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

Response to issues raised in submissions 35, 73 & 78.

"... In the 1990's Koala population estimates for the Eden region varied between 1500 (Jurskis and Potter 1997) and less than 100 (SEFCC 1998). A workshop initiated to resolve a range of issues existing between the forest conservation movement and FNSW concluded that Koala numbers in the Eden region were in the low hundreds (Briggs 1999). In that period there was no attempt to estimate Koala numbers in the Southern Tablelands or the Southern Highlands, though anecdotal information suggested Koala numbers were higher than on the Far South Coast." (Submission 35, Page 12, 3.1)

It could be inferred from the previous statement that the conservation movement and Forests NSW (at that time trading as State Forests of NSW), agreed in 1999 that there were hundreds of koalas. The next statement comes from a draft document provided by the DECCW, under the GIPA Act, and written by the previous author to assist the TSSC.

"... After assessing available evidence, Briggs (1999) estimated that koala numbers on the Far South Coast were between 100 and 1000 koalas, with numbers possibly being towards the lower end of this range.

In rejecting a nomination to list the koala population in the study area as endangered the NSW Scientific Committee (2007) stated that satellite images indicate that, relative to the Koala's dispersal ability, suitable habitat for dispersal is largely continuous between the nominated population area and adjoining habitat, including forested land south to the Victorian border. Based on this habitat continuity and Wildlife Atlas records of Koalas, the nominated population is not disjunct from the broader population of Koalas that occupies forests in southeast NSW.

The absence of anecdotal reports of koalas in recent years from any other part of the region, despite the high level of interest in the koala issue locally, suggests the assumption of a *broader population* of koalas may be optimistic. At best probably only a few breeding aggregates, probably smaller in size than those estimated for the Bermagui/Mumbula population may be persisting.

Eleven years after the Biggs (*sic*) (1999) estimate of koala numbers on the Far South Coast being *between 100 and 1000 koalas*, *with numbers possibly being towards the lower end of this range* the available evidence supports the lower estimate." (35, Pg 17-18, 4.2.5)

¹ Estimating koala populations and trends & Assessing populations and trends in SE NSW (draft) - Information prepared for the Threatened Species Scientific Committee to assist its assessment on the listing of the Koala as a threatened species under the EPBC Act (2010), Chris Allen, Department of Environment Climate Change & Water, NSW. http://www.fiveforests.net/resources/Estimating%20Koala%20populations%20and%20trends%20in%20SENSW_100203.pdf

It could also be inferred from the latter statements that the author² of the report agreed with the conservation movement and State Forests that there were hundreds of koalas in the Eden Region.

As one of two conservation movement representatives at this meeting I recall that it was largely pitched at whether there was less than 100 or more than 1,000 koalas in the Eden forestry region.

"... Koalas occur in sparse, and possibly disjunct, populations on the South Coast (Jurskis and Potter 1997; NSW DECC 2008; Allen et al. 2009). Population densities range from high in parts of the NSW North Coast (e.g. 3 koalas per hectare in an artificially planted reserve at Tucki Tucki (Gall 1980)) to very low (0.006 koalas per hectare (Jurskis and Potter 1997)) near Eden on the South Coast. ...

A synthesis of recent koala surveys was prepared for the purposes of this nomination by Chris Allen of NSW DECCW, combining the results of surveys conducted using a variety of means (Allen 2009). Densities for all areas were uniformly low or very low. The combined estimates for the region from approximately Goulburn south to the New South Wales border sums to approximately 800 koalas. Allen (2009) notes some indications of an increase in the population in the coastal forests north east of Bega, but it must be noted that this is an extremely small population. Recent intensive surveys show that a population at Tantawangalo/Yurammie is now very low and possibly extinct." ³

The evidence to support the notion that there were hundreds of koalas in the Eden region is replicated in the following maps showing post 1980 koala records, areas where koalas were studied⁴ and the fourteen (14) locations where koalas were alleged to have been located during the 1997 regional koala callback survey.⁵ As illustrated in the graphic below koalas in Nullica State Forest were the furthest south in the region although more that 50% of State Forests area in Eden is south of Nullica SF.

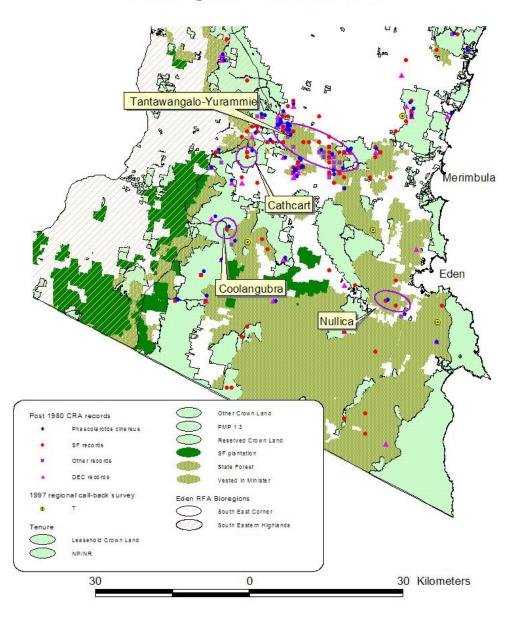
² Briggs, S. (1999). Report on Meeting 17/18 February 1999 to Address Koala Issues. Report to NSW National Parks and Wildlife Service, 43 Bridge Street, (PO Box 1967), Hurstville, NSW, 2220.

³ Advice to the Minister for Environment Protection, Heritage and the Arts (2010) from the Threatened Species Scientific Committee (the Committee) on Amendment to the list of Threatened Species under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

⁴ Jurskis, V., Potter, M. (1997) Koala Surveys, Ecology and Conservation at Eden Research Paper No. 22, Research Division, State Forests of NSW, 27 Oratava Avenue. West Pennant Hills 2125.

⁵ Jurskis V., Douch, A., MacCray, K., Shields, J., (2001) A Playback Survey of the Koala, Phascolarctos cinererus, in the Eden Region of South Eastern New South Wales, State Forests of NSW, South East Region, PO Box 273, Eden, NSW, 2551.

Post 1980 koala records and research areas -Eden region - southern half

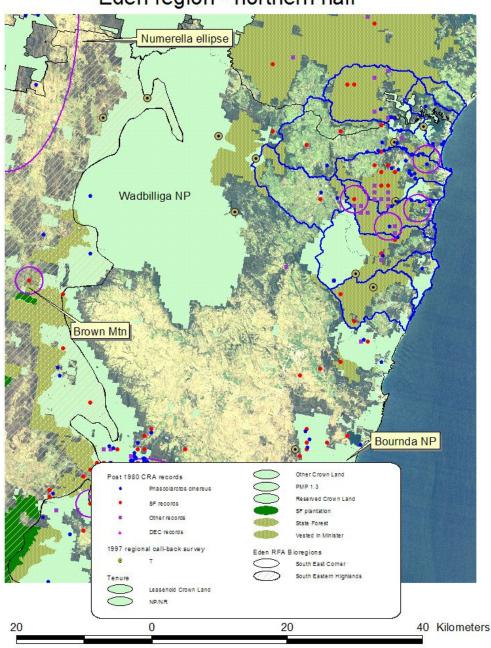


During the Briggs meeting (1999) State Forests researcher, Mr Vic Jurskis, stated that the deceased radio-collared koalas in Nullica were the only koalas in this forest. The koalas the State Forests studied in Tantawangalo and Yurammie had also died and although some remained, very little evidence of koalas was located during community surveys in the area around that time.

The 1997 call-back survey reported four (4) koala responses in the southern half of the Eden region, although none were followed up with ground searches. The response location, on private land adjacent to Bournda National Park, made Forests NSW the most prolific gatherer of koala records in that area.

The following map of the northern half of the EMA shows the four (4) areas of Forests NSW koala research in Bermagui and Murrah State Forest and the sole location on Brown Mountain.

Post 1980 koala records and research areas -Eden region - northern half



Five of the alleged responses in the koala call-back survey occurred in Mumbulla, Murrah and Bermagui State Forest and the remaining five were through Wadbilliga NP (98,530 ha) seemingly linking up with koalas on the tablelands around Numerella.

Although proposals to follow up the alleged responses with ground surveys were rejected, those in Wadbilliga NP have apparently laid the foundation for the belief that the non-commercial forest types growing in shallow stony soils on steep rocky slopes in the area is suitable koala habitat.

Hence the DECCW's 2010 'work plan' (Sub 78 Attachment 2) aims to "... Incorporate koala habitat conservation within existing multi species or landscapescale conservation programs" including the 'Great Eastern Ranges Initiative' the majority of which is already in National Park.

Similarly, as indicated in the TSSC advice to the Minister-

"... These spot data do not include any estimates of the koala population in the extensive areas of National Parks and State Forest that lay astride the Great Dividing Range and adjoining lowlands from Goulburn to the Queensland border."

The ground rules for the Briggs (1999) meeting referred to the-

"... Application of the Precautionary Principle – where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat."

The Briggs meeting was 4 years after the last koala was sighted during logging operations in the Eden region in Murrah State Forest. During the intervening period some 16,000 hectares of forest had been logged that, given a regional density of 0.006 koalas per hectare, would have had a negative impact on nearly 100 koalas. No koalas have been located during any logging operations in the Eden or Southern RFA regions since 1995. At a density of 0.006 per hectare Wadbilliga could support 591 koalas.

The guiding principles for the National Koala Conservation and Management Strategy⁶ also include the precautionary principle, although submission 73 states "... 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."

It could be argued that the 'significant gaps in knowledge about the national population' is sufficient uncertainty and this uncertainty is not addressed by giving weight to incautious assumptions about hypothetical koala populations.

Robert Bertram, 11 April 2011

⁶ National Koala Conservation and Management Strategy Secretariat, Department of the Environment, Water, Heritage and the Arts GPO Box 787, CANBERRA ACT 2601