

Should brumby numbers be reduced dramatically in New South Wales and Victorian alpine national parks?

What they said...

'Alpine wetlands continue to degrade even with very small numbers of feral horses. Kosciuszko cannot begin to recover from drought, extensive bushfires and overgrazing if, as currently proposed, 3,000 feral horses remain'

From an open letter to the New South Wales government signed by sixty-nine scientists and institutions

'Australia's alpine brumbies have...[a heritage] level of cultural significance in Australia and so should be protected'

Australian Brumby Alliance

The issue at a glance

On November 1, 2021, Parks Victoria announced its new plan for managing brumbies in the state's alpine national parks. Parks Victoria will remove the entire population of brumbies from the Bogong High Plains, and significantly increase the annual rate of removal of feral horses from the eastern Alps.

Under the new plan, aerial shooting will be used to cull brumbies if other methods fail to remove enough feral horses to reduce their ecological impact in the alpine region. Ground shooting by accredited operators will be continued in the latest plan, and authorities will establish and maintain small, fenced brumby exclusion sites to protect native species at high risk of extinction.

<https://www.abc.net.au/news/2021-11-01/victoria-brumby-feral-horse-plan/100585774>

A month earlier, on October 1, 2021, New South Wales National Parks & Wildlife Service announced the release of its draft Kosciuszko National Park Wild Horse Heritage Management Plan. The proposed New South Wales plan would see horses culled or removed from some areas of the New South Wales park but allowed to remain in others. The proposal says the government would reduce the number of horses to 3,000 through measures including ground shooting and aerial mustering. It rules out aerial shooting.

<https://www.theguardian.com/australia-news/2021/oct/01/kosciuszko-brumby-numbers-to-be-drastically-cut-under-nsw-government-plan>

There has been opposition to both plans from a variety of sources.

The New South Wales plan has similarly been opposed by those who claim it does not go far enough. The Invasive Species Council argues that though numbers will be reduced, and some areas cleared of horses, important areas will have to suffer permanent horse populations.

Some opponents of the current plans argue that the horses should be removed entirely.

<https://www.theguardian.com/australia-news/2021/oct/01/kosciuszko-brumby-numbers-to-be-drastically-cut-under-nsw-government-plan>

Others who oppose the plans include brumby support groups who argue either that the brumbies should be able to remain within the parks in larger numbers or that the methods proposed to remove them are inhumane.

Background

The information below has been abbreviated from the Wikipedia entry titled 'Brumby' <https://en.wikipedia.org/wiki/Brumby>;

A brumby is a free-roaming feral horse in Australia. Although found in many areas around the country, the best-known brumbies are found in the Australian Alps region. Today, most of them are found in the Northern Territory, with the second largest population in Queensland. A group of brumbies is known as a "mob" or "band".

Brumbies are the descendants of escaped or lost horses, dating back in some cases to those belonging to the early European settlers. Today they live in many places, including some National Parks, notably Alpine National Park in Victoria, Barrington Tops National Park in New South Wales, and Carnarvon National Park in Queensland. Occasionally they are mustered and domesticated for use as camp drafters, working stock horses on farms or stations, but also as trail horses, show horses, Pony Club mounts and pleasure horses. They are the subject of some controversy – regarded as a pest and threat to native ecosystems by environmentalists and the government, but also valued by others as part of Australia's heritage, with supporters working to prevent inhumane treatment or extermination, and rehoming brumbies who have been captured.

There are no known predators of feral horses in Australia, although it is possible that dingoes or wild dogs occasionally take foals. On average, 20 percent of the feral horse population dies each year, mainly from drought, poisonous plants, and parasites. Few feral horses reach 20 years of age. It is estimated that the maximum possible rate that feral horse numbers can increase is 20–25 percent per year.

Population management

Although poor management of feral horses may pose an ecological and environmental threat in some parts of Australia, their management is made difficult by issues of feasibility and public concern. Currently, management attempts vary, as feral horses are considered pests in some states, such as South Australia, but not others, including Queensland. There is also controversy over removal of brumbies from National Parks. The primary argument in favour of the removal of brumbies is that they impact on fragile ecosystems and damage and destroy endangered native flora and fauna.

Public concern is a major issue in control efforts as many advocate for the protection of brumbies, including Indigenous groups, who believe feral horses belong to the country. Other horse interest groups resent the labelling of horses as "feral" and are completely opposed to any measures that threaten their survival. While some animal welfare groups such as the RSPCA reluctantly accept culling, other organizations such as Save the Brumbies oppose lethal culling techniques and attempt to organise relocation of the animals instead.

Meanwhile, conservationist groups, such as the Australian Conservation Foundation, favour humane culling as a means of control because of the damage brumby overpopulation can cause to native flora and fauna, but are also generally opposed to various means of extermination. This makes management a challenge for policymakers.

Population control methods

Options for population control include fertility control, ground and helicopter shooting, and mustering and trapping. None of the methods provide complete freedom from suffering for the horses, and the cost of each is very high. The costs include those that are economic, such

as research, equipment purchases, and labour expenditures, as well as moral concerns over the welfare of the horses. As a result, more effective and efficient means of control have been called for.

Fertility control is a non-lethal method of population management that is usually viewed as the most humane treatment, and its use is supported by the RSPCA.[53] While it appears as though these treatments are effective in the breeding season immediately following injection, the lasting effects are debated. Because it is costly and difficult to treat animals repeatedly, this method, despite being ideal, is not widely implemented.

Shooting by trained marksmen is considered to be the most practical method of control due to its effectiveness. The New South Wales Department of Primary Industries believe shooting is the preferred method of population control as it does not subject the horses to the stresses of mustering, yarding, and long-distance transportation, all of which are related to 'capture and removal' methods. Horses that are only initially wounded from shooting are tracked and dispatched if they are in accessible, open country.

Brumby advocacy groups do not consider mountain shooting to be humane. Helicopter shootings allow for aerial reconnaissance of a large area to target the densest populations, and shooters may get close enough to the target animals to ensure termination. This method is considered the most effective and cost efficient means of control, but disapproval is high amongst those that believe it is also inhumane. Organizations supporting brumbies argue that aerial shooting is unnecessary and that alternative population control methods have not been given adequate trials, while government officials express concern about the need to control rapidly growing populations to avoid ecological problems associated with too many feral horses in certain areas.

Mustering is a labour-intensive process that results in one of two major outcomes: slaughter for sale, or relocation. It may be assisted by feed-luring in which bales of hay are strategically placed to attract feral horses to a location where capture is feasible. Complicating this process is low demand for the captured horses, making it less desirable than fertility control or shooting, which reduce the population without having to find alternative locations for them.

History of management in national parks

As of 2020 the estimated number of brumbies in Kosciuszko National Park is 14,000 up from 6,000 in 2016.

Between 22 October and 24 October 2000, approximately 600 brumbies were shot in the Guy Fawkes River National Park by the National Parks and Wildlife Service. As a result of the public outcry that followed the NSW Government established a steering committee to investigate alternative methods of control. Since the campaign began to remove horses from the national park, over 400 have been passively trapped and taken from the Park, and 200 of these have been re-homed.

A particular feral horse of Australia, the Coffin Bay pony, was completely removed from the Coffin Bay National Park and relocated to a neighbouring parcel of land by 2004. This was a result of a public outcry to a previously proposed plan by South Australia's Department of Environment and Natural Resources to cull all animals in the park.

A New South Wales National Parks and Wildlife Service cull during 2006 and 2007 in Kosciuszko National Park, where there were an estimated 1700 horses in 2005, resulted in a reduction of 64 horses. The New South Wales National Parks and Wildlife Service commenced a plan in 2007 to reduce brumby numbers by passive trapping in the Oxley Wild

Rivers National Park. Over 60 brumbies captured in the Apsley River Gorge have now been re-homed.

In 2008 the third phase of an aerial culling of brumbies took place, by shooting 700 horses from a helicopter, in Carnarvon Gorge in Carnarvon National Park, Queensland.

Parks Victoria's 2021 Feral Horse Action Plan

On November 1, 2021, Parks Victoria announced its new plan for managing brumbies in the state's alpine national parks. Parks Victoria will remove the entire population of brumbies from the Bogong High Plains, and significantly increase the annual rate of removal of feral horses from the eastern Alps.

Under the new plan, aerial shooting will be used to cull brumbies if other methods fail to remove enough feral horses to reduce their ecological impact in the alpine region. Ground shooting by accredited operators will be continued in the latest plan, and authorities will establish and maintain small-fenced brumby exclusion sites to protect native species at high risk of extinction.

The plan will see the removal of up to 500 feral horses in the eastern Alpine region in its first year, and annual removal targets will be developed based on feral horse population surveys in the following years. Parks Victoria said a key component of the Feral Horse Action Plan 2021 is to maximise rehoming opportunities for captured horses, with an expression of interest process open to suitable applicants. However, Parks Victoria acknowledged that previous efforts at feral horse resettlement had been relatively unsuccessful. Fertility control has been ruled out to manage the brumby population.

<https://www.abc.net.au/news/2021-11-01/victoria-brumby-feral-horse-plan/100585774>

New South Wales National Parks & Wildlife Service 2021 draft Kosciuszko National Park Wild Horse Heritage Management Plan.

On October 1, 2021, New South Wales National Parks & Wildlife Service announced the release of its draft Kosciuszko National Park Wild Horse Heritage Management Plan. The proposed New South Wales plan would see horses culled or removed from some areas of the New South Wales park but allowed to remain in others.

Under the New South Wales plan, horses would be removed from 21 percent of the park and would continue to occupy 32 percent of the park but in reduced numbers. The 47 percent of Kosciuszko that is already free of feral horses would be maintained to remain so. The proposal says the government would reduce the number of horses to 3,000 through measures including ground shooting and aerial mustering. It rules out aerial shooting.

Internet information

On November 25, 2021, the ABC published a report titled 'Thousands of brumbies to be culled as Kosciuszko National Park plan finalised'

The article reports on the finalization of the New South Wales draft management plan for wild horses in the Kosciusko National Park.

The full text can be accessed at <https://www.abc.net.au/news/2021-11-25/brumbies-to-be-culled-as-kosciuszko-national-park-plan-finalised/100649060>

On November 4, 2021, Gizmodo published an opinion piece by George Dvorsky titled 'Australia Plans to Kill Thousands of Feral Horses — But Scientists Say It Isn't Enough'

which supports the culling of more feral horses from Australia's alpine national parks. The full text can be accessed at <https://www.gizmodo.com.au/2021/11/australia-plans-to-kill-thousands-of-feral-horses-but-scientists-say-it-isnt-enough/>

On November 1, 2021, Nature magazine published an opinion piece by Bianca Nogrady titled 'Scientists say Australian plan to cull up to 10,000 wild horses doesn't go far enough'. The comment criticises the New South Wales management plan for sacrificing too much to feral horse enthusiasts and not doing enough to protect native species in Kosciuszko National Park. The full text can be accessed at <https://www.nature.com/articles/d41586-021-02977-7>

On October 8, 2021, Australian National Geographic published an opinion piece by Professor Don Driscoll titled 'Feral horses will rule a third of the Kosciuszko National Park under NSW government plan'. The comment is critical of the number of feral horses the New South Wales government is prepared to allow to remain in the Kosciuszko National Park. The full text can be accessed at <https://www.australiangeographic.com.au/topics/wildlife/2021/10/opinion-feral-horses-will-rule-one-third-of-the-fragile-kosciuszko-national-park-under-a-proposed-nsw-government-plan/>

On October 4, 2021, The Sydney Morning Herald published a comment by Anthony Sharwood, author of the book 'The Brumby Wars'. The comment is titled, 'Brumbies do not belong in the Snowy Mountains, but plan is a good compromise'. In the opinion piece, Sharwood acknowledges the shortcomings of the New South Wales's horse management plan first released on October 1, 2021; however, he urges it be accepted as a effective compromise with the potential to satisfy all sides in the debate. The full text can be accessed at <https://www.smh.com.au/environment/conservation/brumbies-do-not-belong-in-the-snowy-mountains-but-plan-is-a-good-compromise-20211003-p58wso.html>

On October 1, 2021, then deputy premier of New South Wales, John Barilaro, issued a press release titled 'Wild horse draft plan for Kosciuszko National Park'. The release promotes the New South Wales Government's draft plan for the management of wild horses in the Kosciuszko National Park. The full text can be accessed at <https://johnbarilaro.com.au/wild-horse-draft-plan-for-kosciuszko-national-park/>

On September 6, 2021, the Reclaim Kosci lobby group which supports the removal of wild horses from the Kosciuszko National Park issued an opinion piece criticising the Kosciuszko Wild Horse Heritage Act was passed by the New South Wales Parliament in 2018. The group claim its support of brumbies is not in line with popular opinion in the state. The full text can be accessed at <https://reclaimkosci.org.au/2021/09/06/silencing-the-community-voice-on-horses/>

On August 24, 2021, The Australian published an analysis titled 'High horses and a wild political ride' by Anthony Sharwood. The article is an edited extract from Sharwood's book 'The Brumby Wars' which was published on September 1, 2021.

The text examines the environmental and political arguments surrounding feral horse management in Australia with a focus on policy in New South Wales.

The text can be accessed at <https://www.theaustralian.com.au/weekend-australian-magazine/brumbies-in-the-high-country-its-a-wild-political-ride/news-story/5f7d817140c7a9679afa7240675b2e5d>

On June 27, 2021, The Guardian published an article ‘titled ‘Alpine brumbies: destructive feral hoofed beasts or a heritage breed to protect?’ The article examines the differing perspective on brumbies in national parks.

The full text can be accessed at <https://www.theguardian.com/australia-news/2021/jun/27/alpine-brumbies-destructive-feral-hoofed-beasts-or-a-heritage-breed-to-protect>

On April 14, 2021, The Mandarin published an article by Melissa Coad titled ‘Community clashes over feral horses management’ which outlines some of the objections of the Brumby Action Group to brumby culling.

The full text can be accessed at <https://www.themandarin.com.au/153716-community-clashes-over-feral-horses-management/>

The Reclaim Kosci lobby group was founded in 2018 by the Invasive Species Council, National Parks Association of the ACT, National Parks Association of NSW, Colong Foundation for Wilderness, and the Nature Conservation Council of NSW. It promotes the removal of wild horses from the Kosciusko National Park.

The site includes a series of brief factual articles challenging what it presents as a series of popular myths about the advantages of brumbies.

<https://reclaimkosci.org.au/myths-v-facts/>

On June 28, 2020, the New York Times published an analysis titled ‘Majestic Icon or Invasive Pest? A War Over Australia’s Wild Horses’. The article is written by Livia Albeck-Ripka, a reporter for The Times, who at the time of writing was based in Melbourne. The text examines arguments for and against the removal of brumbies from Australia’s alpine areas. It can be accessed at <https://www.nytimes.com/2020/06/28/world/australia/brumbies-horses-culling.html>

On June 10, 2020, horsetalk.co.nz published a comment by wildlife ecologist Craig Downer titled ‘Please stop shooting the horses: In defence of Australia’s brumbies’. Downer argues that introduced animals such as brumbies can offer major advantages to their adopted environment.

The full text can be accessed at <https://www.horsetalk.co.nz/2020/06/10/defence-australias-brumbies/>

On December 17, 2019, The Guardian published an opinion piece titled ‘Number of brumbies in alpine parks more than doubles in five years’. The comment criticises the New South Wales government for protecting feral horses in the state’s alpine national parks and highlights the damage being caused by the increasing number of these animals.

The full text can be accessed at

<https://www.theguardian.com/environment/2019/dec/17/number-of-brumbies-in-alpine-parks-more-than-doubles-in-five-years>

On June 2, 2018, The Guardian published a news report titled 'Victoria pledges to remove 1,200 brumbies to protect alps and calls on NSW to act' in which the Victorian government is cited championing its own more rigorous approach to feral horse management and calling on the New South Wales government to act similarly.

The full text can be accessed at

<https://www.theguardian.com/environment/2018/jun/02/victoria-pledges-to-remove-1200-brumbies-to-protect-alps-and-calls-on-nsw-to-act>

On May 25, 2018, the Invasive Species Council published an opinion piece criticises the recent actions of the New South Wales government, prohibiting the removal of brumbies from the state's alpine national park. The comment is titled "'Brumbies Bill' an attack on all we hold dear'.

The full text can be accessed at <https://invasives.org.au/blog/attack-on-all-we-hold-dear/>

The Australian Brumby Alliance has a page on its website outlining the importance of brumbies to Australia's history and culture. This information can be accessed at <https://australianbrumbyalliance.org.au/humane-management-2/inform/brumby-heritage/>

On May 12, 2016, news.com.au published a report titled 'Brumby lovers unite against plan to shoot Snowy Mountains' wild horses' which details the opposition of Snowy Mountains Bush Users Group to plans to dramatically reduce the number of brumbies in the Snowy Mountains area. The full text can be accessed at <https://www.news.com.au/national/brumby-lovers-unite-against-plan-to-shoot-snowy-mountains-wild-horses/news-story/e395bf35b832e84af1ac12b65baa95f1>

In October 2014, The Australian Brumby Alliance published a review of the 2000 cull of brumbies in the Guy Fawkes National Park seeking to remind readers of the animal cruelty which occurred. The full text of the report can be accessed at

https://australianbrumbyalliance.org.au/wp-content/uploads/2012/12/ABA-Guy-Fawkes-2000-review-20_Oct_2014-Final.pdf

On June 8, 2011, Nature magazine published an article by Mark Davis et al titled 'Don't judge species on their origins' which argues that it is not reasonable to assume that all introduced species are harmful to their new environments.

The full text can be accessed at <https://www.nature.com/articles/474153a>

On November 6, 2000, The Guardian published an article titled 'Park rangers' horse cull enrages public' which features criticism of the aerial culling of horses in the Guy Fawkes National Park.

The full text can be accessed at

<https://www.theguardian.com/world/2000/nov/06/worlddispatch.patrickbarkham>

Arguments supporting the substantial reduction of brumby numbers in alpine national parks

1. Brumbies in the high country are damaging the terrain

Conservationists and politicians who support the total removal of brumbies from the Victorian and New South Wales high country argue that these animals are completely unsuited to these areas and do unsustainable damage. Others argue similarly that the enormous environmental harm the animals cause mean their numbers must be dramatically reduced and they must be kept out of particularly sensitive areas.

New South Wales Nature Conservation Council chief executive, Chris Gambian, has stated, 'Horses in Kosciuszko National Park have been doing untold damage to iconic landscapes for decades.' <https://www.abc.net.au/news/2021-11-25/brumbies-to-be-culled-as-kosciuszko-national-park-plan-finalised/100649060> The same point has been made by New South Wales Environment Minister, Matt Kean, who has stated, 'We know that Kosciusko is an ecological wonderland, and these hard-hoofed animals have done untold damage because they've been out of control.' <https://www.abc.net.au/news/2021-11-25/brumbies-to-be-culled-as-kosciuszko-national-park-plan-finalised/100649060>

Calla Wahlquist, writing for The Guardian, has noted, 'The ordinary impacts horses have on pasture – cutting narrow tracks through grass, selective grazing, hoofprints on the soft dirt of a riverbank – amount to severe damage in a critically endangered alpine landscape which did not evolve to cope with hoofed beasts.' <https://www.theguardian.com/australia-news/2021/jun/27/alpine-brumbies-destructive-feral-hoofed-beasts-or-a-heritage-breed-to-protect>

Australia's alpine plants and animals did not evolve with heavy, hard-hoofed animals and many rely on habitats that are now being severely damaged by horses. A New South Wales scientific report concluded, 'habitat damage in streams, wetlands and adjacent riparian systems occurs through selective grazing, trampling, track creation, pugging (soil compaction), wallowing, dust bathing leading to stream bank slumping and destruction, stream course disturbance and incision and sphagnum bog and wetland destruction.'

<https://reclaimkosci.org.au/myths-v-facts/>

Environmental journalist, Anthony Sharwood, has detailed some of the damage caused by brumbies. He has written, 'The sphagnum moss of the Australian high country is a miracle of nature. It stores water like a giant sponge, releasing it slowly so that alpine creeks flow swift and clear in the driest summer. Sphagnum bogs are also the favoured nesting sites of the critically endangered corroboree frog. Brumbies trample this delicate ecosystem to worthless mud-heaps. It's like the Great Barrier Reef's coral is being devoured by an imported European fish, and everyone's cheering for the fish.'

<https://www.smh.com.au/environment/conservation/brumbies-do-not-belong-in-the-snowy-mountains-but-plan-is-a-good-compromise-20211003-p58wso.html>

Sharwood has also stressed that the high country ecosystem is under threat from a range of other sources, making it particularly vulnerable to the damage caused by brumbies. He writes, 'This landscape is unique, beautiful and fragile. We think of mountains as these big, hulking things impervious to damage, but that's not true. The snowgums are under attack by a native beetle. The big fires are coming more often (a fact which makes a mockery of the brumby advocates' pseudo-scientific claims that "grazing prevents blazing"). And then there are the imperilled swamps and bogs.' <https://www.smh.com.au/environment/conservation/brumbies->

[do-not-belong-in-the-snowy-mountains-but-plan-is-a-good-compromise-20211003-p58wso.html](https://www.smh.com.au/environment/conservation/brumbies-do-not-belong-in-the-snowy-mountains-but-plan-is-a-good-compromise-20211003-p58wso.html)

Professor Jamie Pittock, an ecologist from the Australian National University, further detailed the brumbies' capacity to exacerbate environmental damage in New South Wales alpine national parks. He has noted that the northern part of Long Plain has seen an influx of horses since the 2019-20 bushfires. They have cut paths through the sphagnum bogs by walking in to get water, causing the bogs to dry out and become vulnerable to bushfire. They have grazed on the new green shoots of snowgrass, disrupting the regrowth required for several endangered lizards and the broad-toothed rat who use its tussocks for shelter.

<https://www.smh.com.au/environment/conservation/brumbies-do-not-belong-in-the-snowy-mountains-but-plan-is-a-good-compromise-20211003-p58wso.html>

Key conservation groups argue that the numbers intended to be removed under the New South Wales cull is not sufficient to protect the environment. The Australian Academy of Science argues that the number of horses should be rapidly reduced below 3,000. In an open letter with 69 signatories including scientists and institutions sent to the New South Wales environment minister, they note that 'alpine wetlands continue to degrade even with very small numbers of feral horses. Kosciusko cannot begin to recover from drought, extensive bushfires and overgrazing if, as currently proposed, 3,000 feral horses remain.'

<https://www.nature.com/articles/d41586-021-02977-7>

2. Brumbies in the high country are endangering native animal species

Repeated studies have found that brumbies in Australia's alpine national parks cause serious damage to many native species.

It has been claimed that brumbies provide competition with native animals which is displacing and starving wombats, wallabies, and other species. It is further claimed that habitat destruction could impact listed threatened species including the critically endangered Northern corroboree frog, the critically endangered Southern corroboree frog, the endangered Guthega skink, the endangered Alpine she-oak skink, the endangered Alpine spiny crayfish, the endangered Mountain pygmy possum, and the vulnerable Broad-toothed rat.

<https://invasives.org.au/blog/attack-on-all-we-hold-dear/>

The conservation lobby group Reclaim Kosci has noted that other introduced species that threaten native species in the way in which brumbies do are already being actively removed. The group states, 'Introduced pigs, deer, goats, rabbits and foxes also threaten Kosciuszko's natural values and are controlled by park managers through trapping, baiting, and aerial and ground shooting. Feral horses are just as much a threat and should be managed just like other harmful feral animals.' <https://reclaimkosci.org.au/myths-v-facts/>

Reclaim Kosci has reported on the status of several threatened species being negatively impacted by brumbies. They have noted the plight of the broad-toothed mouse. They only exist in alpine and sub-alpine regions of southeastern Australia. They have a ringed tail and a gentle demeanor when handled. Their distribution is highly fragmented due to clearing for roads, ski runs and building developments. These mammals rely on high rainfall, cool summers, cold winters, and a dense ground cover of grasses, sedges, and shrubs. They live in a complex of runways through dense wet grass, sedge, or heath habitat, usually within 15m of a water-course. Feral horses occupying their small and specific habitat have the potential to out-compete the broad-toothed mouse for food (native grasses) and trample remaining nesting areas. Broad-toothed mouse habitat is being impacted from browsing and trampling

associated with the expansion of feral horse populations. The presence of feral horses is directly related to the decline of broad-toothed mouse populations. In 2016, in broad-toothed mouse habitat sites severely impacted by feral horse impacts, no evidence of this species was found at all. <https://reclaimkosci.org.au/2019/02/22/species-at-risk-broad-toothed-mouse/> They have also highlighted the situation of the mountain pygmy-possum, a small, ground-dwelling possum, living in boulder-fields and adjacent heathland in sub-alpine and alpine areas above 1200m. The possums hibernate during winter then wake in spring to feed on Bogong moths that also occupy the boulders. Boulder fields with deep streams running through them are their preferred habitat. Heathland provides shelter from predators and additional food in insects, nectar, fruits, and seeds. The total population is tiny and at risk, estimated at around 3050 adults only. Several threats have caused this species to be listed as critically endangered including feral horses as they muddy streams and trample heathland resulting in loss of food and water sources, shelter from predators, and subsequently threaten the lives of the mountain pygmy-possum. <https://reclaimkosci.org.au/2019/02/22/mountain-pygmy-possum/>

Another native species being negatively affected by feral horses is the Northern corroboree frog. The frog has a highly restricted distribution in alpine and subalpine regions of New South Wales and the adjacent Australian Capital Territory. Populations of this striking frog species have declined significantly, predominantly due to the amphibian disease chytridiomycosis. Adults breed in bogs during January to mid-March, building nests in the dense vegetation and litter that surrounds small pools. This habitat is integral for courtship and juvenile frog survival. In 2018 it was found that feral horse trampling significantly impacts the quality of breeding sites for the Northern corroboree frog by reducing the depth of litter and vegetation in bogs. Damaged habitat exposes eggs and renders them prone to desiccation and death. Horse damage also reduces nesting habitat. <https://reclaimkosci.org.au/2019/02/22/northern-corroboree-frog/>

3. Brumby numbers are out of control and delaying action will result in more horses having to be killed

Supporters of removing brumbies from the high country in New South Wales and Victoria argue that the longer this move is delayed, the more horses will have to be killed.

When Kosciuszko land managers first identified the need to control the increasing brumby herds back in the late 1990s, their numbers were estimated at 2000.

<https://www.smh.com.au/environment/conservation/brumbies-do-not-belong-in-the-snowy-mountains-but-plan-is-a-good-compromise-20211003-p58wso.html> By 2016, their number had grown to 6,000 and the initial New South Wales draft wild horse management plan in 2016 was proposing the horse population be reduced to 600. Critics claim that the result of that plan having been put on hold for a further five years is that the number of wild horses has grown dramatically, and more animals will now have to be culled. As of 2021, the brumby population in the New South Wales high country is estimated to have increased to more than 14,000, an extra 8,000 on the 2016 figure. <https://www.abc.net.au/news/2021-11-25/brumbies-to-be-culled-as-kosciuszko-national-park-plan-finalised/100649060>

Mr Swain a river guide and Indigenous ambassador with the New South Wales Invasive Species Council, has stated that more horses will inevitably be shot under the new plan because of the increased numbers. He has further warned that there is not enough demand from landholders to rehome 11,000 of these animals. <https://www.abc.net.au/news/2021-11-25/brumbies-to-be-culled-as-kosciuszko-national-park-plan-finalised/100649060>

[25/brumbies-to-be-culled-as-kosciuszko-national-park-plan-finalised/100649060](https://www.theguardian.com/environment/2019/dec/17/number-of-brumbies-in-alpine-parks-more-than-doubles-in-five-years) The longer the delay, he claims, the larger the number of animals that will have to be slaughtered. According to a 2019 survey, the number of horses has grown from an estimated 9,187 in 2014, to 25,318 in 2019. That amounts to a growth rate of 23 per cent per annum, despite ongoing drought conditions.

The Australian Alps Liaison Committee survey revealed an extraordinary boom in horse numbers in the north-eastern corner of Kosciuszko, which takes in the Tantangara Reservoir, sitting north of Adaminaby and bordering Namadgi National Park to the north-east. Between 2014 and 2019, numbers in that area lifted from an estimated 3,255 to 15,687 — a growth rate that could see horse numbers double nearly every two years.

Andrew Cox, chief executive of the Invasive Species Council, said that if feral horse numbers continued to increase at the current rate, horses would become the most-sighted animal in the Kosciuszko National Park.

Cox has argued that the exponential growth meant that authorities would have to remove thousands of horses a year just to keep the population stable. He said all humane and effective forms of population control – including aerial culling, which had previously been ruled out by the New South Wales government – should be considered.

<https://www.theguardian.com/environment/2019/dec/17/number-of-brumbies-in-alpine-parks-more-than-doubles-in-five-years>

Cox has further claimed, ‘You can’t just take a few hundred horses out, there needs to be a serious control program put in place. Failure to do so will have negative animal welfare impacts on the brumbies themselves. They are already being hit by cars.’

Cox concluded, ‘The horses will overflow the park and spill into surrounding private lands if we don’t do something to control their numbers. They have no natural predators; they have no diseases. They will starve themselves out.’

<https://www.theguardian.com/environment/2019/dec/17/number-of-brumbies-in-alpine-parks-more-than-doubles-in-five-years>

4. Many false claims have been made about the historical, environmental and tourist value of brumbies in Australia’s alpine national parks

Opponents of retaining brumbies in Australia’s alpine national parks claim they have no unique cultural or historical value. They note that contrary to the claims made by some of their supporters, the Kosciuszko’s horses are not descendants of horses used in World War 1. (These horses were not returned to Australia.) The Kosciuszko population, it is argued, has descended from horses that escaped from local farms or were deliberately released. It is also claimed there is no clear evidence that horses were even taken from the Kosciuszko population for the war effort. Such horses came from many places in Australia.

<https://reclaimkosci.org.au/myths-v-facts/>

The lobby group Reclaim Kosci argues, ‘The feral horses found in the park are just like any other horse. Australia has more than 300,000 feral horses and there are no genetic traits to distinguish the Kosciuszko horses from them or domestic horses. Throughout the late 1800s and early 1900s, wild horses in New South Wales were regarded as a nuisance and a pest and were regularly killed to control numbers. The horses of Kosciuszko that had been in low numbers for about 150 years have little more heritage value than the foxes, pigs, rabbits, and other invasive animals in the national park. What heritage value they do have can be preserved outside the park.’ <https://reclaimkosci.org.au/myths-v-facts/>

It is further argued that the horses are not the tourist attraction that their supporters claim they are.

It has also been argued that the claims made that brumbies help to reduce the risk of bushfires in alpine areas are inaccurate. Their critics note that horses do not feed on the shrubs and unpalatable tussocky grasses that carry fire in extreme conditions, such as occurred in the catastrophic fires of 1939 and 2003. There is, however, some evidence that grazing by feral horses and cattle can increase the intensity of bushfires by removing ground cover, resulting in denser scrub. It has also been noted that the damage caused by severe fires is intensified after the fires due to the erosion and degradation caused by horses.

<https://reclaimkosci.org.au/myths-v-facts/>

Finally, those opposed to feral horses in alpine areas claim that they do not act as the tourist attraction that their supporters argue they are. Several studies have shown that the main activities of visitors to Kosciuszko are snow sports, walking, car touring, sightseeing and nature appreciation. Though many visitors have reported that they like seeing horses in the distance, they are also disturbed by the environmental damage and general pollution that the horses cause. Tourists have noted with concern the degraded and dung-fouled picnic and camping areas, and the polluted and damaged streams and wetlands caused by the horses. Some visitors have claimed to find the horses intimidating. <https://reclaimkosci.org.au/myths-v-facts/>

Reclaim Kosci's Facebook page contains many comments from tourists complaining about the negative effect of feral horses on Australia's alpine areas as an attraction. Included among these are: 'I would like to express my disgust that this was the scene that greeted me after staying at your resort recently. A pest defecating outside my luxury bedroom window. I came to see and appreciate natural Australian scenes. Where were all the kangaroos and native Australian animals?' 'Tourist attraction? They must be joking. I could easily go to any paddock if I wanted to see equines.' 'The amount of horse poo along Long Plain Road and further into the forest along Broken Cart Trail... is truly astonishing. Sure does put a reality check on the natural environment experience. My vehicle was literally plastered in the stuff' <https://m.facebook.com/ReclaimKosci/photos/a.287528555426279/915600119285783/> .

In January 2021, Frontier Economics produced a report for the Invasive Species Council titled 'Reining in feral horses in Kosciusko National Park.' The report includes the following observations on the impact of horses on tourism: 'Richard Swain of Alpine Adventures ... has observed significant and worsening damage to ecosystems within the park. He highlights the prevalence of horses within the park. On one 5-day trip he estimates he saw around 300 feral horses within the park and very few native animals. He considers horses are responsible for the reduction in native animal sightings because they are consuming significant areas of pasture in the meadows which is leading fewer kangaroo, wallabies, and emu sightings. In addition, he considers horses are damaging waterways and riverbanks, meaning he is now observing very few platypuses. Richard notes that "international tourists don't come to see a horse. They come to see what is unique to this country and are increasingly disappointed by lack of native wildlife sightings".

As a river guide Richard has observed a constantly degrading river environment, in the areas where he operates his tours. He suggests there are very few undamaged phragmites or reed beds along riverbank. On trips in the past, he used to teach tourists how to make string out of young Kurrajong tree saplings, but he can now no longer do this as it is impossible to find a young Kurrajong tree that has not been eaten up to horse height with all fresh shoots and

saplings gone.’ <https://www.frontier-economics.com.au/documents/2021/02/reining-in-feral-horses-in-kosciuszko-national-park.pdf/>

5. Control measures can be used that will allow brumby numbers to be reduced as humanely as possible

Supporters of plans to dramatically cull or completely remove brumbies from the New South Wales and Victorian high country regions argue that these actions will be conducted as humanely as possible. They claim that horses will be rehomed where they can be and killed efficiently and humanely where this is the only other option. Aerial culling will either not be used or will be employed only where there is no other option.

The New South Wales Government has stated that the removal of wild horses will be carried out in accordance with best practice animal welfare requirements. Aerial culling has been decided against because it has been judged too difficult to control and too stressful for the animals. Control methods will include ground shooting, shooting in trap yards, and transporting horses to abattoirs. <https://www.abc.net.au/news/2021-11-25/brumbies-to-be-culled-as-kosciuszko-national-park-plan-finalised/100649060>

It has been noted that some horses will have to be humanely culled because rehoming is not a solution for the number of horses that need to be removed both to protect native species and the horses themselves. Australian Brumby Alliance president Jill Pickering has stated that rehoming organisations cannot take on more than a few hundred a year. <https://www.theguardian.com/australia-news/2021/jun/27/alpine-brumbies-destructive-feral-hoofed-beasts-or-a-heritage-breed-to-protect> Pickering has claimed that the combined supply of horses from Kosciuszko, the Victorian Alps, and Barmah national park – where the Victorian government plans to reduce horse numbers in Barmah from 550 to 110 by 2023 through a combination of culling and rehoming – has created a glut, and there are not many trainers with the necessary experience working with brumbies.

<https://www.theguardian.com/australia-news/2021/jun/27/alpine-brumbies-destructive-feral-hoofed-beasts-or-a-heritage-breed-to-protect> Pickering opposes culling and argues for measures such as dart-administered contraceptives to reduce brumbies’ reproduction rates; however, those supporting culling use her data regarding rehoming to present culling as a necessary part of the solution.

The 2018 Victorian plan noted that a decade of efforts removing up to 200 horses annually from the park had been insufficient and their population numbers had not reduced. The plan stated, ‘The impacts of feral horses in the Alpine National Park and other contiguous areas have now reached critical levels, and without intervention horses will continue to cause long-term and severe degradation of wetlands and waterways and prevent the recovery of these areas.’ The government’s proposal was to trap the horses in yards using baits such as lucerne to draw them in.

It would work with organisations, such as horse associations, to re-home them. Horses that it could not re-home, or that were too old or ill to re-home, were to be shot in the yards.

<https://www.theguardian.com/environment/2018/jun/02/victoria-pledges-to-remove-1200-brumbies-to-protect-alps-and-calls-on-nsw-to-act>

Parks Victoria’s Feral Horse Action Plan 2021 states ‘Parks Victoria will continue to work closely with our partners in the humane control of feral horses to reduce their impacts: including removing small, isolated populations and preventing spread into new areas using the most humane, safe and effective techniques, including lethal and non-lethal methods. The preferred methods of managing feral horses include trapping and rehoming, tightly managed shooting, and construction of small-scale exclusion fences.’ <https://www.parks.vic.gov.au/projects/feral-horse-action-plan-2021>

Both New South Wales and Victoria state that culling will only be used when strictly necessary and that all horse management strategies will apply humane practices.

Arguments opposing the substantial reduction of brumby numbers in alpine national parks

1. Brumbies are of historical and cultural significance in alpine regions of Australia
Those who argue that brumbies should be retained in the areas of Australia they now occupy stress their historical and cultural significance.

The Australian Brumby Alliance has given an overview of what those who champion the brumby believe its significance to be. The Alliance states, 'Brumbies are an integral part of Australia's social history and hold important cultural and heritage value. Each Brumby population area across Australia and overseas is unique in that they can be traced back to their original founding stock through social history and genetics and have evolved and adapted to the seasonal extremes of the locations where they are found. The ancestors of today's Brumbies arrived with the First Fleets to Australia and were valued as an essential and versatile work horse. Ancestors of the modern-day Brumbies served during the Boer War and the two World Wars. Brumbies have become iconic to Australia, for example, the naming of rugby teams, army units, on paper currency and of course the film *The Man from Snowy River* which celebrated the heritage of Brumbies in Australia. They also featured at the opening of the Sydney Olympics viewed by people from all over the world.'

<https://australianbrumbyalliance.org.au/humane-management-2/inform/brumby-heritage/>

The Brumby Action group has put a similar argument in opposition to the removal of brumbies from alpine national parks in Victoria. The group states, 'Brumbies are revered and respected for their cultural and social values by the Australian public having featured in books, poems, film and artworks. Most Australians remember with pride the 2000 opening of the Sydney Olympics when Ammo, a beautiful proud Brumby led a parade of over 200 Brumbies that filled the stadium to resounding applause.' <https://www.change.org/p/save-our-australian-brumbies>

On October 11, 2018, a contributor to The University of Melbourne's Scientific Scribbles blog, attempted to explain the cultural significance of the brumby in Australia. He writes, 'Over time [brumbies] began to be associated with Australia's cultural heritage, particularly the pastoral landscapes of early post-colonisation. Both responding to and responsible for this association is "The Man from Snowy River", a poem [written by celebrated Australian bush poet Banjo Patterson] about a band of men riding to catch a horse that had escaped and joined the brumbies of Kosciusko. The poem is so intensely bound to Australian identity that it's written on our five dollar note. What more evidence do you need that Australia's "wild bush horses" are a cultural icon?'

<https://blogs.unimelb.edu.au/sciencecommunication/2018/10/11/the-brumby-problem-when-an-icon-becomes-a-pest/>

The Australian Brumby Alliance and other groups supporting the maintenance of brumby populations in Australian alpine regions argue that these animals deserve the same protection under cultural heritage legislation that it offered to significant buildings and locations in Australia. The Alliance notes that the International Council on Monuments and Sites believes that 'Cultural significance embodies expressions of identity and experience, reflects the diversity of communities, tells us about who we are, the past that formed us, our landscape and that they are irreplaceable and precious.' The Alliance has repeatedly argued that Australia's alpine brumbies have this level of cultural significance in Australia and so should

be protected. The Alliance states, 'Wild Horses represent living heritage values.'

<https://australianbrumbyalliance.org.au/brumby-heritage/>

Leisa Caldwell, founding member of the Snowy Mountains Horse Riders Association, has stressed the unique importance that horses have in human history (including Australian history) and argues that they cannot be regarded in the same way as other feral species.

Caldwell writes, 'Our grandfathers did not ride foxes into battle at Beersheba. It was not pigs, deer or cats that transported humans throughout the world for over 8,000 years and partnered humans in the field for survival. It's not the other introduced animals that still partner humans today in the Olympics. There's no other animal on the planet that has such a relationship or has that interaction with humans. So, horses should be viewed very differently.'

https://www.academia.edu/39131432/Heritage_Icon_or_Environmental_pest_Brumbies_in_the_Australian_cultural_imaginary?pop_sutd=true

2. The environmental damage caused by brumbies is exaggerated

Supporters of feral horses being allowed to remain within Australian alpine national parks argue that these animals are not causing the problems their critics accuse them of creating.

Members of the Barmah Brumby Preservation Group argue that the damage feral horses are said to cause in the Barmah National Park is being falsely attributed to these animals. The supporters of the horses claim that they have been part of the region's ecosystem for over a hundred years, during which time the area has 'evolved into the most significant red river gum wetland forest in the world, whilst the horses have been a part of it.'

<https://m.facebook.com/groups/640063936071221/permalink/1905158772895058/>

The Barmah Brumby Preservation Group further claims that accusations that brumbies are damaging the Moira grasslands are false. The group claims, 'Man-made flooding of the forest at the wrong time of the year is slowly destroying the Moira Grass. Flooding in the summer only causes stagnant black water which not only kills the Moira Grass but also kills Red Gum trees.' The group further notes that the moira grass is facing competition from 'invasive plants and weeds.' The group claims that 'Scientific evidence provided by Parks Victoria to our group in January 2017 actually supports these two factors as the biggest threats to Moira grasslands. The evidence goes further, saying that even if the brumbies are removed, the moira grasslands will still probably become extinct.'

<https://m.facebook.com/groups/640063936071221/permalink/1905158772895058/>

The matter has become even more confused by a more recent report cited by the Brumby Alliance Group which claims that the local grasses are making an unexpected recovery. The Alliance notes, 'The environmental water authority reports a season's outstanding crop of moira grasses, removing all justification [for the planned cull].'

<https://www.themandarin.com.au/153716-community-clashes-over-feral-horses-management/>

The Barmah Brumby Preservation Group has also noted the impact of other non-native animal species. They note 'Pigs and deer are in plague proportions and do cause significant damage. Wild cats, foxes and other feral animals are also causing major problems.' The group claims that off-road use of 4-wheel drives and illegal hunting are a further source of environmental degradation. They claim that rather than seeking to remove brumbies, the Victorian government should be better managing the area to reduce the harm caused by other invasive species and humans mistreating the region.

<https://m.facebook.com/groups/640063936071221/permalink/1905158772895058/>

The same point has been made by former Cooma mayor and former national MP Peter Cochran, who has stated, 'The Park (Kosciusko National Park) is over-run with other feral pests — including wild pigs, wild dogs, foxes, wild cats, deer and rabbits — damaging the park and not enough steps have been taken to manage them. They are all there in large numbers — the pigs in their thousands. They are a massive problem, and for some reason their (National Parks') focus are horses. I can show you hundreds of acres which have been ripped up by pigs — they plough the ground right up. National Parks opposes shooting those animals. I can't see how on earth they can legitimately claim they can shoot brumbies but not wild pigs.' <https://www.news.com.au/national/brumby-lovers-unite-against-plan-to-shoot-snowy-mountains-wild-horses/news-story/e395bf35b832e84af1ac12b65baa95f1>

Some defenders of brumbies remaining in Australia's national parks have also cast doubt on the reliability of the data supposedly demonstrating that feral horses are increasing greatly in numbers.

New Zealand wildlife ecologist Craig Downer has called for 'an independent census of all Brumbies living in the Alpine, Bogong, Barmah and Kosciusko National Parks.' Downer states, 'In all of these parks except Barmah, vast habitats were recently scorched by catastrophic wildfires, now increasing due to Global Warming. Millions of plants and animals perished, many excruciatingly in the flames and including many Brumbies. Yet there has been no census of the Brumbies after these terrible fires. Most probably there has been a major decrease in the Brumby population in and around these parks.'

<https://www.horsetalk.co.nz/2020/06/10/defence-australias-brumbies/> In 2017, the Snowy Mountain Brumby and Sustainability Management Group (SMBSMG) claimed that the techniques used by the New South Wales National Parks and Wildlife Service to estimate brumby numbers were not reliable. The group claims that an aerial survey it has done shows brumby numbers are almost 5000 less than those estimated by the National Parks and Wildlife Service (NPWS).

A separate brumby supporters' group, the Snowy Mountains Bush Users Group (SMBUG), headed by Peter Cochran, claims there needs to be better methodology to give a more accurate picture of brumby numbers. Mr Cochran has stated, 'You need an approved methodology...The NPWS's method has failed,'

<https://www.theland.com.au/story/4811066/brumby-hoax-protection-group-says-park-numbers-grossly-inflated/>

3. The methods used to remove brumbies are often inhumane

Supporters of brumbies remaining in Australia's alpine national parks argue that most of the removal measures proposed, especially culling, are inevitably cruel.

Opposition to aerial culling of feral horses reached a high point in 2000 following reports of a cull organised by New South Wales National Parks & Wildlife Services (NPWS). The cull was conducted in Guy Fawkes national park, 300 miles north of Sydney. 617 horses were killed and the way they were slaughtered resulted in widespread public opposition and the New South Wales RSPCA bringing 12 charges against the NPWS alleging cruelty to animals.

https://australianbrumbyalliance.org.au/wp-content/uploads/2012/12/ABA-Guy-Fawkes-2000-review-20_Oct_2014-Final.pdf A report published in The Guardian at the time states,

'Local people were enraged after discovering badly mutilated carcasses scattered across the park. "The manner in which these horses were killed was absolutely barbaric. It was damned murder - that's what it was," said landowner Greg Everingham.

Mr Everingham contacted the RSPCA, which claimed it discovered several bullet-riddled horses had survived the cull to stagger on for another day.’

<https://www.theguardian.com/world/2000/nov/06/worlddispatch.patrickbarkham>

The Australian Veterinarian Association condemned the cull for the ‘lack of concern by the National Parks and Wildlife Service (NPWS) for the welfare of the many horses which suffered terribly in this incident’.

<https://www.theguardian.com/world/2000/nov/06/worlddispatch.patrickbarkham>

The Australian Veterinarian Association (AVA) responded to the incident by declaring that aerial culls were not suited to mountainous regions and should not be used in such locations. The Association stated that aerial culling should only be considered in Australia's dry open plains, where helicopters could easily track and put down injured animals without causing undue suffering. The AVA vice president Dr Garth McGilvray stated, ‘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.’

<https://www.theguardian.com/world/2000/nov/06/worlddispatch.patrickbarkham>

The result of the Guy Fawkes National Parks aerial cull was that the New South Wales’s environment minister ordered the suspension of all culling of feral horses in national parks while an independent review of the practice was conducted.

<https://www.theguardian.com/world/2000/nov/06/worlddispatch.patrickbarkham>

Aerial culling of horses is now illegal in New South Wales; however, opponents of the practice note that it is still used in Victoria and will be used, when necessary, as part of the state’s most recent feral horse management plan. East Gippsland Shire Councillor, Sonia Buckley, has claimed that controlling the horses with aerial shooting was inhumane and ineffective and it ‘should be completely off the table’. Councillor Buckley stated, ‘It's hard country to be able to see the animals from the air. [Aerial shooters] can't make it in a single shot.’

<https://www.abc.net.au/news/2021-04-09/brumbies-feral-horse-plan-advocates-shooting-to-save-alpine-vic/100052330>

Mountain Cattlemen’s Association executive officer Graeme Stoney, a former Victorian MP, has stated, ‘We are totally against aerial shooting, as this is really cruel, as shooting of mares can leave foals abandoned.’

<https://www.theland.com.au/story/4411210/decision-on-brumby-cull-soon/>

The Brumby Action Group maintains that no form of culling can avoid pain and distress to the animals. Referring to the plan to remove significant numbers of horses from Victoria’s alpine national parks, they claim, ‘There is no doubt, the shooting of 530 brumbies in the Alps if it proceeds will not be kind or pretty, it has every possibility of being cruel and inhumane.’

<https://www.themandarin.com.au/153716-community-clashes-over-feral-horses-management/>

Referring to ground culls already conducted in Victoria in the Barmah National Park in 2018, critics have noted what they claim is the continuation of cruel practices. Murray Willaton from the Barmah Brumby Preservation Group has claimed that he witnessed a stallion being shot in the middle of the stomach and has called such practices ‘unacceptable’.

<https://www.9news.com.au/national/horses-left-to-starve-animal-cruelty-euthanased-brumbies-barmah-national-park/49b32f88-5da0-47e0-ba05-885917ad2bfe>

Snowy Mountains Horse Riding Association (SMHRA) spokeswoman, Leisa Caldwell, has condemned the use of ground culling anywhere within the Australian alpine region. She claims, ‘What’s cruel, terrifying and unnecessary is ground shooting.’

<https://www.news.com.au/national/brumby-lovers-unite-against-plan-to-shoot-snowy-mountains-wild-horses/news-story/e395bf35b832e84af1ac12b65baa95f1>

4. Brumbies are a tourist attraction within alpine regions

Supporters of allowing brumbies to remain in Australia's alpine regions stress the benefits they offer in attracting tourists to these areas.

The Australian Brumby Alliance maintains that brumbies are a significant tourist attraction. They state, 'Brumbies bring tourists to each area they are found with many local horse and adventure trail operators dependent on Brumbies remaining in the wild.'

<https://australianbrumbyalliance.org.au/humane-management-2/inform/brumby-heritage/>

Mountain Cattlemen's Association executive officer Graeme Stoney, a former Victorian MP, has similarly declared, 'They are a wonderful tourist attraction and should be preserved in some form.'

<https://www.theland.com.au/story/4411210/decision-on-brumby-cull-soon/>

In 2018, while promoting a bill seeking to give on-going protection to brumbies in New South Wales alpine national parks, the state's then deputy premier, John Barilaro, stated, 'We want to make sure there is a viable number of horses in the park for future generations to see. It is an important part of our story and our heritage, but it is also an important tourism driver for the mountain.' Barilaro went on to champion the importance of tourism in the region, of which he believes brumbies are a significant component. He stated, 'Kosciuszko National Park is the largest tourism driver in the Snowy Mountains, with the winter ski season and summer tourism products being developed. It was announced recently that \$27 million will be provided for new Snowy Mountains infrastructure such as walking tracks and shared trails. Some of the most beautiful wilderness areas will be open to the public to enjoy.'

<https://www.parliament.nsw.gov.au/Hansard/Pages/HansardResult.aspx#/docid/HANSARD-1323879322-102131>

In a later address to Parliament, Barilaro expanded on this point. He stated, 'There are few places in the world where wild horses can roam freely. Wild horses are a major drawcard for local tourism and have just as much right as anyone to exist here.'

<https://www.parliament.nsw.gov.au/Hansard/Pages/HansardResult.aspx#/docid/HANSARD-1323879322-59677/link/85>

Tourism promotion groups such as visitnsw.com emphasise the Snowy Mountains' connections with brumbies as a way of attracting visitors. They state, 'Sitting near the gateway to the Kosciuszko National Park, home to Australia's highest peak, the Jindabyne region has inspired Australian legends of mountain horsemen, like The Man from Snowy River by Banjo Paterson and Elyne Mitchell's Silver Brumby books. You might even get to see brumbies on a horse-riding tour in the high country, with tour companies like Thredbo Valley Horse Riding.'

<https://www.visitnsw.com/destinations/snowy-mountains/jindabyne-area>

Horse trek operators such as Snowy Wilderness Horse Riding note that sighting brumbies is an important experience for many tourists. Their site quotes the views of some of those who have travelled through the Snowy River area with them on horseback. One visitor notes, 'Cantering through riverbeds and through the most breathtakingly beautiful landscape, we saw brumbies, deer, emu, kangaroos, wild pigs, flocks of king parrots and eagles soaring above. This is an amazing snowy wilderness experience.'

https://www.tripadvisor.com.au/ShowUserReviews-g261617-d1893405-r581800852-Snowy_Wilderness_Horse_Riding-Jindabyne_New_South_Wales.html

The Snowy Wilderness site further encourages visitors to 'Experience the best horse riding

holiday Australia has to offer. Our pristine resort is set on 7,500 acres of wilderness high country and adjoins Kosciusko National Park. If you're after a great horse riding adventure through the Snowy Mountains – complete with breathtaking views – our guided horse treks will be an adventure you'll never forget. From our two hour rides to our multi day horse riding adventures across Jindabyne that can last anywhere up to seven days, we can accommodate any rider experience level. In the tradition of The Man from Snowy River, Snowy Wilderness is a stunning High Country resort, and a sanctuary for Australia's wild horse, the brumby.' <https://snowywilderness.com.au/>

The Wild Horse Management Plan - Kosciuszko National Park acknowledges the tourism value of brumbies in the park. It states, 'The presence of wild horses in the park has tourism, economic and marketing value to the Snowy Mountains region because some people visit the park with the expectation of seeing wild horses in the landscape.'

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Pests-and-weeds/Kosciuszko-wild-horses/kosciuszko-national-park-draft-wild-horse-management-plan-160271.pdf>

5. Brumbies can benefit the natural environment

Those who argue that brumbies should be able to remain in Australian alpine national parks claim that these horses do not simply cause harm to the natural environment. They argue that brumbies benefit the environments within which they live.

Those who claim that brumbies offer benefits to Australian native environments warn against condemning species as harmful simply because they are not indigenous. In June 2011, Nature magazine published an article by Mark Davis et al titled 'Don't judge species on their origins'. Davis argues, 'Today's management approaches must recognize that the natural systems of the past are changing forever thanks to drivers such as climate change, nitrogen eutrophication, increased urbanization and other land-use changes... Certainly, some species introduced by humans have driven extinctions and undermined important ecological services such as clean water and timber resources... But many of the claims driving people's perception that introduced species pose an apocalyptic threat to biodiversity are not backed by data... Nativeness is not a sign of evolutionary fitness or of a species having positive effects...It is time for conservationists to focus much more on the functions of species, and much less on where they originated''' <https://www.nature.com/articles/474153a>

The Australian Brumby Alliance (ABA) argues that any attempt to determine what number of brumbies should remain within Australian alpine regions should be based on a balancing of what number of horses is needed to maximise the benefits they offer and minimise the harms. The ABA has stated, 'Management of feral horses and in fact any potentially overabundant species not only requires measurement of negative impact but also positive impact. There can be unexpected adverse consequences of reduction in the number of feral horses. Management of brumbies in the Alpine National Park should aim to minimise any negative impact caused by feral horses and maximise any positive impact.'

<https://australianbrumbyalliance.org.au/humane-management-2/research/>

The ABA argues that summarily removing brumbies from their present environments will harm those species that have come to rely on them. The ABC claims, 'Removing [brumbies] now will break the environmental balance that has evolved over the past 200 years. Those species who now benefit by co-habituating with Brumbies will suffer, especially those species needing short, constant regrowth of fresh green grass Brumby rotational grazing

offers, such as the Striated Sun Moth.’ <https://australianbrumbyalliance.org.au/humane-management-2/research/>

American wildlife ecologist Craig Downer has claimed that wild horses can make valuable contributions to Australian ecosystems in many different ways. He has written, ‘Equid [horse] feces lend more sustenance to decomposers and food webs that involve mutually sustaining exchanges among all classes of organisms. The latter include many diverse insects, birds, rodents, reptiles, etc. This could help bolster many native species in Australia.

The less degraded feces of equids contain many more seeds that are intact and capable of germination and from many more types/species of plants when compared with ruminant grazers. Thus, the horses’ wide-ranging lifestyles can greatly assist many plants, including Australian natives, in dispersing far and wide and, so, in filling their respective ecological niches. This enriches the food web and allows a greater diversity of animal species, including Australian natives.’ <https://www.horsetalk.co.nz/2018/06/04/brumbies-useful-australian-ecosystem/>

Downer has further claimed, ‘Horses aid myriad plant and animal species by their physical actions. As an example, breaking of ice with their hooves during winter freezes allows other animals to access forage and water. Many of these would otherwise perish. Similarly, they open trails in heavy snow or through heavy brush, allowing smaller animals to move about in search of food, water, mineral salts, shelter, warmer areas, mates, etc.’

<https://www.horsetalk.co.nz/2018/06/04/brumbies-useful-australian-ecosystem/>

Further implications

Years of mismanagement of feral horse populations in Australian alpine regions have created a situation that is difficult to resolve. Wild horse control programs appear to have been typified by periods of relative inaction followed by sporadic crisis control measures, such as aerial culling, which then provoke vigorous opposition and a further period of inaction.

The situation has been complicated by the impact on vulnerable environments of climate change, including catastrophic events such as bushfires; the depredation of other pest animals; and increasing human infringement on alpine areas via tourism and other proposed developments such as Snowy 2 – the extension of the Snowy Hydro Scheme.

Currently, no matter whose figures are used, feral horse numbers are increasing in most of Australia’s alpine regions. Though the most cited figure of 14,000 is disputed by some, there is a general acknowledgement that populations are growing at an unsustainable rate which is likely to negatively affect already fragile ecosystems as well as threaten the horses with periodic starvation. <https://www.nature.com/articles/d41586-021-02977-7>

There is currently no consensus on how to manage this problem. There are some scientists and conservation bodies that maintain there should be no wild horses in Australia’s alpine national parks. Most brumby support groups adopt a more moderate position, acknowledging that wild horse numbers need to be reduced in alpine regions. There would appear to be room for compromise, with a position broadly like that being proposed in New South Wales where numbers are to be substantially reduced but wild horses are to remain in most areas.

The major points of disagreement appear to be how many horses should remain and, if they are to remain, in what areas they will be allowed. Related points of disagreement centre around how they will be removed, or have their numbers reduced.

Neither those seeking the horses’ removal nor those who want them retained trust the figures given by the opposing side on the size of current populations or on what number of wild

horses' different alpine regions can sustain without damage.

<https://www.abc.net.au/news/2021-08-21/brumbies-battle-in-nsw-high-country-kosciuszko-national-park/100372254> Brumby supporters regularly call for new and 'objective' surveys of brumby numbers, while those seeking culling, or removal argue that delays in reducing numbers only mean that more wild horses will ultimately have to be killed.

<https://nsw.animaljusticeparty.org/the-2019-kosciuszko-brumby-count/>

Methods of reducing wild horse populations are equally contested. Aerial culling has been outlawed in New South Wales since the Guy Fawkes National Park cull in 2000 which was a public relations disaster for the New South Wales National Parks & Wildlife Service (NPWS)

The NPWS had to defend itself against 12 charges of animal cruelty levelled by the state's RSPCA. <https://www.theguardian.com/world/2000/nov/06/worlddispatch.patrickbarkham>

New South Wales does still allow ground shooting when the situation requires it. In Victoria, aerial culling is now permitted in circumstances where it is deemed necessary. In May 2020, Victoria reintroduced ground shooting of wild horses, arguing that in some situations it was less stressful on the animals than rounding them up and later euthanising.

<https://invasives.org.au/media-releases/victoria-acts-on-feral-horses-now-legal-impediment-removed/>

Brumby support groups remain in total opposition to aerial culling, and most are opposed to ground culling. <https://www.themandarin.com.au/153716-community-clashes-over-feral-horses-management/> In addition to the cruelty involved in the culling process, opponents point to the inconsistency from an environmental perspective of leaving large numbers of horse carcasses to pollute waterways and feed wild dogs.

https://www.mcav.com.au/assets/files/news/2018/statement_brumby_culling.pdf

Brumby supporters argue for non-violent, non-lethal measures to reduce horse numbers.

The Australian Brumby Association (ABA) claims, 'The most effective, humane, sensible way to manage Brumby numbers that keep both the environment and its Brumbies healthy is to have an ongoing management program. First, we need to identify viable, sustainable population numbers that will not overtax their landscape. Working to an identified, viable population level will then set the number to be removed on a regular basis to sustain that population level. Rehoming groups can then plan for how they may be able to take on rehoming work and increase the chance that more Brumbies can be rehomed under the parks management plan, rather than the current more ad hoc approach.'

<https://australianbrumbyalliance.org.au/wp-content/uploads/2015/12/5.1-Humaneness-Current-Mgmt-options.pdf>

Critics of such an approach argue that rehoming programs have failed to accommodate the number of horses that would need to be removed on a regular

basis. <https://www.parks.vic.gov.au/projects/feral-horse-action-plan-2021#:~:text=The%20Victorian%20Government%20released%20the,over%20a%20ten%2Dyear%20period.>

Recommended best practice for managing pest species endorses the sort of gradualist approach sought by the ABA but acknowledges that animals may have to be put down and larger numbers than some brumby support groups would prefer may have to be removed.

PestSmart is a citizen advice agency managed through the Centre for Invasive Species Solutions (CISS) and funded by the Australian Government. It recommends as best practice a management regime which causes the least disruption possible to the restricted species and gradually removes it from the affected area or reduces its numbers. Its website states, 'There is an expectation that animal suffering associated with pest management be minimised. The most humane methods that will achieve the control program's aims must be used.'

Consideration of animal suffering should occur regardless of the status given to a particular pest species or the extent of the damage or impact created by that pest. While the ecological and economic rationales for the control of pests such as the feral horse are frequently documented, little attention has been paid to the development of an ethical justification as to how these pests are controlled. An ethical approach to pest control requires recognition of and attention to the welfare of all animals affected directly or indirectly by control programs.’

<https://pestsmart.org.au/toolkit-resource/code-of-practice-feral-horses/>

PestSmart further states, ‘From an animal welfare perspective, it is highly desirable that pest control programs affect a minimum number of individuals, and that effort is sustained so that pest densities always remain at a low level. Over the last decade, the approach to managing pest animals has changed. Rather than focusing on killing as many pests as possible, it is now realised that like most other aspects of agriculture or nature conservation, pest management needs to be carefully planned and coordinated.’ <https://pestsmart.org.au/toolkit-resource/code-of-practice-feral-horses/>

If the above principles can be applied it may be possible to achieve a solution which while giving neither side in this debate exactly what they are currently demanding, allows wild horse numbers to be humanely reduced over time. This would require a degree of compromise from the different stakeholders in this issue and a substantial financial investment by government in regular horse population monitoring, research into effective fertility control measures, regular removal from herds of re-homable horses and the training and supervised deployment of shooters to perform small-scale and, if necessary, regular culls.