

Submission
No 280

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

Organisation: Pastoralists' Association of West Darling

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Pastoralists' Association

of West Darling Inc.

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Submission.

Inquiry into the health and wellbeing of kangaroos and other macropods in New South Wales.

The Pastoralists' Association of West Darling (PAWD) is an agricultural organization that has represented the interests of pastoralist in western NSW since 1907. PAWD members are principally involved in the production of wool, sheep cattle and goats, and the management of semi-arid rangelands in the western region of the State, a region that supports a high population of kangaroos.

PAWD is governed by a board of sixteen Councillors, who live on and manage pastoral properties in western NSW. All Councillors each bring a lifetime's experience of dealing with kangaroos on their properties to the table. Some Councillors have experience operating as commercial kangaroo harvesters and others have participated in kangaroo research. All councillors have seen the damage kangaroos do to pastures, property infrastructure and the environment, and had to deal with the issues created by too many kangaroos during drought. Councillors are familiar with the operation of the commercial harvest and non-commercial culling of kangaroos.

PAWD was a member of the Kangaroo Management Advisory Panel¹ and its predecessor organisations for three decades, through which it offered kangaroo management advice to the relevant government departments. PAWD is currently represented on the Kangaroo Management Taskforce².

It is with this background in mind that PAWD makes this submission to the inquiry into the health and wellbeing of kangaroos and other macropods in New South Wales. PAWD appreciates the opportunity to offer comment and recommendations on kangaroo management in NSW. With reference to the inquiry's terms of reference, PAWD submits the following feedback.

(a) Historical and long-term health and wellbeing indicators of kangaroos:

The four common species of kangaroos in western NSW are:

- Red (*Osphranter rufus*)
- Eastern Grey (*Macropus giganteus*)
- Western Grey (*Macropus fuliginosus*)
- Euro (*Macropus robustus erubescens*)

The populations of all four species rises and falls in response to seasonal conditions, with numbers building up in periods of favourable rainfall, and falling (often precipitously) in times of drought. However, the overall population trend in the last three decades has been upwards (see Figure 1). Eastern Greys were observed to increase their range westwards to far west NSW in the 1970's, and Euros have been observed to increase their range beyond traditional rocky habitats to all types of country in recent decades. Kangaroos have benefitted from predator control and the provision of artificial waters since European Settlement of western NSW in the mid nineteenth century. Accordingly, their numbers inside the Dog Fence are higher than outside the Dog Fence. Kangaroos have been killed for commercial and non-commercial purposes in western NSW since settlement, but this has not had a long term impact on the health and wellbeing of the four common species.

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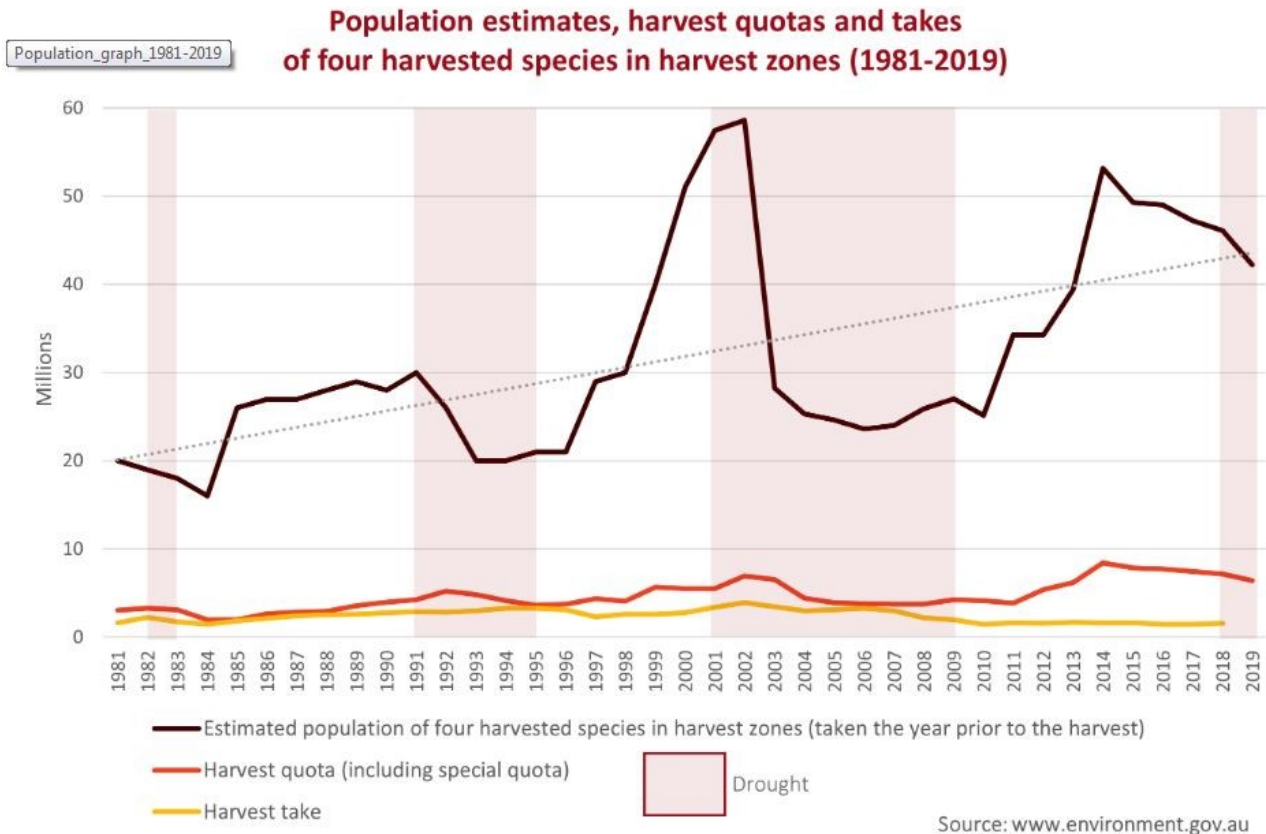


Figure 1.

(b) Accuracy of population estimates.

Reliable population estimates are fundamental to ensuring the sustainability of the commercial harvest and are used to set the annual harvest quotas. The NSW Government has been researching and monitoring kangaroos under the NSW Kangaroo Management Program since the 1970s. Over this period improvements have been made to the design of surveys to estimate kangaroo population size, based on the best available science³. PAWD is confident that the methods used to establish kangaroo populations are of a high standard, and are under continued review in order to improve their accuracy.

(c) Threats to kangaroo habitat.

(i) The provision of water for livestock has exponentially increased the area permanently habitable by kangaroos in western NSW. Away from the Darling River, only areas within 10kms of permanent water are permanently habitable by kangaroos⁴. There are very few natural permanent sources of water in the landscape west of the Darling River; principally two artesian mound springs north east of White Cliffs and isolated springs of varying yield and quality in hilly areas. Removal of artificial water sources currently maintained by pastoralists in western NSW is inconsistent with the long term survival of kangaroos. Closer to the Darling River, excessive extraction of water upstream for irrigation puts all life that is dependent on the River at risk, not just kangaroos. However, the greatest threat to kangaroos is kangaroos themselves, when they consume all remaining sources of sustenance during drought, typically long after pastoralists have removed their domestic livestock on welfare and environmental grounds.

(ii) The threat posed to kangaroos by bushfires is overstated. Kangaroos are large, mobile animals, with the capacity to outrun fire. The 2019-20 Bushfires principally burnt areas excluded from commercial kangaroo harvesting in NSW, or National Parks within commercial kangaroo harvest management zones where harvesting is not allowed (see Figure 2). By contrast, the extent of the 1974-75 Australian bushfire season was six times larger than the 2019-20 fire season, with much of western

NSW burnt out⁵. However, there hasn't been a single suggestion that the massive 1974-75 fires threatened kangaroo survival.

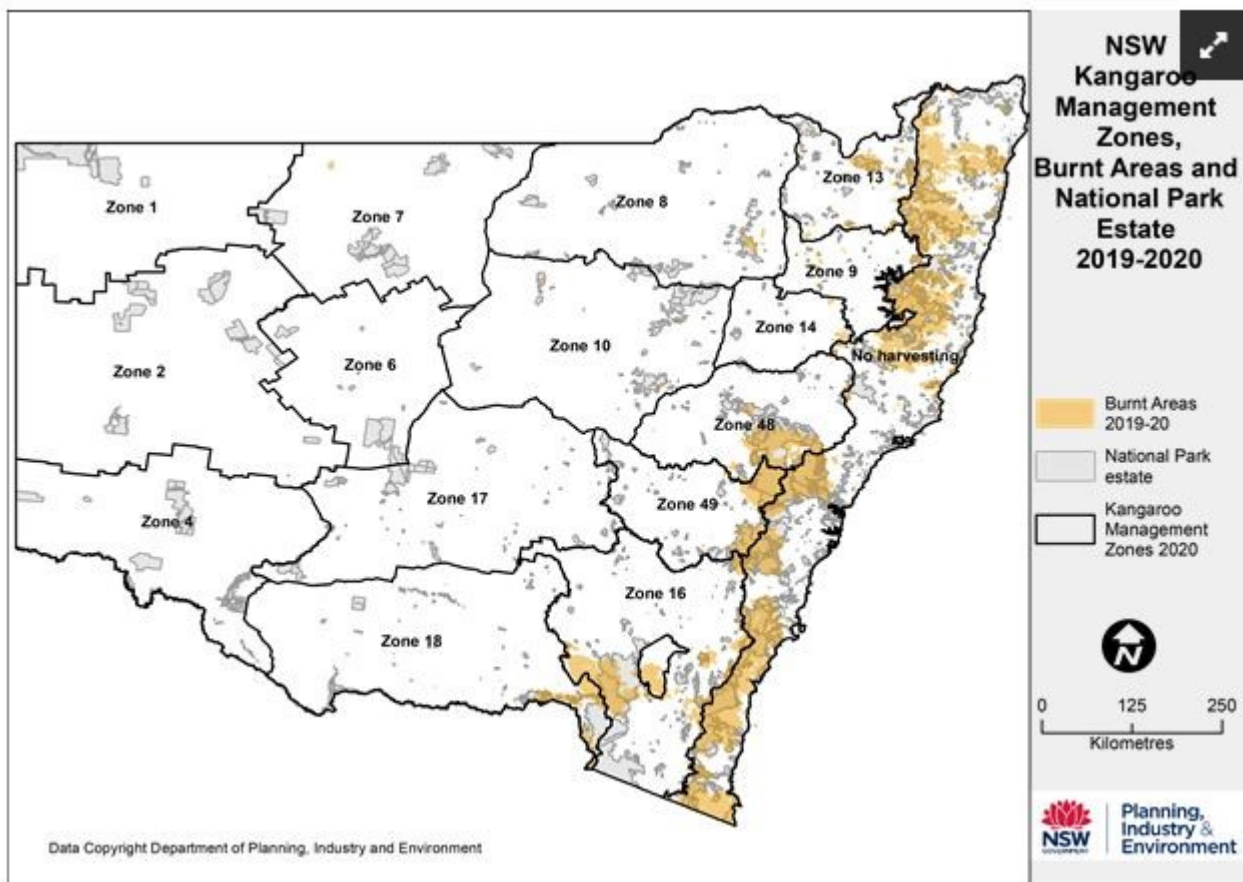


Figure 2.

(iii) Land clearing in western NSW is negligible. It is limited to areas required for built infrastructure (roads, fences, buildings). Accordingly, the impact of land clearing in this area on kangaroos is insignificant.

(iv) The prevalence of true exclusion fencing (typically netting 1.5m high or higher, with an apron flat on the ground or buried) in far west NSW is still limited at this point in time. Furthermore, exclusion fencing does not serve to disrupt the movement of kangaroos if it does not fully enclose an area. Accordingly, some examples of exclusion fencing touted as being disruptive to kangaroos have been identified in error.

The Dog Fence meets the definition of an exclusion fence, and kangaroos in western NSW owe their safety to this fence. Without the Dog Fence, kangaroos would be subject to predation by wild dogs. The population density of kangaroos inside the Dog Fence is many orders of magnitude higher than it is in northeast South Australia, where wild dogs are common.

The construction of exclusion fence clusters to control kangaroo densities are a direct response to the ineffectiveness of commercial harvesting as a control measure. The number of kangaroos harvested as a percentage of the available quota has been very low in recent years. Demand for kangaroo products has been suppressed by the actions of animal rights activists. In response, pastoralists have sought out alternative control methods, such as exclusion fencing. The irony of this is that trying to save kangaroos from commercial harvesting has actually increased the number of kangaroos controlled by other means, including by exclusion fencing.

There are other styles of fencing utilised in western NSW that are known as Total Grazing Pressure (TGP) fences. These fences are significantly lower than exclusion fences and do not have an apron. TGP fences slow, but do not prevent the movement of kangaroos. They will eventually find a way over, under or through a TGP fence. Suggestions that exclusion or TGP fences should be banned and/or removed are inconsistent with the requirements of agriculture, and would expose kangaroos to their main predator.

(d) Current government policies and programs for kangaroo management.

(i) The wording of this point in the Terms of Reference is symptomatic of the confusion about kangaroo management in the general community. The setting of quotas is synonymous with commercial kangaroo harvesting, not non-commercial culling. For the purposes of responding to this point, PAWD assumes that the Committee is inquiring about the setting of quotas for the commercial harvest of kangaroos.

The methods used for setting commercial kangaroo quotas are described in the New South Wales Commercial Kangaroo Harvest Management Plan 2017-2021⁶. They are robust and eminently defensible. These methods are based on the principle of sustainable harvest, such that the size of the harvest does not have a significant impact on the size of the population. Many pastoralists are satisfied with commercial harvesting as the only method of kangaroo control if it is high enough to limit kangaroo numbers to sustainable levels. Accordingly, PAWD contends that a case can be made for increasing the size of the commercial harvest. If this was to occur, it would render other control methods unnecessary. PAWD recommends that the Committee seeks further information about the setting of commercial harvest quotas from the Kangaroo Management Program Team⁷.

(ii) For the purposes of responding to this point, PAWD assumes that the Committee is inquiring about the management of non-commercial culling of kangaroos.

The management of licences to cull kangaroos is the responsibility of the New South Wales National Parks and Wildlife Service⁸. Management of the non-commercial cull is robust and eminently defensible. The availability of legal non-commercial culling as an option for kangaroo control when their numbers exceed the capacity of their habitat to support them is a much more desirable environmental and animal welfare outcome than allowing them be the victim of illegal culling, vehicle collisions or starvation/perishing. PAWD recommends that the Committee seeks further information about the management of non-commercial culling from the Wildlife Team⁹.

(iii) Changes to the conduct of non-commercial culling in NSW in response to the animal welfare and environmental disaster associated with the "Seventeen Twenty" drought served to encourage compliance with licence conditions and the provisions of the national code of practice for the humane shooting of kangaroos and wallabies for non-commercial purposes⁹. Making it easier for landholders to comply with licence conditions increases the probability that compliance will be improved.

(e) Guidelines governing the treatment of 'in pouch' and 'at foot joeys' are prescribed in the national code of practice for the humane shooting of kangaroos and wallabies for non-commercial purposes⁹ and the national code of practice for the humane shooting of kangaroos and wallabies for commercial purposes¹⁰. Methods prescribed for the euthanasia of dependent joeys may seem unacceptable to the uninformed observer, but these methods are extremely effective at achieving instantaneous death without any of the pain and suffering associated with death due to other causes.

PAWD disputes that the claimed high infant mortality rate of joeys, as stated in the Terms of Reference, is an issue. Where is the scientific evidence that high infant mortality rates are a problem? What are the benchmarks against which the claim is made? Is the mortality rate of joeys significantly higher than the mortality rate of the young of other animal species? Is the mortality rate artificially high because females sacrifice their young in time of drought as a survival mechanism and there are already

high numbers of kangaroos in the landscape, inflating the number of joeys that die during drought? Has the mortality rate changed over time, irrespective of seasonal conditions? Is a claimed high joey mortality rate a natural process, and without it we would be faced with an even bigger kangaroo population problem?

(f) Regulatory and compliance requirements are the responsibility of the Kangaroo Management Program Team⁷ for commercial harvesting, and the Wildlife Team⁸ for non-commercial culling. PAWD recommends that the Committee contacts the relevant Teams for further information about regulation and compliance associated with commercial harvesting and non-commercial culling.

(g) The impact of commercial harvesting and non-commercial culling on kangaroo populations is limited. The principal limiting factor on kangaroo populations is the onset of drought (see Figure 1). The main goal of the kangaroo management program (which manages the commercial harvest) is conservation. The Kangaroo Management Program Team works to ensure individual kangaroos are harvested in a humane way, and kangaroo populations remain ecologically sustainable⁷.

The requirement to attach a tag to the carcass of a non-commercially culled kangaroo was waived in August 2018. The implication in the Terms of Reference that this waiver creates a difficulty in establishing the number of kangaroos culled is groundless. Landholders are still required to apply to the National Parks and Wildlife Service for a culling licence. The licence specifies the species that may be culled, and the maximum number thereof. Subsequently, the landholder must supply returns detailing the number of kangaroos culled. There is still full accountability for the action of lawfully culling kangaroos.

(h) There are no current measures that provide a worthwhile incentive for pastoralists to undertake private conservation of the four abundant species kangaroos in western NSW (as listed on page 1). Conversely, the presence of unmanaged populations of kangaroos has a significant impact on the sustainability of agricultural businesses and the environment. To illustrate this point, kangaroos outnumbered sheep three to one in western NSW when their numbers peaked at an all-time record of 17.4 million in 2016. Grazing pressure from kangaroos brought the onset of “Seventeen Twenty” drought forward by six months and delayed recovery. For pastoralists that outlaid significant sums of money buying fodder to keep core breeding livestock alive, or paying for agistment on greener pastures elsewhere, doing so for an additional six months due to the impact of kangaroos on their pastures came at a significant financial cost.

The most straightforward way of encouraging private conservation of kangaroos by pastoralists in western NSW would be to offer a financial incentive tied to the number of kangaroos grazing on their properties. Given (1) recently published research (Pahl 2019) showing the dry sheep equivalent (DSE) of a 50 kilogram kangaroo is equal to 0.7 to 1 sheep and (2) the current value of domestic livestock, a ‘fair-and-reasonable’ payment required to encourage private conservation of kangaroos would have to be a significant sum of money. PAWD is sure that a private kangaroo conservation incentive scheme based on a ‘fair-and-reasonable’ valuation will be very popular in western NSW, and wishes the Committee the best of luck in convincing the State Government to adopt such a scheme.

PAWD recommendations.

Kangaroos are legislated property of the Crown¹¹. With this ownership comes a responsibility to manage the impact of kangaroos on agriculture, the environment and themselves. Kangaroos are responsible for the greatest proportion of unmanaged grazing in the rangelands of western NSW. PAWD (and other stakeholders) have consistently promoted commercial harvesting as the best form of kangaroo population management. As pointed out previously, pastoralists are unlikely to deploy additional control measures if commercial kangaroo harvesting could be developed to a level where it delivered effective population management. However, there are a number of legislative and regulatory

roadblocks that serve to limit the potential effectiveness of commercial harvesting as a control measure. Accordingly, PAWD makes the following recommendations:

- The minimum carcase weight should be abolished to encourage the commercial take of all size kangaroos, driven by price signals from industry (as per other red meat sectors). The existing minimum weights (14kgDW petfood/15kgDW human consumption) are higher than the average weight of some complete consignments of goats or lambs sent to slaughter.
- Resume commercial harvesting of Euros (*Macropus robustus erubescens*). Euros are increasing their range in western NSW and in their preferred habitat their numbers sometimes exceed the number of all other kangaroos combined.
- Permit the commercial harvesting of kangaroos for their skins only. Harvesting skins is a preferable alternative to non-commercial culling when harvesting for full carcasses is not available. Animal welfare requirements associated with skin only harvesting are the same as those for carcase harvesting, and infinitely better than the outcomes for kangaroos associated with drought.

Adoption of these recommendations would match existing provisions in other States and encourage the commercial harvesting of kangaroos as the preferred method of kangaroo population control. Consistency in harvesting regulations across all jurisdictions should be a target of national kangaroo management guidelines.

- Add a trigger for the release of Special Quota to the New South Wales Commercial Kangaroo Harvest Management Plan: Property-scale high density kangaroo numbers (for example in response to an isolated rainfall event). This will allow a commercial option for controlling locally high kangaroo numbers in the event that the zone quota is fully allocated, instead of non-commercial culling.
- Adopt a “High Abundance Quota” to address population booms by species at zone level as required. The current 15% – 17%(Reds) Quota (as a percentage of the population) cannot deliver effective population control when numbers build above long term averages. Provisions to reduce or cease commercial harvesting when populations drop below certain thresholds already exist in the New South Wales Commercial Kangaroo Harvest Management Plan. Accordingly, provisions to increase the Quota when populations exceed certain trigger points should also be included in the Management Plan.
- Licence and royalty tag fees should be borne by Government as a contribution to kangaroo management and environmental stewardship. Licensing costs are frequently cited by harvesters as a barrier to industry participation (Trapper’s Permit \$894, NSW Food Authority Licence \$337, royalty tags \$1.17). The average yearly take per harvester over five years (2015–2019) was 1260 kangaroos, with a gross value of approximately \$25,000. Out of this harvesters paid over \$2500 in licence, royalty tag and NSW Food Authority fees every year. On average these government charges represent a \$2 “tax” on every kangaroo taken by a harvester in NSW.
- Before 2002 the harvest of kangaroos in NSW was justified on the basis of damage mitigation to reduce the impact of kangaroos on pastoral enterprises. After 2002, the basis of commercial harvesting became sustainable harvesting. Kangaroo management policy at State and Commonwealth level should reflect that commercial harvesting has a key role to play in reducing the negative impacts associated with unsustainably high number of kangaroos. “Damage

mitigation” attaches a legitimate reason to commercial harvesting. South Australia’s Commercial Kangaroo Harvest Management Plan already includes a provision to manage the impact of kangaroos on land condition. All States and Territories already have separate legislation for the regulation of damage mitigation by non-commercial culling.

This year’s review of the New South Wales Commercial Kangaroo Harvest Management Plan is an opportunity to adopt these recommendations in anticipation that they will serve to rebuild commercial harvesting to a level where alternative control methods are not required.

Kangaroo populations on National Parks and Nature Reserves should be appropriately managed to limit their impact on vegetation and other animals, and the neighbours of Parks and Reserves. Kangaroos are culled on Parks and Reserves in Victoria and the Australian Capital Territory. Fencing of Park boundaries, commercial harvesting and non-commercial culling are all options for controlling the impact of kangaroos on Parks and adjacent agricultural lands. The State Government should not be exempt from delivering appropriate animal welfare outcomes for the native animals they effectively “own”.

Sturt National Park, in the far northwestern corner of NSW, was heavily impacted by large numbers of kangaroos during the “Seventeen Twenty” drought. Anecdotal reports suggest that they denuded the landscape, before dying in their thousands. The Park is bordered by the Dog Fence on its northern and western sides, which prevents the movement of wild dogs into sheep country, and also the movement of kangaroos in the opposite direction. PAWD suggests a trial of one-way gates in the Dog Fence to allow kangaroos to move from Sturt National Park into Queensland and South Australia, without permitting wild dogs to move in the opposite direction. This would address concerns that exclusion fences are preventing the movement of kangaroos by developing methods that allow them to exit fenced areas. It would also place kangaroos back into environments where conditions are closer to those that existed before European Settlement (more predators, less water).

Work is also required in the area of counteracting damage done to domestic and international markets for kangaroo products by animal rights activists. Reduction in the demand for kangaroo products undermines the role that commercial harvesting can play in kangaroo management. The irony of this outcome is that reduced commercial harvesting will serve to increase the adoption of non-commercial culling and exclusion fencing, as well as road deaths, illegal culling, environmental and agricultural damage and poor animal welfare outcomes in times of drought.

PAWD recommends the Kangaroo Management Taskforce website² as an excellent source of information about kangaroos, their impact on the environment, and their management.

Thank you for the opportunity to provide comment to the inquiry and present management recommendations that would serve to improve outcomes for all stakeholders if adopted.

Lachlan Gall.

PAWD Kangaroo Management Representative.

26th April, 2021.

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