# Submission

National Impacts and Management of Feral Horses in the Australian Alps

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Images

Front cover: Poppy and Davy, rehomed brumbies living happy lives This Page: Butterfly and baby, rehomed brumbies living happy lives

The Animal Justice Party acknowledges the First Nations peoples as the custodians of the land on which we live and work.





# **About the Animal Justice Party**

The Animal Justice Party (the AJP) is a political party established in 2009 to secure the interests of animals and nature through Australia's democratic institutions of government. Our vision is a planet on which animals and nature have the right to live and thrive free from negative human interference and a human society which functions with kindness and compassion within its ecological limits as a responsible member of the Earth community. The AJP seeks to foster respect, kindness, and compassion towards all species particularly in the way governments design and deliver initiatives, and the manner in which these initiatives function.

In New South Wales the AJP has one elected representative in the Legislative Council of NSW, Emma Hurst MLC and one Councillor in local government, Matt Stellino. In Victoria, the AJP has an elected representative in the Legislative Council, Georgie Purcell MLC, and a Councillor in local government, Councillor Julie Sloan.

This submission was prepared by the National Submissions Working Group within the AJP. The working group makes this submission on behalf of the AJP with the approval and the endorsement of the Board of Directors.

### Introduction

Brumbies are wild horses that were introduced to Australia following European invasion. As well as being intelligent and social animals, they hold a special place in the Australian psyche as reminders of our colonial past.

The brumbies that reside in Alpine areas, such as Kosciuszko National Park in New South Wales and Alpine National Park in Victoria are currently living in densities that cannot be sustained by the park ecosystems and, as a consequence, are having a negative effect on those ecosystems. Brumbies compete with native animals for natural resources, and can contribute to habitat destruction, degradation of vegetation and soil stability, especially in the fragile, threatened ecosystems of alpine regions.

Where there are threats that the brumbies will cause serious or irreversible damage to native animals or the environment, humane non-lethal measures to reduce their population size should be implemented. This will mean that the State Governments and their agencies need to be more open to exploring alternatives offered outside of the dominant scientific paradigms that consider aerial culling to be the only option. Killing campaigns (including aerial and ground shooting) can cause horrific suffering and, therefore, we believe them to be unethical.



The AJP regards all animals as individuals worthy of protection, regardless of whether they are native or introduced. The AJP acknowledges that it can be challenging to balance the interests of these animals. Humane, non-lethal methods have proven successful in free-roaming horse populations overseas, with new methodologies and technologies continuing to develop and improve over time. Fertility control should be urgently trialled in Australia, as it is in New Zealand, in conjunction with rehoming. It is important that any rehoming program is accompanied by sufficient financial support. Right now, rehoming groups unfairly carry the burden of addressing this issue, yet many rely on donations to do so and struggle to cover the costs associated with transport, feed, gelding and vet bills.

It should always be remembered that brumbies, like other introduced species, are purely responding to an environment that they are in. They were brought here by humans, and we have a responsibility to find humane solutions to protect all animals and the environment.

The purpose of this enquiry is to consider the the impacts and future management of feral horses in the Australian Alps, with the following terms of reference<sup>1</sup>:

a) identifying best practice approaches to reduce the populations of feral horses in the Australian Alps and their impact on:

- i. biodiversity, including threatened and endangered species and ecological communities listed under Commonwealth, state or territory law,
- ii. the ecological health of the Australian Alps national parks and reserves,
- iii. Indigenous cultural heritage, and
- iv. the headwaters of the Murray, Murrumbidgee, Snowy and Cotter Rivers, including their hydrology, water holding capacity, water quality, habitat integrity and species diversity;
- b) Commonwealth powers and responsibilities, including:
  - i. the protection of matters of national environmental significance under the Environment Protection and Biodiversity Conservation Act 1999, including listed threatened species and communities and the National Heritage listed Australian Alps national parks and reserves, ii. obligations under international treaties, such as the Convention on Biological Diversity, and
  - iii. the commitment to prevent new extinctions under the threatened species action plan;
- c) the adequacy of state and territory laws, policies, programs and funding for control of feral horses and other hard-hoofed invasive species in the Australian Alps, and their interaction with Commonwealth laws and responsibilities;

<sup>&</sup>lt;sup>1</sup> https://www.aph.gov.au/Parliamentary\_Business/Committees/Senate/Environment\_and\_Communications/FeralHorses47



d) measures required to repair and restore native habitats for species impacted by feral horses and other hard-hoofed invasive species in the Australian Alps, including for iconic species like the corroboree frog and the platypus; and

e) any other related matters.

Our submission tackles the future of brumbies in the Australian Alps by discussing the terms of reference developed by the Government. Our submission is structured following these terms of reference; recommendations are provided throughout our submission.

This submission is guided by our mission and vision and underpinned by our policies. The AJP has policies on animals, environment and human issues.<sup>2</sup> Our policies on Animal Law,<sup>3</sup> Brumbies<sup>4</sup>, Introduced Animals<sup>5</sup>, and Wildlife Protection are particularly relevant to this consultation.

Thank you for the opportunity to contribute to this consultation.

- a) Identifying best practice approaches to reduce the populations of feral horses in the Australian Alps and their impact on:
  - i. Biodiversity, including threatened and endangered species and ecological communities listed under Commonwealth, state or territory law,
  - ii. The ecological health of the Australian Alps national parks and reserves,
  - iii. Indigenous cultural heritage, and
  - iv. The headwaters of the Murray, Murrumbidgee, Snowy and Cotter Rivers, including their hydrology, water holding capacity, water quality, habitat integrity and species diversity.

# **The Impacts of brumbies**

There is no doubt that if left unchecked, populations of wild horses in Australia's Alpine regions have a negative effect on their environment. Hard-hoofed animals compact the soil and contribute to erosion, trample native vegetation, destroy sphagnum bogs and pollute waterways. They can also help to spread invasive weeds. As they have no predators and they breed relatively quickly, wild horses can put undue pressure on the landscape in a relatively short period of time.

<sup>&</sup>lt;sup>2</sup> Animal Justice Party *Policies* https://animaljusticeparty.org/policies/

<sup>&</sup>lt;sup>3</sup> https://www.animaljusticeparty.org/animal\_law

<sup>&</sup>lt;sup>4</sup> https://www.animaljusticeparty.org/brumbies

 $<sup>^{5}\</sup> https://assets.nationbuilder.com/ajp/pages/778/attachments/original/1646623512/Introduced\_Animals.pdf?1646623512/Introduced\_Animals.pdf$ 



However, there is evidence to show that when kept in sustainable numbers in the right environments, wild horses can positively contribute to their environments by reducing bushfire fuel loads, reseeding native grasses by intact seed dispersal in their droppings, and fertilising and improving the health of soil via their droppings. They create more abundant and dependable water sources in dry areas and break up ice and snow, helping other wildlife to survive. <sup>6</sup>

This raises several questions. Can wild horses provide any positive impact within the Alpine environments they are currently in, and if so, how many is a desirable number? Finding an answer to this depends on more investment into research. There is some research being carried out by the University of Southern Queensland<sup>7</sup> that suggests there could be a possibility of allowing wild horse populations living in the Alpine Parks at low densities, but until this research work is completed, it will not be known what those densities should be.

Measuring environmental impact also requires that various government agencies develop better methods for counting horses in the Alpine regions. Currently, estimates for brumby numbers vary wildly, therefore, it is difficult to evaluate how widespread or environmentally significant this impact may be.

# **Population Control methods**

Reducing the population of brumbies in our alpine regions is the first step towards reducing their impact on all the areas listed as a concern, however without an accurate assessment of how many brumbies are living in these areas, it is difficult to determine to what degree the population decrease needs to be in order to effect significant change. This also makes it difficult to assess the viability of the various options available. An accurate independent count must be the first step in any evaluation of population control methods.

The AJP asserts that only humane, non-lethal population control measures are appropriate.

### **Aerial Shooting**

Despite claiming that this method is only employed in 'exceptional circumstances', a aerial shooting is the method that appears to be favoured by various government agencies, such as Parks Victoria and National Parks Association of NSW, despite disastrous attempts to use it in the past. A well documented example is the shooting that took place in the Guy Fawkes River National Park, where over 600 brumbies were shot from helicopters in a cull contracted by the NSW National Parks and Wildlife Service. The resultant public outcry and eyewitness evidence of

<sup>&</sup>lt;sup>6</sup> https://www.horsetalk.co.nz/2018/06/04/brumbies-useful-australian-ecosystem/

<sup>&</sup>lt;sup>7</sup>chrome-extension://bdfcnmeidppjeaggnmidamkiddifkdib/viewer.html?file=https://australianbrumbyalliance.org.au/wp-content/uploads/2020/12/ABA-USQ-Research-Proposal-August-2019.pdf

<sup>&</sup>lt;sup>8</sup> https://www.parks.vic.gov.au/get-into-nature/conservation-and-science/conserving-our-parks/feral-animals/feral-horses



inhumane practices resulted in a lawsuit by the RSPCA against the NSW NPWS as well as the Environment Minister.<sup>9</sup>

Professional shooters have reported that the reason the cull was ineffective is that wild horses are not good targets for aerial shooting, due to their flighty natures. As they are prey animals, alert to any danger and quickly panicked, their natural response to the helicopter is to run; this makes it more difficult to accurately shoot them.

The reality of this situation was made apparent in a response by professional shooter, Mitch Kemp, who after participating in an aerial cull reported the horses to be a moving target who travel through high country at high speeds, making it impossible to get a clean shot, something he claimed was 'horrific to animals'. This is a far cry from the claim that aerial shooting is the most humane method of culling available.

A major problem with any form of culling as a method to control wild animal populations is that it can often have unexpected consequences. In a study carried out by three scientists in southern Tasmania, a population of wild cats was studied to see the effect of culling on numbers. They found that contrary to expectations, the result was 'increases in minimum numbers of cats known to be alive ranged from 75% to 211% during the culling period, compared with pre- and post-cull estimates'. <sup>11</sup>

Professor Christopher Johnson, Professor of Wildlife Conservation from the University of Tasmania agrees that culling can have unexpected consequences. He has said that 'removing some animals from a population creates more space and food for those that are left, and can disrupt social controls on breeding. Survival, reproduction and immigration all increase as a result, and the population quickly rebounds'. Ecosystems are constantly adapting and evolving, and it is very likely that removing a major part of that ecosystem will simply instigate another change that will fill the vacuum left behind.

It is clear that any form of culling, whether that be aerial shooting or another method, needs much more careful consideration, from both a welfare and effectiveness perspective before it can be considered to be the sole solution to the problem of excess populations.

<sup>&</sup>lt;sup>9</sup> https://australianbrumbyalliance.org.au/reviewing-the-october-2000-aerial-shooting-of-guy-fawkes-brumbies/

<sup>&</sup>lt;sup>10</sup> https://www.abc.net.au/local/stories/2014/06/06/4020576.htm

 $<sup>\</sup>label{lem:https://www.researchgate.net/publication/273508911\_Effects\_of\_low-level\_culling\_of\_feral\_cats\_in\_open\_populations\_A\_case\_study\_from\_the\_forests\_of\_southern\_Tasmania_12$ 

https://theconversation.com/culling-pest-animals-can-do-more-harm-than-good-40702#:~:text=The%20usual%20response%20to%20 these,that%20culling%20can%20backfire%20badly.



### **Immunocontraception:**

There are two injectable immunocontraceptive vaccines based on porcine zona pellucida (PZP) or gonadotropin-releasing hormone (GnRH), which can result in infertility in horses for up to 3 years.

Theoretical studies question the feasibility of administering immunocontraception in wild horse populations, however no actual studies have been done in Australia. This consultation presents an opportunity to advocate for funding to examine how immunocontraception could work practically in Australian conditions, exploring the feasibility in both widespread and more contained brumby populations.

It is possible to dart horses, but in national parks, treatment of a large number of wild horses over a broad area is challenging. However, if application of fertility control could be achieved in more than 50% of the females, it could be used to slow the rate of increase in a population to zero (2–5 years), but it would take more than 10–20 years before population size begins to decline without further intervention. This would be more effective in the long term than programs of culling which have proven not to be successful.<sup>13</sup>

This strategy has proven to be successful in the USA for the past years with over three decades of use, and is recommended by the National Academy of Sciences (NAS) as the most promising strategy for managing wild horses in their wild habitat. <sup>14</sup> Currently, wild horses in the Virginia Range in Nevada USA are also considered 'feral pests' whose population requires management. <sup>15</sup> Whilst their concerns are based predominantly on the safety of drivers in the area, their terrain is otherwise similar to Australia and their Dept of Agriculture is trialling immunocontraception as a means of population control. The ongoing results should be examined for their relevance to our situation and a similar Australian trial conducted.

Immunocontraception is considered to be a humane method of population control and has the added benefit that it does not have an affect on the animal's ability to carry out their natural behaviours.

#### Removing them from the national parks

Australian brumbies have an important place in the Australian psyche, and among certain sections of the population, are a much-loved animal. As such, they could be a popular tourist attraction that could draw visitors to the areas close to the National Parks. There are currently organisations that run brumby sanctuaries. With some support by state governments, this could be encouraged. There are also agencies that help people to adopt brumbies. This has been on a small scale until now, but with some investment, this could also be encouraged.

<sup>13</sup> https://www.publish.csiro.au/wr/wr17136

<sup>14</sup> https://americanwildhorsecampaign.org/fertility-control

<sup>15</sup> https://www.washoecounty.gov/parks/files/Virginia%20Horses.pdf



The potential to attract people into the high country simply to see brumbies in the wild would be enormous. Walking tours could include looking for wildlife and visiting the historic huts in the region, combined with using existing accommodation options. Incorporating a respectful view of Indigenous culture by employing local guides and ensuring sites are visited appropriately could further extend the tourism opportunities. Supporting ethical ecotourism options creates local jobs and supports regional communities for the future.

Overseas research is showing how grazing from wild horses can increase their environment's resilience to climate change. Because of their ability to consume coarser, drier grasses and convert them, through droppings, to fresher, greener grass, they have an important role to play in sequestering carbon. Horses also tend to nip at grass, rather than pull it up by the roots like cattle and other domesticated ruminants do, which ensures a regular supply of fresh green grass remains for other species to use, after the horse has grazed on it. <sup>16</sup>

Much of the superior ability of the horses to sequester carbon is related to their special digestive system. This is different from the ruminant digestive system of many other plant-eaters, or herbivores, such as cattle because they do not thoroughly decompose their food as other ruminants do, and thereby leave humus-rich droppings behind, which are enormously beneficial to soil.<sup>17</sup>

Due to their potentially positive effect on the environment, and their ability to regenerate over-grazed land, wild horses can be deployed to farmland to maintain grasses and help to re-wild over-grazed areas. However, currently in Australia, there seems to be little interest in researching the potential for wild horses to be used as an environmental asset, so we are missing important knowledge about how to evaluate appropriate density levels of horses in different locations, and take advantage of any potential benefits there may be.

Immunocontraception, wildlife safe fencing and capture/rehoming methods have the ability to reduce the number of brumbies or the habitat damage they cause in alpine regions. As this occurs and horse numbers decline, measures can be put in place to begin the restoration of native habitats that support threatened species and restore and preserve biodiversity for the future.

<sup>&</sup>lt;sup>16</sup>https://www.researchgate.net/publication/353317205\_REPORT\_ON\_CARBON\_SEQUESTRATION\_BY\_HORSES\_BURROS\_AND\_EQUIDS\_AND\_THEIR\_ORDER

<sup>17</sup> https://www.horsetalk.co.nz/2018/06/04/brumbies-useful-australian-ecosystem/



# b) Commonwealth powers and responsibilities, including:

- i. The protection of matters of national environmental significance under the Environment Protection and Biodiversity Conservation Act 1999, including listed threatened species and communities and the National Heritage listed Australian Alps national parks and reserves,
- ii. Obligations under international treaties, such as the Convention on Biological Diversity, and
- iii. The commitment to prevent new extinctions under the threatened species action plan.

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is the key Commonwealth Legislation to protect the Australian environment and endangered and threatened native wildlife within the Commonwealth of Australia. This Legislation offers no protection for introduced animals including wild, free-living horses or Brumbies.

Under Australian legislation the Brumby is classed as 'feral' and is treated as such. There is no provision for their protection, preservation and continuation of the genetics into the future.

The EPBC Act is responsible for protecting the environment, conserving biodiversity and also for protecting and conserving heritage. This highlights the unique and conflicting place that brumbies hold in the minds of Australians, many of whom attribute a significant heritage value to Australia's wild horses. The goals of the EPBC Act should therefore afford brumbies some protection, however their 'feral' status precludes them from being covered by the Act.

The 2021 'Inquiry into Ecosystem Decline in Victoria' raises some interesting points regarding crossover and confusion around which authority is responsible for which aspect of management, as well as the lack of clarity around identifying 'invasive or pest' species. Wild horses appear to fit into this category as they are not native to Australia, however, they are not specifically listed as 'feral' in any of the examples of legislation. Where brumbies are placed in legislation must be clarified.

As described earlier, the ecological impacts of wild horses in sensitive alpine areas cannot be ignored, however the solution is not to vilify the horses and employ lethal control measures. There needs to be a balance between protecting our environment and biodiversity values and finding a way to also ascribe and protect the rights of an animal who has existed in our environment for 150 plus years. It is also important to consider the potential impact of removing these animals from the environment after such a time frame. For example, a recent survey by

<sup>18</sup> https://www.parliament.vic.gov.au/file\_uploads/LCEPC\_59-05\_Ecosystem\_decline\_in\_Vic\_Y9rT7Z1v.pdf



locals in an area known to house brumbies found very few horses and much taller than usual native grass, certainly a concern for bushfire risk.<sup>19</sup>

Protecting our environment and threatened species can be achieved without the need to kill brumbies, especially when other viable options for their removal from sensitive alpine areas have yet to be fully embraced or explored.

The significant role of widespread land clearing leading to habitat destruction, as well as climate change has had a significant impact on the rate of extinctions throughout Australia. This impact cannot be ignored when discussing the protection of threatened species and biodiversity, not everything can be blamed on the existence of brumbies. For example, brumbies were previously cited as reason for the decline of populations of Australia's endemic broad toothed rat, yet the flora and fauna guarantee scientific advisory committee subsequently found the greatest threats to the species were: predation by foxes, burning, climate change and habitat loss - not brumbies. 22

c) The adequacy of state and territory laws, policies, programs and funding for control of feral horses and other hard-hoofed invasive species in the Australian Alps, and their interaction with Commonwealth laws and responsibilities.

In Victoria, there is no Legislation to protect wild living Brumbies within the 2 key areas, namely Barmah National Park and the Eastern Alps of the Alpine National Park Victoria. Currently, brumbies are also covered under Federal, NSW and ACT legislation. This leads to discrepancies in how they are regarded and managed in different states, despite the horses inability to differentiate between state lines. This is especially significant where Victoria's Alpine National Park extends to the NSW border and meets the Kosciuszko National Park in NSW, allowing horses to move freely across states. It would be advantageous to develop a similar approach to managing brumby populations across the states.

In Victoria, feral horses have been formally recognised as a 'threatening process' under Victoria's *Flora and Fauna Guarantee Act 1988*. Parks Victoria therefore has an obligation to reduce their numbers. However, this does not translate as an obligation to cull/kill brumbies. A reduction in brumby numbers could be achieved through other methods.

However the current 'Feral Horse Action Plan 2021'<sup>23</sup> only mentions immunocontraception once, referring to the results of overseas study that showed success in small, confined populations.

<sup>19</sup> https://www.facebook.com/groups/1020884708021074/permalink/5889521364490693/?mibextid=Nif5oz

<sup>&</sup>lt;sup>20</sup> https://www.smh.com.au/politics/federal/why-is-australia-a-global-leader-in-wildlife-extinctions-20200717-p55cyd.html

https://www.smh.com.au/national/siblicidal-kookaburras-truffle-snuffling-potoroos-why-did-australia-s-wildlife-astonish-even-charles-d arwin-20210722-p58c1h.html

<sup>&</sup>lt;sup>22</sup> http://www.environment.gov.au/biodiversity/threatened/species/pubs/87617-conservation-advice-05052016.pdf

<sup>&</sup>lt;sup>23</sup> https://www.parks.vic.gov.au/projects/feral-horse-action-plan-2021



Until we start trialling these methods under Australian environmental conditions, we can never know how effectively that may be used here and therefore we have not even begun to explore our population management options.

d) Measures required to repair and restore native habitats for species impacted by feral horses and other hard-hoofed invasive species in the Australian Alps, including for iconic species like the corroboree frog and the platypus.

This includes restoration of riparian environments such as wetlands, streambanks and drainage lines which can be achieved through rewilding and conservation efforts. One key way to restore riparian environments is through planting native vegetation that increases stability of the soil while also having other biodiversity benefits. However, vegetation alone is not enough. To successfully rewild the Alpine parks, scientists will need specific knowledge of each ecosystem, and the processes that shape that ecosystem. In order to come up with a rewilding effort that is desirable, stakeholders' needs and expectations also need to be met. To this end, structured restoration planning—based on participatory processes involving researchers, managers, and stakeholders—that includes monitoring and adaptive management can be used.

#### **Recommendations:**

- 1. Investigate how legislation affecting wild horses could potentially be brought in line across different states.
- 2. Develop a more accurate methodology for counting and assessing the population of brumbies in the Australian Alps.
- 3. Fund research into safe, humane and effective fertility control methods, and run an Australian trial, so that impact can be measured under Australian conditions.
- 4. Accept that the removal or depopulation of an introduced species, which may have been established for hundreds of years, is complex and difficult, if not impossible, and could even have some negative impacts on the local ecosystem, including native wildlife.
- 5. Ensure that methods used to control introduced species or mitigate their damage are non-lethal, humane, effective and species-specific for instance, deterrence (e.g. small scale, wildlife-friendly fencing of crops; repellents), fertility control, and prevention of further deliberate or accidental breeding, importation and releases.
- 6. Implement a humane capture and re-homing program, which also provides government support to groups and individuals taking on the care of brumbies in genuine animal sanctuaries.
- 7. Encourage and support sustainable, ethical and respectful wildlife-based tourism in Australia.



8. Increase citizen participation in environmental decisions, especially community groups and environmental protection organisations.

### **Conclusion**

Up until now, debate around brumbies has been heated and polarised between those who have a strong attachment to brumbies as a heritage species that should be protected because of their status as a cultural icon and ecologists who see the wild horse as an enemy to the environment due to their being an introduced hard-hoofed species that has not natural place in the Australian Alpine landscape. While The AJP recognises that there is no simple solution to controlling the impact of introduced species such as brumbies, there needs to be much more work done to explore solutions that can strike a balance between animal welfare and the need to preserve the habitats of those species that call the alpine regions home.

It appears that much of the science around the impact of brumbies is dominated by agencies that are aligned with National Parks NSW and Parks Victoria, who share the view that they need to be killed using the quickest and cheapest available method, aerial culling, which is being sold to the public as a humane method of managing the population, even though it has produced disastrous results in the past.

What is of most concern is that there are other scientific voices out there that are not being heard because they are not aligned with the dominant view that the horses need to be killed as they offer no value, ecological or otherwise. We currently have little understanding about the potential ecological value of wild horses, nor do we have a full understanding of the impact complete removal would have on the Alpine ecosystems. It would be a tragedy to inflict more suffering on these animals only to find their absence triggering the influx of another undesirable species to fill the vacuum left behind. Given the public relations disaster (not to mention lawsuit) that arose from previous aerial cullings, falling back on this as the only option when there could be other options available to humanely manage them would pose a serious threat to the social licence of both National Parks NSW and Parks Victoria.

The AJP does not align with the view that the greatest value these horses have is that they serve as cultural icons that should be protected to remind us of our colonial heritage. We don't believe they need to be offered a special status that puts their rights above those of native animals. We do, however, acknowledge that their presence in the Alpine parks is the result of human error, and that it is up to us to find a solution that allows these animals to live out their natural lives with minimal human interference, wherever possible.