Supplementary Submission No 71a

INQUIRY INTO PROPOSED AERIAL SHOOTING OF BRUMBIES IN KOSCIUSZKO NATIONAL PARK

Organisation: Australian Brumby Alliance inc.

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ABA reply to the Federal Senate Horse Inquiry Report 13-Oct-2023

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

Introduction

The Federal Senate Inquiry "Impacts and management of feral horses in the Australian Alps" report 13-Oct-2023 (The Report) can be condensed down to the following key points (Excluding legislation issues).

- The Australian Alps are a national icon, containing substantial heritage values ranging from specialised ecosystems to unique flora and fauna; from millennia of Indigenous cultural heritage to more recent European pioneering history and culture.
- The report frequently states that this iconic region is under significant threats, key among these is from feral horses which if not urgently managed, we face a real risk of losing this iconic landscape and it's native species.
- The report highlights that the 2018 NSW Kosciuszko Wild Horse Heritage Act limits management by providing protections for feral horses, and a need to review actions to prevent further heritage, habitat and biodiversity degradation.

The Australian Brumby Alliance (ABA) is frustrated to find that at interview and throughout the report any information that does not support the committee's view that wild horses, as the key Alps threat to be urgently culled, preferable to extinction is not taken seriously.

This document represents the ABA's critique of the committee's deep biases and that as a result of rejecting any need to monitor native species recovery (or decline) trends, identify all key threats and begin to log key native species counts to see if horse culls actually help or native species continue to decline. In the ABA's view, until all key threats are realistically accounted for (not assumed to be horse impact) and realistically managed; the decline of native species in Kosciuszko national park (KNP) cannot be reversed.

Below are examples of the report's bias against horses that has blinkered the committee's ability to look objectively alternative science and practical experience put before it. Report words are referenced by "P" and a number, for example **P2** words from the Senate report are found on page 2 of the report.

Horse Count

The ABA agrees with the report 3 points below;

- P12**.** On a broader scale, the committee notes that Australia has the world's largest population of feral horses, which has a reproduction rate of around 15 to 20 % per annum,
- P8**.** Feral horses breed in the spring to summer and have a gestation period of around 11 months, producing one foal every two years, and
- P42. Without active management, feral horse populations are left unchecked to increase by 15–20 per cent per annum.

Trampling and compaction

P17**.** Claims *Feral horses damage and destroy vegetation, trample and compact soil, and compete with native wildlife for food and water resources. Feral horses may also spread weeds and alter fire regimes, which can negatively impact the survival of native or threatened species*.

ABA reply

- "Damage and destroy vegetation" is not detectable in low numbers (Berman 2023[1])
- "trample and compact soil" claims arise from Dyring 1990[2] which found this did occur on **tracks.** Dyring's study showed track compacting was less than 1% of the total area, meaning **99% of the area** was **not compacted** or trampled. This false claim that compaction is widespread is frequently made to justify horse culls.
- "compete with native wildlife for food and water" while this may occur in very high density horse areas, it does not occur in low numbers. Conversely horse grazed areas are less burnt than ungrazed areas which will increased native species survival. Horses help create a higher proportion of short green, high quality grass leaf, facilitating some native species.

Exclosure plots Biomass v Biodiversity

P21. *Fences have been set up to exclude feral horses from certain areas, which highlights the difference between areas free from horses and areas affected (see Figure 3.3). The Invasive Species Council highlighted the contrast between impacted and unimpacted areas (either side of exclusion fences) for species like the Broad-toothed rat, which use grasses for their burrows*.
P84. Australia is obliged to establish *'protected areas where special measures need to be taken to conserve biological diversity and control or eradicate alien species that threaten ecosystems, habitats or species.'*

ABA reply:

"Fences to exclude horses" contain tall (high biomass/few species/poor biodiversity[3]) grasses while grazed areas outside the fence have short, fresh, green grass (high bio-diversity). I asked how many broad tooth rats, frogs and native species are found inside fenced areas with high biomass, the reply was "that is irrelevant". Why irrelevant? when a count of native species inside-vs-outside fenced exclusion plots would clarify which environment native species prefer.

Stream Erosion and Water Spawning Species

P25. Erosion and damage (from horses) to the riparian environment (banks and water edges) can affect the ability of animals who rely on the water to spawn, as the erosion smothers and kills fish eggs, decreases water quality and breeding and feeding habitats.

ABA reply

We do see frogs spawning in hoof prints and skinks feeding on dung insect, inferring native species are facilitated by horses at sustainable population levels. See Berman et al. (2023[1]) for other examples of horses facilitating other wildlife species.

9. Coexistence with native species

Positive ecological impact is rarely if ever acknowledged because of the strong value driven belief of many Australian environmentalists; that since horses are introduced, heavy hard hoofed animals they must only cause damage in Australia.

Save energy slashing grass for the Sun Moth - horses will do it for free

[Photo credit ABA sign 2012? and Skink 2018

Skinks by Brumby Dung (2018 VicAlps)

Frogs spawning in hoof prints 2020 in VicAlps

[Photo credit: Renee Neubauer 2020]

Dung Insects feed skinks– pug holes shelter frog spawn - **Investigate before** these horses benefactors are **killed**

Water Quality and Catchment Areas

P30. "Water harvested from headwaters in the Australian Alps National Parks & Reserves contributes to water needs of Canberra and Melbourne. **P30**. Murrumbidgee catchment is significant to the supply of water to NSW & ACT. **P30**. Murrumbidgee catchment supplies water for a quarter of NSW fruit … vegetable … NSW grapes … rice production.
P31. The Commonwealth and Public Sector Union (CPSU) argued that the degradation of waterways by feral horses affects public health …

ABA reply

Adda Quinn 2001[4] "Does Horse Manure Pose a Significant Risk to Human Health" findings concluded:

- While E. coli from a number of species, including humans, can cause intestinal disease under certain conditions, those of equine origin have not been shown to do so, and
- The chemical constituents of horse manure are not toxic to humans. Horse guts do not contain significant levels of the two waterborne pathogens of greatest concern to human health risk, Cryptosporidium or Giardia, neither do they contain significant amounts of the bacteria E. coli 0157:H7 or Salmonella.

Snowy Hydro and Water turbidity

P30. The Tumut River, the largest tributary in the Murrumbidgee catchment, houses part of the Snowy Mountains Hydro-electric Scheme.

ABA reply

Negative impacts from Snowy Hydro (1) and now Snowy 2 have long been reported, for example:
Snowy1

, live
ngs

ter Penny Sharpe that she expects greater care to be taken in sensitive conservation areas.

The NSW Environment Protection Authority (EPA) has also cautioned that there must be "robust controls" to protect the environment or industry operators "face serious regulatory action".

Snowy Hydro Limited and its contractor WeBuild were last week each issued with $15,000 penalty notices following two alleged pollution incidents in Kosciuszko National Park.

The EPA alleges that "inadequate sediment and erosion controls were established despite warnings by officers". A sediment plume had stretched for more than two kilometres down Yarrangobilly River and Nungar Creek was hit with sediment-laden water from roadworks at Tantangara.

The watchdog's executive director regulatory operations Carmen Dwyer said all EPA licensed

"National parks have the highest level of environmental protection of any land type. Great care needs to be taken to minimise any impacts. In this case, that hasn't occurred, and it's unacceptable.

Snowy Hydro has been fined $30,000 after two incidents.

"The EPA is doing its important job of ensuring that our environment is protected and that the

Snowy Mountains Hydro Scheme (1st) Situational and critical analysis by Diane Cousineau and Nathan Cammerman May 2002 impact examples reported include;

- Frogs, platypus, the water rat, and the Eastern Water Dragon have been and *continue* to be affected by habitat changes caused directly or indirectly by the (Snowy1) Scheme.
- Environmental degradation, in particular the decline of fish populations in many reaches of the catchment, has caused the loss of millions of dollars of potential revenue from tourism.
- Saline intrusion up the mouth of the Snowy River has caused damage to fertile farmland and the agriculture industry, caused multiple fish kills and destroyed river bank vegetation, giving rise to additional *erosion* management and bank *stabilisation* costs.

Snowy 2.0 https://reneweconomy.com.au/snowy-2-0-the-making-of-one-of-australias-most-spectacular-infrastructure-debacles/ states Snowy2 has been exempted from the statewide ban on transferring noxious pests between waterways. This condones the movement of invasive Redfin perch, among other declared pests, from Talbingo Reservoir to Tantangara Reservoir and then across the alps into the Murray, Snowy, Murrumbidgee and Tumut headwaters, overwhelming native species and devastating trout fishing.

P31 Trampling and grazing increase water turbidity, which affects water quality at the trampling site and downstream.. highlighted studies … demonstrate that in some cases 'horse affected waterways peaked at 50 times the national turbidity guideline (NTG) with summer seasonal averages seen at 8 times the NTG.

ABA reply

- This Study only selected sites with excessively high horse numbers. No reference to turbidity arising from sustainable or low horse levels. This bias infers all streams used by horses have high turbidity. The study's two sites with no horses and no turbidity was described as having a similar soil and ecology, in reality the ecology was different enough as to not attract horse.
- There was no measurement of how far down-stream the turbidity was influenced by horses.
- Many other animals and vehicles do the same as horses including wombats, kangaroos, deer and pigs. The above study discounted all these other factors based on their four sites selected specifically because horses were there in high numbers.
- Another study compared vehicle vs horse crossing streams (like the stream crossing at Cowombat Flat used as through roads by the general public and park vehicles) showed comparison photo of vehicles and horses crossings showed less turbidity for horse crossing[5].

Impact incorrectly attributed to horses

P2**.** NSW Government provided photographs and video footage of the area to select photos for the report.

ABA reply

The ABA-v-PV court case[6] witness cross examination showed that several 'deer only' sites were counted as 'horse only' sites. The report photos have no date or location to check on the real cause, look to have deer not horse prints, gouged sides which horses avoid by using flat crossings to minimise time to cross streams. Horse avoid walking in stream, preferring firm ground, unless chased by helicopters. Horses fear getting 'cast' (unable to get up) from surrounding raised edges. Deer cope with deeper water and steeper sides and use mud wallows, like after shave, to attract females.

It seems to the ABA that people calling for urgent horse culls to save native species so readily use photos like these with damage consistent with deer impact with impunity as only a court case has forced parks to admit photos of deer damage have been used as evidence of horse damage. This is propaganda, so far from real evidence, but still this message continues to be spread by those who just focus on horses.

Cull horses to save Corroboree frogs

P23. The destruction of areas that are breeding sites for Northern Corroboree Frogs …. Feral horses are '*undoubtedly* contributing to the ongoing decline of Northern Corroboree Frogs and their habitat quality.

ABA reply

The ACT's Corroboree frog populations have not improved after several decades of ACT zero tolerance to horses – there is no doubt there are other factors that are threatening corroboree frogs far more than horses…but instead of investigating these, when it is assumed that culling horses as the key threat has not helped frogs and threatened species, calls to cull horses to save frogs, Broad tooth rats etc. grow louder. There is a need to look for and treat the real threats.

Aboriginal statements

P32. More than 18 First Nations clan groups from across south-eastern Australia have social or spiritual connections to the Australian Alps as part of their traditional country or a place in which they have other rights… landscapes associated with places of spiritual significance …. traditional practices carried out.

ABA reply

The ABA and several Aboriginal nations also attest to the value of 'great horse spirits" being integral part to their values, and that they want an ongoing sustainable presence in areas they have worked wild horses.

- "Many Australian Aboriginal people embrace introduced species not want them culled and incorporate them into the Dreaming" (Rewilding Special: National Parks Ass. NSW, Vol 60 (1) 2016)
- I am a proud Ngarigo and Djiringanj mawa (male), and this is my retelling of my Elders' story of the Ngarigo, Djiringanj and the Brumby.... Our old people were animal lovers holding great respect for these powerful horse spirits. By David Dixon[7] https://australianbrumbyalliance.org.au/wp-content/uploads/2020/10/The-Ngarigo-Djiringanj-their-Brumby-relationship.pdf

Why were a range of Aboriginal views not included in the report, all information should be considered.

Wild Horse weight/speed exaggerated

P33. “It only takes a moment after seeing these horses in flight to imagine the amount of damage done to Bimble when 4 hoofs under .. a horse that weighs in average of 700 to 1,000 kilos .. travel at speeds of 88kms without a rider and average 55kms with a rider. Multiply this with current VicAlp horse numbers …. mindboggling, having our home ripped up… then they urinate and defecated daily whenever it suits them.

ABA reply

These words express passion, inferring deep hatred of wild horses to distort truths to make a point.

- “horses in flight” wild horses do not run when they can walk, they survive by not wasting energy running. Anactedotal evidence shows wild horses soon tire due to poor feed quality and easily overtaken by horses ridden by ‘Brumby runners’ to rope wild horses.
- Damage …. wild horses average of 700 to 1,000 killos. Wild horses weighed by rehomers report average weights of 350 to 450 Killos and average heights of 12.5 to 13.5 Killos. I googled horse weights and found race horses average weights are 700 to 1,000 killos and grow to 15 to 16 hands (1 Hand = 4 inches). This exaggeration of horse weight and speed is from an Associate professor, amazing miss information/distortion of the truth.
- ALL species, including human park visitors, urinate and defecated daily.

P44. We had to paddle [Alpine rivers] through all the dead horses

ABA reply: Only 2or3 dead horse were in the photos shown.

Attempts to wrongfully Trivialise Wild Horse Heritage

P40. Horse advocacy groups claim that many feral horses were captured and drafted for service as light horse mounts in WWI. However, military records indicate that the Australian Imperial Forces only recruited horses from professional breeders, and that these horses were destroyed or transferred to the Syrian and Egyptian imperial authorities after the war.
P41. Ref20: Jean Bou, Light Horse – A History of Australia’s Mounted Arm, Cambridge University Press, Melbourne, 2010, pp. 238–239. (*sourced from professional breeders*)
P34. It was a poem. It was a movie. The reality of the grazing era was not true.

ABA reply

The mothers and fathers of the horses that went to war were still in the areas they were original bred as ‘foundation stock’ such as the Australian Alps and other places in Australia (see Peter Cabena’s Master Thesis[8] chart next page. Many professional horse breeders bred horses in the bush in a semi-wild state. There is no doubt that a large proportion of horses sent to war were from Brumby (few roaming) stock, as were many stock horses and their brothers and sisters and parents remained to breed on in the wild)

See https://australianbrumbyalliance.org.au/wp-content/uploads/2022/08/Brumby-Founding-Stock-BHP-E-Alps-v0.9.pdf , and https://australianbrumbyalliance.org.au/national-cultural-heritage-values-the-wild-horse-population-kosciuszko-national-park/

The poem and the movie are based on fact…Banjo Patterson was given a brumby to ride when he visited Mt Kosciuszko because the brumbies avoided bogs, they knew the country. The locals used brumbies in the mountains. They were mountain bred just like the pony ridden by the Man from Snowy River. (See the Complete Works of Banjo Paterson).

Cultural Heritage vs another Cultural Heritage

P33**.** Argued feral horses should not be given prominence over 65,000 yrs of Indigenous culture…. P34. mainly through ignorance of an Australian society who see them (Brumbies) as more iconic than us Jaithmathang human beings.
P90. National Heritage places, 'objective in managing National Heritage places is to identify, protect, conserve, present and transmit, to all generations, their National Heritage values'.
P91 In 2020, the Federal Court also found that feral horses are not recognised in the National Heritage values of the Australian Alps.116. (Judgement p6.118)

ABA reply

The report correctly highlights the objective of National Heritage places is to … Protect .. to all generations, their National Heritage values. Australia is now a multiple cultural nation, heritage means different values to different Australian citizens, such as Aboriginals and European/later settlers.

The Australia ICOMOS "Burra Charter[9] provides a framework **to resolve conflicting heritage values**.

The Charter emphasises that **co-existence** of cultural values should always be recognised, **respected** and **encouraged**, and that this is *especially* important in cases *where they conflict*. ABA again highlight that that many Aboriginals want to retain sustainable wild horse populations; out of their "great respect for these powerful horse spirits" see above.

Burra Charter/Aboriginal-European heritage (extracts)

- Places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences. They are historical records, that are important expressions of Australian identity and experience.
- Places of cultural significance reflect the diversity of our communities, telling us about who we are and the past that has formed us and the Australian landscape. They are irreplaceable and precious.
- Place means a geographically defined area. It may include elements, objects, spaces and views and may have a range of values for different individuals or groups.
- Conservation should take into consideration *all* aspects of cultural and natural significance *without unwarranted emphasis* on any *one value at the expense of others*.

Anti-Brumby environmentalists often falsely claim that "horses not recognised in National Heritage values of Australian Alps", despite ABA's Media Release 22-May-2020 to correct such false claims[10.]

- Justice O'Bryan ACTUALLY concluded "having regard to the foregoing factors, on balance I do not consider that the proposed Action is likely to have a **significant** impact on this National Heritage value. While there will be **some** impact …… the **retention** of a **significant** population of **brumbies** in the Eastern Alps has the result that the Action cannot be regarded as significant." (Section 255 of Reasons for Judgement)
- **Parks Victoria** also **agreed** that removing an entire population from Bogong High Plains, would **have** a negative impact on the Australian Alpine national park listed values.
- The judge **accepted** that the **continuing presence** of brumbies in the Australian Alps **contributes** to the National **Heritage** Values relating to the pioneering history of the high country (this is in relation to criterion (g), see [252] of the Reasons for Judgement[6]).

- His Honour also found "the **brumbies** are one physical **reminder** of the **historic** activities and, in that sense, contribute to social connection of the pastoral community to the Australian Alps" [253].

- The judge held that **because** there would **still** be a **significant** population of brumbies in the **Eastern Alps** the action would not have a *significant* impact on Natural Heritage value per criterion (g)[255].

The key issue is how **significant** is it if all Bogong Brumbies are culled; since a significant number will be left in the Victorian Alps (PV plan stated 1,200 at that time). Anti-Brumby rehertoric will continue, I'm sure, but we emphasyse that the Judge was informed that; "Both the ABA and Parks Victoria agreed that Brumbies in the **Australian Alps have cultural heritage significance**, and that the final case decision rested more on the **level** of **significance** of losing an **entire** Brumby population."

4. Why retain smaller, sustainable horse populations?

- **Living survivors** of early social life - Purpose **bred to thrive** in harsh conditions.
- **Ancient breeds** DNA- wild living reflects **pre-domestic** horse behaviours.
- **Evolved** by natural selection - **intelligent**, **sentient**, hardy, trainable.
- **Same** DNA as WW1 remounts - **193,836 (Vic)** and **91,210** (NSW). (Ref-4)
- NSW Heritage **Act**, recognises key **bloodlines**, ie: Kiandra greys & Peppercorn chestnuts.
- **Significant** to many - **Bogong** High Plains distinctive Brumbies below.

Waler Exports to Market Zones 1861 to 1931

	Indian	African	S.E.Asian	E.Asian	Total
N.S.W.	52284	19791	10919	8216	91210
Vic.	152742	22108	16636	2400	193886
Qld.	121519	21432	4045	10733	157729
S.A.	22667	908	513	90	24178
W.A.	4723	5697	7248	1357	19025
Tas.	2	282	0	0	284
Total No.	353937	70218	39361	22796	486312
Total Exported	486312				

Cabena Bogong Horses heading to India in Myrtleford sales 1890'S

Constitutional validity

P95. There may be an issue relating to constitutional validity of NSW Wild Horse Heritage Act to the extent it is inconsistent with the EPBC Act…. feral horses simultaneously protected and considered a threat.

ABA reply

Deer and trout also are simultaneously protected and considered a threat. See examples below;

A. National Feral Deer Action Plan 2022 (Draft) extracts;

- In Tasmania, farmer control and recreational feral deer hunting have slowed population growth, but the growth is still around 11 % per year. At this rate, the population doubles every 7 to 12 years (Department of Primary Industries, Parks, Water and Environment; Cunningham et al. 2021)

- Environmental impacts of feral deer are officially recognised as a threatening process in New South Wales & Victoria (NSW Biodiversity Conservation Act 2016, Vic Flora & Fauna Guarantee Act 1988.

B. Deer (Chital, Fallow, Hog, Red, Rusa, Sambar, Sika, and Wapiti) **are protected** wildlife **under the Wildlife Act** 1975. https://engage.vic.gov.au/draft-victorian-deer-management-strategy , even though a wide range of negative environmental, economic and social impacts from wild deer is acknowledged.

C. Trout damaging impacts, for example.
https://vfa.vic.gov.au/recreational-fishing/fish-stocking/managing-recreational-trout-fisheries
Trout are not native to Australia - Trout have been so **successfully** and so **pervasively introduced** (PV breed and annually **re-stock** VicAlps) freshwater systems that most people now think that they are native. The truth is that trout have caused the **extinction** or demise of many freshwater fish and invertebrate species, including some excellent angling fish such as the Murray cod, Macquarie perch and trout cod.

VAGO No "on-ground" evidence

P40. As made clear by *strong scientific evidence*, the committee understands that feral horses have a *negative* impact on the Australian Alps National Park … and the native species that live within it.
P93. During this inquiry it has become *unambiguously clear* that the Australian Alps are under pressure from significant threats. *Key* among these is the threat *posed by feral horses*.

ABA reply

PV, NPWS & environmentalists claim to have "irrefutable evidence" that horses are the priority threat to native species (see most submissions to the Federal Senate Inquiry into Brumby management. This ABA reply to the Federal Inquiry report explains why we are so concerned at what we call flawed "evidence".

The Victorian Auditor report to the Victorian Parliament 2021[11a], after an extensive review of the Dept. of Environment, Land, Water & Planning (**DELWP**) & partner Parks Victoria (PV); into why Victorian native species continue to decline, validates our concerns (list[11b]) for both PV & NPWS, for example;

- DELWP/PV cannot demonstrate if, or how well, it is halting further decline in Victoria's threatened species populations.
- DELWP has **not provided** detailed, **evidence-based** advice to the government about the cost and benefits of protecting and monitoring threatened species **to support** further investment.
- Lacks performance indicators and reporting to demonstrate the impact of its management interventions on halting the decline of threatened species.
- Very limited monitoring and reporting around threat intensity and *on-ground* changes to threatened species populations.
- Without targeted *on-ground* monitoring programs to validate key predictions, they can only be viewed as modelled **assumptions**.
- Does not have targeted *on-ground* monitoring or data to validate these predictions (assumptions).
- DELWP's modelling must be supported by a systematic validation process, such as monitoring *on-ground* changes to threatened species. *This does not occur*.

Culling Horses is Key to Saving Native Species

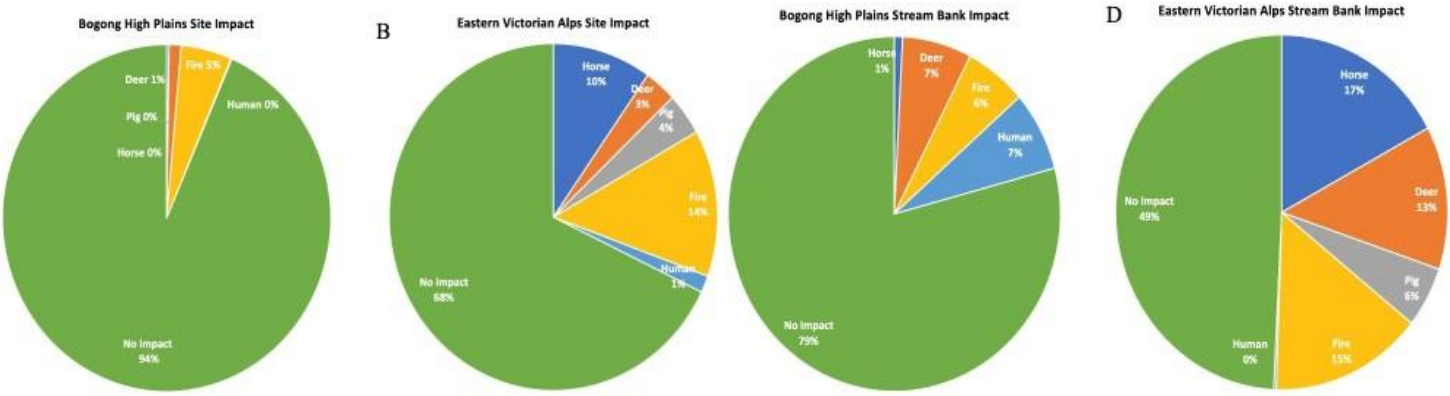
P43. Feral horse management is undertaken by Parks Victoria, with a target of the complete removal of feral horses from the Bogong High Plains, and a significant reduction in the number of feral horses in the other Victorian Alpine areas.

ABA reply

ABA: Removing low horse numbers (Bogong 60-80 horses) cannot help native species. Slide below shows deer impacts 7% vs horse impacts 1% for river banks. All Bogong horses now shot, deer left to increase.

13. Adequacy state laws, policies programs & funding - TOR C

- Kosciuszko (KNP)'s **Wild Horse Heritage Act** 2018, informed by lengthy, robust public consultation (ALL key parties) - **Remains** a **balanced, highly valued** piece of **legislation**.
- Recognise importance to conserve heritage horse groups while protecting high -risk zones.
- Parks cull deer -pigs - populations soon recover at 55% deer & 70% pigs yearly increase.



Site BHP
No horse Impact **100%**

Site EVA
No horse Impact 90%

Stream bank BHP
No horse Impact 99%

Stream bank EVA
No horse Impact 83%

Underestimate deer/pig numbers

P49. In 3 yrs to end of 2022, 10,000 pigs & 6,800 deer culled in KNP.
p49. Aerial shooting used for 88% of 271,959 feral animals culled across NSW … July 2020 to June 2023.

ABA reply

https://www.theage.com.au/national/victoria/deer-hunting-opened-up-after-feral-numbers-soar-to-estimated-1-million-20181005-p50807.html (2018)- Feral deer are mostly found in south-eastern Australia, but scientific studies have warned conditions are ripe for their eventual migration to northern Australia.

With 1 million Deer reported 2018 in S/E Australia, it is not surprising that deer have increased (55% each year) in numbers and area. At least 550,000 deer must be removed annually even to keep 1,000,000 deer static. Culling 6,800 deer (above) over 3 years will not even slow deer population increasing.

It seems that Park agencies significantly underestimate effective deer management. Horses are easy to see in daytime, easy to kill – is that why damage is focussed on them, to look like governments are doing their best to protect native species. The sad result is that prioritizing horse culls cannot 'save' native species.

The relevance to the NSW inquiry into the humaneness of aerial culling horses is that before any species is culled, there must be an evidenced base reason to show horses culling is needed. The ABA repeats, yes too many of any species is bad, however, as found in Berman et. al. 2023, that a safe (sustainable) horse level can be scientifically measured, and that under that level, native species are not negatively impacted.

P55. (The) only population of the Stocky Galaxias (Galaxias Tantangara), listed as critically endangered under the EPBC Act, is within the (NSW Wild Horse management plan) horse retention area.

ABA reply

Stocky galaxias live in a 3.5 km section of creek inaccessible to trout. Trout are the real threat. There were 35 horse crossings along this section of creek. Despite this high horse activity stocky galaxias are surviving there. Now a fence has been constructed around this section of creek to keep horses out.

This may allow vegetation to smother the creek making it no longer suitable for the stocky galaxias. This occurred in the northern part of South Australia, Dalhousie Springs, where "extirpations of fish populations can be attributed primarily to habitat changes associated with reduced disturbance and herbivory as a result of the removal of feral livestock" (Kodric-Brown et al. 2007) https://doi.org/10.1111/j.1472-4642.2007.00395.x .

Manage conflict

P64. Treatment of national parks staff.

ABA reply

People in New Zealand had enough of culls, so they formed the Kaimanawa Wild Horse Welfare Trust (KWHWT). At first, the Dept. Of Conservation (DOC) and KWHWT clashed, occurs in NSW & Victoria. This conflict was resolved by a sustained effort to build trust and find common ground to manage horses living wild in specific areas. This approach is vital to replicate in Australia.

Management decisions relating to the wild Kaimanawa horses are now the responsibility of the Kaimanawa Wild Horse Advisory Group (KWHAG). This group includes DOC, KWHWT now Kaimanawa Heritage Horse (KHH) and other interest groups. Together they develop agreed management plans that DOC implement. Ref: https://kaimanawaheritagehorses.org/

Theatening behaviour is NEVER acceptable. The ABA remains keen to work with NPWS/PV on joint research to test Berman et. al 2023 research results, identify if/what safe horse numbers can be retained, then **if** a safe level is found, work together, like the NZ model, to manage a lasting horse plan, safe for native species.

The overriding sadness of park pest management is their reliance on mass shooting to try to control non-native species. On-ground counts to check if remedial/kill actions help, or not, instead of just assuming it helps, is a vital step forward to helping native species survive and reduce the reliance on mass kilings.

Also horse advocates around KNP and in Victoria are ready to work with NPWS & PV to manage the retention of these sustainable horse population numbers, but never to manage to extinction.

President,
Australian Brumby Alliance Inc.

References

Ref-1: Berman 2023 Use of density-impact functions to inform & improve environmental outcomes of feral horse management: https://onlinelibrary.wiley.com/doi/full/10.1002/wlb3.01107

Ref-2: Dyring, J. 1990. The impact of feral horses (Equus caballus) on sub-alpine and montane environments in Australia. – MSc thesis, University of Canberra, Australia.

Ref-3: Williams, R., Papst, W., McDougall, K., Mansergh, I., Heinze, D., Camac, J., Nash, M., Morgan, J., and Hoffmann, A. 2014. Alpine ecosystems. – In: Lindenmayer, D., Burns, E., Thurgate, N. & Lowe, A.(eds), Biodiversity and environmental change: monitoring, challenges and direction. CSIRO Publishing.

Ref-4: Adda Quinn 2001 "Does Horse Manure Pose a Significant Risk to Human Health"

Ref-5: Detecting stream health impacts of horse riding and 4WD vehicle water crossings in South East Queensland: an event based assessment October 2011.

Figure 5
Sediment Runoff during 4WD Crossing at Numinbah test site

Figure 6
Sediment Runoff during Horse Crossing at Numinbah test site

Ref-6: Federal Court of Australia Victoria Registry - O'Bryan J - No. VID 1569 of 2018 – The Australian Brumby Alliance Inc and Parks Victoria Inc.

Ref-7: David Dixon https://australianbrumbyalliance.org.au/wp-content/uploads/2020/10/The-Ngarigo-Djiringanj-their-Brumby-relationship.pdf

Ref-8: Peter Cabena's Master Thesis: High country grazing in Victoria (1835 – 1935)

Ref-9: The Australia ICOMOS Burra Charter 2013 for Places of Cultural Significance

Ref-10: ABA Media Release 22-May-2020 to correct false claims **Attachment-1**

Ref-11a: Victorian Auditor General (VAG) 2021: https://www.audit.vic.gov.au/report/protecting-victorias-biodiversity?section=

Ref-11b: Victorian Auditor General (VAG) 2021 extract of issues list. **Attachment-2**