

## **INQUIRY INTO KOALA POPULATIONS AND HABITAT IN NEW SOUTH WALES**

**Organisation:** The Myall Koala and Environment Group Inc

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**THE MYALL KOALA & ENVIRONMENT GROUP INC.**  
(Established 1989)

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**email:**

3 March 2017

Koala Strategy Submissions  
PO Box A290  
Sydney South NSW 1232

**NSW Koala Strategy**

Dear sirs,

Thank you for the opportunity to make a submission on the proposed whole of government, state-wide, NSW Koala Strategy.

**Myall Koala and Environment Group -Who are We?**

(Hawks Nest/Tea Gardens on the northern shore of Port Stephens)

Our Group was formed in 1989 as a result of a koala population survey carried out by Professor Ian Hume of Sydney University. During his research project he asked the community to help with tracking koalas. The people that volunteered decided to form an ongoing group to monitor the koala population and investigate other environmental issues that affect the Myall Coast region. One of the inaugural members, Mrs Jean Shaw, the "Koala Lady", took up the role of rescuing sick and injured koalas and maintaining a written record of koala sightings in the towns of Hawks Nest and Tea Gardens. Her records showed a significant drop in the koala population over 10 years resulting in the NSW Scientific Committee classifying the Hawks Nest / Tea Gardens koala population **ENDANGERED** in 1999 (one of only two such localities in NSW). At that time the population was estimated at about 20 animals. NPWS prepared a Recovery Plan in 2003 and since then it has been administered by Great Lakes Council (now MidCoast Council), NPWS/DEC/DECC/OEH and our group.

Our group continues to be very active with 150 members. Because this is a holiday area, many of our members live in Sydney or Newcastle but holiday here regularly.

Currently Gail and Ian Morphett are the licensed koala rescuers in the area. Ian Morphett is the Secretary of the group and continues to maintain koala sightings records from information reported by the public, either personally or by reports to our Koala Sightings Hotline (02 4997 0878) answering machine.

The number of koala sightings in our towns in the past 10 years has been:

<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016/17</u>
709	716	462	187	147	218	209	161	97	113

Over the years the koala population has fluctuated but we estimate it is still in the region of 20 animals. We believe that the reason for this relative stability in the population is a result of constant work by our group over the years. For example,

- we have planted thousands of koala food trees on public land,
- every year for the past 11 years at the Myall River Festival we have given away about 200 koala food tree tubes (Swamp Mahoganies and Drooping Red Gums) to the public for planting on their own properties,

- we encourage the community to take ownership of “our” koalas, by publishing a regular koala report in the two local papers and by giving presentations on koalas to the public at the annual Wildside Festival and to Tea Gardens Public School pupils,
- in conjunction with Great Lakes Council, we obtained a \$230,000 6-year grant from the NSW Environmental Trust for koala habitat restoration,
- in conjunction with Council, multiple signs (which we partially funded) have been erected (see two examples in the attached photo of a speeding vehicle) in Tea Gardens and Hawks Nest pleading with drivers to drive slowly because there can be koalas crossing the road,
- we established a community bush regeneration group called the “Bitou Busters” which removes Bitou Bush and other invasive weeds such as Asparagus Fern, Lantana and Morning Glory from public land.

### **Comments on Chief Scientist and Engineer’s Report and Recommendations**

#### **Recommendation 1 (Whole of Government)**

We support this concept provided that departments such as Planning, Roads and Maritime Service, Rural Fire Service, Office of Environment and Heritage, Regional Development, Local Government and Primary Industries are required to participate and *indicate their commitment to the survival of koalas in NSW*.

#### **Recommendation 2 (Koala Occurrence Data)**

We absolutely agree that there needs to be improved data on the number, location and occurrence of koalas. In the case of the Hawks Nest koalas, we have some idea of the location and occurrence of our koalas because of our sightings data but have always wanted accurate information over time on the numbers. This is vital to determine population trends.

Technology for wildlife monitoring suitable for koala tracking is advancing at a rapid rate and will be capable of accurately and cost effectively monitoring koala populations in the near future. One technology already used for locating koalas is infrared and thermal sensing drones (although not quite accurate or cheap enough yet). Another example was in a report on ABC News on 19 February 2017 which described very sophisticated technology used to monitor birds and penguins by Australian scientists in Antarctica, including miniature radio trackers that include small solar panels to recharge batteries thus prolonging the period between times when animals need to be captured to recharge batteries.

<http://www.abc.net.au/news/2017-02-19/adelie-penguins-cape-petrels-antarctica-tracking-technology/8282548>

#### **Recommendation 3 (Koala Habitat Mapping)**

We support habitat mapping but are concerned at the huge amount of money spent in the past on broad scale vegetation mapping and could be wasted in the future. We believe smarter ways of identifying koala habitat and other vegetation types must be employed. Firstly, satellite based mapping could be used to identify pockets of *potential* koala habitat. Further potential sites may be identified by consulting local councils, national park staff and community groups across the state. Potential sites must then be fine-scale, property-level mapped. National Parks could be excluded from the detailed mapping on the assumption that the habitat is not under threat (UNLESS logging in the park is contemplated, of course).

Many areas where koala habitat exists and koalas are present have local community koala preservation groups in existence (including us here in Hawks Nest). These volunteer groups could be utilised in the detailed mapping process to improve the cost effectiveness of the mapping process. Detailed mapping is critical in relatively small urban koala habitats (such as ours in Hawks Nest).

Teams of koala tracking dogs may be very productive in identifying koala habitat in bushland areas and perhaps more efficiently than humans.

Once identified, koala vegetation should be protected under local council planning mechanisms and be excluded from RFS 10/50 Rule provisions.

#### **Recommendation 4 (Planning System Changes)**

We support ongoing changes to the planning system provided that all changes are consistent across all levels of government down to local council level and that rules designed to protect koala habitat are enforceable.

We support changes to SEPP44 to increase the protection of koala habitat, particularly core koala habitat and movement corridors. We approve of increasing the koala tree species list. However, the following species are not on the proposed new list but are used as food trees by the koalas in Hawks Nest/Tea Gardens:

- |                                      |  |
|--------------------------------------|--|
| • Bangalay                           | Eucalyptus botryoides                        |
| • Flooded Gum                        | Eucalyptus grandis                           |
| • Drooping Red Gum                   | Eucalyptus parramattensis subsp. decadens    |
| • Narrow-leaved Black Peppermint Gum | Eucalyptus nicholii (not endemic but common) |
| • Broad Leaved Paperbark (blossoms)  | Melaleuca quinquinervia                      |

#### **Recommendation 5 (Improve Outcomes by Changes to Legislation and Regulations)**

We wholeheartedly support strengthening the Biodiversity Conservation Bill to improve koala preservation and regulations where deemed necessary. As mentioned in Point 1 in “**Issues important to Hawks Nest/Tea Gardens Koalas**” below, we believe that areas important to koalas in urban areas should be exempted from the standard offsetting rules that apply under the new Biodiversity Regulation Act

#### **Recommendation 6 (Incentivising Landowners and Users)**

This could be a game changer for koalas and other wildlife. In our opinion, a major factor in the stabilising the koala population and, in particular, increasing it in future, will be to dramatically improve connections (commonly referred to as corridors) between islands of habitat. To achieve this, koalas will need to have suitable vegetation across connecting private land. It should dramatically improve koala outcomes if the right incentive programs could be put in place to encourage landowners to agree to establish koala habitat across their land to connect with vegetation on other landowners’ vegetation corridors or koala habitat in national parks or state forests.

#### **Recommendation 7 (Government Agencies Identify Priorities)**

For Recommendation 6 to work, Government Agencies will absolutely have to identify the most suitable habitats on which to invest incentives and launch conservation programs.

#### **Recommendation 8 (OEH Symposia for Scientists and Land Managers)**

We are not sure of the cost effectiveness of this recommendation because it could be quite expensive to facilitate without a defined outcome. Surely in this day and age, electronic delivery and exchange methods would be more cost effective. For example, webinars or social media.

#### **Recommendation 9 (Australian Museum to Hold Genetic Material)**

We support this recommendation. We are particularly in favour of collecting samples from all sick, injured and deceased koalas (where practical). We would also suggest a program from the Museum (similar to Monash University's) of offering DNA testing (at reasonable cost) to researchers, wildlife carers, environmental consultants and volunteer conservation groups to enable them to identify diseases, genetic abnormalities and familial relationships.

#### **Recommendation 10 (Exchange of Information)**

This recommendation seems disjointed and uncoordinated. Researchers and government use SEED, landowners and communities are informed by "field days" (a new series of field days or existing agricultural Field Days?) or perhaps via local government. This recommendation needs to be more structured.

#### **Recommendation 11 (Share Information with Community and Industry)**

We are not sure what the difference is between this and Recommendation 10. We believe the strategy should have an objective of harnessing the knowledge, commitment and passion of the koala conservation community, not just feed us morsels of information occasionally (see detail under General Comments below). In other words, communication should be comprehensive and in both directions.

#### **Koala Advisory Committee**

It is proposed that a Koala Advisory Committee be formed consisting solely of State-level bureaucrats and researchers. If such a committee is expected to deliver recommendations that are not perceived as being imposed on the community without consultation, surely it should include representatives from local government, conservation groups and private landholders.

### **General Comments**

#### **Harnessing the Conservation Community**

There already exist a significant number of volunteer community groups in the state that are committed and passionate about Koala conservation. Most of them already have an in depth knowledge of koala biology, behaviour patterns, habitat requirements and threats in their local areas.

The following is a list that we are aware of and there are sure to be others that we are not aware of:

- Port Stephens Koalas
- Myall Koala and Environment Group (Hawks Nest/Tea Gardens)
- Hunter Wildlife (Newcastle and lower Hunter Valley)
- Koalas in Care (Taree)
- Port Macquarie Koala Hospital
- Koala Preservation Society (Coffs Harbour)
- Friends of the Koala (Lismore)
- Help Save the Wildlife and Bushlands (Campbelltown)
- Wildlife Rescue South Coast (Southern Highlands to Victorian border)
- Southern Highlands Koala Conservation Project (Wingecarribee Shire)
- Upper Mooki Landcare Group (Liverpool Plains)
- Gunnedah Landcare Groups

In addition to focussing programs on state government, local government, scientific community, industry and landholders (all of which will cost significant money) there could be a very cost effective way of making a difference to koala conservation. That is, **to harness the power of volunteerism!**

Programs to help volunteer conservation groups might include:

- Establish electronic information sharing strategies; top down from government and scientific communities, laterally between conservation groups and upwards to the powers-that-be.
- Managers of the koala strategy must listen to the conservation groups who always know what isn't working and which bureaucracies (or sections thereof) are roadblocks to protecting the koala.
- The implementers of the koala strategy should find out what specific and unique tools and needs each individual conservation group has, assess the cost of providing them and if cost effective, deliver them.
- Provide advice and guidance on the most effective ways conservation groups can include their own communities in koala conservation activities. The ideas delivered could come from strategies other groups have successfully implemented.
- Universally acknowledge successful projects that conservation groups have implemented. Perhaps have a "Made a Difference" awards program and presentation ceremony.
- Provide technology to conservation groups to help them manage their organisations, operations and koala populations. This might include
  - Free or subsidised computer software, such as word processing, spreadsheet, database, desktop publishing, etc.
  - Standardised Mobile phone apps to record koala locations or vegetation occurrences.
  - Standardised templates for reporting conservation activities for central recording such as koala occurrence reports, vegetation incidence data, etc. These should include easy incorporation of GPS coordinates such as from Google and camera exif information.
  - A central repository of koala surveying equipment (and operators) could be established and hired out, at cost, to conservation groups wishing to survey

their local koala populations. This repository should upgrade its equipment regularly as technology improves.

- A koala tracking dog unit could be established centrally and made available to conservation groups (and local government) to survey suspected koala habitat areas.
- Establish an inexpensive DNA testing facility (similar to Monash University's) to enable the testing of koala mitochondrial DNA to identify instances of KorV, Chlamydia and genetic abnormalities. The logical place to establish this facility would be at the Australian Museum where it is proposed to hold all koala genetic material.

## **Myall Coast Koala Threats**

### **Kingfisher Avenue Koala Deaths**

As can be seen in the attached map developed by analysing koala sightings data, there is a pronounced movement corridor between the Hawks Nest township and the Myall Lakes National Park. This corridor is quite narrow at the point it crosses the only road from Tea Gardens into Hawks Nest (Kingfisher Avenue). We get frequent reports of koalas on this road (see attached photos) and as a result it is a roadkill hotspot – we have had 6 koalas killed on Kingfisher Avenue in the last 3 years! We and Council have done everything in our power to address this problem. For example we have signage at both ends of the danger area, including a new radar-activated sign which lights up when a vehicle exceeds the 50KPH speed limit (see speeding vehicle photo). Unfortunately, subsequent speed testing has shown average speeds have slightly INCREASED since the radar sign was installed. Other traffic calming measures such as speed humps, ripple strips, painted road markings and roundabouts have all been rejected by Roads and Maritime Services. We need RMS to be more accommodating or come up with viable alternatives.

### **Habitat Loss**

Koalas have effectively disappeared from Tea Gardens because of tree loss and severing of movement corridors. Even though they still reside in Hawks Nest because of the large number of trees within the urban area, koalas have been under increased threat in the past two years because of the introduction of the Rural Fire Service 10/50 Rule. Initially, the rule was heavy handed classifying the entire urban area as 10/50 suitable. During this time, unscrupulous, tree cutters (mostly a team of unlicensed fly-by-nighters) carried out a door knocking campaign resulting in hundreds of trees being needlessly removed without reference to any authority. Despite the enabling legislation and their own Code of Practice requiring them to, the RFS haven't published any locality "**maps**" (definition: a diagrammatic representation of an area of land or sea showing physical features, cities, roads, etc.) of the areas covered by the 10/50 Rule so that anyone can easily see the areas covered by the 10/50 Rule. The RFS online tool only enables checking of **one street address at a time**. Even though the rules have been relaxed a little, the unscrupulous tree cutters still manage to convince some homeowners their trees can come out, without approval, often after a storm which frightens home owners into thinking the next tree will fall on them.

### **Connecting Corridors**

Although we only have a small population of koalas in Hawks Nest, they appear to be generally healthy and do not have signs of inbreeding. We believe this is because there is regular migration of some of our koalas between the township and the Myall Lakes National Park to the north resulting in the exchange of diverse genetic material. If this movement corridor was to be severed in the future (e.g. by inappropriate development in North Hawks Nest) it would be a death sentence to our small urban koala community.

Equally, there needs to be vigilance to protect two other existing corridors from Tea Gardens if the koala population is ever to increase and return:

1. northwest from Shearwater, through the approved environmentally sensitive North Shearwater development and on to Monkey Jacket,
2. southwest from the proposed Myall River Downs development to Kore Kore Creek and into Pindimar.

### **Dogs, Disease and Fire**

Although these issues are significant for the wider koala population, they have not been a major issue in Hawks Nest and Tea Gardens.

- Our koalas appear to be relatively disease free with only two cases of Chlamydia in the past 10 years.
- Dog attacks have been quite rare with only one confirmed death in 10 years and that was by a pair of dingoes. There have been a few domestic dog attacks but they resulted in recoverable injuries or the dogs came off second best.
- There has been no bushfire that has encroached into the townships in the past 25 years. However, occasional controlled mosaic burns have been carried out in the corridor to the north of Hawks Nest between the town and national park. A major outbreak at some time in the future could have an impact on our koalas.

### **Issues important to Hawks Nest/Tea Gardens Koalas**

1. “Core Koala Habitat”, “Koala Movement Corridors” and “Koala Home Trees” in Hawks Nest and Tea Gardens should be formally identified and classified. They should be exempted from the RFS 10/50 Rule and the standard offsetting rules that apply under the new Biodiversity Regulation Act.
2. The Rural Fire Service should be required to publish maps of where the 10/50 Rule applies and to require people to apply to the local council when wanting to remove trees in classified areas. Additionally, the RFS online tool should be modified to require property owners to record online and print that they have requested approval to remove or prune vegetation under the 10/50 Rule. Licensed tree cutters should be required to sight this record before proceeding with the work.
3. The Roads and Maritime Services should be required to be sympathetic to requests for koala protection mechanisms on urban roads where roadkill is an identified issue. We would like to see RMS establish a research project to evaluate traffic management methods on urban roads such as:
  - a. affordable (to Councils and the community) traffic calming techniques,
  - b. road markings such as colours, stripes, images, etc.
  - c. affordable and effective signage,



- d. radar activated speed signs, including speed cameras,
  - e. speed monitoring and enforcement strategies,
  - f. koala and wildlife diversion techniques (tunnels, bridges, fences, ladders).
4. The classifications mentioned in point 1 should also be given specific enforceable protection in planning instruments such as Development Control Plans. They should require owners and developers to arrange for planting of at least as many koala food trees, if not more, as are removed during construction of a development. Plantings should occur within a reasonable distance from the development.
  5. We would like to obtain a Save Our Species grant to enable us to accurately assess the koala population on an ongoing basis so that we can determine if it is increasing or decreasing.
  6. The state government should provide financial support to MidCoast Council to enable it to prepare a Comprehensive Koala Plan of Management (CKPoM) for the entire local government area which is geographically the second largest LGA on the NSW coast with multiple koala habitats but shrinking koala populations.
  7. The state government should support the establishing of a koala hospital in Port Stephens. Because we don't have the facilities, we must use the Port Stephens Koalas organisation on the south side of Port Stephens and the vet at Nelson Bay to care for our sick and injured koalas. Port Stephens Koalas has recently launched a campaign to establish a Koala Hospital in the Port Stephens area. It has received in-principle support from Port Stephens Council. This hospital will be vital to provide a higher level of care than is currently possible. The nearest koala hospitals to Port Stephens are at Port Macquarie (over 2.5 hours to the north) and Sydney (2.5 hours to the south). The cost to establish such a hospital will be significant and will require state government support.

Thank you again for the opportunity to make a submission.

Yours sincerely,

Ian Morphet, Secretary

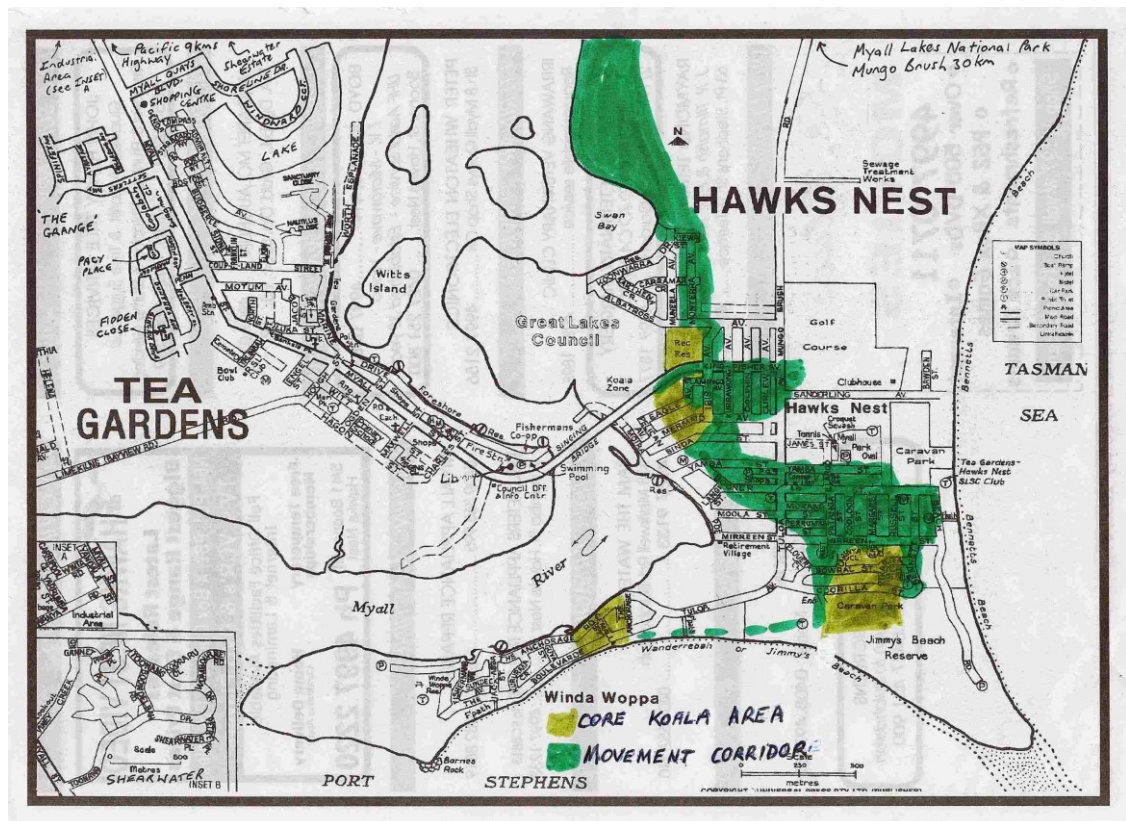


Figure 1 - Hawks Nest Koala Map



Figure 2 - Vehicle exceeding speed limit approaching Kingfisher Avenue roadkill hotspot

(Photo: Ian Morphet)





"Princess seeing out 2016 . " Kinfisher Ave Hawks Nest Dusk 31/12/2016 Photo By Christian Patteson

**Figure 3 - "Princess" beside Kingfisher Avenue, dusk, New Years Eve 2016**

(Photo: Christian Patteson)



**Figure 4 - "Princess" again on Kingfisher Avenue 3rd January 2017**

(Photo: Martin Shulz)