Submission No 294

INQUIRY INTO HEALTH AND WELLBEING OF KANGAROOS AND OTHER MACROPODS IN NEW SOUTH WALES

Organisation: FOUR PAWS Australia

Date Received: 29 April 2021

Animal Welfare.
Worldwide.

To: Legislative Council
Parliament of New South Wales
Macquarie Street SYDNEY NSW 2000
Phone: (02) 9230 3081

Email: portfoliocommittee7@parliament.nsw.gov.au

THE NSW LEGISLATIVE COUNCIL'S PORTFOLIO COMMITTEE NO. 7 – PLANNING AND ENVIRONMENT INQUIRY INTO THE HEALTH AND WELLBEING OF KANGAROOS AND OTHER MACROPODS IN NEW SOUTH WALES.

INTRODUCTION

Thank you for the opportunity to contribute to this imperative inquiry into the health and wellbeing of Australia's native and iconic wild animals – kangaroos and macropods.

FOUR PAWS is the global animal welfare organisation for animals under direct human influence, which reveals suffering, rescues animals in need and protects them. With offices worldwide, including Australia, our vision is a world where humans treat animals with respect, empathy and understanding.

FOUR PAWS is participating in the review out of concern for the health and wellbeing of kangaroos and other macropods routinely slaughtered throughout NSW, both commercially and non-commercially. Tens of millions of kangaroos have been killed in the last decades[1], and it is known to be the largest on land commercial slaughter of wildlife globally[2].

The cruelty sanctioned by the relevant codes and regulations is of high concern to FOUR PAWS as is the absence of monitoring of slaughter to ensure compliance. Compounding this are the grave threats of climate change and land clearing impacting kangaroos and macropods. FOUR PAWS calls for an urgent end to the commercial killing of wildlife, and for the NSW government to review and greatly reform the management and conservation of macropods.

TERMS OF REFERENCE

1 (a) historical and long-term health and wellbeing indicators of kangaroos, and other macropods, at the local, bioregional and state levels, including the risk of localised extinction in New South Wales,

[1] Kangaroo and Wallaby Statistics Archive
[2] WELFARE IMPLICATIONS OF COMMERCIAL KANGAROO HARVESTING: DO THE ENDS JUSTIFY THE MEANS

FOUR PAWS Australia
GPO Box 2845
Sydney NSW 2001 | Australia
phone: +61-1800 454 228
e-mail: enquiries@four-paws.org.au
www.four-paws.org.au
ABN: 86 601 868 286

There is compelling evidence that populations of kangaroos and other macropods are declining[3]. Indeed, it is this concern that has prompted this critical Inquiry[4].

Unfortunately, Australia has one of the worst track records when it comes to rates of extinctions[5]. This history and evidence of decreasing populations of kangaroos warrants a prudent approach and scrutiny of the sustainability of the *New South Wales Commercial Kangaroo Harvest Management Plan 2017–2021.* Particularly in light of the unprecedented bushfires of 2019/20.

(b) the accuracy with which kangaroo, and other macropod, numbers are calculated when determining population size, and the means by which the health and wellbeing of populations is assessed,

There is concern amongst animal and environmental protection organisations, that methods used in Australia to calculate populations of kangaroos and other macropods are not in line with best practice methods. For instance, a major concern is that it appears no attempt is made to account for factors such as: square kilometres of each zone that are devoid of kangaroos, such as towns, industrial areas, and farms where ongoing culling has already reduced populations. Additionally, there are issues with transparency, as detailed information is difficult to access to allow for independent scientific analysis.

Further, government data on kangaroo population increases are in conflict with the slow reproductive capacity of kangaroos (explored below), even under ideal conditions, let alone during a drought. And, the means by which health of populations is assessed is claimed to be by monthly average weight of carcasses and population numbers[6]. These are limited methods by which to assess health, and population estimates do not appear to adhere to best practice and are outdated, leading to over-inflated estimates.

(c) threats to kangaroo, and other macropod, habitat, including the impact of:

(i) climate change, drought and diversion and depletion of surface water sources

Climate change and exacerbated drought conditions have long-term impacts on kangaroo and other macropods' habitats and, in turn, on populations. These threats will only magnify as the climate continues to change.

Increased drought as a result of climate change significantly impacts populations, as kangaroos breed slowly, producing about 1 young per year[7], and breeding is reduced or even ceases when food supply is inadequate[8]. Kangaroos reach sexual maturity between one to several years old, depending on species and sex, and environmental conditions can significantly delay maturity[9].

---

[3] Kangaroo wellbeing to be subject of NSW upper house inquiry; ADJOURNMENT : Kangaroos

[4] Kangaroo wellbeing to be subject of NSW upper house inquiry

[5] OECD Australia Chapter 4

[6] New South Wales Commercial Kangaroo Harvest Management Plan 2017-2021

[7] It's raining kangaroos: the ups and downs of kangaroo management

[8] Kangaroos, Terence J Dawson, 9780643106260 (csiro.au); Lifetime reproductive success in a population of female red kangaroos Macropus rufus in the sheep rangelands of western New South Wales: Environmental effects and population dynamics

[9] Kangaroos, Terence J Dawson, 9780643106260

FOUR PAWS Australia
GPO Box 2845
Sydney NSW 2001 | Australia
phone: +61-1800 454 228
e-mail: enquiries@four-paws.org.au
www.four-paws.org.au
ABN: 86 601 868 286

Not only do these factors dispel notions of 'over-abundance' or 'exploding populations', they are not considered in the *New South Wales Commercial Kangaroo Harvest Management Plan 2017–2021*.

(ii) bushfires

The catastrophic bushfires captured international attention due to the plight of wild animals. But alarmingly, despite the massive suffering and loss of life, kangaroos and other macropods were still slaughtered shortly after the devastating bushfires.

The horrific 2019/2020 Australian bushfires impacted almost three billion vulnerable wild animals[10], most of whom likely perished[11]. Eastern Australia, specifically NSW and Victoria, were particularly hard hit with around 12.6 million hectares burning[12].

The aftermath of the fires continues due to extensive habitat loss, and the final impact will not be known for years to come[13]. Alarmingly, the forecast for the future indicates that this was not a singular event, but that bushfires will continue to escalate and increase in duration[14]. This means that the threat of bushfires has risen in urgency for wild animals, including kangaroos and other macropods.

(iii) land clearing for agriculture, mining and urban development,

Land clearing is a major threat to kangaroos and macropods. Human activity has taken over most of the land in Australia[15], land that was once habitat for numerous native animals, including kangaroos. It is estimated that 50 million animals are killed by land clearing in NSW and Queensland every single year[16], including high numbers of kangaroos and other macropods.

Land clearing is also a detrimental contributing factor to climate change and bushfires[17], it is one of the greatest threats to wild animals[18] and one of the primary reasons it is carried out is to create pasture for livestock[19].

Lastly, an under-researched area connected to urbanisation is the effect of vehicle collision, which indicates significant deleterious impacts on kangaroo populations[20].

---

[10] Australia's 2019-2020 Bushfires: The Wildlife Toll - WWF-Australia

[11] Impact of Australia's catastrophic 2019/20 bushfire season on communities and environment. Retrospective analysis and current trends

[12] After the Megafires: What Next for Australian Wildlife?

[13] Ibid.

[14] Climate Council The facts about bushfires and climate change

[15] Land use in Australia at a glance (agriculture.gov.au)

[16] The invisible harm: Land clearing is an issue of animal welfare

[17] A continent under stress: interactions, feedbacks and risks associated with impact of modified land cover on Australia

[18] OECD Australia Chapter 4

[19] https://soe.environment.gov.au/sites/default/files/soe2016-land-final-web.pdf?v=1492063205

[20] Spatial ecology of an urban eastern grey kangaroo (Macropus giganteus) population: Local decline driven by kangaroo-vehicle collisions | Request PDF

FOUR PAWS Australia
GPO Box 2845
Sydney NSW 2001 | Australia
phone: +61-1800 454 228
e-mail: enquiries@four-paws.org.au
www.four-paws.org.au
ABN: 86 601 868 286

(d) current government policies and programs for kangaroo management, including:
(i) the method used for setting quotas for kangaroo culling,

Methods used for setting quotas are concerning for several reasons. As discussed above, population estimates are carried out by aerial counts, but information as to whether areas devoid of kangaroos are included is lacking. There is sparse accessible information on how numbers are obtained, calculated, and then extrapolated to entire management zones. And factors such as areas devoid of kangaroos, drought, bushfires and high infant mortality rate do not appear to be taken into account.

Population estimates appear out of step with the biological capacity of kangaroo reproduction, in even ideal conditions. For instance, population growth in ideal conditions is approximately 10%[21], while quotas are set at 15-20% of the population[22], irrespective of factors such as drought, fires or flood. It is likely we are not seeing greater declines in kangaroo populations as only a portion of quotas have been used the last few years[23]. This may also indicate that numbers are not there to be harvested, warranting further investigation.

(ii) the management of licences to cull kangaroos,

The NSW Government approved new license conditions to harm kangaroos in 2018[24]. The changes weakened previous conditions, and now include:

- Ecologically sustainable limits on the number of kangaroos that may be culled, based on property size
- Previous and current licence holders can apply for licences over the phone
- More shooters may operate under each licence, and shooter details are provided to the National Parks and Wildlife Service (NAWS) after culling operations, rather than with the licence application
- Removal of the use of carcass tags and the 'shoot and let lie' licence condition to reduce biosecurity risks

The 'ecologically sustainable limits' are being enforced by relying on shooters' reporting.

In NSW, a license is required to harm, i.e. usually kill, protected native animals where they are shown to be a threat to human safety, damaging property and/or causing economic hardship[25]. But there is no requirement to provide any evidence.

Licences are obtained by filling out an online form and lodging it with the local NPWS office. Licences have conditions and under the *Biodiversity Conservation Act 2016* (NSW) it is an offence to contravene a condition of a licence. But no monitoring takes place - only a record sheet is provided as part of the licence and holders must fill it in and provide it to the local NPWS office[26].

[21] FactCheck: are kangaroos at risk?; Kangaroo biology & population ecology
[22] 2021 Quota Report New South Wales Commercial Kangaroo Harvest Management Plan 2017 2021
[23] 2020 Quota Report New South Wales Commercial Kangaroo Harvest Management Plan 2017-21
[24] Licences to harm kangaroos | NSW Environment, Energy and Science
[25] Licence to harm native animals | NSW Environment, Energy and Science
[26] Ibid.

FOUR PAWS Australia
GPO Box 2845
Sydney NSW 2001 | Australia
phone: +61-1800 454 228
e-mail: enquiries@four-paws.org.au
www.four-paws.org.au
ABN: 86 601 868 286

In addition, there have been extensions to the commercial kangaroo harvest zones in Griffith and the South East Tablelands NSW[27].

The basis of diluting licensing conditions was claimed to be due to drought and the necessity of killing kangaroos who were suffering as a result of the drought. However, the conditions are still in place, even after the catastrophic bushfires wiped out unprecedented numbers of wild animals.

(e) current government policies and programs in regards to 'in pouch' and 'at foot joeys' given the high infant mortality rate of joeys and the unrecorded deaths of orphaned young where females are killed,

Government policies and programs in relation to 'in pouch' and 'at foot joeys' are alarming for several reasons.

If food is plentiful, a mature female kangaroo will generally have two joeys in her care, aged around a year apart – one in pouch and one at foot[28]. However, infant mortality rate among kangaroos is very high, ranging from 50% to over 70% due to starvation and predation[29]; and even higher due to drought[30]. On average female kangaroos are only fertile for about 8 years[31], and they successfully raise their first young at around 3 years[32].

Orphaned at-foot joeys are left to die of starvation or exposure to the elements[33] - an estimated 800,000 to 855,000 dependent joeys per year perish as a consequence of commercial shooting alone[34].

This high infant mortality rate is made worse by the killing and cruelty sanctioned by the relevant Codes:

- Decapitation or bludgeoning to death of joeys[35]
- No training for shooting competency within culling (non-commercial purposes)[36]
- No monitoring requirement within culling[37]
- No record keeping for how many young are bludgeoned to death[38]

---

[27] 2021 Quota Report New South Wales Commercial Kangaroo Harvest Management Plan 2017 2021

[28] Ibid.

[29] https://publications.csiro.au/rpr/pub?pid=procite:f9629abd-d2f0-4f52-8d83-0274a227b682; (PDF) Predation by Red Foxes limits recruitment in populations of eastern grey kangaroos.

[30] N. Shepherd and G. Caughley, Condition and recruitment of kangaroos in Kangaroos: their ecology and management in the sheep rangelands of Australia 1987.

[31] Terence J. Dawson, Kangaroos: Biology of the Largest Marsupials 2012 Based on Table 6.1; Lifetime reproductive success in a population of female red kangaroos Macropus rufus in the sheep rangelands of western New South Wales: Environmental effects and population dynamics (researchgate.net)

[32] Ibid.

[33] What happens to joeys when female kangaroos are shot? – RSPCA Knowledgebase

[34] WELFARE IMPLICATIONS OF COMMERCIAL KANGAROO HARVESTING: DO THE ENDS JUSTIFY THE MEANS

[35] https://www.agrifutures.com.au/wp-content/uploads/2020/11/20-126-digital.pdf sec 3; http://www.environment.gov.au/biodiversity/wildlife-trade/publications/national-code-practice-humane-shooting-kangaroos-and-wallabies-non-commercial ss 5-5.1.

[36] Ibid s 3.1.

[37] What is the difference between non-commercial and commercial kangaroo shooting? – RSPCA Knowledgebase

[38] WELFARE IMPLICATIONS OF COMMERCIAL KANGAROO HARVESTING: DO THE ENDS JUSTIFY THE MEANS

FOUR PAWS Australia
GPO Box 2845
Sydney NSW 2001 | Australia

phone: +61-1800 454 228
e-mail: enquiries@four-paws.org.au
www.four-paws.org.au

ABN: 86 601 868 286

Concerningly, due to an absence of records in relation to deaths of orphaned young when females are killed, the true scale of death is not known.

(f) regulatory and compliance mechanisms to ensure that commercial and non-commercial killing of kangaroos and other macropods is undertaken according to the Biodiversity Conservation Act 2016 and other relevant regulations and codes,

There is little monitoring in commercial killing, so compliance is likely a major issue, and therefore even the bare minimum standards as set out in the relevant codes and regulations cannot be assured[39]. In addition, slaughtering takes place at night and in remote regions[40], often resulting in very poor animal welfare outcomes:

- Joeys are often not killed by the first blow to the head[41].
- Hundreds of thousands of kangaroos are not killed by the first shot[42].

(g) the impact of commercial and non-commercial killing of kangaroos and other macropods, including the difficulty of establishing numbers killed by landholders since the removal of the requirement for drop tags;

Overall, there is a lack of evidence that populations require killing and on the long-term impact of these killings on kangaroo populations[43]. Further, even prior to the removal of requirements for drop tags, there were already significant lacks in information and data as to how many kangaroos were killed by landowners and illegal shooters. Removing the requirement for drop tags has resulted in further uncertainty around numbers of animals slaughtered and knowledge of population sizes.

(h) and current and alternative measures to provide an incentive for and accelerate public and private conservation of kangaroos and other macropods.

To provide incentive for conservation of kangaroos and other macropods, it would be beneficial if awareness activities in relation to the impacts of climate change, bushfires and habitat needs of macropods were rolled out. This would bolster the already changing mindset of kangaroos and other macropods as wild iconic animals needing conservation.

Concerns around methods used to estimate population numbers would need to be addressed and information would need to be publicly accessible.

Further potential incentives include:

- Establishing a taskforce to protect kangaroos, which is independent from the Department of Planning, Industry and Environment.

---

[39] The role of inspections in the commercial kangaroo industry | International Journal of Rural Law and Policy (uts.edu.au)

[40] Ibid.

[41] https://www.agrifutures.com.au/wp-content/uploads/publications/13-116.pdf

[42] WELFARE IMPLICATIONS OF COMMERCIAL KANGAROO HARVESTING: DO THE ENDS JUSTIFY THE MEANS; Kangaroos At Risk - Welfare

[43] Is there a need to kill kangaroos or wallabies? – RSPCA Knowledgebase

FOUR PAWS Australia
GPO Box 2845
Sydney NSW 2001 | Australia
phone: +61-1800 454 228
e-mail: enquiries@four-paws.org.au
www.four-paws.org.au
ABN: 86 601 868 286

- The creation of wildlife corridors along migratory paths to reduce injury and deaths by vehicle collisions and fencing.
- Adapting to the global changes caused by the pandemic, and the focus placed on wildlife protection, by investing in sustainable tourism. This would also incentivise international tourists, particularly with rising international support for protecting kangaroos and other macropods.

FOUR PAWS Australia
GPO Box 2845
Sydney NSW 2001 | Australia

phone: +61-1800 454 228
e-mail: enquiries@four-paws.org.au
www.four-paws.org.au

ABN: 86 601 868 286