

**Rebecca Vassarotti MLA**

Minister for the Environment  
Minister for Heritage  
Minister for Homelessness and Housing Services  
Minister for Sustainable Building and Construction

Member for Kurrajong

22/453

Mr Tom Duncan  
Clerk  
ACT Legislative Assembly  
[Tom.Duncan@parliament.act.gov.au](mailto:Tom.Duncan@parliament.act.gov.au)

Dear Mr Duncan

Thank you for your letter of 2 June 2022 providing Petition No. 17-22, lodged by Mr Michael Petterson MLA, concerning the ACT Government's Kangaroo Management Program.

The petition questions the science behind the Kangaroo Management Program and requests a moratorium on kangaroo culling whilst an independent review is conducted.

The Government's response is structured in alignment with the key issues raised within the subject petition.

Eastern Grey Kangaroo populations are under threat generally throughout the ACT and are extinct in some areas.

There is no evidence to support the assertion that Eastern Grey Kangaroo populations are under threat throughout the ACT and are extinct in some areas.

The Eastern Grey Kangaroo is the most widespread and abundant kangaroo species in the ACT. It is listed as being of 'least concern' by the International Union for Conservation of Nature (IUCN). The species is considered abundant locally and is not listed as threatened in any jurisdiction within Australia.

While some land uses in the ACT are unsuitable for kangaroos (for example city/urban areas and pine plantations etc), the ACT contains extensive habitat for kangaroos. Over 70% of the Territory is reserved Public Land (including nature reserves, national parks and unleased territory land) or other Government managed open space land.

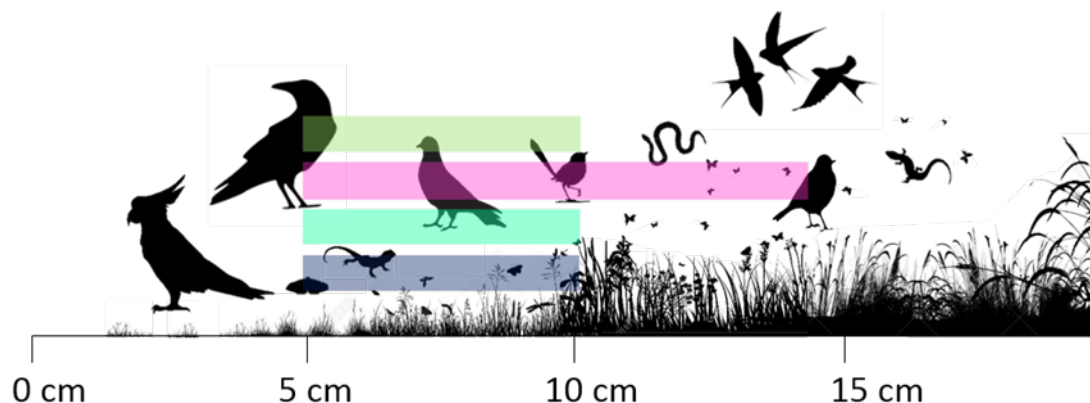
Suitable Eastern Grey Kangaroo habitat extends throughout these areas, from the lower elevation grassy valleys in Namadgi National Park to the lowland grasslands, grassy woodlands and open forests of the plains, hills and ridges and river corridors. These areas provide suitable, often ideal, kangaroo habitat.

The petition questions the scientific basis for determining the sustainable levels of kangaroo populations to be retained.

The ACT Kangaroo Program has been periodically and scientifically peer reviewed. The ACT Kangaroo Management Plan was independently reviewed by eminent ecologist Associate Professor Graeme Coulson from the University of Melbourne who recommended it “serve as a model for the management of kangaroos and other wildlife in Australia”.

The aim of kangaroo management in the ACT is to maintain kangaroos at densities that conserve the natural integrity of the ecological community and result in the maintenance of habitat for all grassland plant and animal species. Kangaroo densities are managed in order to maintain average grass heights between 5 -15 cm. Research has shown that this level of grass structure provides suitable habitat for a wide variety of species as shown in the Figure below. Further information on the research informing the management program can be found at:

<https://www.environment.act.gov.au/nature-conservation/conservation-research/macropod-research>.



The sustainable kangaroo populations on conservation land is calculated in accordance with the Nature Conservation (Eastern Grey Kangaroo) Conservation Culling Calculator Determination 2018. The ‘one per hectare rule’ is the basis for this calculation and is set as the desired sustainable kangaroo density in grasslands under average climatic conditions. The sustainable number is scaled down with increasing tree canopy cover. This base density is then adjusted up or down based on current vegetation and climatic conditions. Annual site specific population estimates are used to calculate how many, if any, kangaroos need to be culled to achieve the desired density. Minimum population densities are retained to ensure no risk of extinction from culling activities.

## The Petition questions the accuracy of the ACT Kangaroo Population surveys.

The ACT Government relies on the best practice scientific methodologies for undertaking kangaroo surveys and population estimates.

The ACT Government is aware of a recent report “Eastern Grey Kangaroos in Canberra Nature Park. Population estimates and culling history 2009-2021. A citizen science project April 2022”. The report details surveys for kangaroos undertaken in 37 Canberra Nature Park reserves with a total of 4,074 kangaroos reported. The counts for individual reserves have been redacted from the report. The ACT Government is a supporter of citizen science and commends the authors for the report.

However, the ACT Government is confident in its kangaroo population estimates that use robust counting methods suited to the individual sites. The citizen science report uses a single method known as “Direct counts” which is a valid method in some circumstances. Direct counts require observers searching the entire site and counting all individual kangaroos without missing any or counting any more than once. Repeat counts should be undertaken to validate results. This method of counting is only suitable for small sites with open vegetation and requires a high amount of knowledge about the site and the behaviour of the animals.

The direct count method is not suitable for many ACT nature reserve sites because of their size, vegetation and terrain. Attempting direct counts at these sites is likely to result in an underestimate of the true population size.

At these sites, ACT Government uses two other count methods – sweep counts and walked line transect counts.

- Sweep counts involve a coordinated line of people walking across a site and counting the kangaroos that move through the line. This type of count requires careful coordination of the counters, aided by the use of 2-way radios and maps. This type of count is suitable for sites larger than those that can be counted directly, and where the vegetation and terrain allow for good visibility from one counter to the next.
- The ACT Government now relies largely on walked line transect surveys which is suited to larger more heavily vegetated sites where kangaroos cannot be reliably counted by a direct or sweep count. Surveys utilising the walked line transect method adopt linear transects which, importantly, are unbiased with regard to landscape features such as roads or waterbodies, that are known to influence the distribution of kangaroos across the landscape and hence risk a bias in abundance estimates. Observers walk approximately 44 km of transects per nature reserve with the aim of achieving a coefficient of variation around the mean abundance estimate of <20%. Surveys are undertaken in the early morning, when kangaroos are evenly dispersed across the grazing landscape and are most likely to be detected from survey lines, over approximately 11 days. Surveys are not conducted in strong wind, heavy fog, or rain.

Methods for counting kangaroos are described in the Eastern Grey Kangaroo: Controlled Native Species Management Plan (2017) (EGK:CNSMP) and in a recent peer reviewed publication available at: <https://onlinelibrary.wiley.com/doi/10.1111/emr.12485>.

Kurahaupo Consulting independently reviewed the kangaroo population count methods, count results, the method for determining the number of kangaroos to cull in the ACT, and the science behind the relevant parts of the 2010 Kangaroo Management Plan (the key policy driver at the time). The review endorsed the ACT Government's counting methods and culling advice.

#### The ACT Government does not support a moratorium on kangaroo culling

The ACT Government's kangaroo management policy and programs are based on scientific knowledge supported by ongoing research, appropriate regulation and monitoring and national codes of practice. Ongoing improvement and review have been, and will continue to be, a key feature in the development of kangaroo management policy and the implementation of management programs in the ACT.

The ACT Government has been extremely transparent in the science behind the kangaroo management program, the lengths that it goes to with respect to animal welfare issues and the community perceptions to kangaroo management. I would direct members of the Assembly and the public to the Directorates webpage (<https://www.environment.act.gov.au/parks-conservation/plants-and-animals/urban-wildlife/kangaroos>).

An overview of the key review processes include:

- 2010 – The ACT Kangaroo Management Plan was released. This plan provides principles, objectives and policies relating to kangaroo management in the ACT. Its explanations include over 400 references including approximately 125 peer reviewed science journals and 155 books or book chapters, most of which have been peer reviewed.
- The conservation cull has been challenged in the ACAT three times: 2012 (did not go to hearing), 2013 and 2014 (reported in *Animal Liberation ACT v Conservator of Flora and Fauna (Administrative Review)* [2014] ACAT 35). Additionally, the cull of eastern grey kangaroos on Defence land was challenged in 2009. All four challenges were unsuccessful and the ACAT held that the conservation cull on both Territory and Defence land was valid.
- 2014 – Kurahaupo Consulting independently reviewed the kangaroo population count methods, count results, the method for determining the number of kangaroos to cull in the ACT, and the science behind the relevant parts of the 2010 Kangaroo Management Plan. The review endorsed the ACT Government's counting methods and culling advice.

- 2017 – The Eastern Grey Kangaroo: Controlled Native Species Management Plan was released. This plan is an update on the 2010 Kangaroo Management Plan and applies only to Eastern Grey Kangaroos in the ACT. It is a statutory plan under the *Nature Conservation Act 2014* and includes two instruments detailing the process for calculating the number of kangaroos to cull for conservation and rural purposes. This plan incorporates relevant research conducted since 2010, some updates to policies and codes of practice.
- 2018 –The ACT Government’s adaptive management approach to managing kangaroo impacts on conservation lands was reviewed by a panel of experts during a Kangaroo Management Research Workshop held in 2018. A report was prepared detailing recommendations, including the adoption of a management goal for grassy ecosystems of maintaining between 5 and 15cm of grass (See figure above). This recommendation has become a key component of the management program, with annual monitoring of vegetation undertaken at all sites considered for culling and vegetation modelling incorporated into the cull calculations. The review report is available online at: [https://www.environment.act.gov.au/\\_data/assets/pdf\\_file/0006/1550292/kangaroo-management-research-report-april-2019.pdf](https://www.environment.act.gov.au/_data/assets/pdf_file/0006/1550292/kangaroo-management-research-report-april-2019.pdf).
- 2008, 2011, 2015 and 2019 – Phone polls of ACT residents opinions to kangaroo management have been undertaken. The results show high support for kangaroo management in the ACT. The 2019 survey indicated that 79% of ACT residents agreed that culling kangaroos is appropriate under certain circumstances, 72% supported kangaroo culling for conservation of other native species while 12% are against culling under any circumstances. The support for culling has grown from 59% in 2008. Reports are available online at: <https://www.environment.act.gov.au/parks-conservation/plants-and-animals/urban-wildlife/kangaroos/opinion-poll-act-residents-views-on-kangaroo-management>.
- Macropod culling is conducted under the strictest animal welfare standards. An audit of compliance with National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Non-Commercial Purposes is undertaken at 5-7-year intervals. A 2017 audit found that all aspects of the Code of Practice were complied with and can be viewed at [https://www.environment.act.gov.au/\\_data/assets/pdf\\_file/0009/1556892/animal-welfare-assessment-kangaroo-culling-2017.pdf](https://www.environment.act.gov.au/_data/assets/pdf_file/0009/1556892/animal-welfare-assessment-kangaroo-culling-2017.pdf).

In keeping with the commitment to ongoing review and improvement, over the next 12 months the following activities will be undertaken:

- Repeat the ACT residents opinion poll;
- Review the 2017 Eastern Grey Kangaroo: Controlled Native Species Management Plan; and
- Undertake an independent veterinary audit during the 2023 conservation culling program to ensure continued regard to animal welfare issues.

I trust that this Government response has been helpful and provides advice on the issues raised in  
Petition No. 17-22.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'R. Vassarotti', with a stylized flourish at the end.

Rebecca Vassarotti MLA

1/8/2022