# INQUIRY INTO PROPOSED AERIAL SHOOTING OF BRUMBIES IN KOSCIUSZKO NATIONAL PARK

Name: Ms Kariss Stone

Date Received: 13 October 2023

# Inquiry into the proposed aerial shooting of brumbies in Kosciusko National Park (KNP)

Dear Animal Welfare Committee,

Thank you for the opportunity to make a submission to this enquiry.

#### **INTRODUCTION**

My name is Kariss Stone and I'm an avid animal and brumby lover. I'm greatly distressed about what is happening to the brumbies, how Minister Sharpe is continuing to order the shooting and slaughter of hundreds of brumbies when she knows there are not even 1000 brumbies in the park. They are being shot in unprecedented numbers. About a year ago, only about 900 brumbies were counted in Kosciusko National Park (KNP) in a helicopter flyover. In June 2023, only 653 brumbies were counted. Where is the justification to keep killing them? This contravenes the current brumby management plan which says the numbers need to be down to 3000.

#### **ADDRESSING TERMS OF REFERENCE - SUMMARY**

As I see it, there are 4 main important points to note with regards to the Terms of Reference.

- 1) Flawed Methodology used to count brumbies
- 2) Aerial shooting of brumbies is cruel and inhumane (as is ground shooting) and horses are left to suffer in agony for hours/days on end if they're not killed instantly which is rare
- 3) Climate change and man-made developments are destroying the park not the brumbies
- 4) There are humane alternatives like rehoming and fertility control

### 1) FLAWED METHODOLOGY USED TO COUNT BRUMBIES

# (a) The methodology used to survey and estimate the brumby population in KNP (term of reference)

Outdated technology to conduct population counts has led to exaggerated brumby numbers and fails to take into consideration the wildfires of 2019/2020 that reduced populations in the Park by at least 35%. Computers used to generate population numbers are unsuitable, and alternative methodology that is now readily available of drone and camera, must be used. The Government claim there are 18,000 or 24,000 brumbies in the

park, based on this flawed methodology, but this is a biological and scientifically impossible claim

The below excerpt was taken from a submission to the "Draft Kosciuszko National Park Wild Horse Heritage Management 2021" by Joanne Canning, BSC Equine Sports Science, HND Equine Sports Coaching, BHSII

"... the Distance software (applied by Cairns) have produced estimates that are biologically and scientifically impossible for brumbies. For instance, the supposed annual increase of 37% which in actual fact is 41% after accounting for removals) in the North Kosciuszko area between 2014 – 2019, is approximately DOUBLE the accepted scientific maximum! This was pointed out in the peer review by St Andrews. Yet no feasible explanation was ever given, because there isn't one."

Minister Sharpe even acknowledged back in 2018 in the Parliamentary Hansard report when she was then Shadow Labor Environment Minister:

"Having spoken to other brumby advocates, we accept that their remains an ongoing issue about the count of the number of horses in the park. We have committed to a scientific count of those horses with key stakeholders. We need to put this issue to bed once and for all. When we take a lot of the emotion out of this debate, a lot of the toing and froing is about if we have got the numbers right. Labour is determined to get to the bottom of that"

https://www.parliament.nsw.gov.au/Hansard/Pages/HansardResult.aspx#/docid/HANSARD -1820781676-76718/link/121

This excerpt clearly shows that she had committed Labor to getting an accurate brumby count, yet instead Minister Sharpe has increased the shooting of the brumbies. To further support this fact that the current methodology is flawed, Dr Claire Galea, independent biostatistician, in May 2023 proved scientifically and biologically that it was impossible for there to be the number of brumbies the Government claim.

The below summary is from her report titled "Independent biostatistical report on the Brumby population in the Australian Alpine National Park", also brings into question this methodology. In her summary she says:

"There are concerning flaws in methodology and statistical modelling of the population estimates of wild horses in the Kosciuszko. Based on this analysis it is impossible to have any confidence in the population estimates provided. The survey methodology contains significant flaws that put in question the counting of wild horses. Insufficient numbers of wild horses were seen to apply statistical modelling techniques to estimate populations. For example: Values from surveys conducted in 2014 and 2019 were combined together as insufficient numbers were seen and population estimates done from this one single value which means that population estimates over time are fundamentally flawed

Here are a couple of videos that really highlight the flawed methodology used to count brumbies – please watch

https://m.youtube.com/watch?v=d4tshwsaEl4&fbclid=lwAR2WAoJh-ALc9fZkd\_3ru6kur1sFcKel-Usp570l\_iPgusplJ-f8P0yBolg&mibextid=Zxz2cZ

# Numbers Lies and Broken Promised..Updated

In beginning of June 2023, there were only 653 brumbies counted by 70 volunteers who spent 2 days camping out, riding, driving, walking around 95% of the northern end of KNP, as evidenced below.



We can announce today

The community count done on the 2rd 4th of June in the high horse density area of the Northern end of Knp Was 653 now of cause we didn't count every single horse but even if we double what we saw which is very very generous But I will leave it to karen Summers will explain in more depth the count and data

But Now we have now confirmed what we already knew well under 3000

What's heartbreaking is since this count, hundreds more brumbies have been cruelly shot by NPWS, at the bequest of Minister Sharpe. The park was closed for 4 months from about late June 2023, and NPWS increased their killing of brumbies. In fact at least 10 truckloads carrying up to 30 brumbies each (therefore 300 brumbies) – that we know of – have been sent for slaughter at the knackeries to be made into pet food.

#### 2) AERIAL SHOOTING OF BRUMBIES IS CRUEL AND INHUMANE

(b) The justification for proposed aerial shooting, giving consideration to urgency and the accuracy of the estimated brumby population in KNP (term of reference)

There is no justification for Labor's proposed aerial shooting of the few hundred brumbies left in the park, especially as Minister Sharpe agreed a couple of months ago to a discussion on 11/10/23 with brumby experts regarding the methodology being flawed, and looking at alternatives to the existing counting methodology. Yet she refused to get a moratorium on shooting of brumbies at that time 2 months ago when she agreed to this round table discussion. Surely this is in contravention of her parliamentary duties? You can't agree to alternatives to the existing brumby counting method, which clearly implies the current methodology is flawed, and therefore there may not be the crazy numbers of brumbies the government claim there are in the park, and then not agree to a moratorium on shooting of brumbies, and in fact increase the shooting.

•••

Both ground shooting and aerial shooting can never be humane, and no one can guarantee a 100% kill shot where the animal doesn't suffer. That's because with aerial shooting for example, when shots are fired from a helicopter, from a distance, at a group of galloping horses, they often never die from the first shot, instead go on to suffer in excruciating pain for hours/days on end.

Foals will often be crushed in the resulting stampede. If stallions go down first, mares will be confused and likely stampede further. This cruel lethal killing method must not take place.

An assessment conducted on aerial shooting in Alice Springs, found that only 63% of horses shot from a helicopter displayed a rapid death, which means 37% of horses lingered with multiple wounds. This is a damming number and indicates cruelty and an inhumane approach to managing brumby populations.

There are humane alternatives to ground and aerial shooting of the brumbies, like rehoming and fertility control. Trapping of brumbies, while a cruel practice in itself, is now even off the table. Having brumbies trapped meant brumby lovers were in a position to take them away and rehome them. But now this isn't even happening.

### 3) CLIMATE CHANGE AND MAN MADE DEVELOPMENTS ARE DESTROYING THE PARK

## (c) the status of, and threats to, endangered species in KNP (Term of reference)

There is no peer reviewed science that proves brumbies cause damage to the Australian Alps. Why doesn't the Government consider the environmental value of nomadic herbivores, which the brumbies are? There are international studies on the benefits of rewilding with nomadic herbivores. For more info you can go to <a href="http://brumbiesforever.org/page1.html">http://brumbiesforever.org/page1.html</a>

WITH nature, not against it. Conservation biologists have classified equines as one of the keystone species which is critically important in the regeneration of the Earth. Scientists believe evolution gave horses the ability to modify their environment to suit their species, and in doing so, they will benefit numerous plants and animals who share their ecosystem. Rewilding or species reintroduction is increasingly being seen as a valuable tool for saving species from extinction, and for reintroducing locally extinct species. Click on this link to learn more <a href="http://theveonline.com/ecological-impact-horses-keystone-species-critical-regeneration-earth/?fbclid=lwAR06IFYvI1jPSCwbT8eG2dnQirprASM4UKPolqnR8ngg-H3eJbflAdZRVB8">https://theveonline.com/ecological-impact-horses-keystone-species-critical-regeneration-earth/?fbclid=lwAR06IFYvI1jPSCwbT8eG2dnQirprASM4UKPolqnR8ngg-H3eJbflAdZRVB8</a>

#### What is damaging the Alpine region?

Climate change, and land clearing for man-made developments, and human activity, are the biggest causes of environmental destruction of the alpine flora and fauna. In fact native flora and fauna are being killed by other factors, not the brumbies:

- The Snowy Hydro project in KNP
- The ski resorts and ski fields
- Four wheel drive tracks
- Hundreds of camp sites and caravan parks

- Multiple bike and walking trails
- Millions of tourists that damage the park every year

Look at this video and you'll see just how man-made developments, not Brumbies, are destroying the park

https://m.youtube.com/watch?v=GXprxgvfNzQ&feature=youtu.be

The **Corrobboree frog** is being killed by chytridiomycosis, the disease associated with amphibian chytrid fungus, **NOT** the brumbies, as this video proves. <a href="https://m.youtube.com/watch?v=HFUA\_i16QpU&feature=youtu.be">https://m.youtube.com/watch?v=HFUA\_i16QpU&feature=youtu.be</a>

Re the decline of the **pigmy possums**, there is not enough bogon moths due to climate change. This is what is causing their decline, **NOT** the brumbies, as this video proves

https://www.google.com.au/amp/s/amp.theguardian.com/environment/2019/feb/25/decline-in-bogong-moth-numbers-leaves-pygmy-mountain-possums-starving

The decline of the **Smokey Mouse** – is due to predation by introduced carnivores, habitat changes due to altered fire regimes and dieback caused by the Cinnamon Fungus, and loss, modification and fragmentation of habitat due to road construction and intensive timber harvesting. As quoted from the Government's own website – "Major threats to the species include predation by introduced carnivores, habitat changes due to altered fire regimes and dieback caused by the Cinnamon Fungus, and loss, modification and fragmentation of habitat due to road construction and intensive timber harvesting" Not anywhere is wild horses listed as being responsible for the demise of the Smokey Mouse.

https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10686

In addition to the above, the NSW Environment website lists threats to the fauna from humans, human development, climate change, weeds, fires, ski runs, ski resorts, roads. Not because of brumbies.

https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10510

### So why, are the brumbies continuing to be vilified and shot in massive numbers?

As already mentioned, native fauna are being killed by other factors, not the brumbies - refer this video to see this <a href="https://m.youtube.com/watch?v=5]Qva3v5d08&feature=youtu.be">https://m.youtube.com/watch?v=5]Qva3v5d08&feature=youtu.be</a>

As for **peat moss**, fires are destroying it. Here's an extract from ScienceDaily

New research from McMaster's School of Geography and Earth Sciences, led by Gustaf Granath (now of Uppsala, Sweden) and James Michael Waddington (who goes by Mike) shows that peat mining for horticulture and fuel, drainage for agriculture and construction, and overall global

warming have made a growing number of the world's bogs dry and vulnerable to fire that can burrow deep into the ground and burn for months, even through the winter, only to re-emerge. "People don't think about a fire going down into the soil. They think about it going across the landscape," Waddington says. Peat mining in Europe and drainage to plant palm-oil plantations in southeast Asia are the sources of the greatest vulnerability, and have already helped to propagate fires that have caused massive destruction and death.

# From fire breaks to fire hazards: Human activity, climate change are transforming the world's peatlands -- ScienceDaily

As already mentioned, brumbies actually have a positive impact on the environment, if they are left to be nomadic herbivores. I've included an example here, and the link to this info.

The end result of their high quantity diet is lots of quality manure. It includes the seeds of whatever wild plants they are eating, and it enhances soil fertility because it contains a high level of nitrogen. As wild horses roam, they deposit manure all over their territories and it encourages the growth of vegetation. Some research has discovered horse-grazed sites show better grass cover and species richness. When they are fenced or held by humans in too small an area, they can damage their environment. So far, there is no proof free-roaming horses have ever damaged the ecology of their environment. On the contrary, if they are allowed to roam freely in enough space, they will enhance their environment. For more info click on this link

http://theveonline.com/ecological-impact-horses-keystone-species-critical-regeneration-earth/?fbclid=lwAR06IFYvI1jPSCwbT8eG2dnQirprASM4UKPolqnR8ngg-H3eJbflAdZRVB8

Here's further proof how wild horses can make valuable contributions to the Australian ecosystems in many different ways.

### Dietary benefits, buildings, dispersing viable seeds

Equids possess a caecal, or post-gastric, digestive system. This enables them to take advantage of coarser, drier vegetation and, through symbiotic microbial activity, to break down cellulose cell walls to derive sufficient nutrients from the inner cell without overtaxing their metabolism. In drier regions, this can give equids a distinct advantage.

Consumption by equids of coarser, drier vegetation can greatly benefit sympatric, pre-gastric (ruminant) herbivores, and energize and enrich the ecosystem as a whole. By recycling chiefly the coarse, dry grasses as well as other dry, withered herbs, forbs and bush foliage, the horses and burros expose the seedlings of many diverse species to more sun, water and air, thus permitting them to flourish. The latter can then be consumed by ruminants (see R.H.V. Bell 1970).

Results from surveys did not reveal a significant effect of wild horse grazing on plant community composition, species richness, diversity, evenness, or dominance. In fact plant species richness was higher in horse grazed areas compared to un-grazed areas. Butterfly and bumblebee habitat use, as well as feeding and resting activities were also higher in horse grazed areas.

These are excerpts from an article by American wildlife ecologist Craig Downer on how wild horses benefit ecosystems

#### 4) THERE ARE HUMANE ALTERNATIVES LIKE REHOMING AND FERTILITY CONTROL

## (h) The availability of alternatives to aerial shooting (term of reference)

The government needs to focus on rehoming of brumbies as a first option, and provide financial assistance to these brumby rehomers who do it tough, as it's very expensive to look after a brumby.

The government should implement a fertility control program. For example they could use Porcine Zona Pellucida, or PZP, which is a fertility-control vaccine given to female horses that has been adopted in the US very successfully to manage their wild horse population.

#### **CONCLUSION:**

- 1) Flawed Methodology (the Dr Stuart Cairns distance software methodology) used to count brumbies means it is biologically and scientifically impossible that there are 18,000 or 24,000 brumbies in the park. This has been proven statistically and scientifically by an independent biostatistician Dr Claire Galea
- 2) Aerial shooting of brumbies is cruel and inhumane (as is ground shooting) and horses are left to suffer in agony for hours/days on end if they're not killed instantly which is mainly the case.
- 3) Climate change and man made developments are destroying the park not the brumbies
- 4) There are humane alternatives like rehoming and fertility control. The government should reach out to brumby rehoming organisations and they will take the brumbies and give them a home, rather than allowing them to be cruelly shot.

The Government should also implement a fertility control program. For example they could use Porcine Zona Pellucida, or PZP, which is a fertility-control vaccine given to female horses that has been adopted in the US very successfully to manage their wild horse population.

Brumbies are being made to be scapegoats, are being vilified for no good reason, and are being shot in unprecedent numbers. Therefore the NSW Government must immediately put a moratorium on killing of brumbies until an independent, unbiased count can be done. This is the moral and ethical thing for the government to do.

Brumbies are part of our heritage and deserve respect. Their ancestors served in WW1 in the Light Horseman Brigade.

Why is it that for 200 + years the brumbies lived in Kosciusko National Park harmoniously with native flora and fauna, but as soon as man started developing the park, clearing masses of vegetation for man-made developments, allowing millions of tourists to trample through the park, allowing destructive four wheel drives in the park, and so on, suddenly they're being blamed for the damage to the park?

I hope the committee will use this information and recommend that the government don't introduce aerial shooting, and recommend the government immediately put a moratorium on shooting of the brumbies until an independent, unbiased count can be done.

Thank you.

Yours faithfully,

Kariss Stone