Submission No 71

INQUIRY INTO PROPOSED AERIAL SHOOTING OF BRUMBIES IN KOSCIUSZKO NATIONAL PARK

Organisation: Australian Brumby Alliance inc.

Date Received: 8 October 2023

PO Box 3276, Victoria Gardens Richmond. Vic 3121

www.australianbrumbyalliance.org.au
ABN : 90784718191

6th October 2023

ABA Submission to the proposed aerial shooting of brumbies in Kosciuszko National Park

Emailed to: animal.welfare@parliament.nsw.gov.au

The Australian Brumby Alliance Inc. (ABA) advocates for the recognition, management, preservation & welfare of **sustainably** managed, **not** to extinction**,** Australian Wild Horse populations in areas they have lived, alongside native species, for 150 – 200 plus years.

The ABA supports the NSW Wild Horse heritage Act position to retain a minimum of 3,000 (we prefer 4,000 minimum to cover bush fires) heritage horse populations in areas already identified that will not negatively impact native species living in specific designated areas.

Terms of Reference for the committee to inquire into and report on the proposed aerial shooting of Brumbies in Kosciuszko National Park and surrounding areas, and in particular:

a. Methodology used to survey & estimate Brumby population in Kosciuszko Nat. Park,
b. Justification for proposed aerial shooting, giving consideration to urgency & accuracy of estimated brumby population in Kosciuszko National Park (KNP),
c. Status of, and threats to, endangered species in Kosciuszko National Park,
d. History & adequacy of NSW laws, policies & programs for wild horse population control, incl. but not limited to adequacy of Aerial shooting of feral horses (HOR002) Standard Operating Procedure.
e. Animal welfare concerns associated with aerial shooting
f. Human safety concerns if KNP is to remain open during operations
g. Impact of previous aerial shooting operations (such as Guy Fawkes National Park) in New South Wales
h. Availability of alternatives to aerial shooting
i. Any other related matters.

Key to Abbreviations:

ABA: Australian Brumby Alliance
BHP: Bogong High Plains
EVA: East Vic Alps
KNP: Kosciuszko National Park
NPWS: National Parks and Wildlife Services
NSW: New South Wales
PV: Parks Victoria
SAP: Scientific Advisory Panel established to advise the NPWS management plan.
VAG: Victorian Auditor General
Vic: Victoria

a. Methodology used to survey & estimate Brumby population in Kosciuszko National Park (KNP)

The ABA has major concerns with the current methodology used to survey and estimate Brumby populations in Kosciuszko and in the Victorian Alps, for example;

- The Formula used to multiply the number of wild horses actual seen is too high.
- The use of transects flown to count horses risks double counting as horses flee from under the helicopter into adjacent areas yet to be counted which further inflates the count of horse sightings.
- Brumby supporters are excluded from the count. To gain consensus on a final count representatives of key Brumby advocates are best being involved.
- Time taken from collecting field count data to finalising the count, is around 12 mths to 3 years - which means that Park managers never work to current data.

The ABA recommend two already **available** methods **to count horse populations** in Alpine regions which would eliminate any aerial count controversy, as follows;

Option 1
The National Parks and Wildlife Services (**NPWS**) Scientific Advisory Panel (**SAP[1]**) has already identify environmentally sustainable populations for each horse retention area (see page 6 of SAP[1)]) report to NPWS, including;

- Conduct "**rigorous monitoring** during horse management (lowering horse numbers) to determine the relationship between horse density and negative impacts and to be able to identify such environmentally **sustainable** populations for different regions".
- **"**While it is clear that horses at a high **density** have a significant **negative** impact, the precise relationship between horse density and negative impacts specific to different areas in KNP is not yet known. There may even be **positive** environmental impacts of horses, at least when their densities are low". Examples provided by SAP[1] include;
    - SAP[1]; Positive impacts seen with light grazing in drier areas can include recycling nutrients, maintaining patchy habitat and improve floristic diversity (Menard 2002),
    - Higher plant species diversity was maintained by wild horse grazing in the Australian Alps (Wild and Poll 2012; Williams et al. 2014).

Option 2
Berman 2023[2] "Use of density-impact functions to inform and improve the environmental outcomes of feral horse management" (Published) shows how to identify safe horse levels. This field research detected a threshold of horse impact at ~250 horse dung deposits per ha.

Above this threshold, a slight increase in horse density resulted in a disproportionately large increase in impact. Meaning a relatively **small population control** effort may **substantially reduce** direct horse impact in this context (*Att.1* easy read mini-Berman). **ABA accepts** the need to reduce **excess** horses but **rejects** calls to prioritise horses above other impacts.

b. Justification for proposed aerial shooting, giving consideration to urgency & accuracy of estimated brumby population in Kosciuszko National Park (KNP).

NPWS/PV rely on **assumptions** that aerial shooting is urgently needed to help native species but **never** follow-up to show if their claim is correct. Reality is - native species **still decline**.

Where horse density numbers exist below the threshold identified by Dr. Berman 2023[2], considerably more expense and control effort likely to **make very little difference** to an already low level of direct impact. Any 'justification' must based on native species counts.

Berman 2023 also found that the cumulative impact associated with sign of deer, feral pigs, fire and humans was **large** compared to that of feral horses.

NPWS/PV now prioritise killing horse and **underestimate** annual increases of deer at 55% and pigs at 70%, which is a **waste** of **public money** - while **native** species continue **declining**.

Removing easily seen horses and underestimating other non-native species seems an 'out' so park managers can appear to be taking strong action to reverse native species decline.

ABA **offers to partner** (effort/cost) **with** NPWS to count Alpine native species to help gain consensus on safe horse density levels using on-ground counts.

c. Status of, and threats to, endangered species in Kosciuszko National Park

Too many of **any** species is bad for parklands, including horses, deer, pigs, fire, humans etc.

Claims of horse impact are based on **assumptions**, **not** native species **counts**; so until robust counts show how native species respond to varying horse numbers, the ABA advocates for the **retention** of **sustainable** Alpine horse populations, who we **see** helping native species.

Neither NPWS nor Parks Victoria recorded native species on-ground numbers, instead they **assume** horses must go first. VAG[3] states "without targeted *on-ground* monitoring programs to validate key predictions, they (NPWS/PV) **can only be** viewed as **modelled assumptions".**

How can Parks try to protect native species unless they learn how native species react to their actions. Victoria's Auditor General 2021 (VAG[3]) report to Parliament, found that:

- DELWP/PV **cannot** demonstrate **if**, or **how** well, they are "halting further decline in Victoria's threatened species populations", and
- DELWP/PV: Do **not address quality** or **effectiveness** of their actions (ie. Less/ more skinks & frogs) - just report number of control activities & treated hectares.

NPWS **do not** follow **their SAP[1]** advice to do regular (every 6-12 months) on-ground counts.

The urgency to remove horses **should be replaced** with the urgent need to reduce **all high impact** levels **down** to **medium** levels, then manage horses by trapping and fertility control.

Richard Williams[4] wrote about declining Australian Alpine ecological health and the inability to arrest this decline in the mid-2000s due to several factors, such as;

- Despite considerable investment (0ver $12 billion/year and effort, Australia failed to reduce the rate and scale of bio-diversity loss.
- "The reasons why this previous expenditure has not been effective are due, in part, to the *lack of* appropriate *information and monitoring*".

We do **observe** on-ground **evidence** of Broad Tooth Rats, native frogs and skinks using the **benefits** of **moderate** Alpine horse numbers (slide below & *Att.2*) as they provide;

- (left) - grazing to stimulate short green grass for i.e. Sun Moths.
- (middle) - provide manure to attract insects for skinks, and
- (right) - hoof prints holding water for native frogs to spawn within.

TOR c. Discussion

Until all factors such as climate Change, Snowy2, tourist infra structures etc. are taken into account to better understand all potential impacts; native species **will** continue to **decline**.

Governments **retain sustainable** deer populations, but **refuse** to acknowledge sustainable wild **Horse** populations. It is essential to apply consistent, fact based, transparent legislation that **also** accommodates **sustainable horse** populations.

Again the ABA repeats that we advocate for sustainable horse populations of 4,000 in park areas where they have evolved over 200 years, based on SAP[1] recommendations and dung counts, and manage to that level by passive trapping, rehoming and fertility control.

d. History & adequacy of NSW laws, policies & programs for wild horse population control, incl. but not limited to adequacy of Aerial shooting of feral horses (HOR002) Standard Operating Procedure.

ABA strongly **opposes aerial** culling because **evidence shows** SOP HOr022[5] (Pest Smart) requirements **cannot** be **met** in mountainous terrain like Kosciuszko. The Aerial Shooting Feral Horses SOP H0r002 requires highly skilled shooters to **adherence to**;

- Head (brain) or chest (heart/lung) shots only - shooting **other body** parts is **unacceptable**.
- Only if the horse can be **clearly seen**, **no foals** present, and the shooter is in range.
- Only if terrain does not reduce accuracy (i.e. **not** over **steep hills**, **rough ground**, **under tree** cover.
- Fly-back' procedure must be followed (shooters fly back to do follow-up shots to vital areas).
- See **ABA paper** on Why horses, or other species, must not aerial shot (*Att.3*)

e. Animal welfare concerns associated with aerial shooting

- The RSPCA[6] defines humane killing as 'when an animal is either killed instantly or rendered insensible until death ensues, without pain, suffering or distress. This is not possible by aerial or ground shooting.
- Inability to adhere to strict conditions results in a slow, painful death of **sentient** wild **horses**; as shown by analysis of wild horse skeletons in Guy Fawkes (*Att.4*) National Park aerial culls where many horses died painfully from bullets to pelvis, back, legs.
- Shooting can be **indiscriminate**. NPWS have ground shot horses in areas their plan identified to retain – this must **never** occur again because it pushes surviving horses out of heritage retention areas into adjacent areas horses can be shoot. Any further lowering of already low heritage horse numbers will reduce their long term survival.

The ABA recognises the need to manage horse populations to safe levels for native species by non-lethal options listed on page 6.

f. Human safety concerns if KNP is to remain open during operations

It is only luck that no-one has yet been shot during park sanctioned ground shooting of wild horses during active periods with **no** advance notification to keep clear of shooters. No firing range is allowed to discharge firearms unless in areas separated from other patrons.

Shooting without adequate advisory warnings should cease NOW and in future warning signs, park visitor website notifications provided at least with a minimum of 4 weeks' notice.

g. Impact of previous aerial shooting operations (such as Guy Fawkes National Park) in New South Wales

The 2,000 Guy Fawkes (*Att.4*) River national Park aerial shooting of 600 wild horses that lead to RSPCA-NSW investigating and laying 12 charges of animal cruelty with wounded horses in agony and distress who survived up to 12 days post shooting and mis-mothered foals dying of starvation. As NPWS faced court action they **plea bargained** 12 cruelty cases in exchange for accepting responsibility for one extreme cruelty case.

Some now claim that the resulting public uproar in 2000 against this horrendous moment was "just an over-reaction", but public distress across NSW was real and widespread. Aerial shooting was banned in NSW as a result – Vivid memories of such horror are strong **today**!

h. Availability of alternatives to aerial shooting

How to expand non-lethal wild horse management options.

Where density of wild horses requires population reduction, the ABA:

- Promotes passive trapping and rehoming as most humane & least stressful method;
- Fertility Control (via dart gun) - proven effective 40 yrs in USA and 10yrs in England.
- Apply new strategies detailed in Berman 2023[2] research "*The Use of density-impact functions to inform and improve the environmental outcomes of feral horse management*" see link in attached summary.
- Count native species on the ground to see if culling horses has helped, or caused native species to decline further. If dropping, replace culls with safe horse numbers.
- Use relevant local communities to help park rangers count, muster, trap and apply fertility control to retain horse populations at agreed safe, density-impact levels.
- Establish Regional Horse Advisory Groups including; Key interest groups, local skills, park staff etc., chaired by person who can centralise extreme views and produce an effective management plan, per NZ & NSW experiences.

It seems inconceivable for a modern nation like Australia to eradicate all of its early Alpine settler living wild horse heritage, while just relying on **assumptions**, not evidence, such as did native species increase or further decrease after culling.

i) Other related matters

Native species field data is key to managing interactions with wild horses.

NSW and Victorian park managers do **not** keep **records** of species population levels and so have no ability to see which of their actions help native species they are charged to protect. Native species population counts pre/post horse removals will confirm, or *refute*, if killing horses is vital to 'save' native species, as claimed by Park/environmental scientists.

VAG[3] highlighted Victoria's inability to record native species counts/trends, but **neither** do **NPWS**, despite SAP[1] recommending "rigorous monitoring during horse management to **determine** the **relationship** between horse **density** and native species **survival** rates".

The ABA is willing **to work with park** managers on data trend monitoring to help slow native species decline in the Australian Alps. Relying on assumptions that short green grass, dung, and hoof depressions are bad for native species will increase conflict; not conflict resolution.

The ABA values native species and often see how native species benefit from mosaic grazed green grass, eating dung insects and frogs spawning in hoof prints (*Att.2*).

We retain our position, that **sustainable** horse numbers can help native species. Conflict can be settled once **Park** staff & **horse** advocates work **together** on key native species counts.

We urge the NPWS to adhere to SAP[1] recommendations; and/or trial Berman 2023[2] dung count density formula to identify horse populations that are **safe** for native species.

Ways to increase passively trapped horses for Rehomers to collect and gentle.

- Part-funding for Rehomers **to increase capacity** to collect horses trapped by parks.
- Partner with us to provide fertility control and reduce the need to rehome horses.
- Government funding to build on Berman[2] 2023's findings;
    - Research the proportions of horse impact to other impacts (ie. deer, pigs, fire & humans), and
    - How to calculate SAFE horse numbers per region.
- Government funding for programs that utilise captures wild horses skills, such as;
    - Working with people with disabilities,
    - Parkland able to hold at least 20 different heritage wild horse populations at genetically sustainable levels for future generations to learn, see and value.

Joint Park & ABA/horse advocate Research

Three times the ABA has offered to partner with Parks Victoria to assess any potential safe horse level for native species, 3 times PV refused.

The University of Southern Queensland agreed to partner with us under Dr. Berman and 2 other USQ scientists – the result is Berman 2023[2] recently published in Wildlife Biology.

SAP[1] and Berman 2023[2] provide two ways to identify safe horse numbers, many Australians value wild horse social heritage and managing safe numbers by rehoming & fertility control.

Success comes from respectful dialogue, genuine listening, developing a working strategy, a strong desire to overcome years of emotional conflict and provide suitable habitat for native species and review safe density-impact levels for alpine horses - *together* we can *succeed*.

The ABA requests to appear before the NSW senate to be questioned on our submission.

Yours sincerely,

President, Australian Brumby Alliance Inc.

ABA attachments

Att.**1**: Dr. Berman 2023 published research easy read
Att.**2**: ABA Fed-Inquiry Slides 14-Aug-23
Att.**3**: ABA Why-Aerial-Shoot-not-humane
Att.**4**: ABA GuyFawkes2000 rev 20_Oct_2014

References

1. SAP: Final Report of the Kosciuszko Wild Horse Scientific Advisory Panel Advice to assist in preparation of the Kosciuszko National Park 2020 Wild Horse Management Plan Sept 2020 file:///D:/KEY%20Docs/KNP%20wild-horse%20SAP-report%20Sept%202020%20(1).pdf

2. Berman 2023: Use of density-impact functions to inform and improve environmental outcomes of feral horse management: file:///D:/ABA-USQ%20DensityImpact%20PUBLISHED%20June23/Wildlife%20Biology%20-%202023%20-%20Berman%20-%20Use%20of%20density%E2%80%90impact%20functions%20to%20inform%20and%20improve%20the%20environmental%20outcomes%20of[h].pdf

3. VAG: Protecting Victoria's Biodiversity October 2021: file:///D:/FOI-Ombudsman-AuditGen-IBAC/VAGO%20Audit-Gen-Office%20VIC/FULL%20VAG%20Rpt%20Protect-Vic-Biodiverisity.pdf VAG stated "In our recent audit, we concluded that DELWP (incl. PV) cannot demonstrate if, or how well, it is halting the further decline in Victoria's threatened species populations". Also link: summary; https://www.audit.vic.gov.au/report/protecting-victorias-biodiversity?utm_medium=email&utm_campaign=Protecting-Victorias-Biodiversity-campaign-MPs&utm_content=Protecting-Vic-biodiversity&utm_source=cust42347.au.v6send.net

4. **Richard Williams:** Ch.6 p:167-207 of Biodiversity & Environmental Change – Monitoring, Challenges & Direction.

5. Pest smart HOr002: https://pestsmart.org.au/wp-content/uploads/sites/3/2021/03/HOR002-SOP.pdf

6. RSPCA: humane https://kbold.rspca.org.au/what-do-we-mean-by-humane-killing-or-slaughter_115.html

……