

23 September 2021

Wildlife Health Australia: Submission to draft National Koala Recovery Plan public consultation

Thank you for the opportunity to review the draft National Koala Recovery Plan.

We have elected to keep our comments brief.

It is our firm belief that disease should always be considered as a significant aspect of any threatened species plan, including Recovery Plans and similar.

If disease is a recognised consideration within such a plan, as it is with the koala, then there are several key advisors who would be suitable sources to consult *during* drafting of these and other similar documents.

These advisors include the

- Wildlife, One Health and Environmental Biosecurity teams within the agriculture side of the federal Department of Agriculture, Water and the Environment and
- Wildlife Health Australia (www.wildlifehealthaustralia.com.au)

We would recommend that these advisors should always be consulted for input during the development of such plans in the future, *prior* to the publication of draft documents.

Whilst the word “disease” is mentioned repeatedly in the draft document, there is very little information on the specifics of the diseases that might be of significance to koalas. Disease appears to be addressed on just one page of this long document (pp 49-50) and somewhat strangely, under the heading “Natural systems modification”. Only two diseases are mentioned by name. We suggest:

- This section is revised so that Disease is its own subheading, not under “Natural systems modification”, within the section “Direct Threats”.
- The section is reviewed, and re-written as necessary, by persons with expertise in both koala health and the likely population effects of disease. In addition to the advisors mentioned above, we suggest consultation with the Koala Health Hub at the University of Sydney (<https://koalahealthhub.org.au>).
- Detail in this section should be relevant to the overarching aims of a written Recovery Plan, and appropriate links to further detail, or explanation of further work to be undertaken, should be provided. The level of detail, and facts or suppositions currently included in this section of the draft appears inappropriate to the overarching aims of the document.
- The section is modified to include specific and detailed mention of the health and disease work that is currently funded within the federal allocation of funds to koalas, which includes a national Disease Risk Analysis for the koala, among other projects.

- The section on “Mortality from dogs and vehicles” should be moved and included under Disease, as these impacts (trauma and resultant morbidity and mortality) are also forms of disease, although non-infectious in nature.
- The final paragraph of the existing section on Disease, which addresses myrtle rust, should be removed and relocated to a more appropriate area, such as under “Ecological threatening processes”.
- Other mentions of disease throughout the document should be reviewed and where appropriate, reworded by a person with appropriate knowledge of koala health and disease.

We also note that there are several sentences throughout the document which attempt to address the possible impacts of stress and immunocompromise. All these comments should be moved or replicated into the disease section (stress and immunocompromise are aspects of disease, again, not necessarily of an infectious nature) and should be reviewed and rewritten by a person with appropriate knowledge of this area of health and disease.

In addition to these comments we suggest:

- On page 3, diagram is adjusted so that in box under Objective 2, wording is changed to “disease impacts reduced”. The occurrence of disease is not as important as the impacts of that disease. Disease prevalence may be 100% but may not affect survival, fecundity etc and will be less significant than 20% prevalence of a disease that causes 100% mortality.
- On page 14, diagram is adjusted so that wording, under Population threats, is changed from “Change in Body Condition” to “Change in fitness”. Body condition is only one of many possible indices for fitness, which is what is really important. Also “increase disease” is probably better termed “increased disease impacts”, as noted above.
- Under first box, we are not sure that Disease fits under Natural Systems modifications, especially if pathogen has been introduced into populations since European arrival to Australia (almost certain for Chlamydia), see also comments above.
- There are various mentions of disease incidence, we suspect you mean rather disease prevalence.
- P 17, it needs to be clearly understood by the authors (and communicated appropriately in this section) that the indicators of disease are going to be different from indicators of disease impacts (see above). There will need to be inclusion of indices or metrics for both of these, and they will likely be different for each. These are more complex and less definitive than either genetic health indicators or population fragmentation indicators/ indices.
- In the Table beginning on page 20, listing Strategies to build and share knowledge, we note that there is a need for a completely absent action / research project on koala health – specific diseases, how to determine the impact of disease at a population level, and also control and prevention strategies.
- There is no mention within this Table of the national koala disease risk analysis, or other related koala health projects currently funded by the federal government.

- The action 2 g needs to be reviewed and rewritten by those with experience and expertise in this area. A suggestion would be “Build on existing guidance information with experts to develop national guidelines for veterinary standards in captive care, sampling, diagnosis, treatment, prevention and control of disease, fertility control and investigation, assessment of suitability for release, translocation, release and post-release protocols for veterinary staff, carers and koala rehabilitation centres; update and review to incorporate new learnings and knowledge.”
- Action 6 describes “Develop meaningful and measurable triggers for and metrics of health, genetics, population and distribution, at relevant planning scales.” We note you would need to have an established, verified monitoring and data collection method for metrics of disease firstly, before you can then use it as a triggering process for action. We are not aware of any national (or other) established and verified system for monitoring and collection data on koala health such as implied here. We understand that this is one part of the NKMP but this does not seem to be explicitly stated in this section.

Overall, our advice would be that the Commonwealth consider a nationally coordinated approach to disease management for this species.

Yours sincerely,

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ABOUT WILDLIFE HEALTH AUSTRALIA

Wildlife Health Australia (WHA) is the peak body for wildlife health in Australia and operates nationally. The head office is located in Sydney, NSW.

WHA activities focus on the increasing risk of emergency and emerging diseases that can spill over from wild animals and impact on Australia's trade, human health, biodiversity and tourism. We provide a framework that allows Australia to better identify, assess, articulate and manage these risks. We provide the framework for Australia's general wildlife health surveillance system.

Our mission is to develop strong partnerships in order to better manage the adverse effects of wildlife diseases on Australia's animal health industries, human health, biodiversity, trade and tourism.

WHA directly supports the Animal Health Committee (AHC), Animal Health Australia (AHA), the Animal Health Policy Branch and the Office of the Chief Veterinary Officer (OCVO) within the Australian Government Department of Agriculture and Water Resources (DAWR) and Australian governments in their efforts to better prepare and protect Australia against the adverse effects of wildlife diseases. It provides priorities in wildlife disease work, administers Australia's general wildlife disease surveillance system as well as facilitating and coordinating targeted projects. Wildlife health intelligence collected through the National Wildlife Health Information System (eWHIS: www.wildlifehealthaustralia.com.au) administered by WHA is provided to members of AHC and the Australian Government DAWR, and Departments of Health (DoH) and Environment (DoE), on issues of potential national interest, potential emerging issues and significant disease outbreaks in wildlife. The information is provided in line with the agreed policy for data security.

WHA is administered under corporate governance principles. A management group, chaired by an appointment from DAWR provides strategic direction and advice to a small team, which oversees the running of WHA. It is important to note that WHA involves almost every agency or organisation (both government and NGO) that has a stake or interest in animal and wildlife health issues in Australia. In addition WHA also comprises more than 600 wildlife health professionals and others from around Australia and the rest of the world who have an interest in diseases with feral animals or wildlife as part of their ecology that may impact on Australia's trade, human health and biodiversity.

More information on WHA is available at: www.wildlifehealthaustralia.com.au