



The Australian Brumby Alliance

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Submission To The Kosciuszko National Park [KNP] Wild Horse Management Review **Independent technical reference Group [ITRG]** Queanbeyan 26-March-2015

Introduction: The Independent Technical Reference Group (ITRG) was established to review KNP wild horse numbers, distribution and their impact on Park values; advice on population controls, and horse management objectives, including horse population targets to protect the natural and cultural park values. Thank you for the opportunity to present this Australian Brumby Alliance submission.

A. Number/Distribution Kosciuszko National Park - ABA response

The ABA understands wild horse populations need to be managed in a way that maintains both their landscape's robustness *and* preserves their sustainable, long term genetic viability *and* provided that all source impacts are quantified before lowering horse numbers. Landscape recovery can only be achieved when all source impacts, such as; goats, rabbits, pigs and humans are lowered together.

Many areas in KNP show only nil, low or moderate impacts where horses live, however these are 'absorbed' seasonally, so not a long term threat to manage. Localised damage occurs near areas where horses and other species frequent, such as; exclusion fences, trap sites and river crossings.

The ABA recommends lowering horse numbers where impacts do not recover seasonally and provided *all* negative impacts are scientifically assessed to identify contributing impacts, such as; those from rabbits, pigs, goats and humans. Without rigorous assessment, money is wasted by lowering one species and leaving other contributing factors to continue their impacts.

In 2014:

- Wild horses occupied 300,000 ha of 690,000 ha of KNP (43 % of total KNP). (*NPWS website*)
- 57% of KNP is without horses. Of the remaining 43%, 6,000 horses live in 300,000ha (*NPWS website*) giving an average of 50ha/horse.

KNP 2001-2020 horse populations/removals:

- 2001: ACT/NSW/Vic (total ALPs) count estimated **5,200** horses [*Dawson 2009*]
- 2003: ACT/NSW/Vic count estimated **2,369** horses [*Walter 2003*]
- 2003 Total ALPs – 2500 KNP – **1500** Removed **49** (*NPWS website*)
- 2003 - 2006 Total ALPs – 5000 KNP – **2500** Removed **133** (*NPWS website*)
- 2006 – 2009 Total ALPs - 7679 KNP - **4237** Removed **362** (*NPWS website*)
- 2009 – 2012 Total ALPs - 9672 KNP - **4836** Removed **588** (*NPWS website*)
- 2012 – 2014 Total ALPs - tba KNP - **6000** Removed **1558** (*NPWS website*)
- 2020 - KNP population is projected to be **10,000** (*Ref:NPWS website*)

Note: Highest trapping rate NPWS have achieved to date is **670** in one year & with trap costs of \$1.074/ horse

ABA Observations on number/distribution in KNP

- Horse numbers in KNP are impacted by predators such as; dogs, snakes, severe snow dumps, catastrophic fires and removal under NPWS passive trap programs,
- The 64% population drop (2003) shows fire is a major predator of Brumbies,
- NPWS trapped a significant total of 670 Brumbies in one year, and
- Passive trapping has the capability to manage a population of 6,000 Brumbies.

B. Impacts on Park Values - ABA response

Two quotes from Lorraine Cairne's 'Summary of Significance' p239;

- "Values of Kosciuszko National Park are of two types: the core values of natural and cultural heritage, and the derived values (e.g. social, recreational, tourism and economic) that depend on these core values." and
- "The park's importance is the sum of all the values of the park. All of these values are worthy of being conserved."

Brumbies enhance KNP park values, for example horses; increase soil water retention, nutrient levels and stimulate new growth by grazing rotation areas [Craig Downer June 2010]. People visit KNP to see horses living wild, either as individuals or as paying guests on tours, stimulating local business. Others visit to reflect on early European settlement history with horses in the land now called KNP.

Horses are accused of cutting into the land; others report their impacts are needed to *increase* bio-diversity. Inside Alpine exclusion plots, dense bio-mass is used to evidence the results of excluding grazers, other experts refer to the increased bio-diversity outside plots where grazing does occur. My observations do not suggest damage never occurs, but that emotion can influence both sides of this argument. The truth lies in-between and can be found using objective, scientific and comprehensive research upon which to create an effective plan that can respect all values found in the park.

Everyone has a personal view on the values to conserve in KNP. Below is a snapshot of how large herbivores, grazing across Australia, increased bio-diversity in pre-historic times and that being present once again in Australian parks can again increase bio-diversity.

- *Rambo and Faeth* found that the use of vertebrates for grazing an area would increase the species richness of plants by decreasing the abundance of dominant species and increasing the richness of rarer species. Species diversity of native plants was able to respond to grazing and increase diversity. The results of the short study showed that areas where grazers were removed had a lower diversity of native grasses, invertebrates and vertebrates in the pools, with an increase in non-native grass abundance and distribution in the area.
- Livestock affect vegetation communities through removal of biomass. This allows less competitive species to become established as dominant plant species are reduced. Trampling also creates areas of bare ground, which may be suitable for plant regeneration from seed or seedbanks and are beneficial for invertebrates and herptiles. Grazing and browsing physical impacts to vegetation from lying, rolling and pushing can also increase structural diversity. [http://www.grazinganimalsproject.org.uk/what_is_conservation_grazing.html]
- For historic grasslands, grazing animals and herbivores were a crucial part of the ecosystem. When grazers are removed, historically grazed lands may show a decline in both the density and the diversity of the vegetation. http://en.wikipedia.org/wiki/Conservation_grazing

- Australian Mega-Fauna, including the giant short-faced kangaroo with a hoof-like toe that cut into soil and gave protection to growing native seedlings (see below). Also note; [Diprotodon optatum](#), [Zygomaturus trilobus](#) and [Palorchestes azael](#) weighing b/w 1,000-2,000 kgs and 9 species weighing 100-1,000 kgs. [http://en.wikipedia.org/wiki/Australian_megafauna].
- [Procoptodon goliath](#) weighed up to 230 kilograms. It had a flat shortened face with jaw and teeth adapted for chewing tough semi-arid vegetation, forward-looking eyes, stereoscopic vision and a hoof-like, fourth toe. http://en.wikipedia.org/wiki/Australian_megafauna

Greenwell's veterinary report to the 2014 Alps National Park review advises;

- Herbivores have been present on all lands during the evolution of species. When herbivores are removed then plant species proliferate, for some this is advantageous but for others they cannot compete and are lost.
- Identify the population density level that serious damage occurs from.
- If trapping is operated in areas of higher population density then the resultant vacuum will attract other groups out of more remote areas.
- Final solution must take animal welfare to be the primary consideration.

C. Population Control methods - ABA response

After quantifying sustainable horse numbers, manage the population to that goal, using the most humane method to remove an agreed number of horses. Passive trapping is the most humane way to capture a Brumby since the horse is lured into the trap, with minimal handling, by skilled, calm, operators and minimal trap program injuries. Brumbies rehomed after passive trapping have the smoothest transition to domestic life and bond well to their new handlers.

Critical requirements the ABA expects of any control method are;

- The primary concern must be to ensure that, if management of wild horses is justified, any stress or injury risk is avoided and only the most humane option is selected.
- Measures to manage wild horse populations must work to an *agreed* target population of sustainable, genetically viable, numbers.
- RSPCA Australia defines humane killing as *when an animal is either killed instantly or instantaneously rendered insensible to pain until death supervenes.*(RSPCA website)
- Lethal methods must only be used when all alternative, non-lethal, humane and effective alternatives that achieve management plan goals have been reviewed.

Methods to control wild horse population *acceptable* to the ABA are;

1. Exclusion Fencing (Appropriate)

Provided fence is constructed to minimise injury or entrapment to KNP local fauna.

2. Fertility Control (Appropriate-needs to be trialled in KNP)

Fertility control is a non-lethal method applied to horses in America for several decades, and used in Australia on other species. Vaccines can now be imported and administered by dart gun without the need to trap first. The cost to use fertility control is low vs trapping.

Caution - Strict procedures must be established to ensure Brumby population fertility controls are humane, well-regulated and ensure Brumby populations are kept genetically viable.

3. Passive Trapping (Appropriate & preferred)

Passive trapping is the most humane capture method. NPWS KNP staff have developed an effective, humane trap process and recently trapped 670 horses in one year.

4. Low Stress ground/aerial mustering (Depending on trial may be appropriate) [Appendix-1]

This involves using horse riders or agile helicopters to manoeuvre the horses, no faster than the pace of the slowest horse in the group, into trap paddocks. Trials are needed to see if this can become a humane alternative to passive trapping for example in remote KNP areas.

5. Post capture outcomes (Appropriate & preferred)

Rehoming with skilled people is the *only* non-lethal outcome. These groups have experience in how to gentle wild horses with the least stress during the transition from wild to domestic. Horses learn to accept a human's touch and ground handling to a level that it can be caught in an open paddock, led by the halter, have its feet picked up and float loaded to its new home.

NOTE: Brumby roping/running (humaneness is highly dependent on ropers skills & intent)

Victorian Alps 'Bulk or Contract' roping is neither humane nor effective. Roped horse stress levels are significantly higher than those passively trapped. One-off roping may assist small horse numbers in exceptional situations, when conducted by a rider that can humanely apply in this method.

Methods to control wild horse population *rejected* by the ABA are:

1. Transport to abattoirs (opposed)

Is *not* considered humane because;

- Time, stress and injury during travel and holding pens to death is unacceptable long. Wild horses should be only be transported in small/family groups by skilled rehomers.
- Trapped horses, unable be rehomed should be humanely shot on site with screens and knock box facilities to minimise stress to the next horse and each death confirmed before removal.
- Note: Euthanizing wild horses by injection is not considered appropriate due to the handling required to administer the injection which *significantly* increase stress/injury. However a wild horse injured and barely moving could be injected by a vet if no kill gun is available.

2. Ground shooting horses roaming free (opposed)

Is *not* considered humane because;

- The ability to achieve a clean kill shot is low,
- The shooter is unable to keep up to a bolting, wounded horse,
- A high flight response will result in adjacent horses scattering, and
- Surviving foals will starve to death.

3. Aerial shooting wild horses (opposed)

Is *not* considered humane because;

- It is not possible to guarantee a kill first shot every time when shooting horses, a moving target, from helicopters, a moving platform, through shifting downdraughts,
- It fails to meet the RSPCA definition of humane killing as *when an animal is either killed instantly or instantaneously rendered insensible to pain until death supervenes,*
- **Rough, steep, canopied KNP terrain** markedly increases injury risk & foal separation,
- It is impossible to ensure ground back-up can promptly kill each wounded horse, and
- More humane removal methods are available; such as passive trapping & fertility control.

D. KNP Management Objectives - ABA response

Management objectives should flow from the fundamental position that Bumbies, in *sustainable, viable* numbers, not causing enduring negative impacts, should continue living wild in KNP.

Legislation is often used to justify removing introduced species. However Aboriginals & Dingoes arrived centuries ago and more recently Post-Settlers & horses arrived. So, when does *introduced* become *indigenous*? Is it *time* or *survival based*? History shows adapting and resilience survive to become *indigenous*. That said we do need to find a balance so all values can be enjoyed in KNP.

NSW Legislation includes conserving *natural & cultural values*. [Appendix-2] The Burra Charter stresses *cultural significance* and the importance of community landscapes as to who we are, and, where such values are in conflict, plans need to be modified to better retain all diverse *cultural significance*. [Appendix-3]

The ABA recommends the following be addressed;

1. Conduct a comprehensive assessment of *all* threats and values in each KNP ecology type,
2. Prioritise management for KNP areas from *most* to *least* ecologically robust,
3. Section KNP into small, distinct management areas so the most appropriate method can be locally applied of all options available – different areas may need different solutions,
4. List and quantify all threats and values per area, for example from rabbits, pigs, goats, horses and humans,
5. Identify how many horses each area can support without losing integrity, and in particular
6. Identify competing threats, such as rabbits, pigs, goats, horses to be *reduced* alongside horse reductions, with the aim to maximise KNP's ecological robustness.
7. Conduct regular, systematic scientific research, such as listed in the 2008 KNP Plan, I.E. ;
 - Partnerships with universities & interest groups to monitor long term effects,
 - Population assessments (*presumable of all threatened flors & fauna*),
 - Habitat use and impact on threatened species habitat,
 - Grazing trials and Weed transmission and erosion trends, etc.

In conclusion the ABA urges the new plan to embrace;

- Quantified, sustainable and viable horse populations continue living wild in KNP, in balance with native flora & fauna, for current and future generations to experience,
- Wild horse management plans that reflect the most humane methods available,
- Management plans that reflect both Pre & Post Settlement social heritage values, and if these values overlap, then a balance be found that respects the differing values.

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Supporting material and a summary of the presentation may be left as hard copy with the Chair or emailed to joanne.knowles@environment.nsw.gov.au

ABA Submission to the KNP ITRG presentation 26-March 2015 - Appendices

Appendix-1

Written March 2015 by Jill Pickering, ABA President

My hosts to see Kaimanawa horses living wild on location were Major Hibbs, the Waiouru Military Commandant and New Zealand's *Department of Conservation* (DOC) Leith Rhynd and Bill Fleury.

Kaimanawa horse management decisions are now made by the *Kaimanawa Wild Horse Advisory Group* (KWHAG). The KWHAG includes representatives from a range of key interest groups, incl. the Army, DOC, KHH rehoming groups and conservation groups. Together, they develop and stay involved with management plans that DOC implements and fund. The 2014 muster gathered 162 horses, of which 147 were rehomed, leaving 300 plus horses to continue living wild on 25,000 Ha.

The total military area is about 63,000 Ha. The area containing flora vulnerable to horse grazing is separated by a buffer zone that each muster clears. Mountain ranges give a natural barrier to separate the horse populated third from the other two 'no go' areas. Family mobs & colt groups graze in their allocated area unless numbers increase to a level that spills into the buffer zone. Experience shows in that a population level of 300 in Waiouru keeps the buffer zone virtually horse free. Populations are counted annually around March and results determine how many will be removed at the next muster, in order to bring the population back to just over the target of 300 horses (*or around 83/Ha*).

The biennial muster uses 3 helicopters that each operate alone to remove specific numbers of horses from pre-selected areas. One helicopter locates & moves one mob at a time at walking pace towards the collection trap adjacent to trap pens. Priority is given to remove all horses in the buffer zone. The collection trap area is surrounded on three sides with steep hills and a river running close to the trap yards. Each helicopter directs its mob slowly down tracks into the basin, and hessian lines are used to fill potential escape gaps. Once the mob is inside the collection trap yard the hessian 'gate' is closed. The helicopter then departs to find the next mob and helicopter 2 brings in its mob at walking pace.

Ground handlers then work the horses into different yards using low pressure techniques and keeping handlers and noise minimal. The horses are separated into yards of stallions, mares with foals and others, in readiness for the next mob to be brought in by another helicopter.

Vets, handlers and KHH rehoming group representatives check the horses and identify those not considered suitable for rehoming. Earlier musters focussed on rehoming younger horses; however more adult horses are now being successfully rehomed. Those not rehomed are sent to a nearby, pre-arranged, abattoir that can process them within 2 days of arrival.

The horses are trucked to one of four approved holding yards across North Island to deliver to people previously vetted by rehoming groups as having appropriate yards and skills to take horses direct from the wild. Although the sub collection point results in double loading stress for the horses, the time from wild to new home is within 2 days.

The key message I came away with was the knowledge that differing values *can* be worked through and produce a well-coordinated process that Kaimanawa horse welfare central to all plan decisions.

DOC staff also said KNP representatives are welcome to observe the muster from a special hessian covered hide on the hillside that does not raise stress levels in horses being mustered. I can provide DOC contact details if you are interested.

PTO for additional appendices

Appendix-2

NSW legislation balances conserving *nature* with conserving *cultural values*. The second and third objectives of the National Parks and Wildlife Act 1974 (NSW) focus on conserving cultural value within the landscape. Note: *Cultural* does not differentiate between Aboriginal or Post Settlement cultural values, and

Threatened Species Conservation Act 1995 (NSW) Objectives start with “Conserve biological diversity and promote ecologically sustainable development” and go on to refer to eliminating or *managing* certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities.

Appendix-3

Burra Charter themes stress;

- *Cultural significance* means aesthetic, historic, scientific, social or spiritual value for past, present or future generations,
- Cultural significance enriches people’s lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences,
- Cultural significance reflects our community diversity, telling us who we are and the past that formed us and the Australian landscape. They are irreplaceable and precious,
- Cultural significance must be conserved for present and future generations in accordance with the principle of inter-generational equity,
- Consider all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others,
- Co-existence of cultural values should always be recognised, respected and encouraged. This is especially important in cases where they conflict, and
- It may be necessary to modify proposed plan changes to better retain cultural significance.

Please contact me on 03-9428-4709 or pickjill@hotmail.com if you have further queries.

End of appendices to ABA submission to the ITRG KNP 2015