydia and Retrovirus) which cause premature death, reduce fecundity and impact on the ability of the koala to withstand and/or recover from natural and anthropogenic threats. Refer also Nom. Qu26. As koala populations become more fragmented and low density, koalas have to travel further on the ground not only to find food trees but also to find a mate. This makes them more susceptible to predators and motor vehicles. It is also making them susceptible to energy deficit, malnutrition and disease.

Female koalas with a joey and juveniles are most at risk.

Retrovirus is not a “recently discovered” disease in koalas. It was first discovered by the late Dr Daria Love at the Dpt. of Veterinary Pathology, University of Sydney and published in the Australian Veterinary Journal in 1988. It was found in an aged koala from Port Macquarie

which had leukaemia. I believe Retrovirus manifests when there is rapid habitat loss causing an initial rise in the density of koalas, causing nutritional and social stress which is then followed by disease, high mortality of animals until the population declines with all remaining animals and their offspring vulnerable forever.

Unfortunately disease in koalas has not been taken seriously. I am still reading the epidemiology of Chlamydial disease in koalas is not well understood. Koalas have not been helped by misleading and unscientific statements made by certain koala researchers who continually wrote chlamydial disease is a natural population control mechanism. The truth is that dehydration and malnutrition are the population control mechanism but this would not be politically palatable. It is also interesting that Chlamydia-free koalas appear to be Retrovirus free.

Refer Nom. Questions 11 and 12.

Extent of occurrence should not include translocated populations outside of the koala's natural range

Area of occupancy does not take into account the many areas of suitable koala habitat which are now unoccupied by koalas. These areas are an indication of either a temporary or permanent decline in koala populations. They are also an indication of local extinctions and the inability or slowness of the koala to recover.

Refer Nom. Qu. 20. Population estimates given by State governments have wide ranges, are either overestimated or exaggerated. Referring to NSW koala numbers overall, this nomination states (P.17) "When the status of the koala was assessed in New South Wales, the state population was estimated by expert opinion to be in the range of 1000-10,000 animals (NSW DECC 2008)". If the number is close to 1000 this is very alarming but if it is closer to 10,000 then this also a substantial decline but not as alarming, except these evaluations were done nearly 20 years.

Direct counting of koalas is impossible and other methodologies can only provide very rough estimates. For example, the Kempsey study states "These transect data infer a theoretical density of less than 0.02 koalas/ha may apply over areas of similar habitat within southern parts of the east Kempsey study area. While crude and subject to qualifications inherent in such an approach, extrapolation of such data suggests a population size estimate of less than 600 koalas currently residing in the south of the study area no. active macro-landscape SAT sites = $46 \times \{\text{habitat grid cell size} = 2500\text{m} \times 2500\text{m} = 625\text{ha}\} \times \{0.02\text{koala/ha}\}$." (Phillips and Hopkins, 2009, p.30).

This formula assumes that each active site is a different koala but in low density populations with koalas having large home ranges this may not be so. Also areas of similar habitat may not have any koalas. I believe the number would be less than half this estimate.

Overpopulation (Refer Nom.p.29 and Qu.4.)

This is a problem for translocated koala populations which have outgrown their habitat. Translocations to islands (off-shore or "land") are only a short term solution and over population is not a natural phenomenon. They are captive colonies and should not be included in the national population number estimate. However these koala populations are also vulnerable to drought, bushfires, low genetic variability and population crashes due to starvation.

Habitat loss and Mitigation measures (Refer Nom.51 and Qu.10)

In NSW, ineffective government policy, inadequate policing and mitigation measures which are unscientific, illogical, are not working and are not reversing the decline of koala populations or assisting recovery. One of the most important recommendations of the NSW Recovery Plan for the Koala was the amendment of SEPP44. This seems to have been put on the back-burner even though it is outdated and possibly illegal in its present form. SEPP44 has been useful in identifying koala populations but it really is just an enabling mechanism for developers to clear koala habitat. Mitigation measures such as planting trees after the koala habitat has been removed are illogical. Also the definitions and assessments of

Potential and Core Koala Habitat have caused many koalas to lose their habitat because it was degraded or fragmented and therefore didn't pass the 15% test. CKPoMs are only "encouraged" and as there is no funding to back this "encouragement", there are few CKPoMs.

I lobbied the Kempsey Shire Council for 20 years to do a CKPoM and eventually it did one in 2009, albeit only for the eastern part of the Shire due to limited funds. It was an exciting time until the NSW Department of Planning refused to allow the Plan to prohibit development in Core Koala Habitat.

I was asked to witness the clearing of some koala habitat (.requirement of the development consent) to ensure no koalas were injured. The koala was not seen but exited the area during the night and was immediately squashed on the highway.

It is "death by a thousand cuts" for koalas on the mid-north and north coast of NSW.

Another mitigation measure in NSW is Biobanking. A developer can buy credits and this enables them to develop in koala habitat but another area of similar habitat will be protected, not necessarily on the same site, or even in the same area.

The result is a 50% loss of koala habitat so it will not reverse the decline of koala populations. I also believe that protecting many unconnected areas of private land is not going to achieve a good conservation outcome.

There is also Part 3A of the Environmental and Assessment Act which gives the Minister for Planning the power to over-ride all other legislation and approve developments no matter what conservation values the land has. The koala **is not protected** from habitat loss in NSW unless the Minister for Planning says so. The Crescent Head/Kempsey community are waiting for the Minister's decision on a very important area of core koala habitat on Goolawah Estate at Crescent Head. We, and the koalas, will be devastated if this land is bulldozed.

Refer Qu.8.

Timber harvesting is a huge threat to koala populations in parts of NSW, Queensland and Victoria.

In NSW, koala populations in the south-east and north east are being impacted by timber harvesting in both SF and private forests which takes their food trees, degrades their habitat and results in disease and premature death of resident koalas. Also there are shooters who use State Forests as public hunting grounds.

There are logging prescriptions for State Forests and a Code of Practice for logging in private native forests which are supposed to protect threatened species, both of which are a joke. I challenge the TSSC to disagree.

Refer Qu.11. Additional actions.

1. There is not enough koala habitat protected in National Parks. National Parks are mostly on inaccessible or infertile land and therefore contain little suitable habitat for koalas. Also they are often "islands" surrounded by private land. Most koala habitat is on private land but protecting this habitat is not easy. More koala habitat needs to be protected as National Park or Reserve. Transferring some State Forests (or parts of) to National Park and acquiring private land as it becomes available are two options. A strategic plan should be prepared to acquire land to connect existing and future National Parks, providing koalas with large areas of undisturbed contiguous forest. More National Parks are certainly needed in south-east Queensland

2. Funding for habitat protection.

Habitat protection is stated as a priority action in both the NKCMS and the NSW Recovery Plan for the Koala. Some serious strategic funding is required.

Caring for our Country funding does not target koalas and there are limited opportunities for land owners to access funding for koala habitat protection.

Incentives and compensation for loss of earnings from forestry could also be considered.

The TSSC must recognise the overall picture of koala populations in their natural range (excluding the translocations) is one of steady unrelenting decline since European settlement. The growth in the human population and its need for more houses, more roads, etc is impacting on the environment, its biodiversity and its vulnerable native species. This is a national issue. The koala is facing so many threats now, it is time to acknowledge their vulnerability and support this nomination.

Yours faithfully

Vanessa Standing

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