Wild Horse Management
2014 Aerial Survey and
2012 Catchments Impacts Assessment

AUSTRALIAN ALPS NATIONAL PARKS

FACTSHEET

Background

The Australian Alps are a place of outstanding natural and cultural significance and the national parks within them are included on the Australian National Heritage List. Containing the highest points in the Great Dividing Range and spanning more than 600 km from Victoria to the Australian Capital Territory (ACT), they cover an area of more than 1.6 million hectares. They are home to the headwaters of many major rivers in south-eastern Australia and contain a variety of complex ecosystems that are critical habitat for native plant and animal species and communities, many of which are under threat.

Since 1986, a coordinated cross-border partnership including the Federal Government, NSW, ACT, and Victorian Government agencies has actively collaborated to provide improved outcomes for the alps landscape and all its diverse values - nature, culture, heritage and communities.

A variety of wild horse research and monitoring projects have occurred. This fact sheet highlights the two most recent projects and their results:

- Wild horses are widespread throughout the Australian Alps and they are causing significant damage to this region including fragile alpine and sub-alpine ecosystems. Impact surveys have been part of the monitoring process.
- Wild horse numbers in the landscape also appear to be on the increase. Over the last 15 years aerial surveys and improved mathematical modelling of horse abundance and distribution have helped inform management of horse population status, now and into the future.

Impact on the Australian Alpine environment

A recently published study[1] commissioned by the Australian Alps Liaison Committee investigated wild horse impacts on treeless drainage lines in the Australian Alps at 186 randomly located sites over an area of more than 300,000Ha.

The study found the impacts of wild horses are widespread across the Australian Alps and within the broad areas where horses occur, 92% of the survey sites showed signs of horses and their impacts. Those sites with an absence of horses consistently had patterns of good condition.

Wild horses are not a natural part of the Australian Alps. Their hard hoofs can cause serious damage to the alpine sub alpine and montane environment, including:

- Destroying habitat critical to many threatened plant and animal species
- Damaging waterways
- Degrading fragile vegetation, including rare species.
- Disturbing soil, and causing erosion and compaction, which results in loss of nutrients from sites. This also assists weed invasion and degrades fragile ecosystems.

Wild horses cause major damage to the endangered Alpine Sphagnum Bogs and Alpine Peatlands. These threatened communities occur only in alpine areas. They are an integral part of the natural catchment system in the Australian Alps and provide critical habitat for native plants and animals.

Degradation of this habitat, which is vital for a range of native fauna including the endangered Alpine Water Skink and Corroboree Frog, the threatened Alpine Spiny Crayfish and the vulnerable Broad-toothed Rat, is a major concern.

[1] *An Assessment of Feral Horse Impacts on Treeless Drainage Lines in the Australian Alps, Australian Alps National Parks Cooperative Management Program, 2016*

[2] *A Report on the 2014 Survey of Feral Horses (Equus ferus caballus) in the Australian Alps, Australian Alps Liaison Committee, 2014.*

2014 wild horse population - aerial survey results[2]

Aerial surveys of wild horses in the Australian Alps were conducted in 2001, 2003, 2009 and 2014. The 2014 survey indicated approximately 9500 horses across the Australian Alps landscape. Significant populations were in northern Kosciuszko and the cross-border areas of the Byadbo-Pilot wilderness and the eastern alps of Victoria.

Drawing on lessons from past years, one of Australia's experts in aerial wildlife surveys assisted with redesigning the 2014 survey to include the whole area of the Australian Alps where horses are known to occur. This new design dramatically improved the precision of the surveys, giving the most precise estimates of wild horse abundance in the Australian Alps to date. Using this new methodology the precision of the population count improved from 25% (2009) to 11.3% (2014).

Results summary

Estimates of the total (average) horse population extrapolated from the specific survey site results:

Location	Horse population estimate
Total in Australian Alps	9,455 (with 95% certainty that the population is between 7,484 – 11,595)
North Kosciusko (NP)	4,247 (with 95% certainty that the population is between 2,777 – 5,893)
Bago-Maragle - state forest and areas of adjacent Kosciuszko NP	1,263 (with 95% certainty that the population is between 588 – 1,964)
Byadbo-Victoria (excluding Bogong High Plains)	3,821 (with 95% certainty that the population is between 2,868 – 5,090)

Future management and actions

Evidence from recent studies and growing reports from park visitors and staff show that wild horses are continuing to cause environmental damage in the Australian Alps. In the past decade, some horses have been removed from the Alpine National Park (NP) in Victoria and Kosciusko NP in New South Wales. However, the overall wild horse population in the Australian Alps continues to grow. The exclusion of wild horses from trial exclosure plots shows that natural mountain systems can recover ecologically.

Park management agencies focus on an adaptive management approach to continuously improve all aspects of park management. This includes improving survey methods to get the most reliable estimates of the number of wild horses in the Australian Alps.

The improved survey methods used in 2014 give us a more reliable basis for understanding changes in the horse population across the Alps and into the future.

NSW National Parks and Wildlife Service and Parks Victoria are each working with community interest groups who will contribute to the development of each state's management plans.

Further research to better understand impacts of wild horses and how their impacts can be reduced, along with on-going surveys to monitor horse numbers, will be vital for understanding the best way to adapt the management techniques for wild horses in the Australian Alps.

Q. How does the 2014 aerial survey compare with the 2009 survey?

A. Comparison of the two surveys to determine overall population trends is difficult due to the different survey techniques. Population trends could not be compared because of the different survey designs and areas. However the 2014 survey methodology was significantly improved and as a result, the precision and reliability was increased. The 2014 result produced a more accurate assessment of current horse numbers.

Q. Why was the whole land area of the Australian Alps not surveyed?

A. All areas that were known to harbour horses, including some adjacent state forest areas were surveyed. Steep, thickly forested areas unfavoured by horses were not surveyed, as also some areas that were considered too dangerous for low level helicopter operations. The only open landscape area not surveyed was the Bogong High Plains in the Victorian Alpine NP. A small population of less than 100 animals exist there and is regularly monitored.

Q. How many horses have been removed from the park?

A. Between the two survey periods 2009-2014 more than 2000 horses have been trapped and moved from Kosciuszko NP, and more than 1100 individuals from the Victorian Alpine NP.

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