



PO Box 3276, Victoria Gardens Richmond, Vic 3121

[info@australianbrumbyalliance.org.au](mailto:info@australianbrumbyalliance.org.au)  
[www.australianbrumbyalliance.org.au](http://www.australianbrumbyalliance.org.au)

ABN : 90784718191

3rd April 2023

## ABA Submission to the Senate Environment and Communications Reference Committee Inquiry into the Impacts and Management of feral (wild) Horses in the Australian Alps

BY Tuesday, 11 April 2023 via Email to [ec.sen@aph.gov.au](mailto:ec.sen@aph.gov.au)

The Australian Brumby Alliance Inc. (ABA) advocates for the recognition, management, preservation & welfare of **sustainable** Australian Wild Horse populations. The Inquiry uses the term feral horses, and we use the term Wild Horse or Brumbies. This submission is using 'horse' or 'Wild Horses/ which is consistent with the term used by NSW park managers.

Our submission will highlight concerns we see with Park horse management across the Alps (ACT, NSW & VIC); and how biodiversity decline, or whether a horse presence helps or hinders native species, cannot be resolved until the following systemic issues are addressed.

### A. Identifying **Best Practice** approaches to reduce the populations of feral horses in the Australian Alps and their impact:

#### **Best practice approach to reduce Horse populations in the Australian Alps**

Alpine parks are managed in (NSW) by National Parks & Wildlife Services (**NPWS**), by Parks Victoria (**PV & DELWP**)(Vic), (ACT) has a zero horse policy. State representatives coordinate with the National Alpine Park; all have similar values – **questioned** by a 2021 audit review.

The Victorian Auditor General (**VAG**) 2021 reports<sup>1</sup> "In our recent audit, we concluded that DELWP (&PV) *cannot demonstrate if, or how well, it is halting the further decline* in Victoria's threatened species populations" and major gaps in DELWP/PV's **in-ability to halt the loss of biodiversity** <file:///D:/FOI-Ombudsman-AuditGen-IBAC/VAGO%20Audit-Gen-Office%20VIC/FULL%20VAG%20Rpt%20Protect-Vic-Biodiversity.pdf> – Findings likely replicated in all states with similar values. Findings such as;

- Do "*not* have a targeted monitoring program and indicators to determine whether its prioritised management interventions are resulting in the predicted response in threatened species populations".
- "Without the support of *on-ground* data validation, these limitations raise questions about the accuracy of information supporting decisions to prioritise & fund actions".

1 ABA Submission to Federal Senate Inquiry into wild horse/Brumby management/cull 11-Apr-23

- That “without targeted *on-ground* monitoring programs to validate key predictions, they can only be viewed as *modelled assumptions*.”

To the ABA, these flaws **must be addressed** BEFORE we can gain an understanding of HOW to halt ongoing biodiversity decline and define “Best practice” Alpine horse management.

The ABA proposes the following as “**best practice**” principles to address the areas of concern raised by the Senate Inquiry into alpine horse management.

- 1a. Best practice** horse management does *not* use *assumptions* but *on-ground* species data.
- 1b. Best practice** horse management is *to identify a horse density level* that maximises the benefits and minimises the negatives for native species by using ‘on-ground’ observations to evidence how native species interact with horses, as reported in: “The Use of density-impact functions to inform and improve the environmental outcomes of feral horse management” (Berman et. Al. in-prep 2023).

This density-impact study measured, direct impact, density-impact functions and the influence of other impact agents in the same environments, such as;

- The difference in direct environmental impact of feral horses between two areas in the Australian Alps with different sized feral horse populations.
- Calculated density-impact functions to assist managers with determining feral horse density targets for control programmes.
- The influence of other agents of impact.

The density-impact study found;

- Minimal sign of feral horse impact was detected where there was a relatively small feral horse population on the Bogong High Plains (**BHP**) with 99% of the length of transects having **no** detection of grazing or trampling impact associated with sign of feral horses.
- Impact associated with sign of feral horses was significantly higher in the Eastern Victorian Alps (EVA), but greater than 83% of the walked transect length was still undisturbed by feral horses.
- They 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. A relatively small population control effort may substantially reduce direct horse impact in this context.
- But where horse densities exist below this threshold, considerably more expense and control effort (resulting from the difficulties related to control at low density) is likely to make very little difference to an already low level of direct impact.
- The cumulative impact associated with sign of deer, feral pigs, fire and humans was *large* compared to that of feral horses.

**2. Best practice** horse management uses *moderate horse density* to provide rotating grazing to stimulate short green grass: Sun Moths (Left), provide manure to attract insects for skinks (middle) & hoof prints holding water for native frogs to spawn (Right). (**Fig-1 below**)

## Alternative paradigm cont.. Work together to harness positive horse impact to slow environmental decline



**Skinks by Brumby Dung**  
(2018 VicAlps)



**Frogs spawning in hoof prints** 2020 in VicAlps  
[Photo credit: Rene Neubaue 2020]

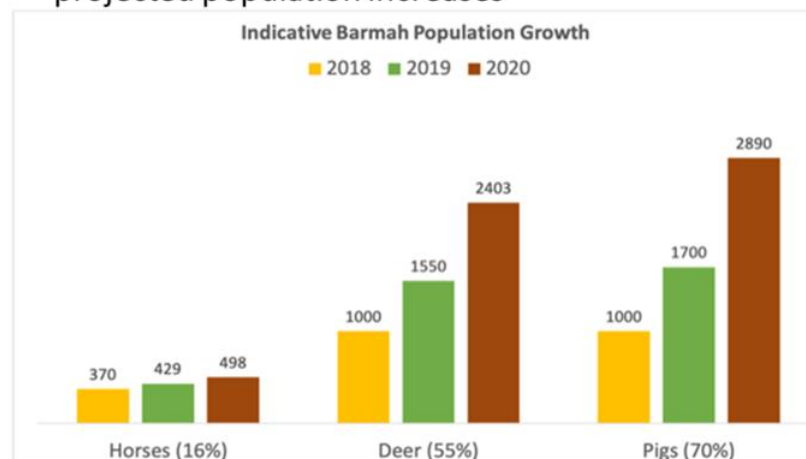
**Save energy** slashing grass for the Sun Moth - horses will do it for free

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

[Photo credit ABA sign 2012? and Skink 2018]

**3. Best practice** horse management does not *ignore logic*. Killing horses may remove horses, but leaves the hidden, highly reproductive species to rapidly increase - this is not logical. See (**Fig-2 below**) showing PV's focus on horse culls, while paying scant attention to deer or pigs.

## Brumbies in perspective: Scale of the problem using Barmah projected population increases



2018 - Total of 34 deer culled but pig data absent (p48 Parks Victoria's Strategic Action Plan 2020).

2019 Cull data not known yet?

**4. Best practice** horse management does not *quote out of context*, such as "Hard hooved horses trample and compact fragile alpine ecosystems", based on Dyring's 1990 study.

- **False:** Dyring's 1990 found horse trampling and compacting was limited to within 1 metre of a track which is **under 1%** (Dyring's calculations) of the **total study area**.

**5. Best practice** horse management does not *exaggerate* or *scare*, yet PV's FOI RFOI2021-22-49 states that PV's Technical Reference Group (TRG) flagging potential threats from horses; added "might devise a *scarier* comment<sup>2</sup>" - maybe to raise public fear of horses?

**6. Best practice** horse management does not use *emotive claims* “hikers became sick from smelly dung and drinking water” (dung smells 2-3 days and attracts insects for native skinks to feed on. Adda Quinn’s 2001 research<sup>3</sup> “Does Horse Manure Pose a Significant Risk to human health?” R.3 October 2001, concluded that;

- “chemical constituents of horse manure are *not* toxic to humans”, and that
- “Horse manure is a solid waste *excluded* from federal EPA solid waste *regulation* because it *neither* contains significant amounts of hazardous chemicals, *nor* exhibits hazardous characteristics”.

**7. Best practice** horse management *considers all new techniques*, not repeat kill & kill again failed methods. Consider the growing appreciation of how predator cascades can encourage natural biodiversity, keep animals healthy and keep balance across Australian ecosystems.

The NSW National Parks Association ‘*Rewilding Special edition*’ Vol-60, No.1<sup>4</sup>, “Bettongs & Bantengs – Welcome to Australia’s Wild Anthropocene!” (Dr Arian Wallach) explains that:

- Australian conservation focuses on controlling and eradicating non-native species. But ecosystems are incredibly complex, and trying to mend nature by killing wildlife can cause further harm.
- Mallefowl nesting success actually declines where Foxes are poison-baited, Woylie populations crashed because intensive Fox control caused higher Cat predation, native vegetation was damaged by Rabbits following an island eradication of Cats.

Mass culls leave carcasses for pig populations to multiply on, then once their “extra” feed is exhausted they turn to killing anything, not just their prey of choice. Note also that;

Researchers monitored 20 kangaroo *carcasses* in *Kosciuszko* National Park and saw large wasp numbers around every carcass. “When they see a carcass, it becomes a feeding frenzy for a (wasp) colony and the wasps will stop at nothing to defend their food”<sup>5</sup>. (Ref: 'Ruthless' European wasps behead Aussie blowflies ..... By Olivana Smith Lathouris 1st June 2020).

**8. Best practice** horse management is *understanding the evolutionary periods* that Australia’s ecology has moved through, such as climate change, megafauna and recently humans. Each period influenced flora and fauna nutritional exchange, consider for example;

- Megafauna roamed Australia for centuries, processed large quantities of grass, which they excreted as nutrient-rich dung and in doing so kept fire breaks of open sunlit grass - only disappearing as the climate cooled and hunter humans appeared.
- Aboriginal nations arrived and managed Australian environments by sophisticated cultural burning to create alternating bush/trees with open green grass to provide a steady supply of food varieties - until European arrivals stopped all cultural burning.
- European graziers used the Alps to graze sheep, cattle and horses which sustained grassy open spaces between bushland and conducted cool burns to stimulate fresh, short, green grass and lowered fire loads – until evicted because of poor governance.

- National Parks saw no value in retaining grassy open spaces created over centuries by Megafauna, cultural burning or grass-eating horses (mini-Megafauna), instead, all was left to return to a “natural” state of “pristine” wilderness. But what is pristine, if not that which Megafauna created long ago? Now open spaces are bushland/trees, little sunlight or green grass and high fuel loads to feed hot, wildfires that kill native species at far higher rates than during centuries of Megafauna and cultural burning.
- Currently, we see increasing park use for recreational and commercial infrastructure, accommodation, road upgrades and snowy hydro 2 to water ever-growing human numbers that have changed natural hydrology forever – is it any surprise that native species are declining with shrinking living space and ability to avoid climate change.

What about human impact? Or political will to cull development on native species land? Or do politics and environmentalists unite to use horse culls as a ‘scapegoat’ to deflect damage by humans, deer, pigs, etc.); what’s next to blame for the ongoing decline of native species?

How do we tell future generations that it was legal to exterminate every social, wild living heritage horse, after VAG said of park’s decisions “without targeted on-ground monitoring programs to validate key predictions, they can only be viewed as modelled assumptions”.

### **1. BEST PRACTICE *example* – Kosciuszko Wild Horse Heritage Act 2018<sup>6</sup>**

- identify the heritage value of sustainable wild horse populations within identified parts of the park, and to
- set out how those heritage values will be protected while ensuring other environmental values of the park (including values identified in the plan of management for the park) are also maintained.
- Reduce horse numbers to a minimum of 3,000, then stabilise 3,000 using fertility control [**GonaCon & PZP**], trapping and rehoming where feasible.

### **2. BEST PRACTICE Alpine horse manage *example* – New Zealand<sup>7</sup>**

<https://kaimanawaheritagehorses.org/>

Around 2023, people asked “How can we stop the slaughter of the NZ’s Kaimanawa horses? They’d had enough of culls, so formed the Kaimanawa Wild Horse Welfare Trust (KWHWT). At first, DOC and Kaimanawa horse advocates clashed, as in Victoria, NSW & ACT at present. The 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 The Department of Conservation (DOC), Kaimanawa Heritage Horse (KHH) and other interest groups together develop agreed management plans that DOC implement.

KWHWT then changed its name to Kaimanawa Heritage Horses (KHH) to recognise the very important historic link the Kaimanawa Horse has to New Zealand’s pioneer past.

### 3. BEST PRACTICE Alpine horse management *example* – The ABA’s approach.

Building on NSW and NZ horse management experiences and our own practical experience, we urge the Senate inquiry to consider the following strategy to manage horse populations;

- Apply modern strategies detailed in the study “*The Use of density-impact functions to inform and improve the environmental outcomes of feral horse management*” (Berman et. Al. in-prep 2023). A technique to help identify actual sustainable horse population densities to suit various park ecological capacities (see above *page-2*).
- Adopt an interim safety margin of at least 4,000 in Kosciuszko, 2,000 in East VicAlps, 160 in Bogong and 160 in Barmah parks while assessing safe density-impact levels.
- On-ground native species and horse data trends per ecologically defined area.
- Control horse populations by; Passive trapping, Fertility Control, Rehoming (using part government funding to build a reservoir of accredited rehomers with the ability to sustain the volume of horses being trapped).
- Establish Regional Horse Advisory Groups include representatives from key interest groups, community skills, park environmentalists etc., chaired by person with the ability to centralise extreme views that will result in a workable management plan, per the NZ & NSW experiences (see *page-5* of this submission).
- 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.

This list is an overview and starting point - the key to this strategy’s enduring success is to bring all views to the table, then respectfully work through each point, chaired by someone experienced in conflict skills resolution and incorporate ‘on-ground’ native species trends.

This can, and has, been *achieved*. The key to success is building respect, driven by a strong desire to overcome wasted years of costly, emotional, conflict. See (p9) NSW National Parks Kosciuszko Wild Horse Scientific Advisory Panel Report strategies and recommendations.

#### **i. Biodiversity, including threatened and endangered species and ecological communities listed under Commonwealth, state or territory law,**

The Victorian Auditor General’s (**VAG**) report “Victoria’s Biodiversity October 2021” found that the Dept. of Environment, Land, Water and Planning (DELWP) and Parks Victoria (PV)’s monitoring and reporting is not comprehensive, lacks accountability and tells Parliament little about the cost, quality or effectiveness of their work to stop native species declining.

The ABA understands that NSW & ACT park strategies also ignore the need to monitor ‘on-ground’ native species trends that could inform ways to improve native species’ survival.

*It is the ABA’s firm belief the VAG report **should** have initiated a major re-think of DELWP and PV’s native species knowledge using “on-ground” native species data pre/post culls.*



However, Park managers continue to rely on the *assumption* that horses negatively impact native species and *fail* to conduct 'on-ground' native species pre/post cull counts to prove or disprove this assumption. Federal cull funds presumable also do not use monitoring trends of at-risk native species to see if federal cull funds have helped native species (*or not*).

**ABA asked to partner with PV to prove/disprove such assumptions - PV rejected our offer.**

### **Vic Auditor General (VAG) FINDINGS on DELWP & PV's inability to use on-ground data to prove or disprove their policies help or hinder native species survival<sup>1</sup>.**

<file:///D:/FOI-Ombudsman-AuditGen-IBAC/VAGO%20Audit-Gen-Office%20VIC/FULL%20VAG%20Rpt%20Protect-Vic-Biodiversity.pdf>

The VAG said "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".

The ABA supports VAG's findings (replicated in any alpine park with similar values to PV).

The Inquiry could, for example, recommend parks develop real-time *on-ground* data trends to inform better ways to slow Australia's declining biodiversity and in particular to urgently address many of the failings the VAG found, for example the VAG reported that;

DELWP & PV: Reporting on biodiversity protection, including threatened species, **lacks accountability** and **comprehensiveness**. It **tells** Parliament and the public **little** about the cost, quality or **effectiveness** of the work DELWP delivers to support its overall objective ...

DELWP & PV: "There are **flaws** and **gaps** in its **performance** measurement and **reporting** framework, and a **lack of supporting data**".

DELWP & PV: Has "only **one relevant** departmental objective **indicator** to measure and report progress in its performance in meeting this objective— '*participation in community-based environmental programs*'. This indicator alone **is not sufficient** to provide a comprehensive assessment and report on the status of the state's biodiversity".

DELWP & PV: (They) "measures the number of threat control *activities* and hectares of *land treated* to controls threats" ..... "While these are appropriate measures of the *quantity* of activity outputs, they are **not supported** by measures of the *quality* and *cost-effectiveness* of activities to deliver the performance objective".

DELWP & PV: Do not ..... "However, **without** targeted **on-ground** monitoring programs to validate key predictions, they can only be viewed as modelled **assumptions**".

DELWP & PV: Do **not have** a **targeted monitoring program** and **indicators** to **determine** whether its prioritised management interventions are resulting in the predicted response in threatened species populations".

"Without the support of on-ground data validation, these (DELWP&PV's) **limitations raise questions about the accuracy of information supporting decisions to prioritise and fund actions**". The ABA has never seen *on-ground* validation of native species counts after culling horses, inferring parks are so sure culling helps that work to verify results is *not* necessary!

## ii. Ecological health of the Australian Alps national parks and reserves,

VAG states that DELWP is unable to determine if it has controlled key threats or halted further threatened species declines “ *because of flaws in its KPIs and its lack of a targeted monitoring program to assess the on-ground impact of its prioritised management interventions on threatened species populations*”. Must be resolved *before progress* can begin.

## iii. Indigenous cultural heritage

Indigenous cultural heritage is retained for future generations. Many Australian Aboriginal people have embraced introduced species .... Even incorporating them into their Dreaming.

Rewilding Special edition: Journal of National Parks Assoc. NSW, Vol 60 (1), 2016 published “Bettongs and Bantengs-Welcome to Australia’s Wild Anthropocene! By Dr Arian Wallach.

- “Many Australian Aboriginal people have embraced introduced species and do not want them culled, even incorporating them into their Dreaming”; Trigger, D.S. (2008) wrote “Indigeneity, ferality, and what ‘belongs’ in the Australian bush: “Aboriginal responses to ‘introduced’ animals and plants in a settler-descendant society” in the Journal of the Royal Anthropological Institute, 14, pp.628-646], for example:

David Dixon<sup>8</sup> <https://australianbrumbyalliance.org.au/wp-content/uploads/2020/10/The-Ngarigo-Djiringanj-their-Brumby-relationship.pdf> includes the following quotes;

- “Whenever we would pass through Kalaru on our way to Tathra, Mum would always point over to the Blackfellows Lake area and tell about our family ancestry and the brumby connection. I remember Mum's story well”.
- “Like our ancestors, the brumbies built their own knowledge and connection with the land for their survival, so ancestral knowledge and the skills of land and nature would have been key to their capture”.
- “The Aboriginal reserve at Blackfellows Lake is where the brumbies were rested and tamed”....” his was my family living between two cultures ... adapting ... surviving, trying to provide for kin via shared contribution.
- Our old people were animal lovers. They would have had great respect for these powerful horse spirits.
- Our people have always been accepting of visitors to our lands and quite capable of adapting to change so that our visitors can also belong and have their place. Learning their ways and gaining true understanding. A caring and sharing culture. The ultimate communicators.
- Our collective journey is one that requires us to acknowledge our collective past and strive to right the wrongs and realise justice is possible. This is a shared history, not a segregated one ...it depends on how you view it, I suppose. It's a shared history, the good along with the bad.
- Our family story about our interwoven history with the brumbies, as told by our Elders, is one that reminds us that reconnecting with our past can be a powerful



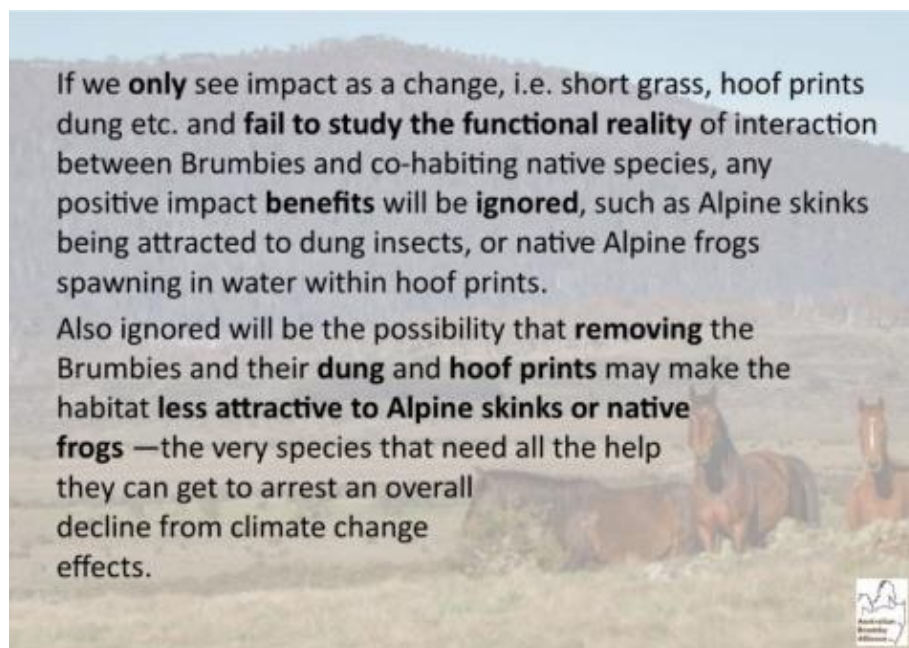
connector to conversation, ideas and possibilities that can unify rather than divide. Which is, within itself, a giant leap toward justice and healing for everyone.

- I'd like to pay tribute to my mother Margaret Rose Dixon for sharing her story with me, and to Paul McIver for permission to share his wonderful brumby pictures.
- 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...the Men from Snowy River.

#### iv. Headwaters of the Murray, Murrumbidgee, Snowy and Cotter Rivers, including their hydrology, water holding capacity, water quality, habitat integrity and species diversity;

The **assumption** that horses cause damage in the absence of on-ground native species data is not best practice. Best practice would use on-ground field observations to see *how* horses help or hinder native species. Until we truly understand why native species are declining, we cannot effectively slow the decline.

ABA despairs that Park management fails to conduct on-ground native counts because our observations show that moderate horse densities do help co-habituating native species.



#### The NSW National Parks & Wildlife Services [NPWS] Scientific Advisory Panel [SAP]

The Scientific Advisory Panel (SAP) was created by NPWS in 2021 to provide scientific guidance to the NSW Heritage Horse Act management plan, recommendations included;

**The SAP state:** “that 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 the SAP include;

- **SAP**; Positive impacts seen with light grazing in drier areas can include recycling nutrients, maintaining patchy habitat and improve floristic diversity (Menard 2002),
- **SAP**: Higher plant species diversity was maintained by wild horse grazing in the Australian Alps (Wild and Poll 2012; Williams et al. 2014), and
- **SAP**: Recommended "rigorous monitoring during horse management to determine the relationship between horse density and negative impacts and be able to identify such environmentally sustainable populations for different regions".

### **Why retaining sustainable horse densities is critical for Australian heritage values**

As this Senate Inquiry will receive a wide range of views and recommendations for horse management in the Australia's Alps, the ABA offers the following 3 examples to show why it is essential to retain correct density-impact, sustainable horse populations for all future generations to see, visit and learn about Australia's iconic living wild horse heritage.

#### **1. Australian early settler social heritage values**

Historic records show how early settlers purposely inter-bred horses brought over to work on farms, cattle musters, communication and carting goods. Purpose built horse power was desperately needed that could thrive on poor quality feed, droughts, high temperatures etc.

Most "farm" animals grazed in unfenced 'common or crown' land, such as the Australian Alps. The horses bred from the founding stock brought over, started to genetically adapt to survive an unforgiving environment. Natural selection soon eliminated less robust mixes.

After the automobile arrived, horses were abandoned in their remote unfenced grazing areas to die or survive. Those who survived living wild in their heritage homelands are called Brumbies, or wild horses.

Other countries abandoned horses that are now referred to as Mustangs in America, Ponies in England include their forest location, such as Dartmoor ponies and New Forest Ponies etc.

Free spirited horses living wild like their ancestors before domestication, are increasingly valued worldwide as replacements for the mass megafauna extinction. See quote from NSW National Parks Association, Rewilding Special edition" Vol-60, No.1,2016 below;

*"Some species escaped domestication, and in their wild form they are bringing back ancestral traits. This is one of the greatest rewilding success stories in the world, but it is not celebrated as such".*

#### **2. Uplifting, aesthetic values**

Many people love seeing, writing about, photographing and painting Brumbies living wild, in moderate numbers, as uplifting, free spirits. While there are others who prefer not to see horses in parkland, that should not mean that their views override others who gain great pleasure from seeing wild horses at safe density-impact levels.

### 3. Defence

Dr. Peter Cabena's Master Thesis<sup>9</sup> records that a total of 486,312 Australian re-mounts, also known as "Walers" were shipped to overseas war zones, see chart extracted below.

Of the total 486,312 horses exported; **193,886** came **from the Victorian Alps** (almost half), followed by 91,210 horses from the NSW Alps – Only one horse, called Sandy, was returned home to Australia, to the desperate sorrow of the Australian diggers the horses had served.

### ABA Court Action only option left

ABA took Parks Victoria to Court to stop entire Brumby populations being eradicated. The case was lost, however, the Judge:

- Accepted the continuing presence of brumbies in the Australian Alps contributes to National Heritage Values relating to high country pioneering history, but that
- Culling ALL Bogong High Plains horses, while 1,200 remain in East VicAlps is not significant enough (under the EPBC Act) to detract from their overall heritage values.



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

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				
Total value	8,171,278 (Pounds)				

### 3. No 'on-ground' proof exists to support the assumption horses are bad for native species

Before these unique horses are culled, robust science requires **'on-ground'** count data, **not assumptions**, to prove/disprove if safe impact-density horse levels can harm native species.

The **ABA** strongly **urges** national **parks** to **partner with us** to conduct combined 'on-ground' studies to understand how different horse densities interact with native species.

It seems inconceivable for a modern nation like Australia to eradicate all of its early settler living wild horse heritage, BEFORE addressing major gaps identified by the Victorian Auditor General (VAG) as **assumptions**, not proof from using 'on-ground' native species data trends.

Especially because we do observe 'on-ground' evidence of Broad Tooth Rats, native frogs and skinks using opportunities provided by Alpine horses they live alongside.

The ABA would welcome the opportunity to expand our recommendations for best practice to manage sustainable Australian Alpine horse populations. The ABA can help resolve this issue; we just need to start the conversation.....

## B. Commonwealth powers and responsibilities, including:

i. 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,

Address major scientific gaps the Victorian Auditor General described as assumptions so that future management is based on real on-ground data trends relating to horse densities and native species population health.

ii. Obligations under **international treaties**, such as the Convention on Biological Diversity;

Address major scientific gaps the Victorian Auditor General described as assumptions so that future management is based on real on-ground data trends relating to horse densities and native species population health.

iii. Commitment to **prevent new extinctions** under the threatened species action plan;

Vic Auditor General report on DELWP on biodiversity protection, which includes threatened species, “lacks accountability and comprehensiveness. It tells Parliament and the public little about the cost, quality or effectiveness” of DELWP’s work “to support its overall objective”.

## C: 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;

The declining Australian Alpine parks ecological health and an inability to arrest their decline was referred to by **Richard Williams**<sup>10</sup> Ch.6 p:167-207 of Biodiversity Environmental Change – Monitoring, Challenges and Direction (**Book**). Richard writes that from the mid-2000s;

- “total governmental expenditure on environmental management, across all government levels, exceeded \$12 billion/year” .... and
- “Despite this considerable investment and effort, Australia failed to reduce the rate and scale of bio-diversity loss” ..... and
- “The reasons why this previous expenditure has not been effective are due, in part, to the *lack of appropriate information and monitoring*”.

## D. Measures required to **repair & 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;

First understand whether the “impact” has increased or decreased native species counts and diversity, by commencing ‘on-ground’ species data and trends monitoring. Learn about native species’ responses and interaction with non-native species by experimenting with various densities. VAG found ‘on-ground’ data is ignored as parks who rely on assumptions.

## Caution

Environmentalists often use the “precautional principle” to press urgent action that cannot wait for native species counts. This tactic has been used and re-used for decades, creating major gaps in our ability to use on-ground data trends to guide robust park management.

It is possible to “Learn while doing”. This is called adaptive management. Management conducted in an experimental way with appropriate controls and treatments carefully monitored is the best way to obtain true progress towards successful management.

## E. Any other related matters.

Alpine environmentalists claim that horses must go to save native species. The alternative hypothesis is that at least some if not many native species may be at risk if horses are all removed. Rigidly following assumptions is dangerous. Confirmation bias is common.

Emotion can make even otherwise excellent scientists blind to evidence contrary to their beliefs, such as occurred in the Tolsma and Shannon 2018 Bogong report below.

- Tolsma & Shannon 2018<sup>11</sup> claimed horse damage was substantial, widespread and expanding ...despite a relatively small number (80) of horses being present on the Bogong High Plains.
- Cross-examination of Tolsma during the ABA-v-PV 2019 court case exposed how field sites labelled ‘**deer** only damage’ ended up as ‘**horse** only damage’, which can occur when a study is influenced by an overriding assumption that horses cause damage.

## Alternative paradigms

For 2 years we've urged Parks Victoria to partner in horse studies to identify if, and what density, small horse populations can continue living wild.....



Kosciuszko environmentalists assume short grass, dung and hoof prints is proof that horses are responsible for **all** impact, but as above, horse signs do not exclude deer being present.



## ABA recommendations to this senate inquiry into horse management

- Incorporate experimental monitoring into horse management to ensure that any unexpected, undesirable consequences of removing horses are detected, and the expected benefits of management can be measured, for example;
  - Ecological benefits may be associated with returning ecosystem structure or function to the period prior to the disappearance of mega-fauna (Freeland 1990).
  - Large grazing animals can maintain a mix of long grass areas and short lawns suitable for graminivorous birds or macropods (Newsome 1975, Fleurance et al. 2012) and
  - Increase insect abundance near (horse) dung provides food for lizards or amphibians (Duncan 1992).
- Ensure that Indigenous cultural values such as retaining “powerful horse spirits” are *respected*: Per(P8) “Our family story about our *interwoven history* with the *brumbies*, as told by our Elders, is one that reminds us that *re-connecting with our past* can be a powerful connector to conversation, ideas and possibilities that can *unify* rather than *divide*. Which is, within itself, *a giant leap toward justice and healing for everyone*”.
- Allocate a proportion of funds to cull horses to begin ‘on-ground’ counts to improve understanding of how horse densities influence ‘on-ground’ native species and to show how horse culls influence native species ‘on-ground’ data counts pre/post cull.
- That this Inquiry recommend that park managers cease to rely on what the VAG call *assumptions* and start to inform future horse management by creating ‘on-ground’ native species data trends in relation to horse densities.



**Rehomers require the following to allow horses to live, without being shot, as above.**

- Significant funding for large Rehoming Sanctuaries to hold horses until gentled,
- 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.



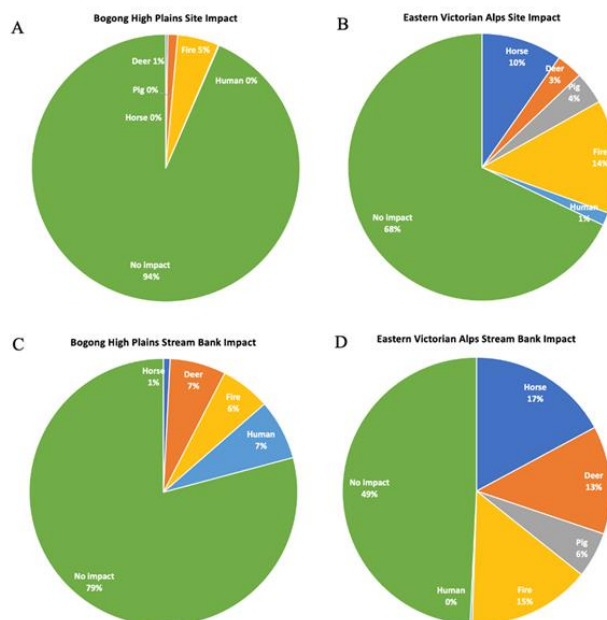
## Discussion

The flaws, lack of 'on-ground' supporting data validation and that Park predictions "can only be viewed as modelled assumptions" (VAG-2021) explains why the ABA seriously questions the accuracy of information that environmentalists rely on to cull all horses.

The ABA and advocates **do see** 'on-ground' observations of i.e. skinks feeding on horse dung and frogs breeding in hoof prints which parks call damage (Fig-1, p-5) accounts for these two conflicting horse management positions; to cull horses vs identify safe horse density levels.

Recent studies clearly show that in spite of deer and feral pig control, fire management and human activity (PV 2016, GSBMPWG 2020, Brown et al. 2021), these combined impacts **far exceed** those impacts associated with the sign of feral horses. The study below also reports;

Chart below shows horse percentage in DARK BLUE



Source: *The Use of density-impact functions to inform and improve the environmental outcomes of feral horse management.* (Berman et. Al. in-prep 2023)

Fig 4. Percentage of impact associated with signs of horses, deer pig, fire and humans of sites visited in the 2021 study to measure the environmental impact associated with feral horses. Impact and sign of potential causes recorded along 500m -transect and a 100m stream bank-transects on Bogong High Plains (BHP) & Eastern Victorian Alps (EVA).

A. Site impacts on BHP  
B. Site impacts on EVA  
C. Streambank impact on BHP, and  
D. Streambank impact on EVA.

## In conclusion

The VAG findings provide a clear process to resolve conflicting horse positions - by using 'on-ground' field observations to learn how horses help or hinder native species. Until we truly understand why native species are declining, we cannot effectively slow the decline.

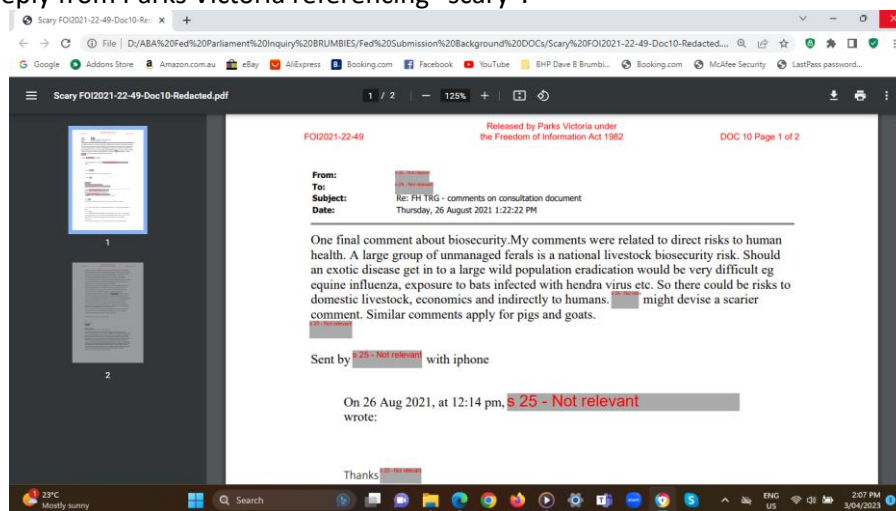
Success comes from respectful dialogue, genuine listening, developing a working strategy, a strong desire to overcome years of emotional conflict and provide suitable habitat for native species and review safe density-impact levels for alpine horses: all *together* we can *succeed*.

Yours sincerely,

President,  
Australian Brumby Alliance Inc.

## References

1. Protecting Victoria's Biodiversity October 2021(full report): <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](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)
2. ABA FOI reply from Parks Victoria referencing "scary".



3. Adda Quinn "Does Horse Manure Pose a Significant Risk to human health?" R.3 October 2001. <file:///D:/ABA%20Fed%20Parliament%20Inquiry%20BRUMBIES/Fed%20Submission%20Background%20DOCs/Adda%20Quinn%20horse%20manure%20not%20toxic.pdf>



4. Rewilding Special edition" Vol-60, No.1, "Bettongs & Bantengs" [https://www.academia.edu/22826243/New\\_South\\_Wales\\_Nature\\_Rewilding\\_Special\\_edition](https://www.academia.edu/22826243/New_South_Wales_Nature_Rewilding_Special_edition)
  5. Researchers monitor 20 kangaroo carcasses in Kosciuszko National Olivana Smith Lathouris 2020 'Ruthless' European wasps behead Aussie blowflies and take on dingos (9news.com.au)
  6. Kosciuszko Wild Horse Heritage Act 2018 <file:///D:/HERITAGE/HERITAGE%20NSW%20Kosci%20BRUMBIES/HERITAGE-NSW%20Brumby-act/Kosciuszko%20Wild%20Horse%20Heritage%20Act%202018.pdf>
  7. Kiamanawa Heritage Horse organisation - <https://kaimanawaheritagehorses.org/>
  8. David Dixon 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...the Men from Snowy River. <https://australianbrumbyalliance.org.au/wp-content/uploads/2020/10/The-Ngarigo-Djiringanj-their-Brumby-relationship.pdf>
  9. University of Melbourne Masters Thesis: Grazing of the High Country Victoria an historical and political geography of High country grazing in Victoria, 1835 TO 1935. Peter Cabena, 1990 submitted for the degree of Master of Arts Department of Geography University of Melbourne, 1980. Considers aspects of historical & political geography of high country grazing in Victoria, including how original settler horse breeding links directly to Bogong High Plains & Eastern Alps Brumby populations today. [https://www.google.com/search?q=peter+cabena%E2%80%99s+master+thesis+submission&rlz=1C1VDKB\\_enAU1026AU1026&og=Peter+Cabena%E2%80%99s+Master+Thesis&aqs=chrome.3.69i57j33i10i160l3.4816j0j15&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=peter+cabena%E2%80%99s+master+thesis+submission&rlz=1C1VDKB_enAU1026AU1026&og=Peter+Cabena%E2%80%99s+Master+Thesis&aqs=chrome.3.69i57j33i10i160l3.4816j0j15&sourceid=chrome&ie=UTF-8)
- 16 ABA Submission to Federal Senate Inquiry into wild horse/Brumby management/cull 11-Apr-23

**10.** Richard Williams Ch.6 p:167-207 of Biodiversity & Environmental Change – Monitoring, Challenges and Direction is a Book, so no reference.

**11.** Assessing the Impacts of Feral Horses on the Bogong High Plains, Victoria Final report Dr Arn Tolsma, Dr James Shannon Jan 2018 [https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.vic-engage.files/3615/1572/4458/Assessing\\_the\\_Impacts\\_of\\_Feral\\_Horses\\_on\\_the\\_Bogong\\_High\\_Plains\\_ATolsma\\_2018.pdf](https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.vic-engage.files/3615/1572/4458/Assessing_the_Impacts_of_Feral_Horses_on_the_Bogong_High_Plains_ATolsma_2018.pdf)

.....