

**Submission
No 149**

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

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Legislative Council
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Inquiry into the proposed aerial shooting of brumbies in Kosciuszko National Park

Thank you for this opportunity to make submission to an issue that is extremely important and profound in our part of the world of Snowy River Country.

As a representative of the local community and with a deep family history rooted in the vicinity of the Kosciuszko National Park since the 1840s, my involvement in brumby management includes knowledge learned from generations of history. I have served as a former member and the Representative of the Local Community on the Kosciuszko National Park Wild Horse Heritage Community Advisory Panel (CAP) from 2018 to 2021. Additionally, I have been an active member of every KNP wild horse committee engaged by NPWS and a liaison since the year 2000. With this background, I would make myself available for inclusion as a witness in the forthcoming inquiry to lend my experience to the proceedings.

I would also like it recorded here that in the recent Federal Enquiry instigated by Senator Pocock that myself and 3 other members advocating for the Kosciusko brumbies gave evidence via phone and zoom on 23 August. Our statements were then completely and disgracefully omitted from Hansard in a glaringly biased fashion.

A brief summary of this substantial submission can be found on the last page.

a) the methodology used to survey and estimate the brumby population in Kosciuszko National Park

I submit the following concerns regarding the methodology employed to survey and estimate the brumby population in Kosciuszko National Park (KNP). It is my contention that the current methodology must be fundamentally flawed. This methodology relies on assumptions manually incorporated by NPWS into the data subsequently received by Dr. Cairns. While St Andrews University developed the Distance Sampling method and, therefore, has peer-reviewed the surveys for KNP since 2009, I believe that there is now a conspicuous absence of their involvement in peer reviewing the last two surveys since they had challenged aspects of the 2019 survey.

Over the past two decades, the survey methods and associated software have undergone constant changes. This lack of consistency does not align with best practices in scientific research. Furthermore, comparisons of surveys from previous years are rendered inaccurate due to substantial differences in surveyed spatial areas. For example, the survey area in 2009 encompassed 1578 square kilometres, while in 2014, it expanded to 3650 square kilometres, encompassing an **additional 2000 square kilometres** of previously well-known and formally recorded brumby habitat

that had never been included before, particularly the Byadbo and lower Snowy corridor plus others. This information is always omitted from any public articles by NPWS which is deceitful.

The extremely inflated population figures claimed by NPWS are, from a biological standpoint, not only implausible but biologically impossible. In the past 20 years, on average only around 3000 horses have ever been physically sighted and counted during formal surveys by NPWS. Still, NPWS maintains that counters must continue to not see up to 85% of the total population. This means that up to 20,000 horses must be continually in hiding?? This assertion is absurd.

Consequently, the official population estimates are based on inaccurate assumptions and NPWS are guilty of a needless and barbaric massacre which is both unnecessary and inhumane.

In 2019, just before the devastating black summer fires, the population estimate stood at a supposed approximation of **20,000** wild horses across KNP, with 15,687 horses confirmed to be in the Northern end of the park. Post-fire assessments, including independent evaluations (see below), suggested that the impact on the horse population was minimal and didn't warrant further survey.

However, despite these assessments, the Minister requested another survey in **October 2020** only 8 months post fire. This new count indicated that only **14,000** horses remained across the entire park. This sudden disappearance of approximately **6000** horses from the 2019 total population raises serious questions. No one has ever found anymore than a few dozen horses that perished in the fires after major searching specifically by both sides.

WHAT HAPPENED TO THE 6000 HORSES?

*There is no evidence that large numbers of horses died in the fires. Witnesses who have frequently flown over the burnt areas of the park have found only individual horse carcasses in a handful of locations... This analysis confirms that the area subject to intense severity fires is relatively small and that the horse population in Kosciuszko National Park is little changed from the 2019 population estimate of the order of 20,000 horses. **BUSHFIRE IMPACTS ON KOSCIUSZKO FERAL HORSE POPULATIONS – Bushfire & horse data analysis 2020 Invasive Species Council ISC Fact Sheet***

*National Parks and Wildlife Service (NPWS) staff euthanised eight horses in the most severely burnt areas due to injuries thought to have been sustained as a result of fire. A small number of other horse deaths were observed in the Kiandra/Selwyn areas by staff on the ground and in the air during the fires. Affected horses were predominantly young. Overall, the number of horses killed or injured during the fires appears to be very low. **Kosciuszko National park Wild Horse Management Stakeholder Update Newsletter May 2020***

*After the 2019 bushfires, members of the SAP have only inspected the area near the Snowy Mts Highway and the link road to Cabramurra, but adequate information has been provided by NPWS and other sources. Our information is that horse mortality associated with the fires has been minor and that horses remain active across the area, with little effect on the total population. **Scientific Advisory Panel (SAP Report)***

We saw no dead horses from the air. Unlike our native wildlife, most appear to have escaped the fires. ANU professor Jamie Pittock in 'The Conversation'

The significant discrepancy between the pre- and post-fire population estimates, particularly the loss of horses exclusively in the northern fire-affected region, challenges the credibility of the survey methodology. If this methodology were accurate, the conspicuous absence of 6000 horses, which supposedly represents more than 30% of the total population or 40% of the northern population, would have been widely noticed. The fact that this discrepancy went UNDISCUSSED by NPWS, Invasive Species Council, the Scientists AND the local brumby advocates, only confirms that these horses never existed in the first place. No one ever found them and it was swept under the NPWS rug.

In the Cairns 2020 post-fire survey, the following estimates were reported: Northern Kosciuszko = 12,511, Snowy Plain = 436, **Southern Kosciuszko = 1,433**, resulting in a total of 14,380 horses from 20k.

However, the next identical survey 2 years later we examine the **2022** estimates, which indicate an astounding increase in the southern end of the park. The population estimate surged from an estimated **1,433 horses in 2020 to a staggering 5,335 in 2022**, marking an increase of **3,902 horses or over 270%** in just two seasons. This sharp and biologically impossible increase is laughable and raises serious questions and demands scrutiny. The local people who live close and bordering this area (for generations) on both sides of the NSW/Victorian border (myself included) feel that this is surely either satire or corruption! A migration was suggested?? Maybe it's the lost 6000??

NPWS contends that 85% of all brumby populations are concentrated in the northern end of KNP. Yet, in the span of merely two seasons, the primary population of horses in the northern region increased by a mere 263 horses (from 12,511), while the southern horse population skyrocketed by 3,902 from a base of only 1,433. These numbers defy logic and demand a comprehensive investigation.

2020 survey

Table 6. The population estimates (N) for each of the survey blocks. Given along with these estimates of abundance along are their 95% bootstrap confidence intervals and coefficients of variation (CV %). Given also are the areas surveyed, including the total

Survey block	Area (km ²)	N	95% confidence interval	CV %
Northern Kosciuszko	1,229	12,511	7,111 – 20,761	27.2
Snowy Plain	161	436	176 – 851	38.4
Cabramurra	–	–	–	–
Southern Kosciuszko	1,146	1,433	949 – 2,028	19.2
Kosciuszko NP	2,673	14,380	8,798 – 22,555	24.1

2022 survey

Table 6. The population estimates (N) for each of the survey blocks. Given along with these estimates of abundance are their 95% bootstrap confidence intervals and coefficients of variation (CV %). Given also are the areas surveyed, including the total area of the four blocks.

Survey block	Area (km ²)	N	95% confidence interval	cv %
Northern Kosciuszko	1,229	12,774	9,379 – 16,862	14.0
Snowy Plain	161	705	343 – 1,222	32.3
Cabramurra	139	–	–	–
Southern Kosciuszko	1,146	5,335	2,979 – 8,384	26.7
Kosciuszko NP	2,675	18,814	14,501 – 23,535	12.4

(b) the justification for proposed aerial shooting, giving consideration to urgency and the accuracy of the estimated brumby population in Kosciuszko National Park

There is absolutely no justification for aerial shooting horses. It is evident that the reported and implausible numbers of wild horses is flawed and are not based on rigorous science but are a deliberate attempt to justify removal or culling rather than relying on accuracy and truth.

Reviews and reports conducted by NPWS and sympathetic anti-horse academics lack comprehensive, independent, and peer-reviewed field studies. These reports often make unsubstantiated claims about the potential adverse effects of horses on ecosystems or endangered species without concrete evidence.

Kosciuszko National Park sought advice from expert ecologists on the Scientific Advisory Panel (SAP) from 2018 to 2021 and the Independent Technical Reference Group (ITRG) from 2014 to 2016 to guide wild horse management. Both panels, comprising specialists in soil ecology, wildlife ecology archeology, invasive species management and wild horse welfare, recommended that horse removal should be based on environmental impacts that warrant their removal rather than population numbers. However, environmental studies assessing the impact of horses have not been conducted, which raises many questions about the inflated population figures used for decision-making.

There is a lack of robust evidence regarding the precise relationship between negative environmental impacts and horse densities, across different habitats.

The SAP emphasises that management decisions **should not be** directly based on the KNP wide population estimates, but rather on environmental impact monitoring...

NPWS should heed its own scientific expert advice and focus on reducing negative impacts rather than arbitrary population targets. **As the SAP and ITRG have consistently recommended, measuring environmental impact over time and managing it should be the primary goal of the management plan.** Other mitigation should also be trialled such as traditional fencing or ‘virtual fencing’ as is used in Europe for highways where deer and elk are prevalent. NPWS were ‘going to’ investigate this.

The ITRG acknowledged significant gaps in knowledge regarding horse impacts on the park, highlighting the importance of measuring environmental impact instead of just counting horse numbers. Despite claims that horse numbers are causing harm, concrete scientific evidence is notably absent. The ITRG & SAP repeated several times in their reports....

The SAP recommends that horse management goals be focused on reducing negative impact rather than a target population size, as was also advised by the ITRG in 2016..

*...The SAP concludes, as did the ITRG, that there is a need to emphasise the importance of measuring environmental impact (instead of just horse numbers) over time, given that reducing negative impact is the ultimate aim of the management plan. . **Final Report of the Kosciuszko Wild Horse Scientific Advisory Panel (SAP 2018-2021)***

*The ITRG could not refer to any established density–damage relationships and lacks evidence on which to deduce the form of this relationship for horses in KNP. The interaction between local density and local impacts is therefore particularly relevant, but we rarely have data to connect the two. While research may be able to fill this gap, it may be more productive to focus primarily on the effect of management interventions on indicators of environmental impact, rather than just horse numbers/densities... the ITRG concludes that there are significant knowledge gaps in our understanding of horses in KNP. **(ITRG Report)***

(c) the status of, and threats to, endangered species in Kosciuszko National Park

Firstly, let's be clear! We have always agreed that there are areas where horses should not inhabit today, such as the true alpine and high sub-alpine elevations or sphagnum bog and fen areas. We have offered to remove any that may roam close to these areas without issue even though they had once been grazed by livestock & wild horses for over 150 years.

The brumbies have not inhabited the unique Alpine elevations of sensitive areas known for endangered species for over 70 years.

The brumby population has coexisted in lower terrain with native flora and fauna, as well as livestock such as (cattle and sheep in their several tens of thousands), for over 150 years without causing any extinctions attributed to them. Areas like Kiandra Plains, once heavily grazed by horses and livestock, demonstrate that these animals are not the main threat to native species. Rather, major threats come from catastrophic firestorms and tourism, not wild horses.

The current horse areas have also been extensively mined for gold, copper and tin. Much of the area is developed for tourism or has been disturbed by the Snowy Scheme with man-made lakes & dams and hundreds of miles of roads, highways & trails.

The lack of independent & peer-reviewed scientific research on horse impacts is alarming. Even NPWS's commissioned scientific committee acknowledges the dearth of research and the speculative nature of the desktop only reports, which often use terms like 'could have,' 'might have,' or 'has potential' without solid evidence. Snapshot views & cherry picked opinion is not science.

As stated above, the scientists and academics on the Kosciuszko National Park Scientific Advisory Panel and the former Independent Technical Reference group recognize these knowledge gaps.

For example, the Broad Toothed Rat population declined long before horses were considered overabundant, and the Northern Corroboree Frog thrived while horses, cattle, and sheep coexisted. Frog populations only began to decline 'after' the grazing era ceased. **The lack of** in-depth, long-term field studies and **independent** actual ground research into horse impacts is evident.

Broadtoothed Rat study:

*Menkhorst et al. (2008) noted a greater than 50 percent decline in the largest subpopulation was in the Mt Kosciuszko area over the period 1999–2008 due to fox and cat predation, fire impacts, and some competition from other rodents. K. Green.(KNP) noted that, in the summer of 1999–2000, the (Broad Toothed Rat) population in the Snowy Mountains fell to about 34 percent of average values over the previous 13 years associated with the earliest snow thaw on record, and has not increased above that point .. part due to subsequent extensive fire, and another early snow thaw in 2006). **THREATENED SPECIES SCIENTIFIC COMMITTEE ADVICE REPORT 2016***

The Mt Kosciuszko area described above has been horse free for well over 60 years but there was still a major decline in rats well before there was a supposed increase in horses in other areas.

'Observations made up until the 1970s indicate that the Northern Corroboree Frog was abundant within its limited geographic range. Large numbers, often many hundreds of individuals, were frequently recorded at suitable breeding sites (Colefax 1956; Jacobson 1963; Pengilley 1966).' (**National Recovery Plan Corroboree Frog OEH NSW**) *'Infection of frogs by amphibian chytrid causing the disease chytridiomycosis' is listed as a Key*

Threatening Process under the Threatened Species Conservation Act 1995 (Kosciuszko National Park Independent Scientific Committee (ISC) 2004)

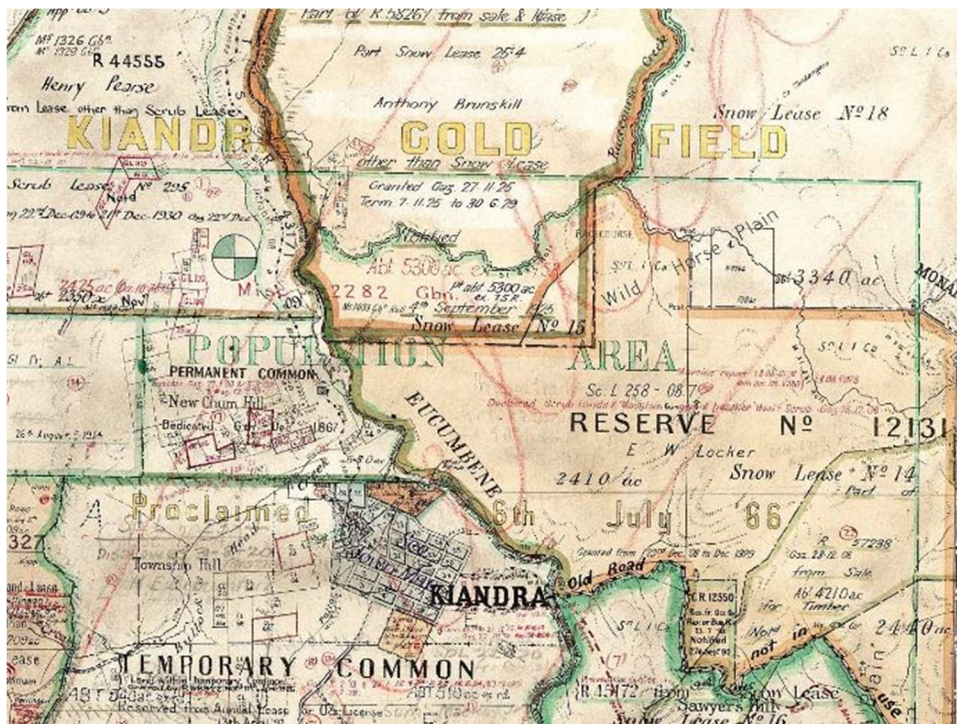
The Northern Corroboree Frog area was once heavily grazed by horses, cattle and sheep where they co-existed for well over 150 years and the frog remained plentiful during the grazing era.. It was only when grazing leases actually ceased that the frog populations started to decline! Horses are now seldom seen in these areas today but it was been agreed in the PoM for removal if needed.

The Southern Corroboree frog & the Mountain Pygmy Possums inhabit Alpine areas between Smiggins Holes and Cabramurra. There have been no horses in these areas for at least 70 years!

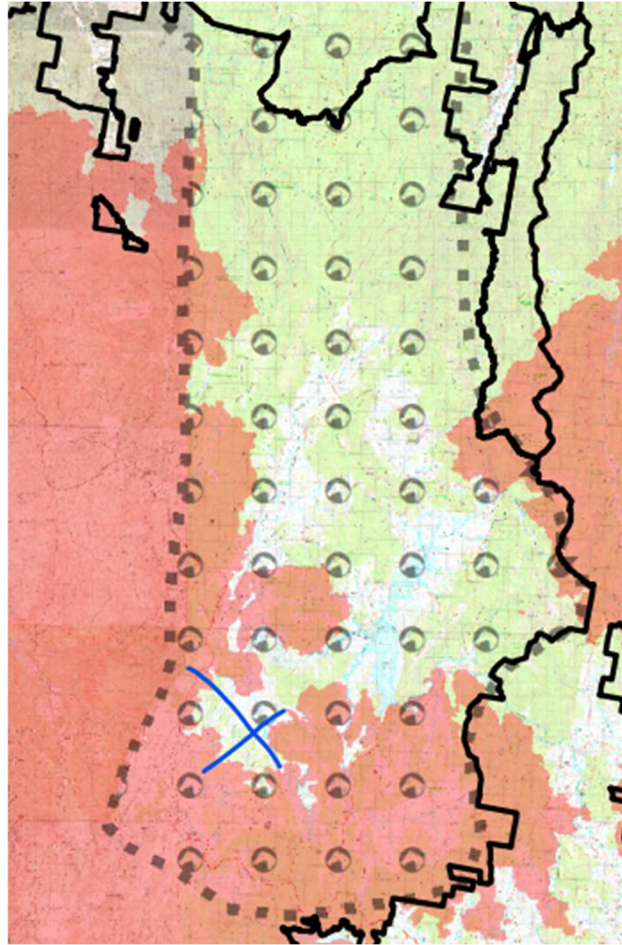
Alpine She-oak skinks also only inhabit 'horse free' areas above 1500m elevation. Brumbies inhabit predominantly elevations below 1500m.

The Alpine She-oak Skink is known from eight broad locations in alpine grasslands, alpine heathland and alpine grassy heathland above 1500 m in the Australian Alps (Swan et al., 2004) (Biodiversity Threatened species & conservation advice www.environment.gov.au)

An area that horses have recently been slaughtered is Kiandra plains where the Parish Map of 1866 demonstrates that the large open plain adjacent to the town is called "Wild Horse Plain" for obvious reasons. The biggest threat to native species in the park is firestorms and tourism. The horse areas like WHPlain in the Black Summer firestorm proved to be the only unburnt refuge for surviving native animals to retreat to. The firestorm finally slowed its pace from the WSW thanks to the grazed areas with less fuel to burn. A lack of grazing by brumbies would have seen these plains overgrown with long dry grasses. The fires would have stormed through the whole of the northern KNP and spread exponentially into Canberra. These grazed areas were the last bastion to stop the fires and then were the only refuge for so many different native species awaiting for the rains and growth to return.



Note: "Wild Horse Plain" north east to Kiandra township and surrounding areas of private leases.



NPWS fire map 2020 with horse distribution overlay of the whole of northern end of KNP. X marks the Wild Horse Plain area where the firestorms finally started to slow coming from the west south west. This was almost identical in 2003 fires also. It may not have been the case if the fuel of dry grasses had not been grazed.

(d) the history and adequacy of New South Wales laws, policies and programs for the control of wild horse populations, including but not limited to the adequacy of the 'Aerial shooting of feral horses (HOR002) Standard Operating Procedure'

The Scientific Advisory Panel recommended the review and development of more stringent Standard Operating Procedures (SOPs), emphasizing the importance of animal welfare outcomes. The panel also recommended the Kiandra horses be retained and recommended pilot studies using the Kiandra horses for various purposes. However, in September 2022, NPWS directed the shooting of Kiandra horses, in spite of their own expert advice.

The Plan of Management's Ground shooting SOPs were not followed during the Kiandra operation, and there has been no transparency regarding newly developed SOPs. This raises serious questions about the ethical treatment of horses during these operations as well as the blatant non-compliance of the Nationally recommended SOP referenced in the Plan of Management.

It is little wonder that the local community has absolutely no faith in not only NPWS but the Government. Sadly we realise that the orders come from the Sydney hierarchy but the local NPWS

staff, many who are our own friends and families will also have to live with the horrendous duties required as well as living in a now fragmented community.

Development and refinement of Standard Operating Procedures (SOPs), and auditing of animal welfare outcomes, should be performed with ongoing involvement from the SAP/newly appointed steering committee and/or additional veterinarians as required, who have specific animal welfare expertise (e.g. MANZCVS in animal welfare and/or animal welfare PhD) in addition to experience in wild horse management. (SAP Report)

The SAP report also stated that:

...Shooting with a firearm without prior capture...

The SAP would only recommend use of any of these methods in very specific circumstances, and only if preliminary trials demonstrated better animal welfare outcomes than achieved with other methods that require prior capture.

Zone 2 has additionally been identified to incorporate an area of potential horse heritage value in the Kiandra region. This population of horses is important to the local communities, and individual horses are well known through the work of local photographers. Anecdotal evidence from the community suggests that this population was reduced during the 2019-2020 fires.

Therefore the SAP recommends that the Kiandra region be utilised as the key region for a pilot community engagement study (detailed in section 2.2.8) prior to further management planning for this region....

In particular, the SAP recommends that the Kiandra population be further assessed as an initial early trial site for reproductive control....

The SAP recommends that data are collected on horses in management zones identified for horse retention (e.g. Kiandra horses in zone 2 – see section 2.2.1) in regard to approachability/flight distance, band sizes, sex ratios, reproductive rates, and identification of individuals....

In particular, the SAP recommends that in the early stages, the Kiandra region within Zone 2 is used as a key area for an initial pilot community engagement program...

The main population in the Kiandra zone is anecdotally less than 300 horses. A rigorous population and environmental impact assessment need to be carried out to empirically inform what an acceptable horse density is for this area.

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

The Kiandra horses were shot Sept 2022 and more recent shootings this year 2023, the current Plan of Management states it will implement the SOP guidelines of 2011: *Sharp, Trudy., 2011 Ground shooting.* <https://pestsmart.org.au/toolkit-resource/ground-shooting-of-feral-horses> (HOR001-SOP)

The DRAFT amendment Plan of Management states it will also implement the SOP guidelines of 2011 *Aerial shooting of feral horses. Standard Operating Procedure* (HOR002-SOP)

But these guidelines continue to be totally disregarded and contravened by NPWS :

1. SOP: The optimal period for ground shooting is during dry seasons or droughts.

1.1. The Snowy Mountains was enduring major widespread rain & flooding at the time of shooting in Sept 2022

2. SOP: Only head (brain) or chest (heart/lung) shots must be used. The horse shot from the side so that the bullet enters the chest at a point behind the foreleg, slightly above and immediately behind the elbow joint. Chest shots do not render the animals instantaneously insensible and are likely to result in a higher incidence of wounding.

2.1. Many fresh bodies have been photographed and confirmed by several witnesses and by the photographs following here in this submission to be through the scapula/shoulder bone not into heart or lung behind foreleg as directed, this is not a kill shot and death would not be instant. Other horses in other areas were found with gut shots 40 cm from heart area.

3. SOP: Culling programs should be timed to minimise the risk of orphaning dependent foals or causing abortion when females are in late pregnancy.

3.1. A large number of mares endured very late-term abortion after being shot this clearly contravenes the Standard Operating Procedures (SOP) for the humane control of shooting horses in Australia. September is obviously spring season. Brumbies usually start foaling from late July all through to March.

NPWS have already demonstrated that they will not comply with any SOPs for shooting. Its very unlikely that NPWS will ever be compliant with helicopter shooting when they can seemingly do whatever they like indiscriminately and get away with it regardless of the government of the day.

How can our community ever trust the National Parks & Wildlife Service to do the honest and ethical thing again?

Some examples - graphic photos follow...

A Kiandra mare with full term foal September 2022 was obviously shot and killed during parturition. This is not a gas produced spontaneous abortion of a foetus when a full-term foal is fully engaged in birth canal with both feet in front of head for birthing. This is an abomination!



Above: This is not expelling a foetus by gas. This is a full term foal's full head and both feet fully engaged in birthing. Now eaten by wild dogs. This mare was likely foaling when shot. This is a total contravention of Standard Operating Procedures. This is an abomination!

Gut shot at Nungar Plain



Furthermore:

Hansard NSW Parliament - May 2018 Labor in opposition
KOSCIUSZKO WILD HORSE HERITAGE BILL 2018
Second Reading Speech

Reverend the Hon. FRED NILE: *I question the sincerity of the Opposition's claim that it cares for the brumbies following what was done when it was in Government. **If Labor were re-elected next March I am pretty sure it would follow the same culling policies.***

The Hon. Penny Sharpe: ***"No, we would not; we ruled out aerial culling."***

LABOR The Hon. Penny Sharpe: *Having spoken to other brumby advocates, **we accept that there remains an ongoing issue about the count of the number of horses in the park. We have committed to a scientific count of those horses with key stakeholders.** We need to put this issue to bed once and for all.*

LABOR The Hon. JOHN GRAHAM (18:06): *...The previous speaker referred to Bob Debus, another Labor figure I recognise. I place on record my thanks to Bob Debus as an outstanding environment Minister not only for the Labor Party but also for New South Wales. The Hon. Robert Brown spoke about the role Bob Debus played in stopping aerial culling. **The shadow Minister has asked me to make it clear that Labor has ruled out aerial culling.***

LABOR The Hon. ADAM SEARLE (20:07): *I make a contribution in this debate and at the outset I reinforce a point that has been made by a number of my Labor colleagues: **the New South Wales Labor Opposition rules out the introduction of aerial culling in the future.** I note that a number of members making a contribution in this debate have used that aspect to attack the Labor Opposition, particularly by reference to the past. The Labor Party acknowledges that, but this is not about the past. This is about the present and the future. **It is wanton misrepresentation of the Labor Party's current position to be suggesting that a future Labor Government might contemplate the reintroduction of aerial culling.***

LABOR The Hon. MICK VEITCH (20:34):... **- about aerial shooting.** *On reading the bill, it is almost as if that has continued to be Labor Party policy and that we will do that. That is just downright offensive. That happened 20 years ago. **We changed our position and it is not going to happen under us.** It is downright offensive for anyone to say that and they should get their facts right. That is the first thing. The Hon. Wes Fang, as a helicopter operator, will understand what I am going to talk about. He may be a better pilot than some of the pilots my brother has had to fly with. **The firefighters who go up in helicopters into Kosciuszko to do their work will tell you that there is serious updraft and they cannot get a stable footing at all. So if aerial shooting from a helicopter was attempted in Kosciuszko National Park the chances are that it would not work. It is just horrendous to even contemplate what would happen. Aerial shooting is not a part of the population management program, and it should not be.***

The abrupt removal of local horsemen from their role in managing brumbies has contributed to the current conflict. Today's brumby issue is a consequence of NPWS ignoring local horsemen, ignoring their own expert scientists, and the lack of independent and comprehensive environmental studies.

In 2000, NSW Attorney General and Minister for the Environment, Bob Debus, permanently banned aerial culling of feral horses in NSW for good reason. However, this ban was only seemingly respected by Labor when this government was in opposition. **Introducing aerial culling contradicts everything the Labor Party has promised in Parliament when they were in opposition.**

(e) the animal welfare concerns associated with aerial shooting

Aerial shooting (and ground shooting) is strongly contested as a humane method with welfare outcomes comparable to or better than other control methods as stated by its proponents. There is a lack of comprehensive evidence supporting this claim as humane.

This is confirmed by both experts in Equine Welfare Science engaged by NPWS:

- i. Emeritus Professor Reuben Rose, specialist Veterinarian in Equine Medicine and Surgery and also Equine physiology & Dean of Sydney University whose family has a long & extensive history of over 100 years with the horses in the mountains was also member of the **Independent Technical Reference Group (ITRG)**.
- ii. Dr Andrea Harvey, veterinarian specialising in Animal Welfare Science and Wild Horse welfare and Ecology and **Deputy Chair of Scientific Advisory Panel (SAP)**.

Firstly, the Standard Operating Procedures of Ground shooting HOR001 as stated above has not been complied with so far, so it is unlikely that SOPs for aerial shooting will be any more compliant. It is also unlikely that specifically developed SOPs by NPWS will be any more stringent or focused on reasonable welfare outcomes when there is a lack of transparency of the SOP for scrutiny.

The definition of a humane death involves instant and painless unconsciousness. Aerial shooting rarely achieves these criteria nor does ground shooting in situ. Moreover, there haven't been sufficient comparative studies assessing the welfare outcomes of aerial shooting against other methods particularly in mountain terrain. There has been no assessments on ground shooting at all!

Some alternative methods such as trapping have demonstrated very good animal welfare outcomes. The local community have also demonstrated very good welfare outcomes with roping for several generations and there is absolutely no evidence to the contrary.

Even under ideal conditions, bad shots can cause severe pain and prolonged suffering. The chase preceding the shooting also inflicts significant stress and harm on the horses. This method stands in stark contrast to humane euthanasia practices.

Given the lack of comparative studies assessing the welfare outcomes of aerial shooting in mountain terrain and the absence of empirical evidence on ground shooting, it is essential to approach wild horse population management with transparency to the community and a thorough understanding of welfare implications.

Introducing aerial culling without any adequate assessment particularly for the mountains, contradicts internationally recognized principles for ethical wildlife control. There has only been one study to assess the welfare outcomes of or aerial shooting.

To our knowledge, this is the first study to quantify animal welfare outcomes and examine explanatory variables for helicopter shooting of feral horses

'Assessment of animal welfare for helicopter shooting of feral horses' 2017

**J Hampton Glenn P. Edwards, Brendan D Cowled, David M. Forsyth, Timothy H. Hyndman
Andrew L. Perry, Corissa J. Miller, Peter J. Adams and Teresa Collins**

All sites were in arid environments, with sparse vegetation characterised by non-vegetated clay pans (Fig. 1a), extensive grassland (Fig. 1b) and occasional stand of woodland.

Even in ideal circumstances of open desert country it was noted from the study that only 63% of shots were reasonably instant deaths. Even some of these horses could have well been unconscious for a extended length of time OR worse paralysed given that the view to determine their death is from a moving helicopter. At best it still means that 37% were not killed humanely in open desert country.

it is improbable that a welfare standard of 100% of animals being killed instantaneously could be achieved by any helicopter shooting operation...

The animal-welfare outcomes observed in the present study may not be observed in other programs of helicopter shooting of feral horses for two main reasons. First, the flat and sparsely vegetated field site permitted unimpeded helicopter manoeuvring and very high visibility for the shooting teams (Fig. 1a). Open terrain is likely to allow more non-fatally wounded animals to be quickly detected and re-shot than do forested or mountainous environments. The presence of tall trees has been shown to reduce animal-welfare outcomes in helicopter shooting (Hampton et al. 2014) and reduces the probability of detecting animals (Bayne et al. 2000)

Alternative methods are commonly used to manage overabundant feral horses (e.g. mustering and translocation, trapping and euthanasia, and ground-based shooting; Nimmo and Miller 2007); however, few studies have quantified animal welfare impacts for these methods. In particular, we are unaware of any empirical evidence that has been published for ground shooting, despite the existence of a national model standard operating procedure in Australia (Sharp 2011b).

If helicopter shooting in open desert/claypan of central Australia cannot attain humane welfare standards, then there is no hope of humane kills in difficult terrain and forests of the Snowy Mountains!

Open claypan with least resistance for shooters (1a) **'Assessment of animal welfare for helicopter shooting of feral horses' 2017**



Example of NON Instantaneous death even in open desert country. ***Assessment of animal welfare for helicopter shooting of feral horses' 2017***



Besides the obvious forested terrain in KNP, even the open plains of the northern Kiandra region has sudden elevation changes several hundred metres plus a major electricity transmission line currently running directly through the middle and possibly even more to be added when the Snowy 2.0 project is completed.

In summary, the one and only assessment for aerial shooting is evidence that it could not be humane particularly in mountain country. Also established is that there has not ever been ANY assessment on ground shooting which has an even worse follow up potential for non-kills.

It's essential to approach wild horse population management with a thorough understanding of the welfare implications of various methods. Ignoring the advice of appointed and acclaimed veterinary and animal welfare experts and introducing aerial shooting is not in line with responsible and humane management practices and is certainly not acceptable to the community.

Additionally, there can be no comparison in this debate of shooting smaller species like pigs or deer with an average body weight up to 60kg to a horse of up to 450kg. For example a '223 or '308 bullet exploding in a large pig involves bodily damage to maybe 20% of its total body mass which may result in a faster death. However the same bullet on a horse could cause less than 5% damage to its total body mass affected. Therefore, a horse could easily survive the injury initially if the shot is not accurate to the brain or heart. Immediate follow-up on an escaping horse is certainly not guaranteed on ground or by air in mountain terrain. This would only ensure that the horse may endure a very slow and cruel death.

I have personally witnessed brumbies being ground shot by a person who was standing less than 6 metres from the horses. Three horses were assumed dead by the shooter who moved on to target others. A minute later I saw one of the three (dead) horses was trying to escape but dragging his hind legs being paralysed in the hindquarters. It took another 10 or more shots for the horse to

finally drop and succumb to the bullets. It was later confirmed by police that these men were so called experienced & qualified shooters!!

Horses have evolved over a million years on earth and for nearly 10 thousand years as beasts of burden for mankind. Their strength and will to live is unequalled in any other modern species. Perhaps this is why the human and horse relationship is so strong as it has endured for thousands of years unlike any other species on the planet.

"some of the horses were riddled with up to 25 bullets" Hon Andrew Fraser MP for Guy Fawkes NP



A brumby shot in the neck continues to try to escape from the bullets. Taken from video footage



NPWS maintains that their survey counters are not able to see up to 85% of the horses during helicopter surveys because of the dense forest canopy, yet they insist that they can see the horses well enough for a clean humane kill!!!? Is this a joke??

(f) the human safety concerns if Kosciuszko National Park is to remain open during operations

The proposal of allowing any kind of shooting in the National Park without closing areas to the public is nothing short of a preposterous and irresponsible duty of care. There is no way that people's safety can be guaranteed.

Kosciuszko National Park is vast and difficult to control, and ensuring public safety would require extensive closures, signage, and notifications. Ignoring these safety concerns could lead to accidents or fatalities, which is unacceptable.

Only recently it was reported that two bushwalkers needed to take shelter under a tree as helicopter shooting was taking place.

Head of National Parks and Wildlife Atticus Fleming said a report on the incident found "a couple of hikers were reported underneath a helicopter" while culling of deer was taking place. "There were things we needed to do a little better around notifications, signage and the closure of these parks to avoid people being in a position where they are interacting with our operations," he said. <https://www.abc.net.au/news/rural/2022-10-28/nsw-rural-shooting-pests/101588312>

KNP is an area equal in size to 3 x Australian Capital Territory. There is no way of controlling visitors to the area from all surrounding borders without major closures, signage and notifications. Adjoining Neighbours have every right to be informed of any shootings taking place as do visitors. It will only be a matter of time before someone is injured or killed and this should never even be considered.

Moreover, adjoining neighbours also face disturbances from the noise of the helicopters and shooting close to boundaries. In one incident already my friend adjoining the park had a prized racehorse injured from galloping around traumatised by the sounds of shooting close by. If the horse had broken through the fence it would likely have been shot!!

My own horses AND dogs were also terrified but I was gratefully at home at the time and was able to keep them calm. I cannot imagine the trauma felt by the brumbies before they are gunned down. The shooting sounds can be heard from several kilometres away depending on the wind. At my own home about 3km away from the boundary it still sounded like WW3!!



NPWS Helicopter shooting feral animals. The bush/hill is Kosciusko National Park. The cleared open land is private property. This photo is taken from a video.

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

The following transcripts tell the story of Guy Fawkes massacre:

NSW Legislative Assembly Hansard – 26 June 2002 - NATIONAL PARKS WILD HORSE CONTROL Honourable Member for Coffs Harbour Mr Andrew Fraser says it all:

I would like to quote to the House from a report issued on 15 November entitled "Report on the Cull of Feral Horses in Guy Fawkes River National Park in October 2000", submitted to the Parliament by Dr English. Dr English is a man of some renown. He is head of the Department of Veterinary Clinical Sciences, Faculty of Veterinary Science, University of Sydney. The report comprises 26 pages but it is interesting to note that the first 20 pages of the report deals with the history of Guy Fawkes River National Park and the brumbies within the national park. The report does not address the slaughter of the brumbies until page 20. Section 75 of the report states:

The intention was to shoot no horses closer than 300 metres from the river ... but when this was not possible the carcasses were later moved away by slinging under the helicopter. Some 40 were moved in this way, these generally being animals that were so poor and weak that they did not move away when the helicopter approached.

A further report on brumby management by Dr English was requested by the government in 2006. (See next section)

I do not believe that. In fact, the evidence is contrary to what is stated in report. The report continues:

Four wounded horses were located and shot from the helicopter on the third morning. The fact that one horse was shot twice but not killed, and not located by this process, was obviously at odds with this protocol.

The protocol was that they were looking at the horses, making sure they were shot more than once—indeed, some of the horses were riddled with up to 25 bullets. The cull numbers ranged from 227 to 616 yet we are still not sure how many were shot. Dr English only looked at 39 carcasses but in his report and in discussions with me he stated that the location of each horse that was shot was global positioning system noted. If that were the case, I believe Dr English and the Government had an obligation to inspect more than 5 per cent. The report basically concludes that the aerial shooting in Guy Fawkes River National Park involved the appropriate technique under the circumstances and that the shooting was carried out in a humane way under approved protocols designed to kill all horses as quickly as possible. I do not accept that these horses were killed humanely.

As a result of that fiasco, 12 charges were brought by the RSPCA against the National Parks and Wildlife Service. On numerous occasions the National Parks and Wildlife Service had the matter adjourned. It is set down for hearing on 3 July, with witnesses to be called to give evidence to support the RSPCA claim that the horses were killed in an inhumane way. Annexure D refers to the horse that was found three days after the shooting and states:

Whilst it was assumed that the 2 shots had been fired from a helicopter due to their position on the top of the body, in the absence of bullet fragments it was not possible to prove beyond doubt that this was so. The possibility of the shots being fired from high ground is discussed, but no firm conclusions were drawn.

Honourable members would be surprised at the anger that wells up in me when I read that statement. Dr English was employed to give an independent report, yet for him to infer, after the National Parks and Wildlife Service admitted that it had shot somewhere between 227 and 616 horses in three days, that someone else had entered the park at that time and shot the horse from high ground, is nothing short of a disgrace. It is hiding the real facts. The report further states:

The fact that this horse was not killed and then not detected alive in subsequent fly overs could have been due to its colour, which would have made it very difficult to see against the brown landscape. It can also be assumed that the horse was lying down or did not move much due to its wounds, and a stationary animal is always much more difficult to detect from the air than a moving one.

This is subterfuge of the worst kind, as is what will happen on 3 July. The RSPCA has contacted its witnesses and told them that under section 5 (1) of the Prevention of Cruelty to Animals Act they will not be needed at court because a plea has been entered into. The National Parks and Wildlife Service will plead guilty to one count of cruelty to horses. This is astounding. I ask the Minister to give a truthful explanation about this matter. I believe that almost two years later the National Parks and Wildlife Service has decided that it can plead guilty to a minor offence, and plea bargain with the RSPCA. I know that the RSPCA is happy with the plea, but I am not. There were 12 charges yet the National Parks and Wildlife Service will plead to only one charge.

The fact remains that this was a barbaric slaughter. Photographic evidence to be produced during the three-week court case would have proved each of the 12 charges and embarrassed the National Parks and Wildlife Service to such an extent that its credibility, which is not very good anyway, would have been shot—to coin a phrase. The National Parks and Wildlife Service inhumanely slaughtered these animals but tried to suggest otherwise, also stating that there was no feed in the park. I challenge the Minister for the Environment and Minister responsible for the Protection of the

Environment Administrations Act to prosecute the service for fouling waterways, something that was not done. At the time I wrote to the Commissioner of Police and asked him to lay criminal charges but I did not even receive a response.

This is a cover-up by the National Parks and Wildlife Service. I commend the actions of the RSPCA. However, it has accepted the plea because it has already spent thousands of dollars bringing the prosecution and having the matter adjourned. The RSPCA is scared that if the matter goes to court the service will weasel its way out by claiming it is an entity, or by some other process, and the RSPCA will lose and have to pay costs. I call on the Minister to direct the National Parks and Wildlife Service to plead to all 12 charges. It should admit its liability and the fact that it botched its attempt to slaughter these horses in October 2000. The truth should be told and the matter should be referred to the ICAC. If the Minister is not prepared to do that, then I will. The subterfuge of this slaughter has been a disgrace. It is a taint on the Minister, the National Parks and Wildlife Service and on Dr Tony English, a man who had great respect in the community. Only by putting all the evidence on the table will the matter be cleared up.

Australian Veterinary Association Media Release 2000

AVA appalled by brutal slaughter of 600 horses and NPWS misrepresentations 2000

The Australian Veterinary Association today accused the NSW Government of twice publicly misrepresenting AVA policies in an effort to moderate public reaction to the shooting slaughter of more than 600 horses in a national park near Dorrigo.

The helicopter cull, supposedly using expert marksmen, was approved by the National Parks and Wildlife Service and occurred about two weeks ago.

The AVA Vice-President, Dr Garth McGilvray, said the organisation had a very detailed written policy outlining the specific circumstances – and types of terrain – where it accepts that properly controlled helicopter culling of wild horses may be necessary.

He said: “Firstly, we would like to express our outrage at the apparent lack of concern by NPWS for the welfare of the many horses which suffered terribly in this incident.

“Our policy expresses the view that helicopter culling may be the most humane method of reducing populations – but it emphasises that the AVA requires that it be done as a last resort by expert marksmen, who are regularly retrained and tested “

“The Minister for Environment, Mr Bob Debus, and later, his departmental head, Mr Brian Gilligan, used careful phraseology in media interviews to imply that the operation had the endorsement of the AVA. Any such suggestion is absolutely untrue.

“The NPWS did not even approach anybody in an official capacity at the AVA until the evening of October 30 – about two weeks after the culling took place – and that belated effort was clearly designed only as an attempt to moderate criticism of what they did.

“Our policy on helicopter culling of horses applies specifically to open arid and semi-arid country, where helicopters can easily pursue any injured animals to ensure they can be put down without undue suffering.

“The very rugged forest terrain in the Guy Fawkes National Park is not suitable for this because of the obvious difficulty in conducting the operation in the most humane manner possible.

“Had they consulted the AVA before the cull we would have advised them of our position. “The AVA, which represents the majority of veterinarians in Australia, is incensed that the NPWS and its Minister have sought – retrospectively – to infer we were directly involved in this cull or that we had somehow approved it. We did neither”, Dr McGilvray said.

(h) the availability of alternatives to aerial shooting

First of all any removal needs to be justified! Flawed population estimates are not justification.

It's essential to remember that for well over a century, the local communities demonstrated their adeptness in managing the brumbies, a task they handled skillfully since the early 1800s. However, this equilibrium was disrupted by the recent intervention of NPWS, barring the locals from their traditional roles. This resulting conundrum places the blame squarely on NPWS and their cohort.

These dedicated horse people, deeply rooted in the local community, have tirelessly advocated for the reintegration of local horsemen into the management process, working hand in hand with park staff. Such a cooperative approach could exemplify a true "win-win" scenario, harking back to a time-proven success story. Moreover, it would go a long way in securing the elusive "social license" that has eluded these conservation efforts, fostering a sense of harmony and shared responsibility.

Minister for environment Bob Debus - Legislative Assembly Hansard – 26 June 2002

...the National Parks and Wildlife Service has been working with a community-based steering committee that comprises scientists, a veterinarian and representatives from conservation, tourist and industry groups, to name just a few, since November 2000 to find solutions to the problem. ...It proposes that capture and removal techniques using horse riders under contract arrangements be trialled over a period of two years. The National Parks and Wildlife Service has worked closely with the steering committee, and particularly with local horse riders, to begin the process of removing horses. The project is seen to have many positive benefits both locally in establishing a partnership of local horse riders, and more widely in promoting methods of managing wild horses that have the support of the wider community. At this stage I can report that the trial was successful in the recent humane removal of 13 horses.

A REPORT ON THE MANAGEMENT OF FERAL HORSES IN NATIONAL PARKS IN NEW SOUTH WALES Associate Professor A. W. English, Faculty of Veterinary Science, The University of Sydney NSW 2006

1 Trapping

For a trapping operation to have any chance of success, there must be good local knowledge of horse behaviour and movement patterns. The siting, design and construction of the enclosure are critical elements in achieving success, in so far as any number of horses are actually caught at all, and certainly in terms of achieving an adequate reduction in horse impacts for the time and expenditure invested in the operation. Trapping may not be as stressful and potentially dangerous as mustering might be, given that the horses are not chased into the trap but go in quietly of their own accord.

2 Mustering

This is likely to be the most commonly utilised method of removing horses from national parks, as long as aerial culling is banned. There are a number of prerequisites for success:

- *Appropriate terrain*
- *A good knowledge of horse behaviour and movement patterns*
- *Suitably experienced local horse riders who are capable of finding and bringing feral horses into an enclosure,*
- *Well sited yards and wing fences designed to expedite the movement of horses into the yards,*
- *Possible use of helicopters and/or motorcycles for part of the mustering process, depending on terrain and vegetation,*
- *Possible use of "coacher" horses to assist in running mobs into the yards.*

When well planned, suitably resourced and properly conducted this method has the potential to capture significant numbers of feral horses. Once the horses are captured there is still the issue of handling them, and of their transfer to a vehicle for transport away from the site — whatever their destination. Strict application of the Code of Practice should minimise the potential for animal welfare concerns during all stages of this process.

3 Roping

The use of horse riders to pursue and rope individual feral horses is likely to be the least effective of the three methods of physical capture, in terms of numbers caught. It is certainly stressful for the horses, and dangerous for the riders. Given that foals are mostly targeted, there may well be a good outcome in that the foal will probably be tamed and used rather than being killed for meat. Whether this form of "brumby running" can be used effectively to reduce populations of feral horses is problematical, but it might be worth considering in specific locations. There is some evidence from Victoria that brumby running may be achieving worthwhile reductions in horse numbers in the Alpine NP in that State. These activities are controlled in Victoria using a permit system, and there may be a basis for considering a similar approach in national parks in NSW, where brumby running is currently illegal.

It's worth emphasizing here that roping as a method of brumby management has never undergone any comprehensive assessment of its welfare outcomes. Critiques of this approach have primarily relied on assumptions and conjecture, lacking substantial empirical evidence. Notably, the 2003 Alpine Horse Management Draft plan had initially proposed a trial involving roping, but this endeavour was halted due to the extensive bushfires that plagued the region at the time.

4 Chemical immobilisation

In addition to the use of the three methods of physical capture discussed above, there is the possible use of projectile syringes to deliver chemical immobilisation agents. While it may be attractive superficially as a non-lethal option there are very significant technical limitations, in addition to concerns about costeffectiveness, human safety and animal welfare.

The major limitation is the restricted range of these rifles (40-60 metres) and the difficulties involved in regularly approaching feral horses to that short a distance — especially in much of the terrain where they are often found. Even from helicopters it would be difficult and very expensive to immobilise significant numbers of horses.

This method of capture would therefore never be used as a primary means of removing large numbers of feral horses from a national park. It may be selected when there is a need to capture an individual horse (eg. a stallion), especially if cost was not a major concern.

- The first 3 methods above of horse removal have been used for generations and have proven to keep populations stable when and where needed.
- It was our group that showed NPWS “how to” implement trapping in 2002.
- Transporting horses long distances over several hours after capture has been a noted welfare issue however most local horsemen that could be involved in any removal event mostly live less than two hours at most from the site.
- All 4 of these approaches was also recommended by the Community Advisory Panel report.
- Both the SAP & CAP stated that involvement by the local community is absolutely vital for any management program to work. Adding local knowledge & experience can only enhance social and local acceptance and better outcomes for all.
- The Plan of Management has not been given adequate time to trial new methods.
- Using local horsemen as volunteers is more cost effective than contractors.





Expert local horsemen remove horses from specific areas by trapping and leading them out of the park by horseback under the supervision of NPWS staff and Veterinarian. This can be done in isolated areas where vehicles cannot access.

(i) any other related matters.

The recent shooting and trapping of over 1300 brumbies in the past several months has inflicted profound suffering and torment upon our community, especially the long-term mountain communities. It's a tragedy that goes beyond the statistics. It's a tragedy that has made some of the most dedicated brumby photographers physically ill, forcing them to retreat.

I can personally attest to the pain inflicted on those who have deep ties to these horses, individuals whose history and families are intricately woven into these mountain landscapes. They find themselves unable to cope with the recent events, leaving a void in their hearts.

Throughout history, horses have held a unique and mystical allure for humans. They symbolize untamed instincts, embodying the unconscious desires within us. Horses also represent the magical, intuitive facets of our beings. In the Bible, horses often symbolize strength, endurance, beauty, and loyalty. The shooting and trapping of these brumbies threaten to snuff out this enduring connection to the mystical, the powerful, and the loyal in our lives.

The Kosciuszko Wild Horses hold undeniable social significance for both local and national communities. They are not just wild animals; they are living, breathing chapters of our shared history and culture. Brumbies have earned their place in the hearts of those who visit the mountain ranges to horse ride, hike, and capture their beauty in photographs.

The brumbies evoke a profound sense of freedom and reverence in the landscape. Their visual appeal touches the soul of many, becoming an integral part of our collective well-being. The prospect of losing them feels like a piece of our identity slipping away.

And the current drama surrounding the brumbies, playing out in social media, serves as a testament to the profound connections we have with them. These aren't just animals; they're symbols of

resilience and freedom. Visiting these areas and viewing the horses has been therapeutic for many, a soothing balm for their mental health.

The aspect I'm trying to emphasize here is that the brumby issue has transcended the realm of environmental debate; it's become a matter of profound mental health for many. This needs to be acknowledged within the broader discussion. While it's possible that this issue stirs emotions on both sides, those in favour of preserving the brumbies' heritage have a unique depth of feeling.

Firstly, we must acknowledge that many brumby supporters come from rural communities that have endured significant hardships, from devastating droughts to relentless fires and the chaos wrought by the pandemic.

For many, their connection with brumbies is not merely recreational but deeply therapeutic. Whether from near or far, these horses provide a sense of solace and therapy, helping people forge connections with their inner selves as they watch these magnificent creatures roam free in rugged terrains.

Yet, for some, the toll has been devastating.

A local indigenous man in his 50s, a descendant of the Ngarigo people, is openly struggling with depression. He embarks on a weekly quest to locate the remaining brumbies within his ancestral lands. This ritual offers him a sense of guardianship over these horses, which hold cultural significance on his heritage-rich terrain.

Another case is that of an elderly lady in her 70s, a solitary farmer and grazier, who possesses a profound connection to the northern KNP brumbies. These horses have been part of her family's legacy for over 160 years. The loss of these horses and their unique heritage has deeply distressed her. This resilient woman, although stoic on the surface, grapples with frustration and helplessness because she believes her wealth of knowledge about these regions isn't being given due credence.

These stories echo the emotional distress that this situation has caused. For those who have known these horses intimately for years, observing entire herds only as carcasses now is gut-wrenching. The recent shooting may be the final blow for some, pushing them over the edge of despair.

The fact that sprawling tourist resorts and man-made developments in the most sensitive Alpine areas that hypocritically replaced our despised grazing leases is deemed acceptable is bewildering. What's also disheartening is how the impact of these developments remains conspicuously unexamined compared to the focus on our heritage horses that only exist in much harder areas. The burden on the environment from these developments far outweighs that of the horses, raising significant questions about our government's priorities and integrity.

To make matters worse are the other introduced species, including noxious weeds, proliferate unchecked, affecting local residents and neighbours including council assets that ratepayers have to pay for on top of their own land managing.

The lack of financial support for the local councils and therefore community from KNP gate takings despite the vast number of visitors to KNP only deepens the frustration, leaving a community simmering with feelings of disdain. The KNP destination for over a million visitors annually causes many detrimental impacts that local ratepayers need to pay for. A small percentage of this income to the local region could go a long way to addressing some of the issues with their neighbours.

Further;

In 2001 the Snowy River Shire Council made a submission to the Vertebrate Pest management in National Parks Inquiry. Their Proposal was called the STOCKWHIP program which was to establish an operational facility to train brumbies obtained from National Parks to assist people at risk and low security prisoner rehabilitation as is done in USA. The General Manager of the Shire at the time was Ross McKinney who was previously also the CEO of Kosciusko National Park. He went to the USA to study this project as he felt it could be a solution for the brumbies.

Another additional and probably ever more worthwhile use of the horses in this capacity when rehoming is overburdened is establishing this facility for returned servicemen and others with PTSD or other mental health conflicts. Beyond Blue & Black Dog Institute for example.

Equine (Horses) Assisted Therapy have proven to be exceptional therapy with mental health issues as already indicated. This is an ideal and very innovative concept and should be investigated further. Infrastructure for a project such as this has already been developed in the local area and is available as are qualified people to assist.

This institution could be self-supporting & cost-efficient using volunteers to assist in the removal and later care of the brumbies. Once the brumbies are trained by the participants they can be sold off or used for riding for disabled as an example. Horses are in demand for this purpose.

Indeed, we cannot deny that horses are introduced animals to Australia, but they have co-existed with native wildlife for now nearly 200 years here. Locals have even noted that wallabies will often flank brumbies for protection against wild dogs. With research there is no doubt that further symbiotic relations will be proven.

The horses hold a unique place in the hearts of many. They are not mere intruders; they are a keystone species on earth and an inseparable & integral part of our heritage and the broader Australian heritage. Therefore, they rightfully deserve distinct and more compassionate treatment.



Horses can have a mutual benefit relationship with native wildlife species.

Summary over page.

SUMMARY of points

1. The methodology of Distance Sampling used in the formal surveys is flawed because much of its data is based on uninformed assumption. It is essential to use parallel surveys by different methods (drones with thermal imaging & dung counts for example) without Distance Sampling to substantiate accuracy as recommended by the scientific teams.
2. The numbers are erroneous and possibly engineered for the purpose of justifying killing horses when the scientists recommend that horse management should be based on impacts not numbers.
3. The impact of horses on ecosystems or endangered species has not been independently studied. There is no empirical evidence to state long term adverse impacts. We believe there may be many benefits to the environment by keeping horses in some areas.
4. History tells us that the local horsemen controlled the brumbies for over a century before they were kicked out by NPWS.
5. NPWS have not complied with the Australian Standard SOPs and they ignore their own scientific advice on welfare issues.
6. There is evidence that all shooting but particularly aerial shooting has doubtless unacceptable welfare outcomes.
7. The Honourable Penny Sharpe and the Labor cohort were explicit in ruling out aerial culling ever under their watch. This was stated in Parliament and are now seemingly renege on this promise.
8. The unrelenting brumby slaughter is causing devastating mental health affects on many people.
9. Once the truth is revealed regarding numbers and impacts a more acceptable method of management can once again be realised but the inclusion of the local experienced community is vital.
10. When the truth is realised that fewer numbers of horses need to be removed on going there is purpose for the horses if rehoming is saturated with benefits to the community at large.

